CHAPTER SIX

PRESENTATION AND ANALYSIS OF QUANTITATIVE DATA: LEARNERS' RESPONSES

6.1 INTRODUCTION

The previous chapter dealt with the analysis of the teachers' responses to the questions set in the questionnaire to gather information for the researcher to be able to answer the research questions. The present chapter deals with the views of the learners in response to questions similar to those set for the teachers. These responses were analysed to answer the main research questions, which will subsequently address the main objective of the study.

The learners' views, like those of the teachers were divided into three main sections according to their relevance to the sub-themes of the study: (i) The first section deals with the learners' subjective self-evaluation of their proficiency in English (as the language of focus in the study because of its role as LoLT), and their evaluation of their teachers' proficiency in English. The learners' views on the teachers' proficiency, as well as their own proficiency in English are important because they impact on their views on CS in the classroom by each group of respondents. (ii) The second section deals with the learners' views on the role of English and Setswana in education, including CS between the two in the classroom. (iii) The third section deals with the learners' views on the use of Setswana and other indigenous languages as the LoLT.

6.2 PRESENTATION FORMAT OF THE ANALYZED DATA IN THE PRESENT CHAPTER

The independent variables used to further analyze the learners' data are:

- academic ability.
- fluency in speaking English (fluent or not fluent); and
- form / grade (F 4 or F 5);

- Gender;
- home language;
- school location (urban or peri-urban);

Academic ability was not measured in any scientific way. Instead, the learners' Junior Certificate examination results, including their performance in the Science subjects, were used by schools to categorize learners into three main streams viz.: low ability (LA), medium ability (MA) and high ability (HA). As explained in Chapter Three, the LA learners were considered academically weak and followed a combined Science syllabus that culminated in a single Science examination consisting of components of Physics, Chemistry and Biology. This syllabus was considered basic to expose the learners to the basic principles in each of the three Sciences. The MA learners were considered to be of average ability and followed a syllabus that culminated in two Science examination papers. The two papers were considered academically more challenging than the paper for LA learners. The HA learners were considered to be the academically gifted group and were offered the three Sciences separately -- both the core and the extended versions. Since the classes were already streamed into these three categories, academic ability was used as an independent variable to investigate whether or not it had any significant influence on CS by learners.

The data on the analysis of the dependent variables by the learners' independent variables will be dealt with in the same way as was done with the teachers' data. The results of the effect of the independent variables on the dependent variables are not presented in tabular format but only reported on owing to a lack of space.

In addition to subjecting some of the results to statistical tests to confirm their significance or non-significance, the effect size was also calculated as the learners' sample was very large. As previously reported in Chapter Four (cf. Section 4.3), the effect size was calculated to confirm whether the relationship is real or random.

6.3 LEARNERS' EVALUATION OF THEIR COMPETENCE AND THE TEACHERS' COMPETENCE IN THE LANGUAGE USE IN CLASS

Table 6.1: Learners' self-evaluation in proficiency in English use in class (RQ5 ii)

	Very well		Well		Not that well		Total		M Frq
Language Skills	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**
1. Write tasks	439	20	1435	64	351	16	2225	100	142
2. Read texts	993	45	1078	48	153	7	2224	100	143
3. Understand teachers' explanations of concepts	617	28	1249	56	372	17	2238	100	129
4. Answer questions in the examination	474	21	1356	61	401	18	2231	100	136
5. Answer questions during the lesson	591	27	1211	54	429	19	2231	100	136

The results in Table 6.1 above show that the majority of the learners rated their proficiency in English as very well or well. Eighty four percent were positive about their writing skill; 93% about their reading skill; 83% about their comprehension of explanation of concepts in class; 82% about the way they answer questions in the examinations; and 81% about the way they answer questions (orally) during the lesson.

The results show that the majority of the learners considered themselves to have mastered the language skills in English. Because of the unavailability of oral examinations in either English or Setswana (Nkosana, 2006), the question on examinations referred to only written examinations. The results also suggest that the learners' speaking and understanding skills are not as strong as their writing and reading skills. This of course, has an effect on the use of CS in the classroom.

Influence of independent variables on the dependent variables

The results showed that the majority of the learners, irrespective of gender, school location, form / grade, and academic ability considered themselves fluent in the four types of language competence: writing, reading, understanding, and speaking. However, the following results showed that the effect of form / grade and HL on some of the dependent variables contained in Table 6.1 above were significant: more F 5

than F 4 learners considered that they read and wrote well in English as indicated by the percentages: 85% vs. 79%, and 94% vs. 92% respectively. The results above were also statistically significant, showing that the relationship between form / grade and the learners' opinion of their proficiency in reading and their interpretation and writing skills during an examination written in English was highly significant ($p = 0.004$, and $p = 0.001$ respectively). Both results had a small effect size (0.07), showing that there was a small association between the learners' opinion and the view that they generally read well in English, and also interpreted and answered examination questions well in English. Subsequent results with the same effect size should also be interpreted in the same way. The high statistical significance of the results could have been largely due to the large sample size. Therefore, in reality, the differences in the learners' proficiency in reading, interpreting, and answering examinations in English may not be as highly significant as the results suggest. Conversely, the differences in the learners' views about the effect of form / grade on the learners' writing, understanding teachers' explanation of concepts, and answering questions during the lessons were not that significant, suggesting that there was not much difference in competence between F 5 and F 4 learners (writing: 85% vs. 83%; understanding explanation of concepts: 88% vs. 80%; and answering a question orally in class: 81% vs. 81%). The results above were not statistically significant.

HL also had a significant influence on the learners' views on their competence in writing, understanding the explanation of concepts, spoken English in class; and interpretation and writing of examinations in English. The results showed that, generally, the majority of the learners, irrespective of their HL, considered themselves very competent in all four the domains of language. However, more learners whose HL is English considered themselves to be more competent than the others. The majority of the other learners whose HL is either Setswana or Ikalanga or 'Others' rated their overall competence in English as average, except for 47% of the learners whose HL is Setswana, and 48% of learners who had more than one HL, and who stated that they read very well in English. The results are not unexpected in that the learners for whom English is a HL had a head-start in the acquisition of English. So, naturally, their competence should be better than that of the other learners. For the other learners, English was either a second or even a third language that was mainly learnt and used at school.

The results showing the differences in the learners' responses were statistically significant. The effect of HL on the learners' responses to their competence in the domains of writing and understanding of the explanation of concepts in English was statistically highly significant (p = 0.006 and p = < 0.0001 respectively). Both results had a small effect size of (0.08) and (0.06) respectively. In addition, the relationship between the learners' HL and their spoken English during the lessons was statistically significant (p = 0.04) with no effect size, showing that the size of the sample had no effect on the significance of the results. (Again, subsequent results with no effect size should be interpreted in the same way). The effect of HL on the learners' views about their competence in interpreting and writing examinations in English also had a tendency towards statistical significance (p = 0.06), showing no effect size. The results are significant, especially the results on the learners' competence in the domains of speaking and understanding of English.

The results suggest that the majority of the learners, apart from those whose HL is English, were likely to CS to Setswana, and their teachers were also likely to CS to Setswana to facilitate communication in the classroom, which impacts on teaching and learning. The results on the effect of HL on the learners' reading proficiency in English were not statistically significant.

The results of the effect of gender, school location, fluency in speaking English and academic ability on the learners' self-evaluation in their competence in all four the domains of language were not significant. The majority of the learners, irrespective of these four independent variables, considered themselves to be proficient in English as they maintained that they wrote, understood, interpreted and answered examinations questions, and read well in English. The learners' best domain of language competence was reading as 63% of the learners fluent in English; 53% of the HA learners; 47% of the female learners and 50% of the learners at S 1 considered themselves to be proficient readers in English. However, the differences in the learners' responses stated above had no statistical significance. The results suggest that the majority of the learners, regardless of their gender, school location, fluency in speaking English and academic ability were less likely to CS to Setswana in class, and that it was also unnecessary for their teachers to CS in class. These results are interesting. The researcher will determine if these results are consistent with the

findings of the study, including the results from the qualitative data obtained through observation of the lessons.

Table 6.2: Learners' views on writing examinations in English (Q5 ii)

Question	Always		Sometimes		None		Total		M Frq
Written Communication	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**
1. Any problems writing examinations in English?	67	3	1576	70	601	27	2244	100	123

The results in Table 6.2 above show that the majority of the learners experienced problems from time to time when writing examinations in English as 73% of them stated. This is contradictory to what 82% of the learners said in Table 6.1 above that they interpreted and answered English well during examinations.

As indicated earlier, this study is limited to spoken communication during a lesson. Therefore it was not possible for the researcher to confirm or refute the assertions made by the learners regarding their proficiency in written English.

Influence of independent variables on dependent variables

The results indicated that effect of form / grade, gender, HL, school location, academic ability, and fluency in speaking English had a significant effect on the learners' views about their experiences when writing examinations in English: 76% of the F 4 learners and 70% of the F 5 learners; 71% of the male learners and 75% of the female learners stated that they experienced problems when writing examinations in English. In addition, the majority of the learners who spoke the following as home languages stated that they experienced problems when writing examinations in English: Setswana: 70%; Ikalanga: 77%; Others: 67%; and more than one HL: 75%. However, 63% of the learners for whom English is a HL stated that they did not experience problems when writing examinations in English. The results were statistically significant and showed the following:

The relationship between form / grade and the learners' opinion about their English proficiency during written examinations was statistically highly significant ($p = 0.007$),

with a small effect size (0.06). This shows that there was a small association between form and the learners' opinions: that more F 4 learners (76%) than F 5 learners (70%) **sometimes** experienced problems when answering examinations in English. The results suggest that CS was more likely to occur in the F 4 than in the F 5 classes. The relationship between gender and the learners' views was also statistically significant (p = 0.02) with no effect size, showing that there was a medium association between gender and the learners' opinions; that is, more girls than boys **sometimes** had problems writing examinations in English. The results suggest that girls were more likely to experience problems when writing examinations in English than boys.

The results of the relationship between HL and learners' opinion about the effect on writing examinations in English were statistically highly significant (p = 0.0003) with a small effect size (0.08): more learners for whom Setswana, Ikalanga and other indigenous languages were HLs were more likely to experience problems writing examinations in English than the learners for whom English was a HL. The results suggest that even though English was taught in schools and was also the LoLT in all subjects except Setswana, the majority of the learners still experienced problems with it. They have not yet fully acquired competence in understanding and writing in English. The results were consistent with the researcher's expectations regarding proficiency in English among learners whose HL was not English.

The results also indicated that the effect of school location, academic ability, and fluency in speaking English on the learners' views about the effect of writing examinations in English were not that significant: the majority of the learners, irrespective of school location, stated that they experienced problems when writing examinations in English (S 1: 64%; S 2: 74%; S 3: 74%; and S 4: 82%). The results suggest that the majority of the learners, regardless of the location of their schools, had not fully acquired proficiency in English. Although statistically the results appeared highly significant (p = <.0001), the effect size of 0.11 showed that the high significance was largely due to the large sample size. Therefore, there was only a small association between the results and reality. Similarly, although the majority of the LA (82%), MA (78%), and HA (60%) learners stated that they sometimes experienced problems when writing examinations in English, the results were statistically highly significant (p = <.0001) in that more LA and MA than HA learners

stated that they experienced problems when writing examinations in English. However, like the results above, the high significance is due to the sample size as indicated by a small effect size of 0.14. The same opinion was expressed by both the fluent and the non-fluent learners in English (57%, and 81% respectively). The difference in their opinions was also highly significant (p = <.0001) with a medium to large effect size of 0.26, showing that the results were not strongly influenced by sample size: there was a strong association between learners' opinions and that they experienced problems when writing examinations in English. The results suggest that the LA and MA learners as well as the non-fluent learners were likely to experience problems when writing examinations in English.

Table 6.3: Learners' evaluation of teachers' English proficiency in class (Q5 ii)

	VW		W		NW		Total		M Frq
Proficiency in English	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**
1. Writes in English	1807	77	494	21	34	2	2335	100	32
2. Reads English	1826	78	448	19	53	2	2327	100	40
3. Speaks English when explaining concepts in class	1452	62	762	33	123	5	2337	100	30

The results in Table 6.3 above show that almost all the learners had positive views about the teachers' proficiency in English. However, there were more learners who said that teachers wrote and read very well in English than those who said that they expressed themselves very well in spoken English (98% and 97% vs. 95%). The results imply that the teachers were highly proficient in English. However, their spoken English was not as good as their writing or reading skills. The same observation was made by the teachers about the learners' proficiency in spoken English (cf. Table 5.1). Therefore, the results may have an effect on CS in the classroom.

