

Does direct grammar instruction improve students' performance on grammar-based tests of English as a foreign language?

Wu, Hsiao-li (Ellen Wu)

Wenzao Ursuline College of Languages, Taiwan

[hlwu@mail.wtuc.edu.tw]

Abstract

This paper reports the results of an experiment designed to test the hypothesis that direct grammar instruction has a positive impact on the test performance of learners of English as a foreign language. At first sight, the results appear to indicate that direct grammar instruction had a negligible effect overall on test performance. However, a more detailed examination of the results suggests that there was a marked positive effect in the case of some students. Furthermore, the test itself proved useful as a diagnostic tool and as a measure of student progress. Perhaps most significant is the fact that a comparison of the results of a pilot study and the experimental study itself raises issues about the significance, or otherwise, of research on teaching and learning second and foreign languages that is based on single experiments. Teachers of languages (international, community and indigenous) need to be sure that experimentally-based research is both robust and of direct relevance to the particular contexts in which they work. This is of real importance for many Pacific and Pacific-rim countries where the teaching and learning of English can have implications for economic success, and the teaching and learning of indigenous languages can have implications for the very survival of these languages.

Background to the research

Over the past few years, I have attempted to make my teaching of English at tertiary level in Taiwan more student-centred and more 'communicative' in the sense that it is "designed to [encourage] learners to communicate real information for authentic reasons" (Ministry of Education (New Zealand), 2002, p. 16). In spite of the fact that language classes in Taiwan are generally large by Western standards and the fact that students are accustomed to teacher-directed rather than student-centred learning, my efforts seemed to me to be successful in relation to student motivation and student progress. Even so, I felt that there was a problem. One of the main aims of many Taiwanese students of English is to achieve a satisfactory score in the TOEFL test, a test of English as a foreign language that was established in 1964 and that has been taken by nearly 20 million students in 165 countries (<http://www.toefl.org>: visited 15 July, 2003). I was not convinced that adopting a communicative approach would necessarily improve students' scores in the TOEFL test. I was also interested in finding out whether it was really the case, as much research on second language acquisition suggested, that teaching grammar explicitly might be less useful than is generally supposed in Taiwan.

It seemed to me that the issues that Western researchers were primarily concerned with were not necessarily those issues that were of most significance to teachers of English in Taiwan where success tends to be measured in terms of the scores students achieve on TOEFL (or TOEFL-style) tests. It may be that TOEFL tests do not provide a good measure of language proficiency. However, they play an important role in Taiwan. In particular, there has been much debate in the press recently about a comparative study of average TOEFL scores across Asian countries that places

Taiwanese test-takers (with an average score of 198 out of 300) at number 23 in a list of 30 countries (see, for example, Yiu, *Taipei Times*, Nov 7, 2003).

It is sometimes claimed that direct grammar instruction has little effect on the ability of second language learners to communicate accurately and effectively. This *may* be the case. However, even if it is the case, it is possible that direct grammar instruction *does* have an effect on students' ability to score well in tests such as the TOEFL. If this is so, it may provide a partial explanation for the fact that so many teachers of English in Taiwan (and perhaps also in other countries where the TOEFL test has a major influence) continue to include a considerable amount of explicit grammar instruction in their teaching programmes. After all, English language teachers in Taiwan may be – or at least may feel that they are – judged on their ability to coach students for examinations such as the TOEFL.

Ideally, I would have liked to examine the relationship between the TOEFL test itself and other measures of language proficiency. I would also have liked to look at the TOEFL test as a whole, rather than one section of it. However, it was necessary to set realistic goals. I therefore decided to examine the TOEFL test (structure section) and to try to find out whether teaching specific grammar points is productive in terms of students' capacity to score well on these sections of the test. Even this fairly modest aim proved, in the event, to be too ambitious. Because students tend to be familiar with sample tests, it was necessary to design my own test, one that was based on the structure section of the TOEFL. Also, because the students who would be involved in the experiment were attending classes where there was a particular language focus, it seemed sensible to reflect that focus in the test itself. It is in this context that the overall aim of the research reported on here was formulated, that aim being to find out whether providing direct grammatical information about, and practise in using, specific language points (relative clauses, modal verbs, reported speech, indirect questions, conditional sentences, the past perfect and passive constructions) increases the chances that intermediate level students of English as a foreign language will perform well on a test similar to the structure section of the TOEFL test in which these language points are examined.

