Study of English as Additional Language Students and the supportive use of the C.Pen Reader

February 16, 2017
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Abstract

As funding continues to be cut throughout schools the continuing responsibility of supporting the English as an Additional Language (EAL) student requires careful and creative approaches. Sal McKeown, a specialist in educational technology states

“ICT can play a key role in supporting students who have English as an additional language”.

With this suggestion in mind a leading supplier of one such element of technological gadgetry requested a study on how best to continue supporting a historically achieving group of educationally successful students.

Introduction

In 2013 just over a million pupils in England were identified as those for who English as an Additional Language (EAL) (cited in Strand, Malmberg and Hall, 2015) attended a mainstream educational establishment.

EAL Students historically have been on a par as their First Language English (FLE) peers when undertaking GCSE’s. 58.3% of EAL students achieved 5+ A*-C in comparison to 60.9% FLE students. However, identified strengths have been in maths, as opposed to reading tasks. To date research has suggested the additional funding used to support EAL students has been influential in positive outcomes for this group of students. Current funding, for all students, has been cut; with this in mind it may well be prudent for secondary schools to consider alternate supportive strategies which continue to enable the EAL student to achieve academic success.

The study is one of an initial growth of interest studies in relation to alternative supportive tools. This study will focus on the C-Pen Reader. EAL students were each given a C-Pen Reader for use in the classroom, free periods and home study. The students were encouraged to use the pen for social reading alongside encouraging their parents to make use of the pen; studies such as that conducted by Desforges and Abouchaar (2003) have suggested the importance of parental involvement in a child’s education.
As a first research paper on reader pens, this initial study will concentrate on suggestions for future studies alongside the quantitative and qualitative aspects of the research findings.

_Hypothesis: Use of the C-Pen Reader by EAL students will support them to gain understanding of any written text provided in lessons and enhance positivity of emotional well-being; namely confidence and attitude to learning._

**Method**

**Participants**

Six EAL students were chosen with a range of varying understanding of the English language which had been tested within their school. 4 students were designated as ‘developing competence’; classified as ‘C’ students. 2 students were identified as ‘early acquisition’, ‘B’ students. C Students are recognised as progressing well in oral and written activities but require further support in lessons such as English and Humanities but are doing well in Maths and Science. B students are able to engage in all subjects but it is clear English is not their first language. Their oral English is developing well but require support for written activities in the classroom.

5 of the students were female, 1 student was male. The age range of the students was 12 to 15. The students had been living in England for a variety of time, 2 students since primary age, 2 students from early secondary age and two students being relatively new to England. The students do not converse in English at home. The students attend a secondary school situated in a South West town with 55 (5.4%) EAL students.

**Materials**

Each student was given a C-Pen Reader to use at school and home during a 6-week study, mid-way through the study there was a 2-week holiday period, with a number of the students returning to their countries of birth. The students received 1:1 instruction on how to make use of the pen with additional supportive written/illustrated instruction. A Teaching Assistant (TA) was chosen to be the point of contact to help and answer any queries; supported by the SENCo.
Feedback forms were provided for the students to complete on a daily basis; recording their emotive well-being and comprehension on a given task. Once a week the student would make use of the audio recorder to provide their comments to semi-structured questions.

The EAL students were encouraged to take the pen home to use for private study or social reading and to share with parents.

**Results**

The results will be given as two entities. Firstly, the quantitative element using a Likert Scale of emotional well-being, i.e. confidence in reading a piece of text without the use of the reader pen and then with the reader pen. Secondly the qualitative aspect of the study is in two-parts; a thematic analysis of the weekly audio recording by each student and finally, a group interview of participants and supportive staff, to gather data in regards to their personal experiences and an insight as to the positive aspects of the C-Pen Reader for the EAL students and teaching staff.

A copy of the feedback form can be found in Appendices.

**Table A. Results from the daily questionnaire completed by each student.**

<table>
<thead>
<tr>
<th>Participant</th>
<th>Confidence of reading text with no support; including adult support *</th>
<th>Confidence after reading the text with the use of C-Pen Reader *</th>
<th>% increase of confidence levels</th>
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<tbody>
<tr>
<td>One</td>
<td>4.9</td>
<td>7.7</td>
<td>57%</td>
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<td>Two</td>
<td>6.25</td>
<td>9.13</td>
<td>46%</td>
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<tr>
<td>Three</td>
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<tr>
<td>Four</td>
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<tr>
<td>Five</td>
<td>7.9</td>
<td>8.45</td>
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<td>Six</td>
<td>7.33</td>
<td>9.56</td>
<td>30%</td>
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*figures are the mean of 6 weeks recorded daily entrants.