Influence of independent variables on the dependent variables

The results indicate that the majority of the learners, irrespective of school location, home language, form / grade, academic ability, fluency in speaking English, and gender considered their teachers to be proficient in English. The results were significant. However, more learners at peri-urban schools were satisfied with the

teachers' writing and reading proficiency than those at urban schools (writing: 82% and 80% vs. 72% and 76%; reading: 81% and 83% vs. 74% and 78% respectively). However, their views about the teachers' fluency in spoken English were similar at all four the schools (S 1 and S 2: 61% at each; and S 3: 60% and S 4: 67%). The results have a significant effect on CS as CS is a mode of oral communication. The differences in the learners' responses to the teachers' explanation of concepts in English were also statistically significant ($p = 0.02$), with no effect size. The results suggest that learners at both urban and peri-urban schools were of the view that, although their teachers had acquired overall competence in all four the domains of English, they were not as proficient in speaking as they were in the three other domains of the English language. The results suggest that teachers were likely to CS in class.

The learners' views (by HL) were similar to those expressed above: More learners considered their teachers to be more proficient in English writing and reading than in speaking. This was more evident from the learners whose HL was either English or who had more than one HL (56% and 55% respectively) as opposed to 61%; 65%; and 65% for Setswana, Ikalanga and 'Others', in that order. The results on the teachers' spoken English were not statistically significant, but results on the learners' views about teachers' writing proficiency in English were statistically significant ($p = 0.01$). The results were as follows: The number of learners for whom English is a HL and who considered teachers to be proficient in writing was not as high as for learners of other HLs (67% for English vs. 75% for Setswana; 81% for Ikalanga; 77% for 'Others'; and 73% for learners with more than one language). This suggests that learners in the former category, as speakers of English as a HL, were likely to feel that the proficiency of their teachers in English was not as good as theirs, as the latter were mainly speakers of English (teachers) as a second or a foreign language. The results had a small effect size (0.06).

The effect of form / grade on the learners' views about their teachers' writing and speaking was not that significant, but its effect on learners' views about their teachers' reading skills was significant. The results were statistically highly significant ($p = 0.008$), showing that slightly more F 4s (80%) than F 5s (77%) were of the view that their teachers were fluent readers in English. However, the results had a small effect size (0.06). Academic ability also had a significant effect on the learners' views on

their teachers' proficiency in writing and reading in English: more LA and MA than HA learners stated that their teachers were very proficient in writing and reading (80%, 81% and 82%; 81% respectively vs. 70% and 72%). The results show that there was no significant difference in the views of the LA and MA learners, but there was a difference in views between them and the HA learners. The differences in the learners' responses to the teachers' writing and reading were statistically highly significant (p = < 0.0001). However, the small effect size of 0.08 in both cases indicated that the high statistical significance of the results was strongly influenced by the large sample size. Therefore, there was only a small association between the results and reality. In addition, the effect of academic ability on the learners' views on their teachers' speaking proficiency when explaining concepts was significant: Almost the same proportion of LA and MA learners (64% and 65% respectively) stated that the teachers were fluent in spoken English, but slightly fewer HA learners (57%) held the same view. The results were statistically significant (p = 0.01), showing that more MA and LA learners than the HA learners were of the view that their teachers explain concepts very well in English. The results had no effect size.

The learners' rate of fluency in speaking English also had an effect on their views on their teachers' competence in English. More of the fluent learners and more of the non-fluent learners were more satisfied with their teachers' writing and reading proficiency than with the teachers' proficiency in spoken English (79%, 77% and 79%, 78% vs. 64%, and 61%). The results on the teachers' writing and reading proficiency were not significant but the results on their proficiency in speaking showed a tendency towards statistical significance (p = 0.08), with no effect size. The results suggest that teachers were not as proficient in speaking in English as they were in writing and reading, and were therefore likely to CS in class. Similarly, the majority of both the male and female learners stated that their teachers' speaking of English (61: 64) was not as good as their writing (77: 79) and reading (79: 79) in English. The results suggest that both boys and girls were satisfied with their teachers' proficiency in English. Hence there was no significant difference in the learners' views in respect of the three domains of language competence. Therefore, there was no statistical relationship between gender and the learners' views.

The results suggest that the majority of the learners, irrespective of all six the independent variables discussed above, considered their teachers to be proficient in

English, but their proficiency was more evident in writing and reading than in speaking. The results have a significant impact on CS in the classroom, suggesting that teachers are likely to CS during their lessons.

Table 6.4: Learners' attitude towards use of CS in class by the teachers (RQ 5 i)

Are you bothered by:	Very much		A little		Not at all		Total		M Frq
	N	%	N	%	N	%	N	%	N
1. Teachers' CS to Setswana in a non-Setswana class?	521	23	842	38	874	39	2237	100	130
2. Teachers' CS to English in a Setswana class?	800	36	670	30	755	34	2225	100	142
3. Teachers' CS to a local language in class?	607	27	688	31	939	42	2234	100	133

The results in Table 6.4 above show that there were more learners who had positive views on CS in class than those who were opposed to it. However, more learners seemed to object CS to English in a Setswana class than CS to either Setswana or a local language. The results suggest that learners did not see the justification for CS in a Setswana class since the LoLT was comprehensible to all the learners taking Setswana lessons. The results also suggest that learners viewed CS as a communication strategy used where the LoLT, such as English, was not effective.

Influence of independent variables on dependent variables

The results showed that all the independent variables (school location, gender, ability, form / grade, fluency in speaking English, and HL) had an effect on the learners' responses to the dependent variables contained in Table 6.4 above. However, the effect of form / grade and HL had no significant effect on the learners' views about CS to Setswana. In addition, the former (form / grade) had no significant effect on the learners' views about CS to a local language whilst the latter (HL) had no significant effect on the learners' views about CS to English in a Setswana class. In this regard, the aforementioned results were not statistically significant. Other independent variables (school location, gender, academic ability and fluency in speaking English) had a significant effect on the learners' views about CS to Setswana; to English in a

Setswana class; and to a local language. The aforementioned results were statistically significant.

For instance, whilst CS to Setswana was not a problematic issue at S 1 and S 2 (urban schools), it was somehow an issue at S 3 and S 4 (peri-urban schools). At the former, 47% and 40% of the learners were not at all bothered by the practice, but at the latter – the peri-urban schools -- 39% at each school were somehow bothered. The results suggest that Setswana as the HL for the majority of the learners at urban schools (S 1: 53%; S 2: 49%) was more acceptable in the classroom than at peri-urban schools where Ikalanga was the HL of the majority of the learners (S 3: 53%; S 4: 74%). Whilst the learners at the two urban schools did not object to teachers CS to English, those at the two peri-urban schools objected (S 1: 40%; S 2: 36% vs. S 3: 42%; S 4: 44%). The results suggest that CS to English was more likely to occur during Setswana classes at urban schools than at peri-urban schools). Only learners at one peri-urban school (S 4) were concerned about the teachers' CS to a local language as indicated by 48% of the learners, but at the other three schools (S 1: 48%; S 2; 44%; and S 3: 41%) CS to a local language was not a problematic issue. The results were unexpected in that learners at the two urban schools were expected to be opposed to CS to a local language, and those at S 3 (peri-urban school) to be in support of it as well as those at S 4 (peri-urban school), as the majority of the learners at S 1 and S 2 spoke Setswana as a HL, but the majority of the learners at S 3 and S 4 spoke a local language (Ikalanga) as HL, as stated above. The above results were all statistically highly significant (p = < 0.0001). However, the effect size of 0.11 (for CS to Setswana), 0.13 (for CS to English) and 0.09 (for CS to a local language) shows that the high significance was strongly influenced by the large sample size. In reality, therefore, there was a small association between the learners' views about CS in all three the scenarios.

The results also show that both boys and girls were not bothered by CS to Setswana. However, more boys than girls were not bothered by the practice (42% vs. 37%). The results suggest that boys were more likely to CS to Setswana than girls, as observed earlier by teachers that boys CS more than girls (cf. Table 5.6). Whilst girls said they were very much bothered by the teachers' CS to English in a Setswana class, almost the same proportion of boys said that they were not (37% vs. 38%). Both boys and

girls did not support CS to a local language (46%; 39%). The results suggest that more boys than girls were likely to CS to either English or Setswana, and that both groups of learners were less likely to CS to a local language. The results above were also statistically highly significant (p = < 0.0001). However, the small effect size of 0.08 for CS to Setswana, and 0.07 for CS to English or to a local language showed that the sample size influenced the significance of the results.

The results of the effect of academic ability on the learners' views on CS were significant: the majority of HA learners were not bothered by the teachers' CS; be it to Setswana (47%); or to English (43%); or to a local language (54%). The results suggest that HA learners were indifferent to CS use; and were of the opinion that CS did not have any bearing on their learning. More MA learners were not bothered by CS to Setswana or to a local language (38%, and 39% respectively), but had strong objections to CS to English as 40% of them indicated. This suggests that MA learners did not see the need for the teacher to CS to English since the majority of the learners were not proficient in it. LA learners strongly objected to CS to English or to a local language as indicated by 42% and 35% respectively; but not so much by CS to Setswana (42%; 35%; vs. 43%). The results suggest that LA learners only viewed CS to Setswana as educationally beneficial, but found CS to English in a Setswana class unnecessary, and CS to a local language unacceptable as none of the local languages was used in education except Setswana. The differences in the learners' views on CS in all three the cases were highly significant (p = < 0.0001), with a small effect size of 0.09, 0.12 and 0.13 in each case.

The views of both the fluent and the non-fluent learners were similar on the teachers' CS to Setswana and to a local language, but they differed from one another about the teachers' CS to English in a Setswana class. In the former (teachers' CS to Setswana and to a local language), 39% of both the fluent and the non-fluent learners stated that they had no objection, but in the latter (teachers' CS to English), 42% of the fluent learners stated that they did not object but 39% of the non-fluent said they had strong objections. The results were not unexpected in that the learners who were less fluent in English were expected to welcome CS to Setswana or to a local language. The results suggest that fluent learners were indifferent to CS, and did not consider its use to have any effect on their learning. However, the non-fluent learners found CS to Setswana or

to a local language educationally beneficial. Therefore, they were more likely to CS either to Setswana or to a local language in class than the fluent learners. Statistically, the relationship between fluency in speaking English and the learners' views on their teachers' CS in a non-Setswana class, and CS to English in a Setswana class was highly significant ($p = 0.009$) and ($p = < 0.0001$) respectively. However, the small effect size of 0.06 and 0.11 respectively showed that the large sample size strongly influenced the results. Furthermore, the relationship between learners' fluency in speaking English and their teachers' CS to a local language had a tendency towards statistical significance ($p = 0.07$), with no effect size. This indicates that there was no association between the learners' responses and reality.

The results also showed that the views of both the F 4 and F 5 learners were similar: almost the same number of each said that they did not object to CS to Setswana (40%; 38%), and the same number of each group also did not object to CS to a local language (42%). However, their views differed on CS to English, as 36% of the F 4s had no objection but 37% of the F 5s had strong objections. The former results were not significant, but the latter were significant. The F 5 learners, as the most senior learners who were about to complete their high school education, were expected to be more fluent in English than their junior counterparts (F 4s) and to be opposed to CS. The results suggest that the F 5 learners viewed CS from English to Setswana or even to a local language as a strategy used to address the difficulties encountered in communication as a result of the learners' lack of proficiency in English. Their objection to CS to English suggests that they found the use of English unnecessary as all the learners in a Setswana class had some degree of competence in Setswana. However, this may not be the case as, on the one hand, a significant number of the learners (57.68%) did not have Setswana as a HL, suggesting that their competence in Setswana may not be that good. On the other hand, the F 4 learners found CS educationally beneficial, hence their general support of it. The effect of form / grade on the learners' views about CS to English in a Setswana class was statistically significant ($p = 0.03$), with no effect size.

