

Corpora in grammar teaching

- towards higher motivation,
deeper understanding and
more solid proficiency
in English grammar

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Projektnummer: 075/G04

Abstract

The principal aims of this project were to increase student motivation and encourage learner autonomy in a university course on English grammar by introducing the use of language corpora (large databases of authentic text). The students worked with problem-solving assignments which involved formulating their own grammatical rules based on examples found in the corpus. They also explained rules to each other in small groups (peer teaching). The methodology was evaluated by means of questionnaires and interviews, primarily focusing on experiences and attitudes. The most important conclusion is that corpus work requires a large amount of introduction and continuous support in order to make students become independent corpus users who know how to formulate relevant corpus queries and interpret the results.

Important note: Sections of this report are reproduced in the following article:

Estling Vannestål, Maria & Hans Lindquist. Learning English grammar with a corpus: Experimenting with concordancing in a university grammar course. *ReCALL* Volume 19 (3). (329-350)

Keywords

grammar, corpus, exploratory learning, peer teaching, higher education, classroom research, action research

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1. Introduction

1.1 Rationale for change

As teachers of grammar in an English proficiency course for Swedish first-semester university students, we have often been concerned about the negative attitudes that many students have towards grammar, many of them finding it boring and difficult. The grammar module has been improved over the years and nowadays contains substantial components of peer discussion and problem-solving activities, but it is still difficult to motivate many of the students. Moreover, several students have severe problems in applying grammatical rules in their own writing, even though they have studied English for many years in school before they enter university. Still, some areas of grammar tend to be particularly problematic, even at university level, such as subject-verb agreement and the use of articles.

We have been using language corpora, i.e. large databases of authentic text, in our research for many years, and we were keen to provide these useful tools to the students in our teaching as well. Regardless of their plans for the future, most people studying English can benefit from having access to a corpus. It can be used, for instance, to check issues concerning English usage when writing a text, for translation and for proofreading. Our question was: could it also be useful for learning about grammatical rules? This is what we wanted to test in the project. The principal aims were to increase student motivation and improve learning, but we also wanted to get the students to take more responsibility for their own learning of grammar by promoting an exploratory approach.

Corpora have been used for teaching purposes for more than two decades (see, for example, Johns 1986), but Römer (2006:121, citing Mukherjee 2004) claims that “most recent research shows that the English language teaching practice [...] has been largely unaffected by the developments in corpus linguistics”. Chambers (2007:3), on the other hand, believes that “consultation of corpora by learners appears to be increasing in higher education”. It may be that it is increasing to a small extent. In Sweden and elsewhere, corpora have mainly been used at higher levels at university, particularly by third- and fourth-semester students doing linguistic research for their term papers. For an exception, see Granath (1998), who used it in a proficiency course for first-semester students.

1.2 Review of relevant literature

As pointed out by Cobb (1997:301), Kern (2006:193) and others, there have been relatively few empirical studies actually evaluating the outcome of using corpora for learning and teaching. Chambers (2007: 5) also points to the fact that most empirical studies have involved small numbers of students. Lexical searches are the easiest type of search to be done in a corpus, and some studies have dealt with collocations and lexico-grammatical patterning along the lines suggested by Sinclair (2004). For a detailed and very useful survey of twelve studies on the use of corpora for the teaching of lexis, grammar and writing, see Chambers (2007). She concludes, among other things, that most of the experiments are carried out by corpus enthusiasts, and that the methodology is not likely to spread widely until it is introduced in language teacher education. A second conclusion is that all the studies are based on work in class – corpus activities outside the classroom have so far not been dealt with extensively in the literature – whereas corpus consultation may have its greatest future outside the classroom (Chambers, 2007:13, see also Egbert, 2005a:4). The present project to some extent corrects both these flaws in that one of the student groups consists of student teachers and in that most of the students’ corpus work is carried out between classes (see further Section 2.2. below).

The phenomenon of peer teaching, just like the use of corpora in learning, has attracted fairly little attention from researchers. This is particularly true of the type of peer teaching used in this project, i.e. “same-level peer teaching” (where students at the same level “teach” each other) (Boud, Cohen & Sampson, 2001:4–5). “Cross-level” peer teaching, however, where students at higher levels “teach” students at lower levels, has been more frequently used and investigated.

1.3 Questions

Experimenting with a new teaching method naturally brings forth a number of questions about how to go about it in order to reach one’s aims. Some of the issues discussed during the planning stage were...

- ... the importance of introduction to how corpora are used
- ... continuous support to make sure that the students understood what they were doing
- ... creating exercise material that was easy to work with
- ... focusing on areas of grammar that the students would find relevant

Being experienced corpus users, we were fully aware that we had to remember that using a corpus can be fairly difficult for someone who has never done it before. The ability to draw conclusions about grammatical rules and language usage from a list of authentic examples from texts requires a thorough introduction and continuous support. We further put a great deal of effort into creating exercises with clear instructions. Finally, in order to make the exercises feel relevant to the students, we focused on rules that tend to be particularly problematic to Swedish learners – rather than on more marginal issues – and explained this to the students.