A thematic analysis looked for data and patterns explored in the weekly audio recordings. The students were set semi-structured questions, as detailed below, and
were asked to elaborate on any of these areas which indicated a level of importance to them personally.

“How have you felt when you have used the reader pen?”

“Has the pen helped you learn anything new?”

“When and where did you use the pen?”

“How often did you use the pen?”

An overwhelming response of “good” was received from each student when they used the pen; several students remarked on how the pen was helping them and this, in turn, made them “feel good”.

All students stated they had learnt something new when using the pen. There was a substantial element of support in regards to the pen enabling them to learn new words, or the pronunciation of a word. One of the competent ‘C’ students had made use of the dictionary feature of the pen to gain further insight into the meaning of new words she had encountered. The ability to pronounce a word correctly had led one student to feel confident in joining a FLE peer-led conversation.

The initial concept in regards to where and when the pen would be utilised had led to an assumption of the predominate lesson being English. However, the feedback provided by the students not only supported this statement but also enabled us to gain a surprising insight of how the pen was used in other subjects. These included Science, History, Child Play (Child Development Studies) and Maths. The older students were provided with the C-Pen Examination Reader for GCSE mock examination papers; particularly for those subjects with complex English terminology. Alongside the classroom environment the students had made use of the pen at home; to read books and to access homework worksheets provided by their teachers in class.

A variation of how the pen was used was seen between each student. On analysis of the data it was noted the less able and confident students did not make as much use of the pen in comparison to the confident and capable students; who accessed the pen on average up to 3 times more.

Finally, all participants took part in a Group Interview. The transcript of the video recording of the group interview can be found at appendices.
Discussion

All students showed an improved score in confidence after using the C-Pen Reader. However, the number of participants was small and therefore subsequent studies should be conducted with a larger participation group.

The ages of the students appeared to have an impact on the confidence levels reported during the study when using the equipment within the school environment. Interestingly the younger students had been residents in the UK far longer than the older students and therefore cultural influences should be consider. The older students were considered to be confident learners, in comparison to their English peers, therefore the use of the C-Pen Reader appeared to be, in their words, a logical tool to support their day to day learning.

Research has suggested parental engagement has a greater impact on the learning abilities and achievements of children. As EAL students it is often understood the parent’s will have little or no English skills; therefore, English will not be spoken at home and home learning will be difficult to support, due to this. The Desforges and Aboucharr (2003) report states:

“... parental involvement seems to have its major impact on children through the modelling of values and expectations, through encouragement and through interest in and respect for the child-as-learner.”

This interest would require the parent to understand what their child is learning, subsequently Desforges and Aboucharr’s (2003), suggestion of the importance of the parent/teacher relationship through positive communication and school-life involvement requires consideration, when language becomes a barrier. Future replication studies should go further to enhance the relationship between the participant students and family members.

Finally, consideration of the hypothesis being met in regards to how the students understood the written text. All students reported they had felt this was an element they had achieved whilst using the C-Pen Reader. Students reported ‘hearing’ the text read to them enabled them to understand the word/sentence at a faster and greater level than attempting to read the text unaided. One student stated “it is easier to hear the word, then to attempt to read the word. The written English word does not sound out correctly, this is difficult to do”. This was further supported with the older students having use of the C-Pen Examination Reader during their mock
examinations. The use of the C-Pen Reader in their day to day education enables this tool to be seen as a ‘normal way of working’. Therefore, subsequent use of the C-Pen Examination Reader is acceptable during examinations and enables the student to join their peers in the main examination hall, as opposed to undertaking in separate examination conditions; a valuable saving for any school.
References


Appendices

Feedback form:

C-Pen Reader Pen Research for Scanning Pens Ltd

November/December 2016

Daily Record

DAY: 1       WEEK: 1       NAME: Participant 6

No support/on your own: How well did you understand the text you were asked to read?

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How well did you understand the same text, using the C-Pen?

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Transcript of video recordings:

Researcher: We are joined by the EAL students who have been trialing the C-Pen Reader Pen and today we are going to ask their opinions on how they found the pen useful in their classroom. So to start with “hello”.

Students: Hello

Researcher: Can you tell us how it’s been for you.

Student 6: Really good, I think

Researcher: Why has it been really good?

Student 6: It has helped me to understand new words.

Researcher: Did you try to read the word on your own, first, and then with the pen?

Student 6: (Nods) Yes

Researcher: How did you find that?

Student 6: Very good.

Student 4: Urm, I have learnt how to say one word (student is making the hand movement of using the pen as she is explaining her learning experience) to help me pronounce, to help me with my pronunciation.

Researcher: Ah, is hearing the word easier than reading the word?

Student 4: Yes, in English it is not the same writing as sounds (student makes a writing example with her hands as she is explaining what she means).

