

“It’s too slow. It doesn’t make sense. I’ll ask my friend to help me – it’s better!”: Using e-translation in the classroom

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Overview

The distinctive position of EAL learners in the UK requires them to make sense of and learn language and content from subject based input. ICT is seen by many teachers to offer new opportunities to support this. For example, where L2 text is incomprehensible, many teachers hope that L1 computer mediated communication, translation tools and L1 subject resourcing through the internet will make it much easier to provide first language support for L2 input. The new PNS EAL CPD materials *Learning and teaching for bilingual children in the primary years* (DfES, 2006) suggest that teachers should use ‘multilingual software’. *Teaching Isolated Bilingual Learners* (Davies, 2005) suggests that teachers may want to:

- Promote the use of first languages as a support for learning, through access to dual language dictionaries and materials, internet, dual language books and tapes
- Provide opportunities for the bilingual learner to use their first language skills academically, for example by encouraging the use of first language websites for research
- Support learners to become independent users of internet translation tools, electronic bilingual dictionaries, and first language websites to support their curriculum, English and first language learning
- Use a variety of media to capture and store learners’ first and English language output to inform assessment for learning

- Use email or video conferencing to communicate and keep in contact with isolated bilingual pupils and their teachers and to respond to concerns, monitor progress, advise on targets and strategies or support lesson planning
- Use tape recorders, word processing, digital and video cameras, and translation websites to produce specific dual language resources

However, to date, there has been very little examination of how teachers of pupils learning EAL in English schools are using new multilingual technologies to support access to the curriculum through facilitating comprehension nor how they are using these technologies to support English language learning. In 2005-6, NALDIC, with support from BECTA, funded a small action research project on the use of e-translation in the classroom. This was identified by our preliminary scoping which indicated that many teachers of ‘new to English’ pupils were attracted by the idea of using free internet based translation engines with EAL learners to help them make sense of curriculum input. Seven studies were carried out at two primary schools and one secondary school in the Coventry area (see Table 1). The case studies were co-ordinated by an advisory EAL specialist and involved specialist EAL staff working in a range of situations, both in collaboration with mainstream teachers and in withdrawn sessions. The brief for participants was to try out the use of e-translation with an earlier stage learner of EAL and describe the outcomes.

A range of first languages was covered although teachers’ choices were limited by the availability of e-translation. For example, a number of African heritage learners were excluded from the study as free e-translation facilities could not be located for their first languages. Teachers were free to choose subject and teaching contexts and translation engines.

Table 1 Schools involved in the study

Case Study	School type	Year group	Subject area	First language
1	Primary	4	Literacy	Dutch
2	Primary	4	Science	Polish
3	Primary	6	Science	Urdu
4	Primary	6	Science	Turkish
5	Primary	6	Literacy	Arabic
6	Secondary	7	ICT	Polish
7	Secondary	11	English	Maltese

Range of languages and subjects

The choice of subject contexts was deliberately left open. It was felt that this might provide a valuable insight into teacher participants’ experience of difficulties encountered with texts in the context of an EAL learner in mainstream schooling. In this context, teachers combine support for learners to acquire and extend

subject matter comprehension whilst at the same time modelling and extending their use of language. Three participants chose English and a further three chose science. Both of these subjects create significant difficulties for EAL learners as evidenced in results from national tests. The choice of ICT by one participant was in response to the difficulties that many of the teacher

researchers experienced with access to appropriate hardware during mainstream lessons. Although work has been done on the language of mathematics, no participants chose to work in that subject area. Despite the fact that the subject is core in both primary and secondary schools, limitations on the amount of support available means that EMA funded teachers rarely have the opportunity to work with learners in mathematics sessions in Coventry schools.