1.4 Importance of the project

The project combines several assumptions about teaching and learning. One is the idea that exploratory learning is a way of improving learning outcomes (e.g. Manning, 1996:24; Kennedy & Miceli, 2001:71; Bernardini, 2004:16–17). Furthermore, authentic teaching material is generally accepted as having pedagogical advantages over non-authentic material, since it presents language as it is used in real communicative contexts (Johns, 1998:11; Aston 2000:12). It is true that examples from a corpus only provide co-text, rather than global communicative context, but it can be argued that the concordance line is superior to the invented example, as corpora provide attested examples of language use, and a simple click enables the learner to view the context in greater detail if a particular example presents difficulties. Thirdly, the project involves peer teaching, where the assumption is that students learn more when they have to explain an issue to someone else (e.g. Whitman, 1998:5; Boud, Cohen & Sampson, 2001:3). Our hypotheses were that these methods would increase student motivation and also improve their ability to explain and apply grammatical rules.

2. Method

2.1 Students

The grammar course in which the language corpus was used is part of a more comprehensive proficiency course for first-semester students of English, which also includes vocabulary training, academic writing and oral presentations. The course is taken both by programme students, aiming to become teachers or international administrators, and by students who

study English as an independent course. Contrary to many other courses at the English department, which are taught in five-week modules, the proficiency course runs all through the semester, since it is believed that proficiency development is a process which needs to be practised over time. Students are divided into groups of around twenty and meet the teacher for twenty sessions, nine of which are devoted to grammar. Each group of twenty students is further divided into “peer groups” of four, who meet between classes in order to discuss grammatical problems and review each other’s compositions.

The courses at the English department mainly attract female students, typically in their early twenties. This was also the case in the student groups taking part in the corpus project; only 12.5% in the first semester (5/40) and 21% in the second semester (6/28) were male. In the first trial, 25% of the students (10/40) had another mother tongue than Swedish, whereas this percentage was higher in the second trial: 39% (9/28). There were no foreign students taking part in the course during the two semesters that the project ideas were tested.

The implementation of corpus work was done in two trials (two semesters), with two different groups of students. In the first semester, the students were all from the teacher-training programme, whereas in the second semester, all the participants were from the international administration programme.

2.2 Innovation

In the first trial, we used one experimental group and one control group (the first one comprising 20 students and the second group comprising 23 students at the beginning of the semester). In the experimental group, some of the ordinary problem-solving exercises whose answers could be found in the grammar book were replaced by corpus exercises (see below), whereas the control group used the grammar book and the ordinary activities (discussion questions, translation sentences and gap-filling exercises) only. As mentioned above, the students were all from the teacher-training programme and we endeavoured to create two groups that were as similar and comparable as possible (see Appendix 1 for learners’ profiles). The two groups contained fairly equal proportions of males and females and students with a Swedish vs. a non-Swedish background. The students in the two groups further seemed to have done equally well in upper secondary school, their grades being very similar.

To make the two groups as similar as possible from a proficiency-level point of view, we also used the results of the diagnostic test which all students take at the beginning of the semester. This diagnostic test consists of fifty fill-the-gap questions where grammatical structures occurring in authentic sentences are to be translated from Swedish into English and fifty multiple-choice questions where words occurring in authentic sentences are to be translated from English into Swedish. The control group had done marginally better in the diagnostic test, scoring 53 on average out of 100 as compared to 51 for the experimental group.

Unfortunately, some characteristics of the experimental group proved to be disadvantageous to the experiment, in spite of our efforts to create similar groups. For instance, it turned out that more students from the experimental group were aiming at becoming teachers at a lower school level as compared to the students in the control group, and we have often experienced that primary school student teachers are less motivated for grammar studies than secondary school student teachers. It was also soon discovered that the experimental group in particular included some really weak students.

In the second trial, we abandoned the idea of using an experimental group and a control group (see Section 2.3 for a brief discussion) and instead all 35 students (this time from the international administration programme) were introduced to corpora. Their upper secondary school grades were similar to those of the students in the first trial, but the average score on

the diagnostic test was some ten points higher than the previous semester, which indicates that – as a whole – these students might have been better at English than the students taking part in the first trial. We also made some modifications to the exercises and the overall set-up (see Section 3.2).

The corpus used for the exercises was the Cobuild Concordance Sampler (the free on-line version of the Cobuild Corpus). This demo version consists of a selection of the full corpus (some 56 million words of spoken and written British and American English), and the output is restricted to 40 concordance lines for each search. In earlier studies, a variety of corpora have been used, and arguments have been presented both for large general corpora and smaller, sometimes domain-specific corpora (cf. Chambers, 2007:8–9 for an overview and discussion). The reasons for choosing the Cobuild Concordance Sampler were that (a) it is free of charge and available on the Internet, thus facilitating access between classes and in the future; (b) it has a search program that is more useful for grammatical searches than, for instance, the British National Corpus, another free on-line corpus; (c) it is big enough for most types of grammatical problem-solving, and (d) it contains both British and American English, which makes for comparisons of these two varieties. The fact that the corpus is freely available means that the students were provided with a tool that they might use in the future, after the course had finished.

The first two two-hour sessions started with a discussion of what the word *grammar* means to the students, their experiences of learning grammar in school and their attitudes to grammar. As expected, many students associated grammar with a boring book of rules and equally many exceptions, and several of them described negative experiences from school, involving teachers who either disregarded grammar entirely or taught it with great reluctance. The rest of the introduction was devoted to an introduction to corpora in general and to the Cobuild Concordance Sampler in particular. The students carried out introductory exercises which were initially based on printed-out concordance lists. At the next stage, the students worked with hands-on exercises on the computer. The teacher presented different search techniques and pointed to various important issues, such as the importance of looking at the context of a keyword in a concordance list, and the fact that a concordance list may include lines that have to be disregarded for various reasons – they may for instance contain examples that are not relevant for the construction under study, plain errors, misprints etc.