Research methods

The original intention was that students in two intermediate level English classes at *Wenzao Ursuline College of Languages* in Taiwan would be asked to begin and end their course by completing a test designed on the basis of the structure section of the TOEFL test. That test would deal with relative clauses, modal verbs, reported speech, indirect questions, conditional sentences, the past perfect and passive constructions. One mark would be given for each correct answer. Both classes would be following the same course – a course based on *New American Streamline: Connections* by Bernard Hartley and Peter Viney (Units 42, 51, 52, 58, 60, 61, 62, 64, 65, 66, 69, 72, 74, 75, 76), a course that includes the grammar points to be tested. Students in one of the two classes would be given a self-access resource designed to cover the grammar points (and associated meanings) that were tested in the pre- and post-test and were asked to work through these in their own time, repeating each of the exercises until they achieved a perfect score for each one or until two weeks before the end of the course (whichever was first). The pre-test and post-test scores of both groups of students would then be compared.

Because there were difficulties associated with the initial stage of the experiment (first semester 2003), it was decided to treat that stage as a pilot study, reserving the full experiment for the first semester of 2004. The pilot study involved two groups of students (*Group A* (experimental group) and *Group B* (control group)) who were following the same course but had a different teacher. *Group A* students took the pre-test (before the start of the course) and post-test (after completion of the course). It was not possible to arrange for the other group (*Group B*) to take the test before they began the course. However, it did prove possible to retrieve the scores of all of the students on their pre-course college examination (grammar section) as well as on the college examination (grammar section) they took at the end of their previous course (2003). In spite of the difficulties that were associated with what turned out to be a pilot study (the study conducted in 2003), the results proved to be interesting in a number of ways. Furthermore, these results clearly indicated that it would be wise to pay attention to the students' college examinations as well as to the results of the pre-test and post-test in attempting to reach conclusions.

Following the pilot study in 2003, the experiment was conducted in the first semester of 2004 with two groups (*Group C* (experimental group: 49 students) and *Group D* (control group: 48 students)), the students in both of which were following the same course as those involved in the pilot study the previous year. Students in both groups took both the pre-test and the post-test. In addition to the course, students in *Group C* (the experimental group) were provided with the self-access resource pack. The pre-test and post-test results for both groups were then compared.

Staff and students involved in the experiment were given an explanation of the experiment's aims and methods. It was clearly indicated that those who did not wish to take part would not be obliged to do so and that anyone who initially agreed to take part could withdraw at any stage. It was also explained that no individual student or staff member would be identified in the reporting of the research. In the event, all those approached agreed to take part and none withdrew during the course of the experiment.

Critical review of selected literature dealing with the effects of grammar instruction and the relationship between proficiency testing and grammatical accuracy

Communicative language teaching and the question of focus on form

Some supporters of what has been called 'communicative language teaching' have argued that there should be no formal instruction in grammar. For example, Beretta (1998, p. 233) has claimed that "form can best be learned when the learner's attention is focused on meaning". However, as Celce-Murcia, Dornyei and Thurrell (1997, p. 143) note, the "the lack of firm linguistic guidelines in relation to what is meant by the term ['communicative approach'] led to a diversity of communicative approaches that shared only a very general common objective, namely, to prepare learners for real-life communication rather than emphasizing structural accuracy".