Although HL appeared to have an influence on the learners' views on CS in class, the results of the learners' views on CS to Setswana or to English were not significant, and consequently had no statistical significance. However, the learners' views about CS to

a local language were significant, hence the results had a tendency towards statistical significance (p = 0.08), with no effect size: Almost the same number of the learners with differentHLs (Setswana: 44%; Ikalanga: 40%; 'Others': 45%; and learners with more than one HL: 45%) had no objection to CS to a local language, except the learners for whom English was a HL (53%) who stated they were a little bothered by the practice. The results suggest that CS was generally accepted in the classroom, irrespective of the learners' HL, as there were more learners who did not object to it, including learners for whom HL was English who partially objected to it. The results above show that there was no strong objection to CS, irrespective of the learners' gender, academic ability, HL, fluency in speaking English, the form / grade, and the location of their school (urban or peri-urban).

The learners were further asked, according to gender, about their views on the teachers' language use in class. Their responses were as follows:

Table 6.5: Learners' views on teachers' language use in class by gender (RQ 5 ii)

	Male		Female		Both (M&F)		Total		M Frq
Language use	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**
1. Use Setswana in a non-Setswana class.	537	25	457	21	1162	54	2156	100	211
2. Use English in a Setswana Class.	487	25	634	32	842	43	1963	100	404
3. Express themselves well in spoken English.	628	29	352	16	1171	54	2152	100	215

The results in Table 6.5 above show that learners generally agreed that teachers, irrespective of gender, CS to Setswana in the lessons of the subjects taught in English (54%); CS to English during Setswana lessons (43%); and express themselves well in spoken English (54%). However, looking at the two groups individually, more male teachers than the female teachers CS to Setswana; yet more male teachers than their female counterparts express themselves well in spoken English. During Setswana classes, more female teachers than the male teachers CS to English. The results also showed that there was more CS to Setswana than to English.

The results suggest the following: the male teachers do not CS to Setswana due to a lack of fluency in English, but it could be so in the case of the female teachers. CS to

Setswana is more likely to occur during the lessons taught by the male teachers, and CS to English is more likely to occur during the lessons taught by the female teachers; so CS occurs in the classroom, irrespective of the LoLT used (English or Setswana); and both the male and female teachers use it. It should however, be noted that out of the 25 teachers of Setswana, only three were male. Furthermore, CS was more likely to occur during the lessons of subjects taught in English than during Setswana lessons.

Influence of independent variables on dependent variables

The majority of the learners, irrespective of gender, school location, form / grade, academic ability, and fluency in speaking English, were of the view that both the male and female teachers CS to Setswana in a class taught in English; and that Setswana teachers (both male and female) CS to English in class. The results also show that the majority of the teachers, irrespective of gender, were fluent in English. The results suggest that CS is prevalent in the classroom irrespective of the teacher's gender, but that the teachers' CS to Setswana does not imply a lack of proficiency in English as Setswana teachers also CS to English. CS is an attempt to facilitate communication in the classroom.

The results also showed that the following independent variables had a significant effect on the learners' views about the dependent variables stated in Table 6.5 above. Hence the results were statistically significant: Form / grade had a significant effect on the learners' views about the teachers' CS to Setswana in a lesson taught in 'English'. Both the F 4 (56%) and F 5 (52%) learners stated that their teachers CS to Setswana in class. This suggests that teachers CS to Setswana regardless of the level of class they teach. The results showed a tendency towards statistical significance ($p = 0.08$), with no effect size. Although both boys and girls said their teachers CS to English during Setswana lessons, more girls (46%) than boys (39%) stated that Setswana teachers, regardless of gender, CS from Setswana to English in class. The results were statistically highly significant ($p = 0.008$). However, the small effect size (0.07) shows that there is very little association between the learners' opinions and the view that Setswana teachers CS to English during the lesson, and that the high significance of the results was mainly due to the large sample size.

The statistical test results showed that the relationship between school location and the learners' views about Setswana teachers' CS to English in class was statistically significant (p = 0.01): almost the same proportion of learners at each school were of the view that both the male and female teachers of Setswana CS to English in class (S 1: 54%; S 2: 56%; S 3: 54%; S 4: 50%). The results suggest that CS to English was common in schools regardless of their location. A small effect size (0.12) showed that there was a less notable association between the learners' views and the view expressed above. In addition, both the Form F 4s (46%) and the F 5s (40%) stated that their teachers CS to Setswana in class. The results on the learners' views about the teachers' CS to English were statistically significant (p = 0.02); with a small effect size (0.06).

Furthermore, almost the same number of learners with different academic abilities (LA: 46%, MA: 41%, HA: 43%) agreed that Setswana teachers CS to English in class, and the results were statistically significant (p = 0.04); with no effect size. This suggests that Setswana teachers use similar forms of delivering lessons across the classes of different ability levels. This is based on the fact that 92% of the teachers teach at F 4 and F 5 levels. This observation is interesting given that during the lessons of subjects taught in 'English', CS is used to overcome the communication barrier caused by the learners' lack of fluency in English; but in a Setswana class, it appears that the motive is different. This observation will be discussed further in Chapter Seven when the qualitative results of the study are discussed. The results also showed that Setswana teachers, irrespective of gender, CS to English, as learners with different HLs stated: Setswana (42%), Ikalanga (43%), English (53%), 'Others' (45%) as well as learners with more than one HL (45%). The results were statistically highly significant (p = 0.003), with a small effect size (0.06).

Furthermore, the results on the effect of gender, school location, form / grade, academic ability, fluency in speaking English, and HL on the learners' views on the teachers' fluency in spoken English were significant: Slightly more girls than boys said both the male and female teachers were fluent in spoken English (58% vs. 50%). Almost the same proportion of learners at each of the four schools said teachers were fluent in spoken English, irrespective of gender (S 1: 50%; S 2: 55%; S 3: 56%; S 4: 58%). Slightly more F4s than F5s said both the male and female teachers were fluent

in spoken English (F 4: 58%, F 5: 50%). Almost the same proportion of learners (LA: 58%; MA: 51%; and HA: 56%) held the same view that teachers, regardless of their gender, were fluent in spoken English. Slightly more of the non-fluent learners than the fluent learners stated that both the male and female teachers were fluent in spoken English (57% vs. 50%). Although learners, irrespective of HL, stated that teachers were fluent in spoken English, the number of the learners whose HL is English who held the same view was slightly lower than the numbers of learners of other home languages (English: 47% vs. Setswana: 50%; Ikalanga: 57%; 'Others': 56%; and the learners with more than one HL: 58%).

The results above suggest that teachers at both urban and peri-urban schools, both male and female, teaching both F 4 and F 5 classes of learners with different home languages, fluent and non-fluent in English, and with different academic abilities, were fluent in English. The results on the effect of gender, school location and academic ability were highly significant (p = < 0.0001), as well as form / grade (p = 0.0004). The results suggested that the relationship between the above said independent variables and the view that teachers were fluent in spoken English was of high significance. However, a small effect sizes ranging from 0.07-0.09 showed that the large sample size strongly influenced the results. Similarly, the effect of fluency in spoken English and HL on the learners' views were statistically significant (p = 0.01) and (p = 0.03) each with a small effect size of 0.06 also showing a strong influence of the sample size.

The results of the influence of gender, school location, academic ability, fluency in speaking English and HL on the learners' views about teachers' CS to Setswana during the lessons of subjects taught in 'English' were not statistically significant. The results of the effect of fluency in speaking English on the learners' views on CS to English also had no statistical significance.

Table 6.6: Learners' views on teachers' language use in class (by subject) (RQ 5 ii)

	English		Setswana		Both (E and S)		History		HE		Biology	
Language use	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
1. Mix languages when speaking in class	146	6	58	3	1116	47	119	48	36	25	981	41
2. Use Setswana in a non-Setswana class	836	35	*	*	*	*	67	27	34	24	953	40
3. Express them well in spoken English	452	19	12	0.51	815	34	120	49	38	27	875	37
4. Express them well in spoken Setswana.	12	0.51	630	27	1176	50	38	15	15	11	322	14

NB: * Not applicable

The results in Table 6.6 above show that the majority of the learners were of the view that the History teachers and the language teachers (English and Setswana) CS more than the teachers of the other subjects. However, looking at the subjects individually, the least CS occurs in a Setswana class (3%) and in the English class (6%). Regarding CS in an English class, it may occur from time to time due to the proficiency problem that both the teachers and learners confirmed the latter (learners) have with English (cf. Tables 5.1 and 6.1); but its occurrence was not as frequent as in the other subjects taught in English.

With respect to spoken English, the majority of the learners (49%) said History teachers were the most fluent; while the least were the Setswana teachers at 0.51%. The observation made regarding Setswana teachers is expected given that these teachers mainly teach in Setswana and are expected also to use Setswana as the LoLT. However, the observation made regarding English teachers' proficiency in English suggests that their level of competence in English varied from teacher to teacher. With respect to spoken Setswana, the majority of the learners (50%) said the language teachers were fluent, especially Setswana teachers. This is not unexpected, given that Setswana teachers are expected to be fluent in Setswana, and that the majority of the teachers considered themselves to be proficient in it as the national language (cf. Table 4.6 in Chapter Four). The results suggest that CS occurs across all the subjects; but

that it occurs less during Setswana lessons. While it occurs during English lessons, it is not at the same rate as it is in the lessons of the content subjects. The results also indicate that the History teachers are the most proficient in English; and that the language teachers are the most proficient in Setswana (mainly Setswana teachers).

Influence of independent variables on dependent variables

The results showed that the majority of the learners, irrespective of form / grade, academic ability, school location, gender, fluency in speaking English, and HL, shared the view that the language teachers (English and Setswana) were fluent in the respective subjects they teach; that the History teachers were the most fluent in English, followed by English teachers; that teachers of subjects taught in 'English' CS in class, but Biology teachers CS to Setswana the most. All the aforementioned independent variables, except gender, had a significant effect on some of the dependent variables. Only academic ability had a significant effect on the learners' views about teachers' CS to Setswana during lessons of subjects taught in 'English'. The results showed that the LA and the MA learners said Biology teachers CS more to Setswana than the other teachers; but the HA learners said it was the English teachers who CS more -- LA (41%) and MA (41%) vs. HA (41%). The results suggest that HA learners did not expect the teachers of language subjects to CS in class by virtue of the mandate bestowed upon them to promote fluency in the respective languages they teach. The differences in the learners' views were statistically highly significant ($p = 0.0003$), with a small effect size of 0.06.

Academic ability and fluency in speaking English had a significant effect on the learners' views about the History teachers' fluency in English. More LA learners than the MA and HA learners considered the History teachers to be more fluent than other teachers (76% vs. 53%; and 57% respectively). The differences in the learners' views about the History teachers' fluency in English were statistically highly significant ($p = 0.0005$), with an effect size of 0.24. The results show that there was *medium* of association between the learners' opinion and the view that the History teachers were the most fluent in spoken English. The results suggest that the History teachers' CS was not due to a lack of fluency in spoken English. Academic ability had no significant effect on the learners' views about English (Land L) teachers' fluency in

English as the differences in the learners' views were not significant (LA: 53%, MA: 52%, HA: 57%). Consequently, the results had no statistical significance.

Fluency in speaking English had a significant effect on the learners' views about the History and the English (L and L) teachers' fluency in spoken English. Both the fluent and the non-fluent learners (61% and 43% respectively) stated that the History teachers were the most fluent in spoken English followed by the English (L and L) teachers (59% and 52% respectively). Both results had statistical significance. The statistical results for the former was $p = 0.01$, with no effect size. The results for the latter were statistically highly significant ($p = 0.006$), with a small effect size of 0.07. Similarly, HL had a significant effect on the learners' views about the English (L and L) teachers' fluency in spoken English. The results were as follows: Setswana: 41%; Ikalanga: 31%; English: 50%; Others: 39%; and more than one language: 37%. The results suggest that the English (L and L) teachers were not as fluent in spoken English as they were expected to be. The differences in the learners' views were statistically highly significant ($p = 0.004$), with a small effect size of 0.06.