After the introduction, the students explored a number of aspects of English grammar with the help of the corpus exercises developed in the project (presented in a booklet that was distributed to the students in the first session¹). A problem encountered at the preparation stage was the scarcity of actual examples of exercises that could be used as a source of inspiration for the exercises that were to be created in the project. A few exceptions are Tribble and Jones (1997) and Johns ([www])². Appendix 2 provides an example of an exercise created in the project.

The students were instructed to do the exercises in pairs between classes, half of the pairs doing some of the exercises and the other half doing the rest. The students thus carried out most of the corpus work outside the classroom, either at home or on public computers at the university. The corpus queries had been formulated in the project, so the task for the students was to type in these queries and draw conclusions about grammatical rules based on the concordance lines of examples appearing on the screen. The exercises were of various

¹ The booklet with exercises produced in the project is freely available for downloading (in either Word or PDF format) from: <http://www.vxu.se/hum/utb/amnen/engelska/kig/>.

² A visit to Karlstad University, where corpora are used in teaching to a small extent (and have previously been used on a larger scale in a project similar to the present one, see Granath, 1998), provided further ideas for how the corpus exercises could be created.

kinds and levels of difficulty, but we tried to create exercises where the interpretations would be relatively straightforward. Some grammatical problems that were originally planned to be included thus had to be discarded, simply because they could not be solved in an easy way by means of corpus searches. Some examples of topics dealt with in the exercises are: uncountable nouns, invariably plural nouns, subject-verb agreement, article usage, tense, the simple vs. the progressive form, verb complementation, adverbs in *-ly*, *it* vs. *there* and *who* vs. *which*. The final task was to formulate one's own usage question and corpus query.

In the classroom a system of peer teaching was implemented, based on the students' work at their computers. They worked together in groups of four (i.e. two pairs) and took turns at "teaching" each other (one pair teaching another pair), which meant that everybody was continuously engaged in the language learning process. The importance of varying the roles of "tutor" and "tutee" is pointed out by Falchikov (2002:82). The students were encouraged to get involved in discussion rather than just presenting information. While they were at work in the peer groups, the teacher walked around listening to the discussions and helping out if the students ran into problems. Sometimes, for instance, the pair responsible for presenting a particular grammatical problem had not fully understood the exercise or how to interpret the results of their corpus study. Finally, the teacher went through the answers to the corpus exercises in the whole class, together with the students, in order to make sure that everybody had understood what could be learned from the corpus data.

Two students, Maria Karlsson and Sara Månsson, were engaged in the project work even before the start of the project. They participated in the planning process, in the introductory meeting at Stockholm for all new projects financed by the Council (in which the project leader could not take part because of childbirth) and in the trip to Karlstad University. Finally, our project students tested and commented on all the corpus exercises that were produced in the project before their implementation. This was a very valuable contribution, since the students had both taken the grammar course a few years earlier.

2.3 Procedures

Since the project is based on the researchers' practice and since two of the members in the project group taught the classes³, the methodology can be characterized at least partly as 'action research', more specifically of the type which stresses reflective practice and is carried out by the "teacher as researcher" (cf. Cohen, Manion & Morrison, 2000:230–234).

As mentioned above, different methods of evaluation were used in the two trials. In the first semester, we applied a system with an experimental group and a control group. However, such an approach is not always optimal. Pawson & Tilley (1997), for instance, point to several problematic aspects, such as the difficulty of establishing what actually causes differences (cf. the well-known Hawthorne effect), a study of this kind tending to lend itself to a focus on negative results (i.e. if a new idea turns out not to be successful for everybody all the time, the conclusion is often drawn that the new methodology is not successful at all). Furthermore, regarding this particular project, some students in the experimental group complained about having a heavier workload than the students in the other group, and some students in the control group were disappointed at not having being introduced to corpora. We therefore decided to use corpora in both groups in our second trial.

The students in the first trial were evaluated from two different perspectives: the development of their attitudes to the study of grammar and the development of their actual knowledge of grammar, whereas the focus in the second trial was solely on attitudes (since we did not use a control group this time). The attitudes and the students' own perception of their development were investigated by means of questionnaires containing rank orderings as well

³ First semester: Maria Estling Vannestål (project leader). Second semester: Emil Tyberg (project advisor).

as open questions. The questionnaires were handed out to the students in both semesters, one at the beginning and one at the end. In the first trial, 20 students from each group (three students being absent in the control group) answered the first questionnaire, whereas 14 and 16 students from the corpus group and the control group respectively filled in the second one (some students had dropped out and some were absent when the evaluation was carried out). In the second trial, 28 (out of 35) students answered the first questionnaire and 27 students answered the second one.

Both questionnaires included some general background information: sex, age, first language, parents' education, grade in English from upper secondary school, a self-evaluation of the students' knowledge of English and so forth. The rest of the first questionnaire (at the beginning of the semester) comprised questions about the students' experiences from school and attitudes to and expectations of the grammar course (see Appendix 4). The questions in the second questionnaire (at the end of the semester) focused on the students' attitudes after the course, the extent to which their expectations had been fulfilled and their opinions on working with corpora and peer teaching (see Appendix 5).