Range of pupils and teaching contexts

Most of the case study pupils were at early stages of learning English. The length of time they had spent in the country varied from a few weeks to two years. As such, all were still acquiring BICS. All were literate and all but one had had some formal education in their countries of origin. None of the teacher participants worked with a learner who was not literate¹. In three of the case studies, teachers chose to work with two pupils who shared the same first language. None of the teacher participants shared a first language with the pupils and in most cases were largely unfamiliar with the pupils' first language.

There was an equal mix in the way that participants decided to work with the pupils on the translation project. In half the case studies, participants attempted to provide support for pupils by using e-translation as a tool in their mainstream lessons. In the other half, the work with e-translation was done away from the mainstream setting, either as a form of pre-teaching or as a form of withdrawn support.

Findings

First language	Translation engine	Advantages	Disadvantages
Arabic	Sakhr http://translate.sakhr.com/sakhr/elogin_ET.asp	Straightforward to use	
Dutch	http://babelfish.altavista.com/	Easy to use	
Maltese	http://www.survol.com/hierflie/e2mdemo/	Easy to use and to navigate the dictionary using a 'joystick'	
Polish	www.poltran.com		Sometimes very slow
Polish	www.tenar.tpi.pl/	Includes an image search (Google) & also sound files	
Turkish	InterTran http://www.tranexp.com:2000/InterTran/InterTran	Easy to understand with helpful drop-down menu of plausible alternatives	Extremely slow
Urdu	http://dsal.uchicago.edu/dictionaries/platts		
Urdu	http://biphoset.spray.se/tracker/dict/		Poor word coverage

Ease of use

All the pupils found the technology easy to manage

It was easy to understand and both boys were very comfortable using it. They particularly liked the drop-down menu which provided plausible alternatives for many of the words/phrases they wanted to use. (Case Study 4)

Anna is confident when working on the computer and very quickly understood how to use the translation engine. She was keen to type in the English words for translation and could read and understand the translated version of the text. She was happy to work independently as long as the translation made sense. (Case Study 1)

However, although the technology was easy to manage, there were a number of significant limitations caused by the speed of translation and the lack of a first language keyboard.

We did find that the pace of this online dictionary was very slow. It was difficult to keep student G on task. He was much more interested in looking for images to copy even when he knew the word. (Case Study 2)

The site was extremely slow and each request had to be sent several times (5+) before being translated. Endless messages stating that the site was too busy to handle the request made the whole exercise very time-consuming and frustrating for all of us. (Case study 4)

We immediately found a problem as the English keyboard didn't carry the Polish alphabet i.e. many of the letters in the Polish alphabet carry an accent. I decided to use the Polish dictionary and copy the word straight across from there if accents were required. (Case Study 4)

The online translation service had a pop-up keyboard screen using Arabic script, and words could be formed by simply clicking on the appropriate part of the screen. A at first attempted to write his name using the keyboard, but had extreme difficulty in seeing the letters as they were much too small. He found it necessary to guess which might be the right one, and could only read accurately what he was trying to write once it had appeared on screen. This was extremely frustrating and made the whole process very slow. Additionally A, a confident computer user, was of the opinion that the letters did not appear in the order he would have expected, based on his keyboard knowledge prior to coming to England. (Case Study 5)

Reliability of e-translators in rendering content comprehensible

The most fundamental difficulty encountered was that the e-translations accessed were not sufficiently advanced to be reliable at anything beyond isolated word level.

Once she had begun to work on the translation it quickly became apparent that the English sentences could not be translated directly into Dutch. Unfortunately, although the list of items needed was easy to translate, the instructions and titles were more difficult. Sentences such as 'Turn off the cold tap when happy' do seem rather strange on closer inspection! In the end it became necessary to analyse each sentence and break it down into extremely simple statements in order to arrive at a reasonable translation. (Case Study 1)

The translation device needed a simple sentence structure. Verb forms (modals, continuous past/present) were difficult, sometimes impossible to translate. Specialist vocabulary and scientific terminology did not translate. 'Woolly' words, such as 'did', 'got' 'some' could not be confidently translated (Case Study 4)

As a general rule, it was found that small sentences translated better than whole chunks of text but even word translations were not necessarily secure, and teachers' lack of knowledge of the pupils' first languages meant they were unable to help.