There is no way of being sure what content and methodology are best in any particular instance in relation to second language learning. As Sheen (1994, p. 127) notes, "the frequent paradigm shifts in the field of second and foreign language teaching have not resulted in significant progress in language learning. The fault seems to lie in the overstatement of criticisms directed at existing paradigms and the failure to challenge the validity of the advantages imputed to replacements". Furthermore, as Ioup (1984,

p. 350) observes, the research results that are needed “will not be easy to obtain” and “many of the hypotheses put forth must be viewed as tentative” [so] we must be cautious of the conclusions drawn from them”.

An overview of studies on the effect of a focus on form on second/ foreign language acquisition

Long (1983) examined the findings of ten research studies concerning the effects of formal instruction in the case of second/ foreign language teaching/ learning and concluded that “there is considerable evidence to indicate that SL [second language] instruction does make a difference” (p. 374). He noted that six of the ten studies supported the belief that formal instruction helps language acquisition, three did not, and one (i.e. Martin, 1980) seemed to indicate that exposure to language without formal instruction was helpful. Following further studies on the effects of direct formal instruction on second/ foreign language acquisition, Ellis (1994, p. 623) also reached the conclusion that “formal instruction can result in definite gains in accuracy”. He added, however, that “if the instruction is directed at a difficult grammatical structure which is substantially beyond the learner’s current interlanguage, it is likely that it will only lead to improved accuracy in planned language use”. The problem is that it is not clear from the research studies exactly what type of formal instruction is helpful and what types of effect are likely to be achieved. It is therefore useful to look at some of these studies in more detail.

An examination of some research on the effect of direct language instruction on second/ foreign language acquisition

Dulay and Burt (1974) carried out a study of Chinese-speaking and Spanish-speaking child learners of English. From that study, they concluded that there was evidence of a *natural order* of acquisition of English morphemes. If this is the case, it suggests that direct instruction may have little effect because what really matters is sufficient exposure to the language to allow natural acquisition to take place. This conclusion is also supported by other research that was carried out later (see, for example, Dulay, Burt & Krashen, 1982). However, these studies have been criticised by a number of linguists. Because the study conducted by Dulay and Burt (1974) was a cross-sectional one rather than a longitudinal one, it was not constructed in a way that could reveal the actual order of acquisition of morphemes. Because the data for all of the students was treated together rather than separately, it is impossible to tell what morphemes any individual learner had control of. As Ellis (1994, p. 287) has noted, experiments of this kind are not sufficiently well designed to support the view that direct language instruction is *not* effective. All they can really do is support “the commonsense assumption that learners need to understand input in order to learn from it”. In other words, these studies do NOT indicate either (a) that there is a natural order of acquisition in second/ foreign languages, or (b) that direct formal instruction is of no real value.

There are other studies – studies that are more convincing – that also argue that learners of second/ foreign languages acquire the language in the same way whatever they are taught. Cazden, Cancino, Rosansky and Schumann (1975) and Wode (1978) conducted experiments that seemed to indicate that interrogatives in English are learned in a particular sequence by all learners, and Meisel, Clahsen and Pienemann (1981) have argued that word order is learned in a particular sequence whatever learners are taught. Pavesi (1986) argues that this is also true of relative clauses. In each of these cases, the order in which particular structures appeared in the language

of second/ foreign language learners was different from the order in which they are acquired by children in the context of first language acquisition. There are, however, difficulties in interpreting the findings of experiments such as these. As Tarone (1990) argues, new forms which appear in the carefully controlled speech/ writing of second language learners may be absent, or present irregularly, in less controlled contexts. They may be used accurately and appropriately only some of the time. It could also be that teaching new forms *does* have an effect – but that that effect is less evident as time passes. Thus new forms may appear regularly immediately following instruction, but may later appear only irregularly until they are finally fully integrated into the learner's language. The fact that the language of learners is often very variable makes it extremely difficult to reach any definite conclusions about (a) the effect of direct formal instruction, and (b) the presence or absence of a natural order of acquisition.