In the first semester, the experimental group and the control group were further compared in terms of an initial diagnostic test (see Section 2.2) and their final exams. As pointed out by Egbert (2005a:6–7), “it is difficult to measure learning results over short periods of time, and sometimes even over longer ones”, there being so many confounding factors. However, since all students' knowledge and proficiency is normally tested anyway, we included these tests in our evaluation process. The students in the experimental group and the control group sat the same regular exams at the end of the semester: a grammar test and a composition test. The reason for including the composition test in the evaluation is that one of the aims of the project was to increase our students' ability to apply grammatical rules to their own writing. The grammar test consisted of translation sentences, explanation tasks and spot-the-mistake tasks. In the composition test the students had to write a 700-word composition on a topic from a list given out one week in advance.

The students taking the grammar course in the second semester were interviewed about their experiences and opinions of the corpus work. In the interview we focused more on some of the critical questions accounted for in Section 1.3 above, since we realized that we had not been very specific about these issues in the questionnaire. For instance, we asked questions about how the students had experienced the introduction, and how well they had understood the instructions in the exercise material. These semi-structured group interviews were carried out according to an interview guide (see Appendix 6) by an independent interviewer in the groups in which the students had been working throughout the course, and were then transcribed by the project leader (for the interview methodology, see Cohen, Manion & Morrison, 2000:267–292).

The combination of quantitative and open questionnaire questions, quantified examination grades and the researchers' qualitative reflections makes this a mixed methods study of the kind recommended by Huh & Hu (2005:18–19).

3. Results

3.1 Trial number one

The introduction to the first trial went well, and the students seemed to have understood, at least superficially, what they were supposed to do. A brief mid-semester evaluation showed, however, that many students found the corpus work difficult. Some students felt that technical problems (slow Internet connections at home, the corpus website not always working) and the fact that they sometimes did not understand how they were supposed to interpret the corpus

results prevented them from carrying out their tasks in a satisfactory way. As a result of this, some of the remaining sessions were moved to the computer room, giving the teacher a possibility to provide more support to the students in their corpus work.

There were also a number of outside factors that influenced the corpus work in a negative way this semester: unfortunate scheduling (which resulted in very little time between classes for some parts of the semester), a very heavy workload in another course partly running parallel with the proficiency course (which resulted in the grammar course work not being prioritized), unusually many weak students and remarkably many personal problems among the students. Several students dropped out of the experimental group, but none from the control group, so at the end of the semester the former comprised 14 students, while the latter comprised 23 students. The following sections present the most important results of our evaluation, and graphs illustrating the statistics described can be found in Appendix 7.

3.1.1 Questionnaires

Our hypothesis was that the students would be more positive towards grammar after the course, and that the improvement in attitude would be greater in the experimental group. Several students were (much or slightly) more positive towards grammar after the course: 35% (5 students out of 14) in the experimental group and 75% (12 students out of 16) in the control group, while 29% (4 students) in the experimental group and 13% (2 students) in the control group were slightly more negative (see Appendix 7a). Equally many students had not changed their attitudes. So even though the hypothesis that the students would be more positive was supported to some extent, the hypothesis that improvement would be greater in the experimental group was not. The figures even indicate that the corpus work had been detrimental to attitude improvement, an idea further confirmed by the fact that none of the students mentions the use of corpus activities as a reason for a positive change in attitude; instead they point to factors such as knowledge improvement and the teacher's pedagogical skills.

In one question we asked the students about the extent to which their expectations of improving their general English proficiency, understanding of English grammar and ability to explain grammatical phenomena had been fulfilled. Our hypothesis was that the experimental group would find that their expectations had been fulfilled to a higher extent. Both groups found that their expectations had been fulfilled, at least to a fairly high extent, but the control group's expectations were fulfilled to a slightly higher degree (see Appendix 7b), and again our hypothesis was not supported (and *our* expectations not met).

Does this mean that our students have been scared away from corpora for life? In another question, we asked the students in the experimental group whether they thought they would use corpora for certain purposes in their future working career. Surprisingly, considering the answers to the previous questions, most students were positive towards corpus use, especially for answering questions from pupils and marking papers, but also for their own writing (see Appendix 7c).

The following comments from our students in the first trial illustrate both positive and negative opinions on using corpora:

A very good tool, both for teachers and students.

It's more fun to work with corpora.

A bit tricky at the beginning but good when you understand how it works.

I actually use the corpus to look up things for my compositions, not just for the exercises.

Feels like just a lot of counting.

It takes a lot of time and I don't like it at all.

3.1.2 Test results

Our hypothesis was that the corpus students would have improved their grammar skills more than the control group. However, when we calculated the mean scores, the experimental group ended up with 49 points and the control group with 51 out of the possible 70 (see Section 2.3). As mentioned above, the difference between the groups in the diagnostic test at the beginning of the semester was also 2 points in the control group's favour. Thus the control group had learnt exactly as much, or as little, as the experimental group and our hypothesis was not supported.