The results also showed that form / grade, academic ability, school location, fluency in speaking English and HL had a significant effect on the learners' views on the teachers' fluency in spoken Setswana. The majority of the learners, irrespective of all the above independent variables, considered Setswana teachers the most fluent in spoken Setswana: F 4 and F 5 learners (81% of each), LA: 75%, MA: 77% and HA: 78%), at both urban and peri-urban schools (S 1: 72%; S 2: 78%; S 3: 80%; and S 4: 77%), the fluent and the non-fluent learners (54% and 47% respectively), and learners with different HLs (Setswana: 75%; Ikalanga: 48%; English: 56%; 'Others': 56%; and those with more than one HL: 52%). The results were statistically significant, showing that the relationship between the aforementioned independent variables and the learners' views on Setswana teachers' proficiency was of varied statistical significance: Form / grade ($p = 0.09$) and Fluency in speaking English ($p = 0.06$) – the results showed that there was significant tendency of relationship between these variables and the learners'views. The former had no effect size; the latter had a small effect size (0.06). Academic ability ($p = 0.002$) and school location ($p = 0.002$) – the results were statistically highly significant. Both results had a small effect size (0.07 and (0.08) respectively. HL ($p = 0.04$) -- the results were statistically significant

without an effect size. The results suggest that Setswana teachers' fluency in spoken Setswana was unquestionable, therefore their CS to English in class was not due to a lack of proficiency in Setswana. The results are significant and they will be further discussed in Chapters Seven and Eight. Other results had no statistical significance.

6.4 LEARNERS' VIEWS ON THE EFFECT OF CS ON THE LIEP OF BOTSWANA

Table 6.7: Learners' views on the revision of the LiEP (RQ 5 iii)

	Agree		Disagree		Not Sure		Total		M Frq
LoLT	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**
1. Setswana should be used for T and L in primary schools.	1737	83	240	11	118	6	2095	100	272
2. Setswana should be used with English from primary to university levels.	1281	61	473	22	350	17	2104	100	263
3. Other local languages should be used for T and L.	722	35	1170	56	190	9	2082	100	285

The results in Table 6.7 above show that the majority of the learners had positive views about the use of Setswana in education: they supported that it be used for teaching and learning at all the levels of education alongside English; an even higher majority supported its specific use at primary schools. However, they disapproved of the use of other local languages in T and L (61%, 83% vs. 56%). The results suggest that the majority of the learners are likely to CS to Setswana, but they are less likely to CS to other local languages.

Influence of independent variables on the dependent variables

The majority of the learners, irrespective of school location, gender, HL, ability, form / grade, and fluency in speaking English, agreed that Setswana should be used for T and L at primary schools; and that it should also be used alongside English at all the levels of education. However, they disagreed with the view that other local languages should also be used for T and L. The results suggest that learners recognized the importance of Setswana in education especially at the lower levels. The results of the dependent variables were not tested for statistical significance because they only had

an implicit relevance to the main subject of the study, viz. the role of CS in teaching and learning.

Table 6.8: Learners' views on relationship between CS and English proficiency (RQ 3)

CS vs. English proficiency	Agree		Disagree		Not Sure		Total		M Frq
1. Teachers' CS to Setswana **may be due to** inability to express oneself well in English.	N	%	N	%	N	%	N	%	N
	869	41	762	36	495	23	2126	100	241
2. Learners' CS **may be due to** inability to express oneself well in English.	1316	63	403	19	374	18	2093	100	274

The results in Table 6.8 above show that there were more learners who were of the view that the teachers' and learners' CS to Setswana in a class taught in English was due to a lack of fluency in English. The opinion on the learners' CS was very clear -- that learners CS to overcome a language problem -- but it was not so clear regarding the use of CS by the teachers. There was an insignificant difference between those who said that the teachers CS because they could not express themselves well in English and those who did not think so (41% vs. 36%). In addition, 23% of the learners were not sure why the teachers CS to Setswana in class. Earlier (cf. Table 6.3 above) nearly all the learners said the teachers were fluent in spoken English (95%). This suggests that the former refers to the teachers' BICS and the latter refers to the teachers' CALP.

The results suggest that some teachers were not proficient in spoken English, hence their CS in class, even though the majority CS mainly to assist the learners to understand the lesson. The results also suggest that because learners could not express themselves well in English, they CS to Setswana to overcome the language problem.

Influence of independent variables on the dependent variables

The majority of the learners, irrespective of form / grade, fluency in speaking English, HL, gender, academic ability, and school location shared the view that the teachers' and learners' CS was due to a lack of fluency in English. However, the number of the learners who said so about the teachers was not as high as the number in the learners' case. Form / grade, academic ability and fluency in speaking English had a significant

effect on the learners' views on the dependent variables contained in Table 6.8 above, but gender, school location and HL did not.

The results of the effect of form / grade on the learners' opinion on the view that **teachers' CS** may be due to a lack of fluency in English were significant: 44% of F 5 learners agreed with this view, but the view of F 4 learners was not so clear. The number who agreed with this view was the same as that whom disagreed (38%). The results suggest that some teachers (although in the minority) were not fluent in English, hence their CS to Setswana in class. The results were statistically significant (p = 0.01), with no effect size. Form had no significant effect on the learners' view that **learners' CS** was due to a lack of fluency in English, and the results had no statistical significance: Both (F 4: 62%, F 5: 64%) agreed that learners' CS was due to an inability to express themselves in English. In addition, academic ability had a significant effect on the learners' views on their CS in class. More HA learners (68%) than the MA (64%) and LA (55%) learners were of the view that learners CS to Setswana because they were unable to express themselves well in English. The results suggest that learners acknowledged that they lacked competence in spoken English. The results were statistically highly significant (p = < 0.0001), with a small effect size of 0.07. Academic ability did not show any significant effect on the learners' opinion regarding the teachers' CS. Almost the same number of learners in all three the categories of academic ability agreed that the teachers' CS may be due to a lack of fluency in English (LA: 38%; MA: 40%; HA: 44%). The differences in the learners' views were not statistically significant.

Fluency in speaking English had a significant effect on the learners' views about the teachers' CS to Setswana; and the differences in the learners' views were statistically significant (p = 0.01), with a small effect size (0.06): 45% of the fluent learners agreed with this view but the views of the non-fluent learners were not clear: 36% disagreed with the view but 35% agreed. Forty-five percent of the learners did not offer their views. The results suggest that teachers CS in class. However, the low rate of learners who ascribed CS use to the teachers' lack of fluency in English suggests that generally, learners considered their teachers to be fluent in English as they had previously stated. Fluency in speaking English had no significant effect on the learners' views on their CS to Setswana. Hence the results were not statistically significant. Almost the same

number of the fluent and non-fluent learners agreed that the learners' CS was due to inability to express themselves in English (66% vs. 62%). Gender, school location, and HL had no significant effect on the learners' views, so the results were not statistically significant.

Table 6.9: Didactic consequences of CS in a non-Setswana class (RQ 4 i)

	Agree		Disagree		Not Sure		Total		M Frq
1. I follow the lesson better when a teacher explains certain concepts in English.	N	%	N	%	N	%	N	%	N
	1415	67	484	23	221	10	2120	100	247
2. We generally participate more when we are allowed to use Setswana.	1417	67	520	25	178	8	2115	100	252
3. CS in group discussions increases participation.	1548	74	352	17	187	9	2087	100	280
4. CS does not help learners to improve their English.	799	39	1011	49	264	13	2074	100	293

The results in Table 6.9 above show that the majority of the learners viewed CS use in class as positive; that CS improved the understanding of their lessons, increased group and class discussion and, above all, had no adverse effect on their acquisition of English proficiency. The latter was disputed by some learners, though fewer, namely 39%.

The results suggest that, in the learners' view, CS to Setswana had positive educational results, and that it does not have a negative impact on the acquisition of proficiency in English. However, some learners, although in the minority, viewed CS negatively from the point of view of language development. The results therefore suggest that there were more learners who were likely to CS to Setswana in class than those who were not.

Influence of independent variables on the dependent variables

The results show that the majority of the learners, irrespective of gender, school location, form / grade, academic ability, fluency in speaking English and HL (in some cases), shared the views that CS had positive effects on learning, improved the understanding of concepts, increased class and group participation; and did not

negatively affect the learners' acquisition of English proficiency. However, gender, school location, form / grade, academic ability, and HL had a significant effect on the learners' views on some of the dependent variables contained in Table 6.9 above. The results on the effect of gender showed that more girls than boys agreed that CS enhanced their participation in group discussions (F: 76%; M: 72%) as well as in class discussions (F: 69%; M: 64%). The results suggest that more girls than boys were likely to CS to Setswana in class or group discussions. The differences in learners' views on the two views above were statistically significant. The results of the former (group discussions) were statistically significant (p = 0.01), and the results of the latter (class discussions) were statistically highly significant (p = 0.009). Both results were without effect size. There was no significant difference in the learners' views on their ability to follow a lesson when a teacher code-switched (67% of both the boys and the girls agreed that CS enhances lesson comprehension) and about the effect of CS on English proficiency (M: 50%; F: 48%). Consequently, the aforementioned results had no statistical significance.

School location had a significant effect on learners' views on the effect of using CS regarding their acquisition of competence in English. Although more learners, irrespective of school location, disagreed with the view that CS negatively affected the acquisition of English proficiency, more learners in peri-urban areas than in urban areas disagreed (S 3: 55%; S 4: 50% vs. S 1: 47%; S 2: 44%). The results suggest that more learners in peri-urban than in urban schools considered CS beneficial. Therefore they were more likely to use it than learners in urban schools. The results were statistically highly significant (p = 0.004), with a small effect size (0.07), showing that there was a nominal relationship between the learners' opinion and the views expressed above. The differences in the learners' views on the effect of school location on the other dependent variables had no statistical significance.

Form / grade had a significant effect on learners' views on all the dependent variables contained in Table 6.9 above, except the view that learners' participation in group discussions was enhanced by CS: more F 4s than F 5s agreed that they followed a lesson better if certain concepts were explained in Setswana, and also participated more in class if they were allowed to CS in class (69% vs. 64% and 69% vs. 64% respectively). The results suggest that more F 4 learners than F 5 learners were likely

to CS in class. Both results were respectively statistically significant (p = 0.02) and (p = 0.01), but had no effect size. In addition, more F 4s than F 5s disagreed that CS negatively affected learners' competence in English (52% vs. 45%). The differences in the learners views were statistically highly significant (p = 0.008), with a rather small effect size (0.06). However, the differences in the learners' views on the effect of CS on their participation in group discussions were not statistically significant.

Academic ability had a significant influence on the learners' views on the effect of CS on comprehending lessons and the explaining of certain concepts. More LA and MA learners than HA learners agreed that CS enhanced their understanding of the lessons, especially when concepts were explained (74%, 70% vs. 58%). The results suggest that more LA and MA learners than HA learners found CS educationally beneficial. Therefore, LA and MA learners were more likely to CS in class than the HA learners. There was no significant difference in the learners' views on the use of CS to enhance learner participation in group and class discussions, and that it did not negatively affect learners' acquisition of English competence (cf. Tables 6.9 d). The aforementioned results were not statistically significant.

HL had a significant effect on learners' views on the effect of CS in the classroom: the views of learners for whom English is a HL were in contrast with the views of the majority of the other learners:

- The majority of the learners (Setswana: 74%; Ikalanga: 76%; Others: 74%; and learners with more than one HL: 77%) stated that they followed the lesson better if the teacher CS to Setswana, but the learners for whom HL is English (71%) disagreed. The differences in learners' views were statistically highly significant (p = 0.002), with a small effect size (0.09).
- The learners whose HL is English disagreed with the view that CS increased class participation, but other learners agreed with this view (English: 53% vs. Setswana: 76%; Ikalanga: 72%; Others: 76%; and more than one HL: 69%). The differences in opinion between learners whose HL is English and those of the other learners were also statistically significant (p = 0.02), with a small effect size (0.07).

- The opinions of learners for whom English is the HL were also evenly divided on the benefits of the use of CS during group discussions: 50% agreed that it enhanced participation; and the other 50% disagreed). However, other learners agreed that CS increased participation during group discussions (Setswana: 83%; Ikalanga: 81%; Others: 80%; more than one HL: 80%). The results above were statistically significant (p = 0.04), with a small effect size (0.07).
- The learners whose HL is English also held a contrary view on the effect of CS on learners' acquisition of English proficiency, but others felt that CS did not have a negative effect on English proficiency (English: 56% vs. Setswana: 47%; Ikalanga: 50%; Others: 46%; more than one HL: 51%). However, the differences in the learners' views were not statistically significant.