Another problem that can be found in some of the experiments that have been carried out is that they do not seem to take full account of the very different ways in which formal instruction may happen. In other words, they do not take full account of either the methods used to teach language or the type of context in which language is taught. Even so, there is at least one very persuasive piece of evidence that supports the view that providing comprehensible input without a focus on form does *not* lead, in the case of second language learners, to accurate use over time. This is the study conducted by Swain (1985) involving students attending a Canadian French immersion programme. Swain found that these students exhibited grammatical errors in spite of the fact that they had an abundance of comprehensible input. This appears to provide firm evidence in support of the view that first and second language acquisition are very different. In fact, Newport (1990), for example, indicates that the notion that there is a 'critical period' in the case of second language acquisition is almost certainly mistaken. Stern, Burstall and Harley (1975) studied the effects of language tuition on 17,000 British schoolchildren, some of whom began their tuition at age 8, others at age 11. The results of this study – the largest single study of children learning a second language in a formal classroom setting – indicated that the older children made more rapid progress than the younger ones (something that we would not expect if the same processes were at work as in the case of first language acquisition). The findings of this study are supported by those of Genesee (1981; 1987) which involved children attending French immersion programmes in Canada. What the evidence currently available seems to indicate is that first language acquisition and second language acquisition are fundamentally different in a number of important ways. Thus, Cook (2000), summarising current research indicators, notes that the following are true only in the case of a second language: complete success is very rare; fossilization and backsliding are common; difficulties in forming grammatical judgments are common; and both teaching and correction are generally helpful.

Some support for the view that direct language instruction can have a positive effect on second/ foreign language acquisition

Weslander and Stephany (1983) studied 577 children with limited English proficiency in grades 2 to 10 in public schools in Iowa. They found that although students who had more instruction did better syntactically, the effects were strongest at the lowest levels of proficiency. However, although Ellis (1984) found that three hours of instruction in wh-questions led to some students improving a great deal (as demonstrated in a game designed to elicit relatively spontaneous oral questions), those who improved the most were actually those who had practised the least. This

experiment raises questions about the value of practice (or, at least the value of certain types of practice). So, too, does another experiment by Ellis (1992) which indicated that the accuracy with which adult beginner learners of German performed the 'verb-end' word order rule in communicative speech was not affected by differences in the amount of practice in this structure they had had over a six-month period. These experiments raise questions, but they are not questions about the value of direct language instruction. In fact, a study by Lightbown, Spada and Wallace (1980) of 175 French-speaking school learners of English showed that half-hour grammar lessons had a significant effect on judgments of grammatical accuracy (of a range of morphological features) in comparison with a control group who had not had these lessons. To some extent, this finding is contradicted by a study by Pica (1983) who looked at the effect of formal instruction on unplanned speech. He came to the conclusion that although formal instruction is of assistance, it has an effect only on those features that are easy to acquire. By 'easy to acquire' he means those cases where there is what he refers to as a transparent form-function relationship. This type of conclusion really needs much more detailed follow-up. After all, degree of transparency can actually be a factor of teaching as well as of language itself.

A conclusion that Ellis (1994, p. 621) has reached is that "formal instruction may have a delayed effect". This would not be surprising. After all, teachers constantly recycle teaching points in order to give learners the opportunity to come to terms with them gradually over a period of time. What *is* interesting about this observation is that it alerts us to the fact that experimental data should be treated with caution in that there are so many factors that need to be taken into account in interpreting them. In many cases, the experiments involved are conducted over a short time period although effects may vary over time and different results may have emerged if the experiments had been repeated.

There appears to be no convincing evidence to support the view that teachers of English in Taiwan should abandon grammatically oriented instruction. In fact, such evidence as there is suggests that this type of instruction can be helpful. The most enlightened response to the research that has emerged to far is, I believe, to treat it with caution, bearing in mind that there are many factors that need to be taken into account in its interpretation. In summarising the position, Johnson (2000, p. 174) says:

Overall, the empirical research to date suggests that contextualized formal instruction appears to result in faster learning and in higher levels of accuracy (Long, 1983; Pica, 1983), although such instruction is likely to be effective only if it is carefully timed (Pienemann, 1984; 1989) and accompanied by other types of focus (Ellis, 1983, pp. 92 - 113).

