Chapter 5

Conclusion

5.1 Introduction

This chapter examines the contribution made by this study to research on immersion, and specifically its effects on vocabulary size, within the South African context. It discusses the limitations and the practical implications of the study and makes suggestions for possible further research in the field.

5.2 Review

The aim of the study was to consider various types of immersion situations in the South African school context in an attempt to make a contribution to current understanding of the effects of immersion on students' second language acquisition, specifically their vocabulary size. This section comments on the findings and explains whether they support the aims and address the research problems as expressed in Chapter 1.

5.2.1 Summary of major findings

As stated in §1.4, this study aimed to investigate the effects of two different conditions of immersion on Grade 7 L2 students' vocabulary size, and to compare this vocabulary size to that of MT speakers of English. The findings revealed that, in the case of receptive vocabulary at least, the two conditions of immersion, length and quality, had a significant effect on vocabulary size at certain levels of vocabulary. As was expected at the outset, MT speakers of English, used as a benchmark or foil against which to compare the size of the immersion subjects' vocabulary, scored consistently and significantly higher than the groups that had experienced the least exposure to immersion, that is the late and shallow immersion subjects.

Scores of early and late immersion candidates, however, differed significantly on Test A only at the 2000-word level: at the 3000-word level the scores of these two groups were very similar, suggesting that neither of these immersion groups had reached the stage noted by Laufer (1994) at which one's vocabulary moves from basic (1000 to 2000 word families) to above-basic words (3000-word level and above). This pattern was only partly reflected in the scores of deep and shallow immersion subjects on this test: the former group scored significantly higher than the latter at the 2000-word level as well as at the 3000-word level. This may imply that the effects of quality of immersion were influential enough to start pushing DI learners' vocabulary beyond the basic level and into the above-basic, 3000-plus word level. MT English speakers and the deep immersion group did not differ significantly at any of the levels of this test, however, which may suggest that the gap between the two groups is gradually narrowing as a result of the quality of immersion being experienced. On the other hand, there were significant differences between the MT English speakers and the early immersion group at the 3000-word level on Test A at least, which might indicate that, at above-basic levels of vocabulary, the variable of quality of immersion may be more conducive to a closing of the gap between the immersion groups and the mother-tongue speakers of English than time spent in an immersion classroom.

Scores on the five levels of the VLT revealed some significant differences between the conditions. MT English speakers scored significantly to very significantly higher than shallow and late immersion subjects – again, this confirmed what I had initially assumed would be the case. Early immersion subjects achieved significantly higher scores than the late immersion subjects at the 2000-word, 3000-word and 5000-word levels, while there was a significant difference between deep and shallow immersion subjects at the 3000-word level only. This may support the notion that, despite the effects of quality of immersion noted in the results of Test A in the previous paragraph, in the earlier stages of vocabulary development (that is, the basic vocabulary levels) length of immersion may have a more significant effect on vocabulary size than quality of immersion. ANOVAs revealed slightly more significant effects for the length of immersion variable in general (26 instances as opposed to 24 for the quality of immersion variable), and more very highly significant differences specifically (11 as opposed to 9). It is also worth noting that the only significant interaction effect occurred at the 5000-word level of the VLT, which could be regarded as a cut-off point between basic and above-basic vocabulary: perhaps at the higher levels of vocabulary, and where cognitive development and maturation begin to

play a role, the effects of length and quality may begin to blur. The fact that there were no significant differences between the immersion groups at the UWL or 10 000-word level may well be because very few subjects from any of the groups, even the MT English speaking students, could answer the questions from the last two levels of the test. This is not surprising, given these students' maturational and cognitive level, as the test was designed originally for entry-level university students, not students about to enter high school.

As far as receptive vocabulary size is concerned, both conditions of immersion could be said to have affected vocabulary size. There were significant differences between the early and late immersion groups, as well as between the MT English speakers and the late immersion subjects. Deep and shallow immersion subjects did not differ significantly overall, though again the vocabulary of shallow immersion subjects was much smaller than that of the MT subjects.

Productive vocabulary scores produced less conclusive results. Neither the one-way nor the two-way ANOVAs revealed any significant differences between any of the groups, including MT English speakers, at any of the four levels of vocabulary. As was discussed in some detail in §4.5, this may have been a result of the fact that it was a free active/productive exercise which did not force children to extend themselves and use vocabulary from more advanced levels than the 1000- and 2000-word levels. Another limitation was the fact that data were obtained from only one relatively short writing test. Whatever the reason, it is clear that all the children in the study, mother-tongue speakers of English as well as the immersion children, reveal a fairly limited productive vocabulary, and one that is drawn predominantly from basic vocabulary – that is, the 1000- and 2000-word levels.