The results suggest that the majority of the learners, except those learners for whom English is a HL, found CS to Setswana pedagogically beneficial. Therefore, the former (learners whose HL is either Setswana, Ikalanga, Others, and those with more than one HL were more likely to CS to Setswana in class than the latter (learners whose HL is English). The results were not unexpected in that the latter (learners for whom English is a HL) may not speak or understand Setswana.

Fluency in speaking English also had a significant effect on learners' views on the dependent variables contained in Table 6.9 above: More non-fluent learners than fluent learners agreed that it was easier for them to follow a lesson if CS was used (81% vs. 62%). They participated more in group and general class discussions if they were allowed to CS to Setswana. The results suggest that non-fluent learners (more so than the fluent learners) found CS educationally beneficial. The differences in the learners' views were statistically highly significant (p = < 0.0001), with no effect size. Fluency in speaking English had no significant effect on the learners' views on the effect of CS on English proficiency among learners. Therefore the results had no statistical significance.

Table 6.10: Learners' views on the effect of CS use in class on non-Setswana speaking learners (RQ 4 iv)

	Agree		Disagree		Not Sure		Total		M Frq
CS in class	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**
It is improper to CS to Setswana in a class of non-Setswana speakers.	1353	65	477	23	257	12	2087	100	280

The results in Table 6.10 above show that the majority of the learners (65%) did not support the use of CS in a class that had learners who were non-Setswana speakers. The responses to this question are interesting, given that nearly all learners in the study were citizens of Botswana (99.3%) or 2 239 learners, while non-citizens accounted for only 0.67% or 15 learners. The results show that despite what the respondents (both teachers and learners) say about CS, the majority of the learners were mindful that the educational benefits they accrued from its use may not benefit their other classmates who did not fully understand Setswana.

Influence of independent variables on the dependent variables

The results showed that the majority of the teachers, irrespective of academic ability, HL, gender, form / grade, school location, and fluency in speaking English, shared the view that it was not fair for the teacher to CS to Setswana in a class in which some of the learners did not fully understand Setswana. The results of the effect of these independent variables, except academic ability, were not significant. Consequently, the differences in learners' views were not statistically significant. Academic ability had a significant effect on the learners' views on the dependent variable expressed above: more HA and MA learners than LA learners agreed that CS to Setswana should not be used in a class with learners who did not fully understand Setswana (HA: 70%, MA: 65%, vs. LA: 59%). The results suggest that HA and MA learners disapproved of teachers' CS and found it discriminatory to learners who did not fully understand Setswana, but LA learners were not as concerned as the former, suggesting that they found CS educationally beneficial. The differences in learners' views were statistically highly significant (p = 0.006), with a small effect size (0.06).

Table 6.11: Reasons for learners' CS use in the classroom (RQ 4 ii)

	%
1. Ask a question	42
2. Answer a question	27
3. Summarize a lesson	17
4. Discuss class tasks	32
5. All of the above	12
6. None of the above	40

NB: Excludes Setswana lessons

The results in Table 6.11 above show that the learners were allowed to CS to Setswana in class to perform different educational tasks, but in varying degrees. The most common task was to ask a question, followed by a discussion of class tasks, and to answer a question. The least performed task was a summary of the lesson. The results indicate a prevalence of CS in the classroom even though 40% of the learners said that it was not used, and only a few (12%) admitted that they were allowed to CS all the time. The results suggest that the learners were allowed to CS from time to time during a lesson, depending on the task at hand, even though not all the teachers allowed CS during their lessons.

The results also show that the teachers discouraged the learners from CS yet they themselves CS freely as indicated in Table 5.11 (cf. Chapter 5). This suggests that they believed that CS had instructional benefits but had a negative impact on language development.

Influence of independent variables on dependent variables

The results showed that the majority of the learners, irrespective of school location, gender, form, academic ability, fluency in speaking English, and HL, admitted that they were allowed to CS in class but to varying degrees. They CS mainly to ask a question, discuss class tasks, and to answer a question. All the independent variables, except HL, had a significant effect on some of the learners' responses. The results showed that there was more CS at peri-urban schools than at urban schools as more learners at the latter than at the former stated that they were not allowed to CS (S 1: 45%, S 2: 46% vs. S 3: 35%; S 4: 39%). The results were statistically highly

significant (p = 0.0009), but with no effect size. Furthermore, more learners at peri-urban than at urban schools stated that they were allowed to CS to:

- ask a question (S 3: 53%, S 4: 46% vs. S 1: 37%, S 4: 40%): p = < 0.0001;
- answer a question (S 3: 34%, S 4: 26% vs. S 1 and S2: 26%): p = 0.01, with a small effect size (0.07);
- discuss class tasks (S 3: 38%, S 4: 35% vs. S 1: 29%, S 2: 30%): p = 0.0002 summarize a lesson (S 3 and S 4: 21% vs. S 1:11%, S 2: 18%): p = < 0.0001 (very few learners in both school locations), and
- perform all class functions - although very few in both cases: (S 3: 14%, S 4: 16% vs. S 1: 8%, S 2: 16%): p = 0.0009.

As indicated above, the differences in learners' responses were statistically highly significant in all cases above (without effect size), except for answering a question. The results suggest that CS was more likely to occur in classes at peri-urban than at urban schools. This suggests that lack of a proficiency in English may be more of a problem among learners at peri-urban schools than at urban schools.

Gender had a significant effect on learners' responses to the views that they were allowed to CS when asking a question and discussing class tasks. More boys than girls said that they were allowed to CS when asking a question (M: 47% vs. F: 42%) and when summarizing a lesson (M: 19% vs. F: 16%) respectively. In addition, almost the same number of both boys and girls stated that they were allowed to CS for different purposes in class. The results suggest that CS was prevalent in class and that boys were more likely to CS to Setswana than girls. The results on the differences in learners' views on CS when asking a question and also when performing other class functions were statistically highly significant (p = 0.008 and p = 0.001 respectively). The former had no effect size and the latter had a small effect size (0.06). The differences in learners' views on CS when summarizing a lesson showed a tendency towards statistical significance (p = 0.09).

Form / grade also had a significant effect on learners' views on CS to ask a question, and also to perform different class functions. More F 4 learners than F 5 learners stated that they were allowed to CS when asking a question (F 4: 46% vs. F 5: 42%)

and when discussing class tasks (F 4: 35% vs. F 5: 31%). The results suggest that CS was more likely to occur in F 4 classes than in F 5 classes. Both results demonstrated a tendency towards statistical significance ($p = 0.07$ and $p = 0.09$ respectively), with no effect size.

Furthermore, fluency in speaking English had a significant effect on learners' views, hence the differences in learners' views as set out above were statistically significant: more fluent learners than the non-fluent learners stated that they were allowed to CS when asking a question (45% vs. 41%); answering a question (31% vs. 25%); and discussing class tasks (34% vs. 30%). The relationship between fluency in speaking English and CS: when asking a question had a tendency towards statistical significance ($p = 0.09$); answering a question was statistically highly significant ($p = 0.004$); and discussing class tasks was statistically significant ($p = 0.04$). None of the results had an effect size. In addition, more F 4 than F 5 learners stated that they were allowed to CS to perform all class functions listed in Table 6.11above (42% vs. 39%). However, the number of F 4 learners who stated that they were never allowed to CS in class was very small and was the same as that of F 5 learners (12%). This suggests that CS was used at both levels, but that its functions varied. The differences in learners' views in both cases showed a tendency towards statistical significance ($p = 0.08$ and $p = 0.07$ respectively), but without any effect size.

Academic ability had a significant effect on learners' views about CS to summarise a lesson, and to discuss class tasks. The results showed that more LA and MA learners than HA learners stated that they were allowed to CS when performing both functions (LA: 21%, MA: 18% vs. HA: 12%) and (LA: 33%, MA: 34% vs. HA: 27%). The results suggest that CS was more likely to be used during classes of LA and MA learners than in classes of HA learners. Both results were statistically highly significant ($p = 0.0001$) and ($p = 0.004$), and both had no effect size.

HL had no significant effect on learners' views on any of the dependent variables. Consequently, the statistical test results showed that there was no relationship of statistical significance between HL and any of the dependent variables.

Table 6.12: Learners' views on educational benefits of CS use in a non-Setswana class (RQ 4 ii)

	Agree		Disagree		Not Sure		Total (N and %)		M Frq
	N	%	N	%	N	%	N	%	N
1. I learn better when a teacher CS.	1781	84	235	11	104	5	2120	100	247
2. I participate more when I am allowed to CS to Setswana.	1086	53	674	33	283	14	2043	100	324

The results in Table 6.12 above show that the majority of the learners have positive views on CS in the classroom. They were of the view that the use of CS enhances teaching and learning; and also increases learner participation in the lessons (84% and 53% respectively). The results suggest that learners were likely to CS to Setswana in class.

Influence of independent variables on dependent variables

School location, form / grade, fluency in speaking English, and HL had a significant effect on learners' views that CS to Setswana enhanced learning. More learners at peri-urban than at urban schools agreed that CS enhanced learning (S 3: 87%, S 4: 86% vs. S 1: 79%, S 2: 83%). Thus CS was more likely to occur at peri-urban than at urban schools. The results were statistically significant ($p = 0.01$), with no effect size. Slightly more F 4 than F 5 learners agreed that CS enhanced learning (F 4: 86% vs. 82%), suggesting that F 4 learners were more likely to CS than F 5 learners. The results showed a tendency towards statistical significance ($p = 0.06$), with no effect size. Slightly more non-fluent than fluent learners also agreed with the aforementioned view (90% vs. 84%). The results were statistically highly significant ($p = < 0.0001$), with no effect size. Furthermore, the number of learners for whom English is a HL who agreed that CS between English and Setswana enhanced their learning, was not as high as for the learners of other home languages (English: 60% vs. Setswana: 88%, Ikalanga: 90%, 'Others': 82%, and learners with more than one HL: 90%). This suggests that the learners for whom English is a HL (who could speak and understand Setswana) did not CS as much as learners of other HLs did). The results were statistically highly significant ($p = 0.0006$) with a small effect size of 0.07. On the contrary, academic ability and gender had no significant effect on learners' opinions

about the aforementioned view. In this regard, the differences in learners' responses were not statistically significant.

Only HL, form / grade, academic ability, and fluency in speaking English had a significant effect on the learners' opinion on the view that CS enhanced learner participation in the lesson. The majority of learners for whom English is a HL, held a different view from the other learners of other home languages. They disagreed with the view that CS enhanced their participation in the lesson, but other learners agreed (English: 67% vs. Setswana: 61%, Ikalanga: 64%, 'Others': 52%, and learners with more than one HL: 63%). The results were expected in that, having English as their HL, which is also the LoLT, put them at an academic advantage over other learners. The differences in learners' responses were statistically significant ($p = 0.04$):

- Regarding form/ grade, more F 4 than F 5 learners agreed that CS enhanced their participation in lessons (F 4: 55% vs. F 5: 51%); the results were statistically significant ($p = 0.03$).
- Academic ability: More LA learners than MA and HA learners agreed that CS enhanced their participation in the lesson (LA: 59% vs. MA: 56%, HA: 45%). The results were also statistically highly significant ($p = < 0.0001$).
- The views of the fluent learners were in contrast to those of non-fluent learners: the former (fluent learners) disagreed with the view that CS to Setswana enhanced their participation in the lesson, but the latter (non-fluent learners) agreed (54% vs. 69%). The results were also statistically highly significant ($p = < 0.0001$).
- Only the results of the influence of HL on learners' views about the effect of CS on learning and on class participation, and the effect of academic ability on learners' views on class participation had a small effect size of 0.07 and 0.10 respectively. This showed that there was a small association between learners' opinions and the views expressed above.
- Other results, although statistically significant, had no effect size, showing that the views expressed above were remote from reality.
- Gender had no significant effect on learners' views regarding both views as the learners' views were almost identical. Consequently, the learners' responses were not statistically significant.

The results above suggest that learners for whom English was a HL were less likely to CS to Setswana in class than the other learners. However, more of the less fluent learners, the F 4 learners at peri-urban schools, and the LA learners were more likely to CS to Setswana in class because they found CS didactically and educationally beneficial.