Terminology, meaning and significance

The terminology used by linguists in discussing second language learning/ acquisition reveals a lack of agreement in relation to some issues that are relevant to the research reported here.

For Krashen (1981), learning and acquisition involve distinct processes, the first (learning) being conscious, the second (acquisition) being subconscious. He sees subconscious acquisition as being the primary process, requiring no more than comprehensible input. Conscious learning is, he believes, far less significant and is limited to a restricted number of rule-governed domains. For Strozer (1994), on the

other hand, conscious grammatical instruction is necessary and significant. This raises issues that relate to what is meant by ‘conscious’, by ‘grammatical’ and by ‘instruction’. Is what Strozer refers to as ‘conscious grammatical instruction’ fundamentally different from what Schmidt (1994) terms ‘noticing’? Is ‘noticing’ different from ‘understanding’? According to Schmidt (1995), ‘noticing’ involves rehearsal in short-term memory, whereas ‘understanding’ involves becoming familiar with rules and their meanings. Is this difference one that can be reflected in different types of instruction? Are Long’s references to ‘focus on form’ essentially the same as references to ‘consciousness-raising’ by Fotos and Ellis (1991) and Rutherford (1987)? Is ‘consciousness-raising’ the same as ‘input-enhancement’ (Sharwood Smith, 1991)? The answers to these questions are critical in relation to research that seeks to determine the effect that grammatical instruction has on performance, whether that performance relates to communicative interaction or test-taking.

According to Torlaković and Brook, it is “obvious that in L2 acquisition, both explicit and implicit learning are present”. But this is not, as they observe, “the same thing as direct conscious instruction being *necessary* for L2 learning”. Nor does it tell us anything about “the effects of [different types] of learning” or whether what is consciously learned (by whatever method) can or does eventually become automatized (http://www.cognitivesciencesociety.org/confproc/gmu02/final_ind_files/torlakovic_brook.pdf: visited 16 July 2004). These are critical questions which highlight problems relating to the precise significance of much of the published research on the effect of grammar-based instruction on second language performance. So far as this study is concerned, the importance of these observations is that they highlight the need to be clear about exactly what is involved in the experimental process. In other words, it is important to be clear about *precisely* what the experiment involves (the precise form, for example, that the self-access resource takes and the precise nature of the pre-test and post-test). It is also important to restrict any comments made on the basis of the data gathered to what can genuinely be concluded in relation to that data rather than making inferences about grammar-based instruction more generally.

Grammar-based instruction and proficiency testing

The research conducted here has a bearing on proficiency testing only to the extent that the test instrument designed for the experiment reported here is based on part of the TOEFL test, and the TOEFL test is itself claimed to be a test of proficiency.

The concept of ‘proficiency’ has been defined in a range of different ways. A widely accepted definition is that provided by ACTEFL (1986), that is, “a hierarchy of global characteristics of integrated performance”. The words ‘global’ and ‘integrated’ suggest that proficiency involves overall ability to use a language, rather than the ability to use particular structures accurately. Even so, in spite of recent changes to its format, the TOEFL test continues to rely heavily on the ability of test takers to select grammatical constructions on the basis of contexts that are very limited. Sections of the TOEFL focus on the atomistic (individual structures etc.) rather than the global. To this extent, the TOEFL test appears to be out of touch, to some extent at least, with contemporary approaches to proficiency testing. It is, for example, very different from other tests of proficiency such as the IELTS (International English Language Testing System) (<http://www.ielts.org/>) or the proficiency benchmarking system included in the *Common European Framework of Reference for Languages* (Council of Europe, 2001, pp. 21 - 42). As Chen and Johnson¹ observe:

Does it [the TOEFL test] provide the best possible measure of learner proficiency? It is, after all, only one of a number of possible test instruments and there are many universities, particularly in Europe, that do not think highly of it. Like many similar tests, it measures learner performance in a particular test on a given day under a particular set of circumstances. In spite of some recent changes to its format, there are those who would argue that it is out of touch with research on the importance of rich discourse context, that it is somewhat dated in being largely atomistic in orientation (testing specific language points – often in limited single sentence contexts – rather than overall use and comprehension), and that it is culturally and cognitively biased in favour of those who have studied in a North American context. Furthermore, as North (2000) notes, it provides a number score (rather than a set of proficiency descriptors). For test takers – and anyone else who lacks detailed technical knowledge of the test – this number is largely meaningless except as an indication of whether the required threshold has been attained or not.

