Core Vocabularies: Same or different for Bilingual Language Learning and Literacy Skill building with Symbols?

Introduction

The importance of culturally and linguistically suitable symbol sets for those using augmentative and alternative forms of communication has been discussed in the past (Huer M.(1997), Nakamura et al (1998)) and yet there remain very few freely available symbol sets that are suitable for use in the Gulf Region. This may in part be due to the fact that many therapists and teachers working in this area are not Arabic speaking and tend to use systems that have been developed in English speaking nations with a simple word for word translation between English and Arabic. Although this appears to offer a satisfactory bilingual strategy, difficulties have been encountered by AAC users where not only are the symbols failing to meet their needs but the lexical concepts may also be incompatible. Core vocabularies are deemed to be suitable across languages and environments (Baker et al, 2000) but this may not always be the case in the early stages of vocabulary building and it is this concern that has led to the research described in this paper.

Aim

Due to the lack of freely available basic Arabic word or phrase symbol set vocabularies, the research project team felt that it was essential to produce a dictionary that could provide localised lexical concepts. These needed to suit the cultural social and environmental settings as well as complement symbol sets already in use. The core and fringe vocabularies had to be appropriate for symbol users as well as for those with language and literacy learning difficulties.

Method

During the first two years of the project Arabic word lists were gathered from schools, clinics and hospitals with the support of AAC users, their families, carers, teachers and therapists. These lists were filtered to remove duplicates and categorised by frequency of use and parts of speech. Initially 100 core words were selected, this was followed by a further 400. The top 500 were compared with five Arabic word frequency lists gathered from language learners (Buckwalter et al (2014) and Kilgarriff et al (2013)), commentaries on Aljazeera (Zaghouani, 2013) and The Supreme Education Council literacy lists Grade 1,2,3 and Lebanese reading lists (Oweini and Hazoury, 2010). The aim was to make sure that those word lists offered to AAC users, language and literacy learners contained an accurate representation of what would be considered a localised core vocabulary rather than one that had been adapted from English.

Results
At the outset it appeared that the top 100 locally collected words were mainly nouns and verbs in comparison to the English core vocabulary lists gathered by Banajee et al (2003), Van Tatenhove (2009) and others, where no nouns appear and other parts of speech such as pronouns, adjectives and prepositions are well represented. However, as the local list grew to 500 words the differences in parts of speech between the English list collected from five adult AAC users by Beukelman et al (1984) and Arabic AAC user list changed in their proportions. There were still around 23% more nouns in the Arabic AAC lists but the use of verbs dwindled in its difference. In English there remained an increased use of pronouns and adverbs but these words are often adapted with additional elements such as I’ll in English and can be seen as part of another word in Arabic, so not counted. When the localised AAC user list of 500 Arabic words was compared against the most frequently used Arabic word lists it was found that the lists compared favourably. This confirmed that in most cases a minimal addition of some parts of speech would be required to make up acceptable core vocabularies for Arabic AAC users.

<table>
<thead>
<tr>
<th>Parts of speech</th>
<th>Local Arabic list</th>
<th>Kelly (spoken Arabic)</th>
<th>SEC (MSA Arabic)</th>
<th>Buckwalter (spoken Arabic)</th>
<th>Aljazeera (Colloquial Arabic in comments)</th>
<th>Oweini (MSA Arabic)</th>
<th>Beukelman (5 English Adult AAC users)</th>
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</thead>
<tbody>
<tr>
<td>Verbs</td>
<td>21.8%</td>
<td>17.6%</td>
<td>12.6%</td>
<td>15.6%</td>
<td>8.6%</td>
<td>16.9%</td>
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<tr>
<td>Nouns</td>
<td>50.2%</td>
<td>63.2%</td>
<td>62.8%</td>
<td>44.2%</td>
<td>41.2%</td>
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<td>Pronouns</td>
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<td>3%</td>
<td>8.8%</td>
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<tr>
<td>Adjectives</td>
<td>13.6%</td>
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<tr>
<td>Prepositions</td>
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<td>Negative particles</td>
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<tr>
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<tr>
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</tbody>
</table>

Table 1 Use of certain parts of speech within 7 word lists

(Further statistics to be produced in final paper)

Conclusion

The use of more nouns that are concrete in nature and easy to produce as symbols is a known phenomenon in AAC user lists, but the often similar distribution between nouns, verbs, pronouns and adjectives in all the Arabic lists shows that the locally collected lists are not so different from those collected from wider Arabic speaking populations. However, there still remain considerable differences between the English adult AAC users list of 500 words and the local Arabic AAC word list. A further analysis of the data is required to explain the differences in frequency of use for individual parts of speech as well as the linguistic nature of the entries. (to be completed for the publication)

It appears that more research is required where some languages differ in their syntax in order to present an efficient way of offering suitable core vocabularies to
those who are AAC users living in bilingual environments. The small number of words needed as building blocks to successful language and literacy acquisition cannot necessarily be based on a straight forward ‘word for word’ translation however appealing this may appear to symbol set creators.

Word count 948

Acknowledgements
To be completed after review as they would affect the anonymous nature of this extended abstract.

References


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