Table 6.13: Learners' attitude towards CS use in a Setswana class (Didactic) (RQ4 i)

	Agree		Disagree		Not Sure		Total		M Frq
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**
1. English should not be used in a Setswana class.	890	43	878	42	308	15	2076	100	291
2. No objection to teachers' CS to English to clarify a point.	1351	65	593	28	144	7	2088	100	279
3. It's okay to answer teachers' questions in English.	283	15	1578	76	227	11	2088	100	279

The results in Table 6.13 above show that the learners' views were almost evenly split on CS in a Setswana lesson: 42% supported its use, but 43% did not. Despite this split response, the results also show that the majority of the learners (65%) supported the teachers' CS during a lesson as long as it was educationally beneficial, such as for clarification of a point, but objected to the learners' CS as 76% of them had indicated. The results suggest that in a Setswana class, the learners viewed the teacher's CS as having an educational role; and that the teachers were more likely to CS than the learners.

Influence of independent variables on dependent variables

The majority of the learners, irrespective of academic ability, fluency in speaking English, gender, form / grade, school location, and HL, supported the teachers' CS to English, but did not support the learners' CS in a Setswana class. The results suggest that learners regarded the teacher's CS to be for a specific purpose, namely to clarify a point; but did not find it essential for learners to CS since they expressed themselves better in Setswana -- a language all learners in a Setswana lesson understood. Learners were not as supportive of CS in a Setswana lesson as they were in a lesson taught in 'English' (cf. Table 6.12). Therefore, it appears that learners associated CS with

lessons taught in English because they regarded it as a teaching strategy employed to address the learners' incompetence in English.

The following independent variables had a significant effect on learners' views about the teachers' CS to English in a Setswana class:

- Academic ability: more HA learners than MA and LA learners supported the teachers' CS to English for clarification purposes (HA: 72% vs. MA: 64%, LA: 56%). The results suggest that HA learners regarded CS to be inconsequential to their learning, but other learners (especially LA learners) were not as enthusiastic about CS in a Setswana class as they were about CS in a class taught in English. The results also suggest that LA learners find CS to Setswana more didactically beneficial than CS to English.
- Fluency in speaking English: more fluent learners than non-fluent learners did not object to the teachers' CS to English (76% vs. 66%).
- Both results (above) were statistically highly significant (p = < 0.0001), with a small effect size of 0.13 and 0.07 respectively.
- School location: although the majority of learners at all four the schools did not object to the teachers' CS to English in a Setswana class, on average, more learners at urban than at peri-urban schools did not object (67% vs. 62%). The results suggest that CS to English seemed to be more acceptable in urban schools than in peri-urban schools. Learners at urban schools held English in high esteem because of its official status. The results were statistically highly significant (p = 0.004), with a small effect size (0.06).

The small effect size in each case suggested that a large sample size influenced the significance of the results.

Academic ability and fluency in English also had a significant effect on learners' views that English should not be used in a Setswana class: slightly more LA learners than MA and HA learners were opposed to CS to English in a Setswana class (52% vs. 43% and 49%), thereby suggesting that the LA learners were also likely to be less fluent in English. The results were statistically highly significant (p = < 0.0001) with a small effect size (0.14). In addition, there were more fluent learners who supported CS to

English in a Setswana class than those who did not (54% vs. 48%), and that there were more non-fluent learners who did not support CS to English than those who did so (52% vs. 46%). The results suggest that learners who considered themselves to be fluent in English were more likely to code-switch to English in a Setswana class than the less fluent learners. The results were statistically significant ($p = 0.01$) with no effect size.

Academic ability, school location, and fluency in speaking English had a significant effect on the learners' views that it was acceptable for them to CS to English when responding to a teacher's question in a Setswana lesson: more LA learners than MA and HA learners disagreed with this view (80% vs. 75% and 72%). The results on the effect of academic ability on learners' views were statistically highly significant ($p = 0.005$), with no effect size. Although the majority of the learners at all four the schools were opposed to CS when answering a teacher's question, more learners at peri-urban schools than those at urban schools were opposed to this practice (76% vs. 73%). Similarly, more non-fluent than fluent learners disagreed with this view (77% vs. 72%). The effects of school location and fluency in English on the learners' views were statistically significant ($p = 0.01$, with an effect size of 0.06 and $p = 0.02$ with no effect size respectively). The results suggest that more LA learners, not fluent in English, at peri-urban schools, were less likely to CS to English in a Setswana lesson. The results are consistent with those already expressed above, namely that generally, learners were less enthusiastic about CS to English than to Setswana. For these learners it appeared that learning was more effective if Setswana was used than if English was the LoLT. Other results had no statistical significance. In addition, gender, form / grade, and HL had no significant effect on learners' views about the dependent variables expressed above. Consequently, the differences in the learners' views were not statistically significant.

Table 6.14: Learners' views on extent of their CS use in a Setswana class (RQ 2)

	Agree		**Disagree**		**Not Sure**		**Total**		**M Frq**
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**
1. I never use English in a Setswana class.	1164	56	705	34	218	10	2087	100	280
2. Learners use Setswana only during Setswana lessons.	712	35	1125	55	226	11	2063	100	304

The results in Table 6.14 above indicate that the number of the learners who said they personally never CS during Setswana lessons was almost the same as those who said that other learners did (56% vs. 55%). The results suggest that, like in other classes taught in English, learners CS during Setswana lessons.

Influence of independent variables on dependent variables

The results demonstrated that the majority of the learners, irrespective of academic ability, form / grade, fluency in speaking English, gender, school location and HL, stated that personally, they never CS to English during a Setswana lesson, but that other learners did. Notwithstanding the above, the following independent variables had a significant effect on the view that learners never CS to English during a Setswana lesson:

- Academic ability: more LA learners than MA and HA learners stated that they did not CS to English during Setswana lessons (64% vs. 58%, 47%). The results suggest that, in a Setswana class, LA learners were less likely to CS to English, but HA learners were more likely to CS, whilst the MA learners were likely to *moderately* CS to English. The results are consistent with those stated above (cf. Table 6.13). The differences in learners' responses were statistically highly significant ($(p = < 0.0001)$, with a small effect size of 0.09.
- School location: more learners at peri-urban than at urban schools agreed that personally, they never CS to English in a Setswana class (S 3: 57%, S 4: 61% vs. S 1: 52%, S 2: 54%). The results suggest that CS in a Setswana class was more likely to occur at urban than at peri-urban schools. The results had a tendency towards statistical significance ($p = 0.09$) with no effect size.
- Fluency in speaking English: more non-fluent than fluent learners stated that they never CS to English in a Setswana lesson (58% vs. 51%). The results suggest that the fluent learners were more likely to CS to English in a Setswana class than non-fluent learners. The results were statistically highly significant ($p = 0.002$), with a small effect size of 0.07.

Furthermore, academic ability and gender had a significant effect on learners' views about language use in a Setswana class: more HA and MA learners disagreed with the view that learners use Setswana only during Setswana lessons. This implies that CS to English occurred during Setswana lessons. However, half of the LA learners agreed that there was no CS during Setswana lessons (HA: 65%, MA: 56% vs. LA: 50%). The results were statistically highly significant (p = < 0.0001) with a small effect size (0.15). In addition, more girls than boys disagreed with the view that learners used Setswana only during Setswana lessons (56% vs. 53%). The results suggest that there was CS during Setswana lessons. The results had a tendency towards statistical significance (p = 0.09) with no effect size. The results suggest that CS occurred during Setswana lessons even though some learners attributed its use to other learners; but not to themselves.

Gender had no significant effect on learners' views pertaining to CS to English by individual learners. School location and fluency in English had no significant effect on learners' views on general CS by learners in a Setswana class. In addition, HL and Form / grade had no significant effect on the learners' views on both dependent variables contained in Table 6.14 above. Consequently, the insignificant results had no statistical significance.

Table 6.15: Learners' views on extent of teachers' CS in a Setswana class (RQ 2)

	Agree		Disagree		Not Sure		Total		M Frq
CS in a Setswana class	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**
1. My teacher sometimes CS to English.	1180	58	722	35	147	7	2049	100	318
2. The teacher sometimes allows learners to CS to English.	589	29	1262	62	194	9	2045	100	322

The results in Table 6.15 above show that in a Setswana class, teachers CS to English, but they discouraged their learners from doing the same (58% vs. 62%). The results suggest that CS during Setswana lessons seems to be the privilege of the teachers, but the same privilege was rarely extended to their learners.

Influence of independent variables on learners' views about dependent variables

The results showed that form / grade and fluency in speaking English had a significant effect on learners' views about teachers' CS in a Setswana class: more F 5 than F 4 learners agreed that their Setswana teachers sometimes CS to English in class (60% vs. 56%). The results indicated a tendency towards statistical significance ($p = 0.08$). The more fluent learners than the non-fluent learners agreed that Setswana teachers sometimes CS to English in class (66% vs. 60%). The differences in the learners' views above were statistically significant ($p = 0.01$). Both results had no effect size. Form / grade had no significant effect on the view that learners were allowed to CS in a Setswana class.

Furthermore, HL, and fluency in speaking English also had a significant effect on learners' view that Setswana teachers allowed CS to English in class: the majority of the learners whose HL is Setswana (65%), Ikalanga (72%), Other (70%), and learners with more than one HL (62%) disagreed with the view that Setswana teachers allowed their learners to CS to English in class. However, 70% learners for whom English is HL agreed that Setswana teachers allowed CS. Furthermore, more non-fluent than the fluent learners disagreed with the view that Setswana teachers allowed CS in their classes (70% vs. 64%). The differences in learners' views in both cases were statistically highly significant ($p = 0.003$ and $p = 0.005$) with a small effect size of 0.10 and 0.6 respectively. The results above suggest that Setswana teachers freely CS to English in class, but actively discouraged their learners from doing the same. HL had no significant effect on learners' views about Setswana teachers' CS in class. Furthermore, academic ability, gender, and school location had no significant effect on learners' views on both dependent variables expressed above. Consequently, the differences in learners' views were not statistically significant.

Table 6.16: Learners' views on the effect of CS on the pace of teaching and learning (RQ 4 iii)

	Agree		Disagree		Not Sure		Total		M Frq
Effect of CS on lesson pace	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**
CS use during the lesson is a waste of teaching time.	241	12	1602	78	207	10	2050	100	317

The results in Table 6.16 above indicate that the majority of the learners (78%) did not find the use of CS a waste of teaching time. Because CS did not affect the pace of the lesson, teaching and learning were not compromised. This question will be answered in detail in the next chapter by analyzing the qualitative data.

Influence of independent variables on learners' views about the dependent variable stated above

The majority of the learners, irrespective of school location, gender, form, fluency in speaking English, academic ability, and HL, did not view CS use as a waste of teaching time. However, only school location had a significant effect on learners' views about the impact of CS on teaching time: more learners at peri-urban than at urban schools indicated that CS had no adverse effect on the pace of the lesson and teaching time (S 3 and S 4: 80% vs. S 1: 76%, S 2: 75%). The results suggest that although CS was used in both urban and peri-urban schools it was more likely to be used in the latter than in the former; and that learners were positive about the effect of CS on teaching and learning. The differences in learners' views were statistically significant (p = 0.02), with no effect size. Other independent variables had no significant effect on learners' responses to the dependent variable contained in Table 6.16 above. Consequently, the results were also not statistically significant.

Table 6.17: Learners' views on their use of CS in class (by gender) (RQ 5 ii)

	Boys		**Girls**		**Both**		**Total**		**M Frq**
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**
1. CS to Setswana in class	521	25	347	17	1189	58	2057	100	310
2. Express themselves well in English	327	16	770	37	974	47	2071	100	296

The results in Table 6.17 above show that although both boys and girls were of the view that they expressed themselves well in English, they CS to Setswana in class. However, more boys than girls CS (25 vs. 17) and more girls than boys were fluent in English (37% vs. 16). The results suggest that girls were less likely to CS than boys, and that their CS was not necessarily due to a lack of fluency in English. A similar observation was made in the previous chapter by teachers.