We were able to find most words although it was hard at times for me to be sure that we had found the right meaning for the context. For example the word offered by the dictionary in translation of the word 'weed' was 'haxixa hazina' pronounced hashi'sha hazina... (Case Study 7)

Some teachers attempted to 'test' the translation by feeding the translated text back into the engine. This was generally unsuccessful.

We did attempt to translate from Arabic back into English, both in order to clarify whether or not the translations made sense, and also to enable A to communicate more effectively than he could using English alone. This was not particularly successful unfortunately, and was abandoned fairly quickly. (Case Study 5)

One participant discovered another way of checking reliability whilst at the same time enhancing the pupil's comprehensible output.

In order to ensure, as far as possible, that the translation engine was producing an adequate result, I asked A to explain some of the words that we found and, for many of them, the result was good. Equally, it was sometimes possible to tell from his spontaneous comments whether or not the translation made sense. However, without constant interrogation, it would not be possible to ensure that the meaning of the text was, in fact, being accurately conveyed by the translation engine. See examples below:

Word or phrase to be translated	A's response
Twins	Two. There's two.
To decide	He have to say 'This? Or this?'
narrow yard	At the back. Like this. (Appropriate gesture)
to pick up	He cut?
Treasure hunt	*
Nest	Bird (Pointing to tree)
Branches	Ah! Tree up again!
Nodded	*
nod/s	*

*Not able to find an adequate translation for this
(Case study 5)

However, the limitations of many of the tested e-translators made them less than ideal in rendering content comprehensible and in encouraging learner independence. In many of the studies, rather than the e-translator becoming a learning aid it was something of a burden and the EAL specialist provided much more than 'normal' support time to the learner.

They (the pupils) needed an adult with an advanced understanding of English to be able to re-word the questions, sometimes several times, into a format that InterTran understood and could work with. Even then, some of the choices were ludicrous ('donkey' instead of 'is' for example!) (Case Study 4)

It would have been impossible for her to work without intensive adult support which, unfortunately, is rarely available. Even though she was extremely competent when using the computer, with good keyboard skills and a secure grasp of how to use the translation engine, Anna needed help in selecting the appropriate languages, and she needed someone to explain the activity quite carefully. (Case Study 1)

There needed to be an adult supporting the activity, as typing in an unfamiliar language can be laborious and time-consuming. Particular difficulties include un-noticed spelling mistakes and attempting to translate unfamiliar English names – 'Andy' 'Kate' and 'Jill'. Additionally, it was often necessary to re-word or shorten a phrase in order to receive an adequate translation, something that can only be done by an already-competent speaker of the language. The principal difficulty, of course, is that without even a basic knowledge of written or spoken Arabic, it is almost impossible to judge whether or not a translation is accurate enough to make sense. (Case Study 5)

The advantage of this was that the exercise engaged the teacher in some way with the pupils' first language

It was also useful in making the language-learning activity a two-way process so that Anna was able to learn the English she needed, but was also able to teach me the equivalent phrases in Dutch. (Case Study 1)

Motivational and other benefits of acknowledging and using first languages

All the case studies noted that initial motivation of EAL learners was increased by their access to e-translation.

A was deeply engaged in the task (to such an extent that he failed to notice all the other pupils leaving for lunch!) and expressed great satisfaction when clarification was obtained quickly and easily. He read at speed, appeared to have understood the text, and enjoyed an opportunity to work productively at an appropriate level. (Case Study 5)

N absent for the next session but on arriving back at school was eager to continue as she enjoyed working on this project. (Case Study 3)

Anna enjoyed using the computer during lesson time and found Babelfish easy to use. For her, being able to use the computer during a part of the lesson she would normally have great difficulty in understanding meant that she could maintain her interest in the lesson. Additionally, she was able to approach the group work with more confidence, knowing that she fully understood what she needed to do. (Case Study 1)

Although much has been written about the importance of 'recognising and valuing' linguistic diversity, very few examples are given of how this might be encouraged in practice, particularly in situations where few learners or teachers share a common language. One of the major advantages of using e-translators was the recognition of learners' home language in a high status context which resulted in clear social advantages for the pupil and often enhanced confidence.