As regards the results of the composition exam, we hypothesized again that the experimental group would do better than the control group. The compositions were graded on a scale from A to E, where A-B is pass with distinction, C-D plain pass and E fail. The letter grades were given numerical values so that means could be calculated: A = 4, B = 3, C = 2, D = 1, fail = 0. The experimental group obtained an average grade of 1.43 and the control group 1.56. The fail rate in the experimental group was 36% (7/23) and in the control group 30% (5/14). Again the control group thus performed at a slightly better level.

We were of course disappointed that our hypotheses about more positive attitudes and improved learning had not been confirmed and we were quite concerned about the future of the project. On the other hand we realized that the negative factors beyond our control had probably contributed to the results. Furthermore, most of our students – even if they had not learnt more grammar with our corpus exercises – claimed that they were positive towards the idea of using corpora in the future, and this was indeed a positive outcome.

3.2 Trial number two

As mentioned above, corpora were used in both student groups in the second trial. We also made some changes to the set-up of the corpus work. After the introduction the students did the first corpus exercises in class in the computer classroom, rather than between classes. This meant that the teacher could provide more support and explanations as to how the corpus work was to be carried out, how conclusions should be drawn, etc. Furthermore, the number of exercises was decreased, the layout was made clearer and introductory exercises where the students were asked to formulate their own corpus queries were introduced (see Appendix 3).

3.2.1 Questionnaires

At the end of the semester, the majority of the students had a more positive attitude to grammar after the course than before it started. 63% (17 students) had a slightly more positive attitude and 22% (6 students) had a much more positive attitude, whereas 15% (4 students) had not changed their attitude (see Appendix 8a). No students expressed a more negative attitude to grammar after the course. However, the change of attitude in a positive direction is not ascribed to the use of corpus activities, but mainly to knowledge improvement and a good teacher – the same factors that were mentioned by the students in the first trial.

On a scale from 1 to 7, the average scores for fulfilled expectations regarding proficiency, understanding and explaining were between 4.6 and 5.2 (see Appendix 8b), and the results were thus quite similar to those from the first trial. Finally, when asked about the likelihood of their using corpora in the future, again the majority of the students were positive, particularly about using them for writing texts in English (see Appendix 8c).

3.2.2 Interviews

The interviews with the students show heterogeneous opinions in terms of attitudes to the use of corpora, but a few aspects recur in most of the interviews. First, the corpus often did not work when the students used it from their homes, and sometimes not when they used it at university either. This of course caused frustration and resulted in some students not prioritizing the corpus work. Second, many students did not feel that they really learnt how to formulate their own corpus queries.

Apart from these two aspects, the students' answers differed a great deal. Some liked using the corpus, finding this way of working interesting. Others said that they preferred the more traditional way of reading about grammatical rules in the book. Some students felt that the exercises were too simple, whereas others found them very hard. Some students did not understand how to interpret the results of the corpus searches. They pointed to the fact that a corpus only provides examples from texts, no grammatical rules, and they had severe problems with the inductive way of working. We also asked the students about the peer teaching aspect, and many students said that they enjoyed it, both explaining grammatical rules to other students and having grammatical rules explained to them by their peers. Many students said that they probably would use corpora in the future, but they would have appreciated learning more about how to formulate their own queries.

4. Discussion

The project described in this report started out from the hypothesis that advanced EFL learners' motivation, grammatical understanding and general proficiency would be enhanced through the introduction of inductive learning by means of corpus work in the curriculum. However, as pointed out by Sun (2003:611), concordancing does not automatically lead to inductive learning in all students. Among the weaknesses of previous work on Computer-Assisted Language Learning (CALL) listed by Huh and Hu (2005:10) is the tendency of pedagogues and researchers to assume that CALL methodology must be a good thing and to suppress negative results. Probably the most important conclusion that can be drawn from the present project is that introducing the use of corpora to students requires a great deal of time, support, patience, enthusiasm and reflection from the teacher. It is necessary to spend much time together with the students in front of the computers in order to help them get to grips with the corpus work.

First, the students need help with purely technical matters ("How do I unblock pop-up windows?", "Why does the computer tell me that the query syntax is bad?" etc.). One of the most negative experiences in the project work was the technical problems that the students encountered, and perhaps we overestimated their general computer skills. When deciding which corpus to use we were aware of the fact that the free on-line version of the Cobuild corpus sometimes has technical problems, but we have not experienced them to the extent that our students did. The other alternative, using a corpus that the university pays for, might have worked better, but on the other hand it would have restricted the students' access to the corpus – both during and after the course. A possible solution in the future could be to offer the students several different corpora to work with.

Second, the students need very clear guidance as to how they should draw conclusions from what they see on the screen. Most students are used to reading about grammatical rules before they see examples. It can thus take a lot of time and practice for them to understand how they should think when faced with a concordance list of authentic examples, from which they are supposed to extract rules of language usage. It might not be as simple as Barnbrook

(1996:140) puts it, viz. that “students can derive the information they need directly from the language, as though the computer were a tireless native speaker informant.” As pointed out by, for instance, Gavioli (1996:83), it is easy to overlook the difficulty of interpreting concordance lines, and the students have to be led very carefully into this process by looking at clear examples. Furthermore, the need for support does not stop after the introductory phase. The importance of training is stressed by, for instance, Cheng, Warren & Xun-feng (2003:183), Yoon & Hirvela (2004:277) and O’Sullivan & Chambers (2006:65). The inductive way of thinking seems to be particularly problematic for weak students, as has also been observed by, for instance, Granath (1998) and Mauranen (2004). We tried to give the students more support by spending more time than originally planned in the computer room, but obviously they would have needed even more help.