It is not, however, the strengths or weaknesses of the TOEFL test that concern me here. Whatever its strengths or weaknesses, the TOEFL test is currently widely used in Taiwan and it is relevant to the extent that my concern is not to determine whether the use of self-access grammar-focused materials of the type developed in the context of this research project increase overall proficiency, but whether they increase students' ability to perform well in a test similar in nature to part of the TOEFL test. So long as the TOEFL test continues to be widely accepted in Taiwan and elsewhere, the results of such an experiment will be of interest to educationalists even though, in the longer term, it might be more useful to examine the relationship between self-access grammar-focused materials and proficiency development itself (without reference – direct or indirect – to the TOEFL test).

The test instruments

Introduction

The overall aim the research project reported here was to find out whether providing instruction in the form of a self-access resource (focusing on relative clauses, modal verbs, reported speech, indirect questions, conditional sentences, the past perfect and passive constructions) increases the chances of intermediate level students of English as a foreign language to perform well on a test similar in design to the grammar section of the TOEFL test in which the language points referred to here are examined. With this aim in mind, appropriate classes (experimental and control) at *Wenzao Ursuline College of Languages* in Kaohsiung, Taiwan were identified, staff and students were invited to participate in the research and a test and self-access resource were designed on the basis of the content of the course the students were to pursue.

The content of the students' English language course

Initially, two classes of intermediate students of English as a foreign language (students who were judged, in being placed in these classes, to have approximately the same overall level of English language proficiency) were identified. In both cases, the students were studying English as a minor rather than a major subject. Each class would follow the same eighteen week first semester course (from March - July 2003). It was later decided that the research conducted in 2003 would be treated as a pilot study and that the full experiment would be run in 2004 and would involve two

different groups of students who were following the same course as those involved in the 2003 pilot study.

All of the students involved in the research project were following a course based directly on *New American Streamline: Connections* by Bernard Hartley and Peter Viney (Units 42, 51, 52, 58, 60, 61, 62, 64, 65, 66, 69, 72, 74, 75, 76). Some of the textbook units from *New American Streamline: Connections* include particular grammar points. These units were analysed and it was found that the following structures received particular attention: *relative clauses, modal verbs, reported speech, indirect questions, conditional sentences, the past perfect and passive constructions* (see *Appendix 1: Content of Relevant Units in New American Streamline: Connections*).

I then reviewed the TOEFL test with particular reference to the grammar section. This involved accessing sample test sections on the Internet (see, for example, <http://www.free-toefl.com>). The questions involved were found to be of a multiple-choice type. Two examples are provided below:

1. With the passing of time and the encroachment of people, the habitat of gorillas _____ to decrease.

- (A) continuing
- (B) which continue
- (C) continues
- (D) that it has continued

2. Sugar intake, particularly that of refined sugar, _____ curtailed by most overweight people wishing to lessen their corpulence.

- (A) must being
- (B) which must
- (C) must be
- (D) must

In designing the self-access and test materials, I took account of the nature and content of the relevant sections of the TOEFL test and the structural content of *New American Streamline: Connections* (Units 42, 51, 52, 58, 60, 61, 62, 64, 65, 66, 69, 72, 74, 75, 76). Both the self-access materials and the test were designed in such a way as to highlight the grammar points included in the units from *New American Streamline: Connections* which the students would be studying during their course. The questions contained in the test were constructed in line with the sample TOEFL test questions that had been examined.