Researcher: Let’s move to the younger members of the group, hello guys, have you used the pen in different lessons:

Student 5: I have used it in Geography and History.

Researcher: Are the words in those lessons complicated and long?
Student 5: Yes, it helped me and I can read the words now.

Researcher to Student 2: How have you found it.

Student 2: Good, it was easier to read, like, I’ve used it in English.

Researcher to all: Which lessons have you used it most in?

Students voices overlapping: English

Student 4: I have used it in my Science lesson, the words are difficult

Researcher: The teachers are joining us now. Good morning.

Teachers: Good morning.

Researcher: We asked the students to record how they were feeling using the pen, has anything struck you of this being a supportive tool?

Teacher: XXXXX has discussed using it with your homework haven’t you (teacher looking at student who nods) and how he hasn’t necessarily so much wanted to use it in school so much in his lessons, but when he is independently working he has used it at home and I think you also said (teacher looking at the student) that you have shown it to your mum (student nods in agreement) as well and your mum has been having a bit of a go with it as well, hasn’t she? Which has been good.

Generally, from the others, I’ve found that English and Science seem to be the lessons that have used it in the most. Generally, mainly for pronunciation, isn’t it (looking at students for confirmation) and if a teacher gives out a worksheet that hasn’t been read out to them they can use the pen to scan over for the particular words that they want.

A couple of them have also had them for their exam (looks at students for confirmation) for their health and social care exam, did you use it? (Looking towards the older students for confirmation) Did you find it useful then?

Student 6: Yes, I think just four times.
Teacher: Yeah, so I don’t think they are necessarily using it to read whole blocks of text, they are using to read individual words every now and again which they may be struggling with.

Researcher: Thank you, (looking towards Student 2) now I heard your mum has been using the pen, what did she use it to read?

Student 2: She can’t really read in English but she tried to like to read after, when she had it.

Researcher: What was she trying to read, an article or newspaper?

Student 2: I think it was a book.

Researcher: Has there been any complications or difficulties for the young people, I’m thinking about accessibility, forgetting to get the pen out if it is not to hand.

Teacher: Most of the students, when I’ve seen them, have carried them in their pockets...

Researcher: Pocket friendly size?

Teacher: Yeah, the blazers are quite good, I guess if you had a school jumper it wouldn’t be the same, but they all wear blazers (students all nod) lots of them keep their pens, rulers and everything in their blazer like it is their bag really, so I think the pen has been another addition to that really.

I think you guys being the younger ones (looking towards the younger students) haven’t necessarily been as keen to have it out in lessons, have you? Is that because you haven’t really thought to have it out? (looking at the students as asking the question), or a bit shy using it?

Student 5: Yeah

Teaching Assistant: I would just like to add to that, another young lady, who is not here today, I think she has been very shy about getting it out, when I have seen her I have tried to encourage her, “please use it” and she has answered “no I haven’t” ... I think she was just too shy (looking towards the Teacher who confirms this statement with a nod).
Researcher: Do you think if this was a tool they used from primary age, do you think that element of shyness may be overcome? Obviously with the older girls, confidence is playing a part here?

Teacher: Yeah

Researcher: Do you think culturally there is an impact?

Teacher: Yeah definitely, and we, as you know, bought a lot of pens for our students for the exams, so it is a big shift for all of them to be starting to use those pens. So I would say that these guys, actually, use it more now than our students who are possibly weaker readers who we bought the pens for, and this is because they have had one on them all the time. It is hard, I think, we are trying to bring the pens in more down to Year 7 and then all the way through. I guess if they had them from primary school, as well, then they would be even keener to use them. So yes, I think as a school we need to work on having the pen being accessible to everyone and not making it “oh your using a reading pen, look”, it should just be when they need it..

Researcher: A tool?

Teacher: Yeah… we’ve got spell checkers for teachers to use, and they’re becoming more and more that the students are asking for them, and using them, so hopefully a reading pen will just become like the spell checker, you will ask for it, like a dictionary, that you just ask for it when you need it.

Researcher: So a shift in perception and a shift in attitudes?

Teacher: Yes, and I think the quality of the pen has increased a lot, especially the scanning, so these guys especially, when they have scanned a word, it has read it perfectly, which has been really, really good. So, we had used the old style reader pen and obviously now we now have the new style and the students are a lot keener to use the new style pen now it is so much easier.

Researcher: Turning to the two older participants, you’ve had use of the pen, and Miss mentioned the exam pen, would this be of use for the two older girls in an exam?

Teacher: Yes, some of them have already used in their exams already, they are also allowed a bilingual dictionary, so with the dictionary and the reader pen, both of them (nodding to the girls) have been allowed to use them in their exams.
Researcher: How did this make you feel? Having at tool that may be quite helpful?

Student 6: It is more easy and really help.

Researcher: Thank you