Influence of the independent variables on the dependent variables

The results showed more girls than boys (62% vs. 52%), more LA learners than MA and HA learners (LA: 64% vs. MA: 58%, HA: 53%) stated that learners CS to Setswana in class, regardless of their gender. The results suggest that learners, regardless of gender, CS to Setswana in class but boys were more likely to CS than girls; and CS was more likely to occur during classes of LA learners. CS was least likely to occur during classes of HA learners**.** The results of the effect of gender and academic ability on learners' views about their CS in class were statistically highly significant (p = < 0.0001), with a *medium* effect size of 0.22 and (p = < 0.004), with a *small* effect size of 0.06 respectively. These statistical results suggest that there was a *medium* association between learners' opinion and gender, and a *small* association between learners' opinion and academic ability on the view that they CS in class, regardless of their gender.

In addition, there were more learners, regardless of HL, who stated that both boys and girls CS than those who said they did not. However, the smallest proportion was for learners for whom Setswana was a HL, followed by learners for whom English was a HL (55%, 56%). The numbers of learners whose HLs were Ikalanga, 'Others' and learners with more than one HLwere slightly higher (59%, 60%; and 65% in that order). The results suggest that learners for whom Setswana was a HL were reluctant to agree that they CS to Setswana in case they be viewed as using their HL in class, which may be seen as an indication of a lack of fluency in English. Concerning learners for whom English was a HL, the results were expected, given that their HL was the LoLT. Therefore, they were likely to be sensitive to CS to Setswana in class. The results on the effect of HL on the learners' opinion were statistically highly significant (p = < 0.0001), with a small effect size of 0.11. Furthermore, more non-fluent than the fluent learners stated that both boys and girls CS to Setswana during lessons of subjects taught in 'English' (Non-fluent: 62% vs. Fluent: 50%). The results also showed that almost the same number of learners at both urban and peri-urban schools stated that both girls and boys CS in class (urban: 57.5% vs. peri-urban: 57%). The results on the effect of fluency in speaking English, and school location on learners' views regarding their CS in class were statistically highly significant (p = < 0.0001) with a small effect size of 0.12 and 0.16 respectively. The results suggest that

both boys and girls, regardless of their HL and school location, were likely to CS to Setswana in class because of the status of Setswana as a national language spoken by almost all learners (99%). However, more learners not fluent in English were likely to CS to Setswana than the learners fluent in English. Form / grade had no significant effect on learners' views on their CS in class.

Furthermore, gender, academic ability, HL, school location, fluency in speaking English, and form / grade had a significant effect on learners views on their fluency in spoken English: Although learners, regardless of gender, stated that they expressed themselves well in English (M: 46%, F: 48%), more girls considered themselves to be more fluent than boys (47% vs. 26%). More LA learners than MA and HA learners stated that both boys and girls were fluent in spoken English (LA: 53% vs. MA and HA: 45% each). Similarly, more learners, irrespective of HL stated that both boys and girls were fluent in English but that girls were more fluent than boys, except for learners for whom English was a HL, who did not see any difference in fluency between boys and girls (31%, 31%). The ratios were as follows in favour of girls: Setswana: 43: 12; Ikalanga: 31: 18; 'Others': 42: 15; and learners with more than one HL: 38: 16. In addition, more learners at S 2, S 3 and S 4 stated that both boys and girls were fluent in English, but at S1 more learners said girls were more fluent (S 2: 52%; S 3: 47%; S 4: 50%). Despite the views of learners at the first three schools expressed above, looking at each group individually, more girls at each school considered themselves to be more fluent than boys. The ratio was as follows: S 1: 47% vs. 12%; S 2: 36% vs. 12%; S 3: 32% vs. 21%; and S 4: 33% vs. 17%). The girls' views appeared to be highly subjective. Furthermore, more non-fluent learners stated that both boys and girls were fluent in spoken English but more fluent learners said girls were more fluent than boys (50% vs. 42%).

The results suggest that even though learners, irrespective of gender, CS to Setswana in class, girls' CS did not signal an inability to express themselves in English, but it was likely to be the case with boys. Therefore, the former (girls) were less likely to CS than the latter (boys). However, for learners whose HL is English, fluency for both boys and girls was rated the same. This was not unexpected, given that it was a language for both home and school.

The statistical test results showed that the differences in learners' views on the aforementioned dependent variable influenced by fluency in English, school location, and HL were statistically highly significant (p = < 0. 0001), each with a small effect size (0.09, 0.12 and 0.08, in that order). The influence of gender on learners' views was also statistically highly significant (p = < 0.0001) with a *medium* effect size of 0.32. Academic ability had an influence of statistical significance on learners' views (p = 0.02), with a small effect size (0.08). The effect of form / grade on learners' views showed a tendency towards statistical significance (p = 0.07), with no effect size.

6.5 LEARNERS' VIEWS ON THE USE OF SETSWANA AND OTHER INDIGENOUS LANGUAGES IN EDUCATION

Table 6.18: Learners' views on the teachers' use of other local languages in class (RQ 2)

	Always		Sometimes		Never		Total		M Frq
	N	%	N	%	N	%	N	%	N
Use other local languages in class	136	7	917	46	952	47	2005	100	362

The results in Table 6.18 above show that teachers CS to a local language in class. However, this form of CS is minimal because of the insignificant difference between the number of learners who said it occurred and those who said it did not occur (53% vs. 47%). The results suggest that this form of CS rarely occurred in class. This is not unexpected given that local languages have no official status in education.

Influence of independent variables on learners' views on dependent variables.

School location, gender, form, academic ability, and HL had a significant effect on the learners' views on the teachers' CS to a local language: the majority of the learners at peri-urban schools stated that other local languages were used in class, but those at urban schools said they were never used (S 3: 69%; S 4: 66% vs. S 1: 60%; S 2: 64%). The results suggest that teachers at peri-urban schools were more likely to CS to a local language than those at urban schools. The results were statistically highly significant (p = 0.001), and the effect size (0.23), shows that there was a *medium* association

between the learners' opinion and the view that their teachers sometimes used a local language in class to ensure understanding.

Furthermore, more boys than girls stated that teachers CS to other local languages (besides Setswana) in class to ensure understanding (56% vs. 50%). However, the girls' view was evenly divided: half of them concurred with the majority of the boys; but the other half stated that CS to a local language never occurred in class. The results suggest that CS to a local language occurred from time to time in the classroom. Whilst the majority of the F 4 learners agreed that their teachers used other local languages (besides Setswana) in class to ensure understanding of the lessons, just more than half of the F 5 learners disagreed (57% vs. 52%). The results suggest that there was likely to be more CS to a local language at F 4 than at F 5 level. Both these results were statistically highly significant (p = < 0.0001) and (p = 0.0006) respectively. However, an effect size in each case (0.10 and 0.08) showed that there was a small association between the learners' opinion and the views stated above, and that the significance was largely due to a large sample.

In addition, more MA than LA learners (56% vs. 52%) held the view that other local languages were used in class, but 51% of the HA learners held an opposite view. The results suggest that teachers were unlikely to CS to local languages during classes of HA learners than during classes of MA learners and, to some extent even during classes of LA learners. Although there was a small difference between the number of learners who stated that local languages were used in class and those who said they were never used, to some extent, HL influenced the learners' views. The former (the view that local languages were used in class) was agreed to by 56% of the learners whose HL is Ikalanga; 51% of 'Others'; 53% of the learners with more than one HL, and 50% of the learners whose HL was English. However, 51% of the learners whose HL is Setswana and the other 50% of the learners whose HL is English agreed with the latter (the view that local languages were never used in class). The results suggest that the learners' local language might have been used for didactic reasons where the official LoLT was failing, and that it was likely to be used in a class where the teacher was sure that the language used was intelligible to the majority of the learners. The statistical test result (p = 0.08) showed that there was a tendency towards statistical significance in the relationship between the former independent variable (academic

ability) and the learners' opinion on the view expressed above. The results of the effect of HL on the learners' views were also statistically significant (p = 0.02). However, both results had no effect size.

Only fluency in speaking English had no significant effect on the learners' responses. Both the fluent and the non-fluent learners agreed that other local languages were used in class (50% vs. 54%). Consequently, the results were also not statistically significant.

Table 6.19: Local languages teachers use in class (RQ 2)

Languages	N	%
1. Ikalanga	837	90
2. Others	95	10
Total	**932**	**100**

The results in Table 6.19 above indicate that Ikalanga was the main local language to which CS took place. This was not unexpected, given that it was the home language for the majority of the learners (more than 46%). The other local languages were hardly used in class. The results suggest that although CS in the classroom was mainly between English and Setswana; sometimes it also involved Ikalanga, a local language of the area.

Influence of independent variables on dependent variables

Further analysis of the results by independent variables showed that all but school location had no significant effect on learners' views. Learners at peri-urban schools held contrasting views from learners in urban schools: the majority of those at the two peri urban schools stated that, besides Setswana, Ikalanga was the local language used in class, but the majority of the learners at the two urban schools disagreed (S 3: 71%, S 4: 61% vs. S 1: 66%, S 2: 61%). The results were consistent with the learners' population distribution by HL. There were more learners in peri-urban schools whose HL was Ikalanga than in urban schools (S 3: 58%, S 4: 74% vs. S 1: 23%, S 2: 36%). Setswana was a HL for the majority of the learners at urban than at peri-urban schools (S 1: 53%, S 2: 49% vs. S 3: 29%, S 4: 18%). Therefore, Ikalanga was more likely to

be used in peri-urban schools than in urban schools. The results were statistically highly significant (p = 0.0004), with no effect size.

Furthermore, the results showed that nearly almost all learners, regardless of academic ability (LA and MA: 98% each, HA: 100%); gender (M: 98%, F: 99%); Form (F 4: 99%, F 5: 98%); and fluency in speaking English (fluent: 97%, non-fluent: 99%), agreed that Ikalanga was the main local language used in class besides Setswana. The results were not unexpected given that Ikalanga was the local language for the majority of the residents of the region in which the study was carried out. The results suggest that besides English and Setswana, Ikalanga was the main local language which could be used in the classroom. However, none of the four independent variables stated above had any influence of statistical significance on the learners' opinions on the views expressed above.

Table 6.20: Learners' negative perceptions about the use of Setswana in class (RQ 6)

	Agree		Disagree		Not Sure		Total		M Frq
	N	%	N	%	N	%	N	%	N
1. It is easier to learn new concepts in English than in Setswana.	959	45	663	31	519	24	2141	100	226
2. Setswana should only be used in Setswana classes.	1064	51	792	38	221	11	2077	100	290

The results in Table 6.20 above indicate that there were more learners who had negative perceptions about the use of Setswana in class than those who had positive perceptions. Learners found the learning of new concepts to be easier in English than in Setswana (45% vs. 31%); they did not support the use of Setswana outside Setswana lessons (51% vs. 38%). The results suggest that the learners did not support the use of Setswana as the LoLT, except during Setswana lessons. The learners' present view contradicts their earlier view **(**cf. Table 6.7) in which they supported the use of Setswana as the LoLT. The results therefore affirm the status of English as the LoLT, and downgrade the use of Setswana in education.

Influence of independent variables on dependent variables

The results showed that more learners, irrespective of school location, gender, Form, and HL, had negative perceptions about the use of Setswana in education. Therefore the results were not statistically significant.

Generally, the majority of the learners, regardless of HL, did not support the use of Setswana in education, but the learners whose HL is English (87.5%) were the most opposed to the idea of Setswana being used as the LoLT in schools. The results were not unexpected, given that such a policy would reduce the hegemony of English in education. The aforementioned results were not statistically significant. They suggest that the learners' perceptions about the use of Setswana in education are negative. They regard English as a HFFC language, and Setswana as a HFIC language in education.

However, fluency in speaking English and academic ability had a significant influence on learners' views on the dependent variables stated above (cf. Table 6.20): more fluent than the non-fluent learners agreed that it was easier to learn new concepts in English than in Setswana (53% vs. 41%), and also agreed that Setswana should be used in Setswana classes only (54% vs. 50%). The results showed that learners who were fluent in English had more regard for the use of English in education than Setswana. Therefore, they were less likely to CS to Setswana in a class taught in English, but were more likely to CS to English during a Setswana lesson. In both cases, the results were statistically significant. The former was (p = < 0.0001), showing that the relationship between fluency in speaking English and the learners' opinion on the effect of learning new concepts in English vs. Setswana was highly significant with a small effect size of (0.12). The latter result was (p = 0.06), showing that there was a tendency towards statistical significance between fluency in speaking English and the learners' opinion of using Setswana as LoLT, but there was no effect size.