Some students felt that they learnt less by using the corpus, rather than the other way round. Judging from the results of our project it is thus not obvious that corpora facilitate students’ understanding of grammatical principles. One possibility that has been discussed among the project members is that corpus work maybe should be introduced through work of a more lexical nature (including phraseology) during the introductory semester, and grammatical structures saved for the second semester, when the students feel more comfortable with the methodology and the weakest students have usually left the program. Perhaps it would also be a better idea to focus on introducing the corpus as a tool for writing, rather than for grammar learning.

Many students said that they could see the benefits of being able to use a corpus to get help with usage questions when writing texts in English. Most of the student teachers also realized the potential of using corpora when marking papers and answering questions from students. However, many students also felt that the course had not made them understand well enough how they should formulate their own corpus queries. If we want our students to become independent corpus users, we also need to put a lot of effort into teaching them this particular aspect of corpus work. We tried to improve the exercise material in the second trial, by introducing exercises where the students were instructed to formulate their own corpus queries, but again it seems that the students would have needed even more practice, preferably in the computer room with the teacher. As pointed out by Chambers (2007:13), “there is no research directly focusing on independent corpus consultation by significant numbers of learners”, so this is obviously an area where more work needs to be done.

Catering for the needs of all students in a student group is not an easy task, especially when the group is heterogeneous in terms of proficiency level, metalinguistic knowledge and motivation. One further complication which has been much discussed in recent years is the notion that students have different learning style preferences (cf., for instance, Brown 2000: 112-134; Dunn, Denig & Lovelace 2001). As a teacher, one should always strive to present alternative ways of learning. It is possible that using computers in language learning can appeal to students with certain learning styles, but on the other hand one must also remember that some students do not appreciate using computers at all. In the project we have accordingly discussed the possibility of offering corpus activities for our students on a voluntary basis in the future, rather than having all students do the same thing. In this way, and especially if we also design other types of grammar activities, we could present several different ways of working with grammar, and thus perhaps cater more efficiently to the various needs of our students.

In conclusion, even if none of our expectations were entirely fulfilled in relation to our original aims, and in spite of many practical problems of various kinds, the project has provided a number of valuable insights. In particular, through the qualitative evaluation of the corpus work we have gained explicit knowledge about the students’ experience of their learning situation. This is knowledge which can be used in further development of corpus-

based teaching. In future work we hope, among other things, to be able to investigate more closely how students could best be trained to work independently with corpora, formulating their own queries and interpreting the results. Another interesting area of study would be how corpora could be used in teacher training, for instance, to contrast information found in course books used for language teaching with authentic language found in corpora.

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Appendix 1: Learner profiles

Table 1: First trial, spring 2006 (20 + 20 students at the teacher training program)

	Sex		Average age	First language		Parents' education		
	Male	Female		Swedish	Other	Sec. school	Upper sec.	Tertiary
Corpus group	2	18	23	15	5	3	10	7
Control group	3	17	25	15	5	6	6	8

	Grade in English			Self-evaluation (grammar knowledge)	Self-evaluation (writing)	Teaching level aimed at		
	G	VG	MVG	Average 1–7 (1 = very bad, 7 = very good)	Average 1–7 (1 = very bad, 7 = very good)	Prim.	Sec.	Upper sec.
Corpus group	1	13	5	2.9	4.5	11	1	8
Control group	1	11	4	3.7	4.7	7	4	9

Table 2: First trial, autumn 2006 (28 students at the international administration program)

	Sex		Average age	First language		Parents' education		
	Male	Female		Swedish	Other	Sec. school	Upper sec.	Tertiary
Corpus group	6	22	22	17	11	4	11	13

	Grade in English			Self-evaluation (grammar knowledge)	Self-evaluation (writing)
	G	VG	MVG	Average 1–7 (1 = very bad, 7 = very good)	Average 1–7 (1 = very bad, 7 = very good)
Corpus group	2	16	3		3.1
					5.0

Appendix 2: Example of a corpus exercise

Corpus exercise on *dozen*, *thousand*, *million* and other numerals

A. Two of the following phrases are correct expressions. Use the corpus to find out which ones.

- (a) two dozen eggs
- (b) two dozens eggs
- (c) two dozens of eggs
- (d) a dozen of eggs
- (e) dozens of eggs

Queries:

two+dozen|thousand|million+NNS
two+dozens|thousands|millions+NNS
two+dozens|thousands|millions+of+NNS
a+dozen|thousand|million+of+NNS
dozens|thousands|millions+of+NNS

Results:

correct: _____

incorrect: _____

Example sentences from the corpus:

B. How would you translate the two correct expressions into Swedish?

(a) _____

(b) _____

Appendix 3: Example of a corpus exercise including query formulation

Corpus exercise on *used to* vs. *be used to*

How would you formulate corpus queries to find out the difference in verb form (infinitive or *-ing* form) following the two structures *I used to...* and *I'm used to*? Tip: Write *I'm* as two separate words (i+m) in your query.

Results:

Do you know why there is a difference?

Appendix 4: Questionnaire 1 (beginning of semester)

(abbreviated and translated from Swedish into English)

The questions in this questionnaire refer to the students' attitudes and experiences from school. Questions 1–4 were asked in relation to three levels (primary school, secondary school, upper secondary school) and concern grammar teaching in English, the students' first languages and other foreign languages.