Designing the self-access resource

The self-access resource is divided into parts (sections) – one for each of the grammatical areas covered. Each part begins with a title (sometimes including sub-headings) which clearly indicates the nature of the grammar point that is in focus. The titles are:

- Introducing Reported Questions and Reported Answers (with ‘to be’);
- Introducing: Reported Questions and Reported Answers (with What? Where? How?);

- Introducing *He said that he could . . .*;
- Introducing *Do you know if . . . ? Do you know who . . . ?*;
- Introducing *I'm sure about . . . ; I'm not sure about . . .* ;
- Introducing *I don't know if he can . . .* ;
- Introducing Tense and Time: Past Perfect + past simple - Past Perfect Continuous + past simple;
- Introducing *the one . . .* ;
- Introducing conditionals;
- Introducing passive.

In each section, the title and/or sub-heading is followed by a pictorial and verbal representation of the grammar point in focus. This is intended to indicate as clearly as possible both the relevant structure and the associated meaning/s.² Where it was considered useful to do so, this is followed by a diagrammatic representation that indicates how the target structure operates and/or is derived. This is, in turn, followed by one or more examples and exercises (see *Appendix 2: Self-access resource*).

Designing the test

A test based on the structure section of the TOEFL test and including those grammar points listed in the textbook units and demonstrated in the self-access resource was designed. Although it was felt that the fact that students *might* perform better on the test the second time round simply by virtue of the fact that they had encountered the content before, this seemed unlikely and the advantages of using the same version of the test as both a pre-test and post-test were considered to outweigh any potential disadvantages. In terms of focus, the test questions are sequenced as follows:

- Question 1:* sure about + substitution;
- Question 2:* 1st. conditional in the context of an interrogative including the present tense of the verb 'to know';
- Question 3:* 2nd. conditional in the context of a statement involving the past tense of the verb 'to ask';
- Question 4:* subject pronoun and present tense verb in the context of an imperative ('ask') + object pronoun + *where*;
- Question 5:* 1st. conditional following subject + negative form of the verb 'to know';
- Question 6:* insertion of past tense form of appropriate verb in the context of present report of past event;
- Question 7:* 1st. conditional in imperative construction;
- Question 8:* relative pronoun in the context of an interrogative involving the verb 'to know';
- Question 9:* 1st. conditional with modal auxiliary in the context of a clause involving present tense form (negative) of 'to know';
- Question 10:* Base form of the verb 'to know' in the context of present report of past event in conditional context;
- Question 11:* Past perfect in the context of past simple;
- Question 12:* relative clause containing past tense form of verb 'to be' following interrogative construction including present tense form of the verb 'to know';
- Question 13:* past perfect in the context of past simple;
- Question 14:* negative indefinite pronoun in initial position in complex object

- construction;
- Question 15:* past perfect progressive in the context of past simple;
- Question 16:* passive construction with past tense of the verb 'to be';
- Question 17:* indefinite article + indefinite pronoun in the context of noun group object following present tense form of the verb 'to be';
- Question 18:* simple passive construction involving verb 'to make';
- Question 19:* past perfect progressive in the context of simple past;
- Question 20:* conditional involving present simple form of the verb 'to be' following a main clause including the modal auxiliary 'will';
- Question 21:* passive construction involving present perfect;
- Question 22:* passive construction involving past perfect;
- Question 23:* past perfect in the context of past simple;
- Question 24:* present perfect progressive in the context of a present adverbial ('now');
- Question 25:* 3rd. conditional involving verb 'to have' in hypothetical context;
- Question 26:* 3rd. conditional involving verb 'to be' in hypothetical context;
- Question 27:* present perfect with 'already';
- Question 28:* present perfect progressive in the context of present adverbial ('now');
- Question 29:* 1st. conditional (basic);
- Question 30:* present perfect + adjective;
- Question 31:* modal verb('could') plus base form of lexical verb following reporting clause with past tense form of reporting verb;
- Question 32:* reported question involving noun group plus past tense of the verb 'to be';
- Question 33:* reported question involving past tense of the verb 'to be' followed by an adjective;
- Question 34:* reported question involving past tense of lexical verb;
- Question 35:* present perfect progressive in the context of present adverbial ('now').