What was abundantly clear to me however, was the delight and relief experienced by the pupil on discovering 'his' language in school. He spent some time avidly reading the homepage before translating parts of it for my benefit, and was pleased and proud to be able to demonstrate his knowledge of the language and aptitude for reading. (Case Study 5)

Anna was also able to make connections with other pupils in the class who were interested both in the work that she was doing on the computer, and in finding out about the Dutch language as a result. She was able to successfully complete a task that her peers were also engaged in for the first time. (Case Study 1)

Carrying out this project has helped me to understand that when pupils come into primary school at an early age they may have had very few opportunities to develop their first language in an academic context. It was interesting to hear the first language exchanges that took place when pupil M joined the sessions and this may be a way forward for some children to work. (Case Study 3)

All the pupils, without exception, were initially thrilled to be given access to their preferred language in the classroom, particularly in the context of a high-status activity such as ICT. I am slightly concerned, however, that the end result could easily be to isolate bilingual pupils from their peers. Class teachers were so pleased to have their 'problem' children taken away to do 'special' work, and none expressed any interest either in the work that had been done or how it might be adapted for use on a regular basis. (Case Study 5)

There is no doubt that the sessions were beneficial to R and it is reported by his teacher that he tackled his coursework with increased confidence. The use of the internet possibly only served to speed up the process of locating words, as compared to using a paper based dictionary. However the internet did provide instant access to media resources such as photographs and video. We even found a short video clip of limbo dancing from a video search on 'Yahoo' <http://uk.search.yahoo.com/video> that greatly added to R's understanding of the poem 'Limbo' by Edward Kamau Brathwaite. (Case Study 7)

The only exception to this was the contemporaneous use of e-translation in the ICT session

However overall this proved to be rather distracting during the main teaching part of the lesson for the pupil who had to switch from listening to the teacher, then listening to me, then turning to the computer to look up the word. By the time this had been done the teacher had moved on and we had missed a small chunk of her input. During the independent task we were able to use translation more successfully but I felt that the pupil felt rather hindered by the interruptions: he was very anxious

to be seen to be coping with the lesson in line with the rest of his classmates. (Case Study 6)

This led the case study author to conclude that:

Pupils with a developing use of English find it easy to use the technology independently but the lesson would still need to be carefully planned by the subject teacher so that the pupil would know which words/phrases were key to the lesson objectives and therefore 'worthy' of translation.... Compared to my experiences of using e-translation in a withdrawal session the benefits of in-class support were less obvious. In order to make in-class e-translation effective there needs to be joint planning between subject and specialist EAL staff, including the identification of a pc or laptop for the pupil to use. (Case Study 6)

Focusing on form and function

Limitations in the technical and linguistic capabilities of the e-translators did have advantages. Key amongst these was the way that they helped draw the learner's attention to the relationship between form and function.

In the end the exercise was abandoned – we managed to ask and answer only 3/20 questions successfully, both because the questions were untranslatable, and due to lack of time. However the boys benefited from the session in a variety of ways. They both had a much clearer understanding of the science material we had managed to translate – not because of the effectiveness of the translation, but because of the amount of time and energy they invested in discussing precise meanings of words in both English and Turkish. They also focussed on some of the 'woolly' words in English mentioned above and having that discussion in Turkish has improved their ability to use the vocabulary more effectively in subjects other than science. (Case Study 4)

The use of e translators was also helpful as an aid to independent learning where pupils were encouraged to examine their own level of comprehension of the text/material under study. Used in this way they provided a useful example of assessment for learning.