5.2.2 Contribution of the study

Research has indicated that good reading and understanding of text requires a vocabulary of at least 3000 word families (5000 words). With a vocabulary of this size, L2 readers will be able to comprehend 95 to 98 percent of the words in an academic text and should be able to guess the words they do not know from the context (Coady, 1997a; Laufer and Nation, 1995; Laufer, 1992; Nation, 1990). Thus a vocabulary of this size is very important for success in academic studies or at secondary

school. Research has also shown that much vocabulary can be learnt incidentally (Grabe and Stoller, 1997; Newton, 1989, in Nation and Newton, 1997; Wode,1995, 1999) (§2.3.2.1). The results of this study make a contribution in this area in that they reveal that, in the South African context at least, immersion on its own is not enough when it comes to building a vocabulary large enough to cope with the demands of academic texts at high school level. This is particularly the case where receptive vocabulary is concerned. Simply exposing children to immersion in an English speaking environment and expecting them to build up an adequate vocabulary on their own is not enough: some intervention is necessary. Second language students, particularly those who have not mastered at least the first 2000 high frequency words in English, will need some explicit vocabulary instruction to reach a level of vocabulary size commensurate with that of speakers of English as mother tongue in their age group. Incidental learning through communicative language activities does not seem to be adequate in building up a large enough vocabulary. As Swain (1998) advocates, there is a need for more pushed output.

Productive vocabulary size was particularly small across all groups, including MT English speakers. All subjects used a very small proportion of words from the 3000- and above 3000-word levels, showing very little variation in their vocabularies. This may have been as a result of the type of exercise, which did not insist on the use of particular low frequency words, although in the Kiel study (Daniel and Nerlich, 1998; Kickler, 1995; Wode, 1995, 1998), which made use of the same activity to elicit productive data, immersion children produced more words in total and more different types, as well as more words that they could only have learnt incidentally from teacher talk or other sources outside the classroom, than their non-immersion counterparts. Unlike the Kiel studies, the present study used data from the MT English speakers as a benchmark against which to compare the scores of the immersion groups. The fact that even these children used so few words from the above-basic levels indicates the generally low level of productive vocabulary across the whole spectrum of this cross-section of the South African Grade 7 pupil population, and is a finding that can probably be extrapolated to writing skills of primary school students in general.

A further contribution made by this study is that it adds to an understanding of the nuances in the concept of immersion by providing a categorisation of different types of immersion within the South African school setting. It draws attention to the fact that different schools may present very different

immersion environments, even those schools that are supposedly similar and classed in the same category, such as the ex-'Model C' schools used in this study. This highlights the fact that differences between categories, such as ex-'Model C', rural and township schools, for instance, may be vast, even when all the schools fall within the ambit of the same national education department. It also reminds one that there are children in the same classroom who may have experienced very different periods of immersion, and yet very few if any concessions have been made for this fact. It is hoped that this categorisation will make a methodological contribution and may prove useful when applied in other studies dealing with immersion in the South African context.

5.2.3 Limitations of the study

Several limitations to the study did emerge. The two schools used in the study did not prove to be as different as had been initially presumed: however, on a positive note, two contexts at the top end of the immersion continuum were compared, and nevertheless differences were found. Both schools were staffed by a very similar cohort of teachers who, in the main, spoke English either as a home language, or very fluently. School business was conducted through the medium of English. The schools were situated in the same city and children were exposed to very much the same influences as far as language input is concerned. But the schools were differentiated by their pupil make-up. Although, theoretically, students at the two schools received the same kind of language support and had much the same opportunity for output, the reality was that the Grade 7 group at School S, being as it was almost entirely African language speaking, probably used one or more of several of the students' L1s as the language of communication, both socially as well as within the more formal confines of the classroom. This might also have affected the students' chances for pushed output and meaningful feedback, as much of their conversation was likely to have been in their L1. Most children spoke one of the Sotho languages as mother tongue. These are closely related, which probably meant that there was less need for code-switching between the L1 and English.

In addition, the fact that there were pronounced differences between late immersion, shallow immersion and mother-tongue speakers of English within the context of, on the surface at least, rather similar schools, lends weight to the argument that these differences could be extrapolated to other schools in

the South African context: much greater differences could be predicted between ex-'Model C' schools and township and rural schools, for instance.

A second limitation to the study was the fact that testing conditions were not identical. School D provided for a more favourable testing situation in that the children were tested over a period of two days, with less chance of fatigue becoming a factor. However, this did mean that absenteeism became an issue, and the data of some subjects had to be removed as they had missed part of the testing process. Subjects at School S were tested over a single day and fatigue and boredom with the testing process may have been a factor. However, the potential for absenteeism was ruled out. In any future study an effort should be made to standardise the actual testing process as far as possible.

As far as the materials are concerned, some items in Test B produced unexpected and skewed results. These anomalies may have been caused by the items themselves, or may have been the result of outliers.

The writing exercise may have produced scores more reflective of reality had it been a controlled free writing exercise, as mentioned earlier (§5.2.2). This would have pushed children to use more of the low frequency words that they knew. They were not forced, or pushed (Swain, 1996), to extend themselves lexically. Also, motivation may have played a role, particularly in the poor writing performance of the MT English group. During the data gathering I found it was necessary to encourage some children more than once to keep writing and to make sure that they had answered all the questions at length. However, the exercise was selected partly in order to give this study some comparability with the Kiel study.