1. How did you work with grammar in school (separately, integrated with reading, writing etc., no grammar)?
 2. What kind of teaching material did you use (a specific grammar book, a textbook where grammar was integrated, no grammar)
 3. What was your classmates' attitude to (negative 1 – positive 7)?
 4. What was your teachers' attitude to grammar?
 5. What do you think about learning English grammar (on a scale from 1–7): easy – difficult, interesting – boring, useful – not useful?
 6. What is your experience of using computers in (a) school, (b) at home (on a scale from 1–7): little experience – a lot of experience)
 7. What do you think about working with computers (on a scale from 1–7): easy – difficult, interesting – boring, useful – not useful?
 8. What is your experience of working in pairs/groups (on a scale from 1–7): little experience – a lot of experience)
 9. What do you think about working in pairs/groups (on a scale from 1–7): easy – difficult, interesting – boring, useful – not useful?
 10. What are your expectations of the grammar course (on a scale from 1–7): to improve my English proficiency, to better understand how grammar works, to be able to explain grammatical rules to other people, to find my way in the grammar book, other things
 11. What way of working with grammar would you prefer (on a scale from 1–7): explanations provided by the teacher – an exploratory working method, independently – in a group
- NB! Throughout the questionnaire we also asked the students to add any other comments.

Appendix 5: Questionnaire 2 (end of semester)

(abbreviated and translated from Swedish into English)

1. What do you think about learning English grammar (on a scale from 1–7): easy – difficult, interesting – boring, useful – not useful?
2. Do you think that your attitude to grammar has changed this semester (much more positive, slightly more positive, neither more positive nor more negative, slightly more negative, much more negative)?
3. If your attitude has changed, what do you think is the reason?
4. To what extent has your expectations of the grammar course been fulfilled (see Appendix 2, question 10)
5. On a scale from 1–7, what did you think about working (a) with the corpus, (b) in an exploratory way, (c) in pairs between classes, (d) in peer teaching groups in the classroom, with whole-class surveys?
6. How do you evaluate your own engagement in the course (1 = very inactive, 7 very active) concerning (a) reading the grammar book, (b) working with corpora in pairs between classes, (c) in peer teaching groups in the classroom, (e) in whole-class surveys?
7. How can the corpus work be improved in the future?
8. How can the peer teaching part be improved in the future?
9. Do you think you will work with corpora in the future:
 - teachers: (a) when writing texts in English, (b) when marking students' essays, (c) for answering questions from students, (d) for classroom activities?
 - international administrators: (a) when writing texts in English, (b) when translating texts, (c) for answering questions from colleagues and friends?

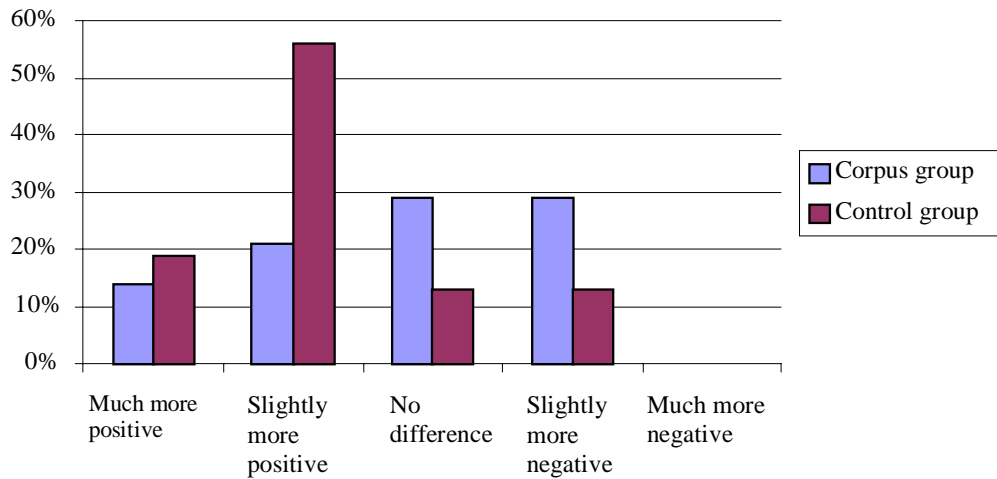
Appendix 6: Interview guide

(translated from Swedish into English)