We read a paragraph at a time from the text, after which A would indicate which word or group of words he had difficulty in understanding. We then used the translation engine to work out what these words meant in Arabic, rather as if we were using a standard dictionary. In many ways this was a surprisingly efficient way to operate. A had to monitor his own understanding of the text and make decisions about which words needed translation. This meant he was able to choose to translate only those words that were central to his understanding in order to maintain the pace of the story. (Case Study 5)

The results were interesting. It was impossible to type in a phrase from the question and get a direct translation,

however, this made the boys look more closely at the English words used in the question and helped them to clarify which ones they understood clearly, which vaguely and which not at all. Interestingly, both boys have continued to use the discussion method in their wider learning, without any encouragement from staff, and even when they are working in different ability groups on separate tasks. Presumably this is because they have found the exercise beneficial, even though the translation activity itself was unsuccessful. Neither expressed any desire to use the translation engine again for other tasks. They both agreed that "It's too slow. It doesn't make sense. I'll ask my friend to help me – it's better!" (Case Study 4)

Conclusions

Although the case studies demonstrate the many shortcomings of current e-translation facilities, particularly in how well they can render content comprehensible, they also suggest a variety of ways of working with this technology to support pupils learning EAL. These include using e-translation to:

- Encourage a focus on form and function
- Engage the EAL learner in using metalanguage towards a better understanding of how English is constructed and used in meaningful and purposeful contexts
- Encourage self-assessment for learning to increase learners' independence
- Enhance motivation and promote recognition and valuing of pupils' first languages
- Engage monolingual teachers in gaining some understanding of aspects of learners' first languages

As a result of their involvement in the project, the teacher participants formulated a number of suggestions of ways to make the most effective use of e-translation. These included:

- allow time for prior research into e-translation facilities available
- ensure access to hardware, appropriate keyboards and first language dictionaries before the session begins
- be aware of the steps needed to ensure adequate e-translation, for example:
 - Use complete sentences, correct grammar, spelling, and punctuation.
 - Keep sentences simple and short
 - Avoid slang terms and idioms.
 - Avoid pronouns and missing out words.
 - Capitalize names
 - Avoid abbreviations, acronyms and non-standard contractions
 - Keep adjectives and adverbs close to the words they modify

- Avoid sentences that begin with 'it is' followed by an adjective²
- prepare some basic translations of classroom instructions for pupils to read before starting work so they can be reassured that they have understood the task, and can start work immediately
- use images to support learning in the event that e-translation fails
- work with pairs of learners if possible
- acquire some understanding of how the learner's first language works
- ensure mainstream teachers and parents are aware of the opportunities to use e-translation to support learners to understand English and to continue to develop their first language
- ensure that principles of good practice in relation to EAL teaching and learning are applied when using e-translation

References and further information

DfES (2006) *Learning and teaching for bilingual children in the primary years* London:DfES

Available from
http://www.standards.dfes.gov.uk/primary/publications/inclusion/bi_children/

Davies, N. (ed) (2005) *Teaching Isolated Bilingual Learners* Luton: NALDIC

All individual case studies are available online at
<http://www.naldic.org.uk/docs/resources/ICT.cf>

¹ For an example of the use of e-translation with non-literate learners, see Chris Pim's 2005 case study of using Babelfish alongside Readplease 2003 (<http://www.readplease.com/>), a free software that reads out any inputted text in a synthesized voice, to support a non-literate French speaking early stage learner of English. Pim, C. (2005) *Online translation, text-to-speech synthesisers and Microsoft Agent technology: Use of home language to provide a route into the curriculum* Available from
<http://www.naldic.org.uk/docs/resources/documents/Useofhomelanguagetoprovidearouteintothe curriculum.pdf>

² Adapted from guidance for users on the e-PALS Global Network site which involves learners in 191 countries in an online classroom community. The community can be accessed at
<http://www.epals.com/community/>