Furthermore, more HA learners than MA and LA learners agreed that it was easier to learn in English than in Setswana (HA: 50% vs. MA: 45%; LA: 39%). The results suggest that HA learners were less likely to CS to Setswana, but that MA and LA learners were more likely to CS to Setswana. However, more LA than MA and HA

learners agreed that Setswana should only be used in Setswana classes (60% vs. 51%, 45%). The results were unexpected. The LA learners were expected to support the wide use of Setswana as the LoLT. The HA learners and, to some extent, the MA learners were expected to oppose the use of Setswana as the LoLT. Both results were statistically highly significant (p = 0.0009 and p = <0.0001 respectively). However, the high significance was greatly influenced by a large sample size as the effect size was small in both cases (0.06 and 0.08 respectively).

Table 6.21: Learners' negative perceptions about the use of other local languages in class (RQ 6)

	Agree		Disagree		Not Sure		Total		M Frq
	N	%	N	%	N	%	N	%	N
1. It is easier for me to learn in my own language than in English.	571	27	1194	57	319	15	2084	100	283
2. I have no problem when a teacher uses the learners' local language in class.	815	40	1060	52	183	9	2058	100	309
3. There is no need to use other local languages in class besides English.	909	44	871	42	272	13	2052	100	315
4. My teacher sometimes uses my local language in class to ensure understanding.	1079	53	829	40	145	7	2053	100	314
5. Learners participate more when they are allowed to use their own local language in class.	1004	49	737	36	300	15	2041	100	326
6. Allowing learners to use their local lang. in class does not help them improve their spoken Eng.	1365	67	468	23	218	11	2051	100	316

The results in Table 6.21 above show that, generally, learners had negative perceptions about the use of a local language in education. Their negative perceptions were as follows: they did not think that using their own local language made learning easier (57% vs. 27%); the use of a local language in class had a negative impact on acquiring fluency in English (67% vs. 23%); it was unnecessary to use local languages in class (44% vs. 42%). Consequently, they objected to the teachers' CS to a local language (52% vs. 40%).

Despite the negative views expressed above, some of the learners were of the opinion that using a local language in class had some positive effects on teaching and learning, such as increased class participation and increased understanding of lessons expressed by 49% and 53% respectively. The results suggest that some learners recognized the value of using local languages in education, even though they were in the minority, and even though it was not officially permissible to use them.

Overall, the majority of the learners shared the view that allowing the learners to use their local language in class had little or no educational value. This outcome, therefore, suggests a negative perception among the majority of the learners of the use of local languages in education. The local languages were mainly viewed as LFFC languages, as opposed to English that was undoubtedly viewed as a HFFC language.

These results above are similar to those expressed earlier in Table 6.20. In both cases, and on the one hand, Setswana and other local languages were viewed negatively as LFFC languages with a minimal or no role to play in education. On the other hand, English is positively perceived educationally as a HFFC language. Despite the negative perceptions expressed earlier about Setswana and other local languages in education, previous results indicated that CS to either Setswana or a local language occurs in the classroom. This implies that the LoLT (English) may be problematic to use in the classroom. This issue will be revisited in Chapter Eight when the responses to the research questions are discussed.

Influence of independent variables on dependent variables

All the independent variables had a significant effect on some of the learners' responses as contained in Table 6.21 above.

Gender, form / grade, academic ability, and fluency in speaking English had a significant effect on learners' opinions that it was easier for them to learn in their own language than in English: more girls than boys (60% vs. 56%) and more F5 than F4 learners (61% vs. 54%) disagreed. The results suggest that female learners in F5 were unlikely to CS to their local language in class. However, almost the same number of learners with different academic abilities (LA: 58%, MA: 57% and HA: 58%) shared

the same view as stated above. This suggests that despite the learners' differences in academic ability, the majority of them were unlikely to CS to a local language in class. In addition, the majority of the fluent learners disagreed with the view that it was easier for them to learn in their own language than in English, but the majority of the non-fluent learners agreed with this view (60% vs.53%). The results suggest that learners who were not fluent in English were more likely to support the use of their local language in class than the fluent learners.

Furthermore, the majority of the learners for whom Ikalanga is a local language agreed that they found it easier to learn in their own language than in English, but other learners whose HL was either Setswana or English or 'Others', including learners with more than one HL, disagreed (47% vs. 47%, 79%, 63%). The results are not unexpected because the use of Ikalanga in class would be more beneficial to the learners whose HL is Ikalanga than to the other learners. Furthermore, although they were some learners who understood Ikalanga, even though it was not their HL, there were other learners (30%) who did not understand it at all.

The results above were statistically significant. The relationship between gender and academic ability as independent variables, and the view that it was easier for learners to learn in their own language than in English, were statistically significant ($p = 0.03$ and $p = 0.01$ respectively). The former had no effect size, but the latter had an effect size of 0.07. On the one hand, the relationship between form / grade and fluency in speaking English, and, on the other hand, learners' views on the view stated above, were statistically highly significant ($p = 0.0003$ and $p = 0.0001$ respectively). The former had a small effect size of 0.07, but the latter had no effect size. School location and HL had no influence of statistical significance to the learners' opinions on the view stated above.

School location, gender, and HL had a significant effect on learners' opinions about the teachers' use of a local language in class. The majority of the learners at the two urban schools objected to teachers' using a local language in class, but at the two peri-urban schools there were more learners who had no objection to it than those who did object (S 1: 54%, S 2: 59% vs. S 3: 47%, S 4: 47%). The results were not unexpected as there were more learners whose HL is Ikalanga in the two peri-urban schools (S 3:58% and

S 4:74%) than there were in the two urban schools (S 1: 23% and S 2: 36%), as previously stated. The results suggest that CS to a local language was more likely to occur at the two peri-urban schools than at the two urban schools.

In addition, although both boys and girls disagreed with the view that learning was easier if a local language was used, slightly more girls than boys disagreed (F: 54% vs. M: 48%). The results suggest that boys were more likely to support the use of a local language in class than girls. Similarly, whilst more learners whose HL was either Setswana or English or 'Others', including learners with more than one HL, disagreed with this view, more learners for whom Ikalanga was a local language agreed with this view (Setswana: 51%, English: 64%, 'Others': 68% vs. Ikalanga: 49%). As previously stated, learners for whom Ikalanga was a HL would benefit didactically if a teacher were to CS to their local language. The differences in learners' views stated above were statistically highly significant (school location: $p = 0.0001$, gender: $p = 0.0003$, and HL: $p = 0.0001$). However, the high significance was due to a large sample size as small effect size was recorded for each result (0.11, 0.08 and 0.15). Academic ability, form, gender, and fluency in speaking English had no influence of statistical significance on the learners' views.

School location, gender and HL had a significant effect on learners' opinions on the view that there was no need to use other local languages in class. More learners at urban schools agreed with this view, but those at peri-urban schools disagreed (S 1: 45%, S 2: 51% vs. S 3: 46%, S 4: 45%). Furthermore, the proportion of girls who agreed with this view was the same as the number or proportion of boys who disagreed (47% vs. 47%). Whilst there were more learners, irrespective of HL, who agreed that there was no need to use a local language in class, more learners whose HL was Ikalanga were of the view that a local language should be used in class (Setswana: 51%, English: 64%, Others (including learners with more than one HL: 49% vs. Ikalanga: 48%).

The results suggest that more learners at the peri-urban schools, majority of them boys, whose HL is Ikalanga were more likely to be supportive of the use of their local languages in class alongside English. While the reason behind their views may be a lack of proficiency in English or Setswana, it could also be due to strong affinity to

their language that Bakalanga are known for in Botswana as already alluded to in Chapter One.

The results stated above were statistically highly significant (p = 0.0008, p = 0.004 and p = < 0.0001). However, the small effect size in each case (0.06, 0.07 and 0.15), suggested that the sample size largely influenced the significance of the results. As the previous results demonstrated, academic ability, form / grade, and fluency in speaking English did not have any significant effect on learners' views. Consequently, their results were not statistically significant.

School location, gender, academic ability, and form / grade had a significant effect on learners' views that sometimes teachers CS to a local language to ensure understanding. The majority of the learners at urban schools refuted this statement, but the majority of the learners at peri-urban schools agreed (S1: 51%, S 2: 49% vs. S 3: 66%, S 4: 64%); whilst both boys and girls agreed that sometimes teachers CS to a local language in class, more boys than girls agreed with the statement (M: 55% vs. F: 51%). Although the majority of the learners in each category of academic ability agreed with the statement above, more MA learners than HA and LA learners agreed (MA: 58%, HA: 50% and LA: 49%). The results are interesting in that, thus far, the views of MA and HA have been in contrast with the views of LA learners. Similarly, both F 4 and F 5 learners agreed that their teachers sometimes CS to a local language in class, but more F 4 than F 5 learners agreed (F 4: 57% vs. F 5: 48%). The results suggest that CS to a local language was likely to occur more at peri-urban schools than at urban schools, and that more boys than girls, learners of MA and in Form 4 classes were likely to support CS to a local language. The results also suggest that the objective of using a local language was to enhance comprehension of the content of the lessons where the LoLT may not be effective.

The differences in learners' views expressed above were statistically significant. The effect of school location, academic ability, and form / grade on learners' views that sometimes teachers CS to a local language to enhance understanding of the lesson was highly significant (p = 0.0001, p = 0.0003 and p = 0.0005, in that order). The *medium* effect size of 0.23 showed that there was a *medium* association between learners' responses (by school location). However, the small effect size of 0.09 and 0.08 on the

results of effect of academic ability and form / grade showed that sample size largely contributed to the high significance of the results, and that there was a small association between the results and reality. Fluency in speaking English and HL had no effect of statistical significance on learners' views.

Only school location had a significant effect on learners' views that learners' participation in class increased if they were allowed to CS to a local language. The majority of the learners at peri-urban schools agreed that CS to a local language increased class participation (S 3: 55%, S 4: 60% vs. S 1: 43%, S 2: 43%), but those at urban schools disagreed. The results were statistically highly significant (p = < 0.0001), with a small effect size of 0.14. All the other independent variables had no significant effect on learners' views. Hence their results were not statistically significant.

Form / grade and fluency in speaking English had a significant effect on learners' views that allowing learners to CS to a local language in class negatively affected the attainment of fluency in English. Although both the F 4 and F 5 learners agreed with this view, more F 5 than F 4 learners agreed. The results suggest that F 4 learners were not as negative about CS to a local language as the F 5 learners were. Similarly, both the fluent and the non-fluent learners agreed that allowing CS to a local language was detrimental to the acquisition of English proficiency among learners. However, more fluent learners than the non-fluent learners were opposed to this practice. The results on the effect of form / grade on learners' views were statistically highly significant (p = 0.007), with a small effect size of 0.06, but the differences in learners' responses (by fluency in English) indicated a tendency towards statistical significance (p = 0.08), with no effect size.

The results showed that more learners (boys) who were not fluent in English, were in F 4, whose HL was Ikalanga, and who were attending peri-urban schools, were more receptive to CS to a local language and were, therefore, more likely to CS than the fluent learners (girls) who were in F 5, whose HL was any of the languages in the study apart from Ikalanga, and who were attending urban schools. Academic ability was not as influential to learners' views as the other independent variables. Learners,

despite their different academic abilities, shared similar views -- they did not CS to a local language in class.

6.6 SHORT SUMMARY OF FINDINGS

According to their responses, the learners acknowledged the existence of CS in the classroom. They also acknowledged that CS did not only take place between English and Setswana, but that it was extended also to a local language, Ikalanga, although minimally so. The learners' attitude towards CS was generally positive, and they found it educationally beneficial. They did not object to CS to Setswana, but more to CS to English during Setswana lessons than to CS to a local language in any class. Furthermore, like their teachers, they were of the view that CS is used more during the lessons of content subjects than during the lessons of language subjects.

Having quantitatively analyzed and presented the results from the teachers' and the learners' responses in the previous and the present chapter respectively, and having stated what the statistics indicated, the next chapter will deal with the analysis and the presentation of the qualitative data obtained through lesson observations. The aim is to determine whether or not CS occurred during the lessons observed; to identify the nature of CS and its functions in the classroom, and its effects on teaching and learning. It is hoped that the findings from the qualitative data will corroborate the findings reached by analyzing the quantitative data.