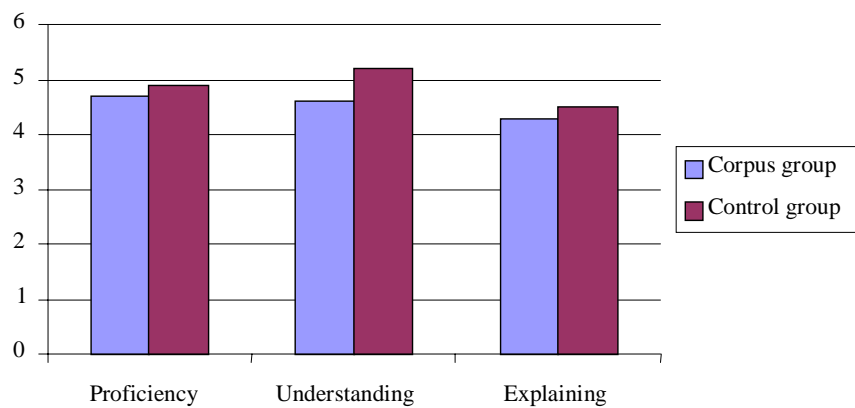
1. What did you think when you heard that you would be part of a group that would use computers in grammar teaching? Fun? Scaring? Any other reactions?
2. What did you think about the introduction to corpora? Were the instructions clear? Were the introductory exercises comprehensible?
3. About the corpus work between classes:
 - (a) Where did you usually work with the corpus (at home, at the university)? Did you have any technical problems?
 - (b) Did you usually understand the instructions well enough to carry out the exercises?
 - (c) Did you usually manage to draw conclusions about grammatical rules based on the corpus results?
 - (d) How well did you manage to formulate your own corpus queries? Did you use the search guide at the back of your compendium to help you formulate queries?
 - (e) How well did the work in pairs by the computer between classes go? Did you feel that the workload was fairly divided between you?
 - (f) Any other comments?
4. About peer teaching in the classroom:
 - (a) How did you experience being the person explaining grammatical rules to your peers?
 - (b) How did you experience having grammatical rules explained to you by your peers?
5. What did you think about learning grammar in this way (by drawing conclusions based on corpus results) compared to learning in the more traditional way (from a grammar book)? More difficult/easier? More boring/more fun? Any other comments?
6. Did you use the corpus for any other purposes, besides carrying out the grammar exercises? Why/why not?
7. Do you think the corpus will be of use to you in the future? In what way?

Appendix 7: Statistics based on questionnaire 2 (1st trial)

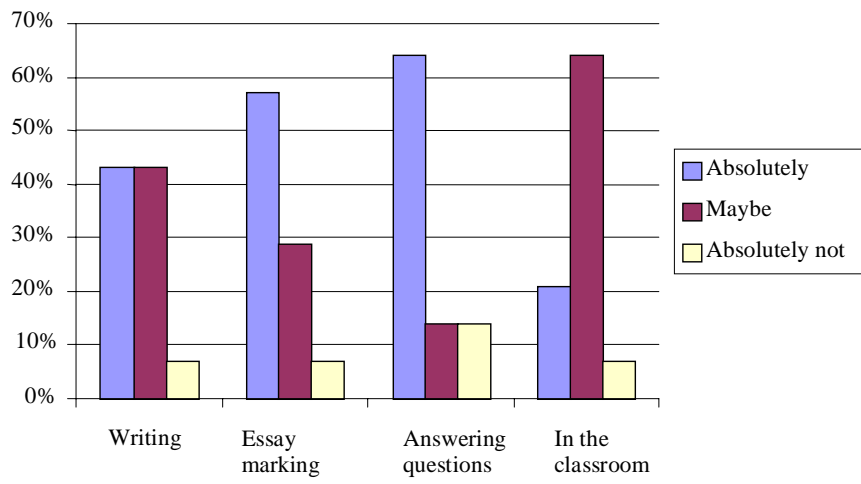
7a. Attitudes to grammar after the course



7b. Fulfilment of expectations

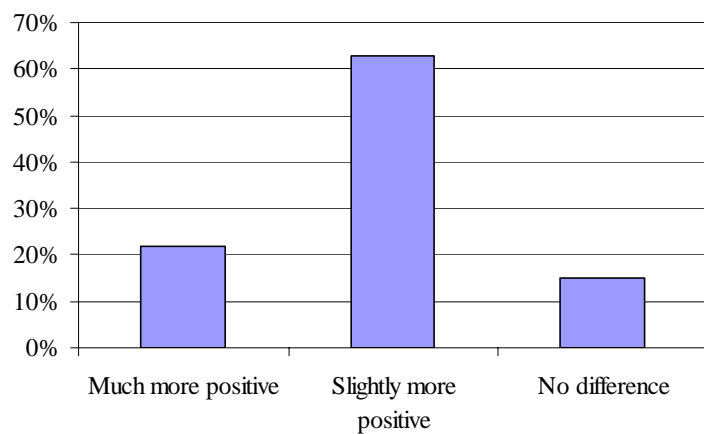


7c. Future use of corpora

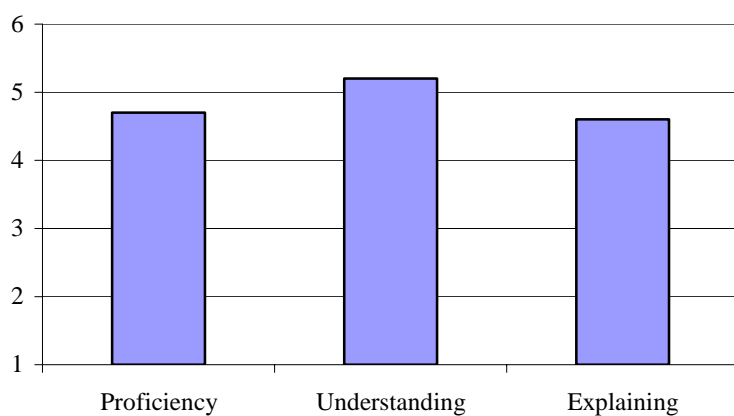


Appendix 8: Statistics based on questionnaire 2 (2nd trial)

8a. Attitudes to grammar after the course



8b. Fulfilment of expectations



8c. Future use of corpora