Another point which could be regarded as a limitation is that the present study considered only how many word types subjects used in their productive vocabulary. But as Laufer (1994:30) notes, '[s]ince the vocabulary quality of a piece of writing depends on the type of words used and also on an effective way of varying these words, both measures of lexical richness (lexical profile and lexical variation) seem to be necessary in the assessment of writing.' By variation is meant the number of different word types used by a subject, and how these are spread across the word classes. However, it should also be kept in mind that the productive data was not the main focus of this study.

5.3 Implications for further research

From the results it appears that although in many cases there were no significant differences between early and late or between deep and shallow immersion subjects, what is clear is that the gap between mother-tongue speakers of English and those subjects who have experienced a shorter period or lesser degree of immersion is pronounced. Something in the way of conscious intervention and scaffolding is necessary on the part of teachers if the vocabulary of these children in immersion is to grow to a level at which they can access the academic textbooks they will encounter at high school. Genesee (1978, in Obadia, 1998) reports, for instance, that late immersion programmes have been found to be as successful in their results as early immersion programmes – success depends much of the time not on extent of exposure but on quality of teaching. Stevens (1983, in Genesee, 1998) compared the achievement in the L2 of a group of partial late immersion students in Montreal with that of a teacher-centred, curriculum driven conventional total late immersion programme. She found that the two groups reached the same level of second language proficiency, despite the fact that the former programme, which was student-centred, provided only half as much exposure to the target language. Both these studies underline the importance of teacher input and teaching method in immersion programmes, and this is an area that requires investigation, particularly in some current ex-'Model C' schools in South Africa. At present it seems that very few concessions are made for L2 students in such South African schools, and that they are simply expected to cope lexically. In the Schleswig-Holstein programme, for instance, booster periods were provided in addition to the students' traditional English-as-subject lessons, in order to prepare them better for immersion when it was introduced (Burmeister, 1998). Future studies could examine the feasibility of similar programmes in South African schools.

Explicit teaching of vocabulary might help to close the apparent gap in vocabulary size between MT English speakers and immersion students, but this depends on whether this gap is merely an inadequate vocabulary size or whether it is a reflection of generally poor reading skills. Immersion children may not have adequately developed their CALP skills in their L1, which means they will have difficulty in transferring these skills to their L2. Further studies will need to investigate this possibility. If these immersion children are entering an English speaking environment later in their school career, are their reading skills in their L1 well enough developed to allow them to transfer CALP skills to the L2? Are

children who enter this system early being given the chance to develop CALP skills in their L1 at all? In either case, simply teaching vocabulary might not be enough.

Both basic and academic vocabulary are required to meet Laufer's (1992) vital requirement of 95 percent of text coverage for comprehension. Given that some of the groups in this study performed very poorly at all levels of vocabulary, it seems that these children do not even have an adequate knowledge of the most basic vocabulary (1000- and 2000-word levels), let alone the 3000-word level and above. It is imperative that they do progress towards this level though, as they are on the threshold of high school where texts become increasingly academic in their focus, and where they will need a thorough knowledge of at least the 2000 high frequency words as well as a developing knowledge of the UWL or 3000-word level which will provide 90 to 95 percent text coverage and will allow students to read to learn (Alderson, 1984, in Laufer, 1997; Cooper, 1999; Hacquebord, 1994; Laufer, 1992, 1997; Nation, 1990; Pretorius, 2000; Smyth, 2002). This indicates a need for research into the efficacy of vocabulary instruction, particularly of the basic levels of vocabulary, at primary school level.

There is definitely scope for more research into the effects of immersion in South African schools. Follow-up research should look at the differences between immersion in ex-'Model C' schools and township and rural schools. These three categories would provide three very different scenarios. Given the research into the importance of a vocabulary of adequate size to cope with academic texts, and given the results of this study, which show that immersion children from relatively privileged and well-resourced schools have in most cases not built up a big enough vocabulary for academic study to be successful, there is certainly a case for research into methods of increasing vocabulary size in the immersion classroom.

5.4 Conclusion

This study does make a contribution in so far as it adds to the general understanding of the state of immersion in South African schools, by providing some insight into the effects of different kinds of immersion on one aspect of language acquisition, vocabulary. That this is a vital part of language knowledge has been clearly attested to. As Corson (1985:3) puts it:

After the very earliest stages of schooling, when children have learnt to structure their language, the chief linguistic factor which influences the communication of meanings is the content of their language: the use of *words*. By their choice and use of words children can explain, describe, justify and impress with their display of knowledge. Language theorists in education have often overlooked a fact that experienced classroom teachers tacitly acknowledge in their daily practice: that it is the different ways children can and want to use *words* in schooling which is the measure of their language ability and the measure of much of their success potential in education. [...] To a very large extent, then, educational failure or success depends on children having the words, wanting to use them and being able to use them.