The test included as *Appendix 3: The test*. The answer key is included as *Appendix 4: Test answer key*.

Setting up and reporting on the pilot study and the experiment

Introduction: Ethics-related considerations

Before the test instruments were prepared, staff at *Wenzao Ursuline College of Languages* who were teaching the relevant classes were advised of the details of the planned research and were asked whether they would be prepared, in principle, to be involved. It was indicated that involvement in the research was purely on a voluntary basis and that anyone agreeing to be involved could withdraw that agreement at any time up to the beginning of the experimental phase. Teachers who did agree to be involved would have their identities protected and all reporting would be done without reference to the names of participants. Even so, it was explained that anonymity could not be guaranteed because it would be possible for those familiar with the institution to discover which groups had been involved in the research and who had taught them. Prior to the running of the pilot study in 2003 and the experiment in 2004, students in the classes that had been targeted for involvement were advised of the nature of the proposed research and asked whether they would

agree to participate. In the case of the teachers involved, it was explained that participation was voluntary and that only those students who expressed a desire to be involved would be included. Those who initially agreed to be involved could withdraw at any stage up to the end of the post-test phase. Reporting would not include the names of students. In the event, all of the teachers and students approached agreed to be involved and none withdrew at any stage.

The pilot study

Two groups of students were involved in the pilot study which was conducted in the first semester of 2003. The first group - *Group A* - included 41 students; the second group - *Group B* - included 47 students. Each group was involved in a first semester intermediate English course based directly on *New American Streamline: Connections* by Bernard Hartley & Peter Viney (Units 42, 51, 52, 58, 60, 61, 62, 64, 65, 66, 69, 72, 74, 75, 76). In the event, it proved impossible for the students in *Group B* to take the test before their course began. For this reason, the aims of the pilot study were revised, the focus being on detecting any problems associated with either the test or the self-access resource. Even so, a number of strategies (see following) were adopted in an attempt to partially compensate for the fact that one group of students was unable to take the pre-test.

The students in *Group A* took the test (pre-test) just before they began their course (a course lasting 18 weeks). Six weeks before the end of the course, they were provided with the self-access resource and asked to complete each section in their own time and hand it in for marking.³ Unless they gained a perfect score, they were given the section again, along with instructions to look carefully at the grammatical information provided. Over a four-week period, they could repeat and submit each section as many times as they liked until they gained a perfect score. When a student completed any section correctly, that section was withdrawn. At the end of the four-week period (two weeks before the end of the course), all of the remaining sections were returned, whether or not students had successfully completed all of the exercises.

At the end of the course, the students in *Group A* took the test for the second time; the students in *Group B*, who had not been provided with the self-access resource, took the test for the first time.

Issues of objectivity, validity and reliability in relation to the test were considered in relation to test construction, test administration and test scoring. A test is *objective* if it cannot be influenced by the experimenter (test user) in its administration, scoring and interpretation. Standardisation is a precondition of objectivity, as are exact instructions for test administration, and check lists for scoring. In this case, the test instructions were designed to be the same in all cases and the test was administered in the same way and by the same person on each occasion. An answer key designed at the time the test was constructed (see *Appendix 4*) was used and the test was administered without preamble from the test administrator (the same person on each occasion), the instructions forming part of the test itself. Test *reliability*, which relates to accuracy of measurement, was assured by the multi-choice nature of the test itself. Thus, the test can be regarded as reliable because there is only one acceptable response to each multi-choice question, these responses being the only ones that are both grammatically correct and semantically appropriate. Test *validity* relates to the extent to which a test measures what it is designed to measure. In this case, the test was designed to measure candidates' ability to select correct responses from a number

of alternatives (as in the case of the section of the TOEFL test on which it is based). There is, of course, in the case of multi-choice testing, a margin of error in that the correct response can be selected by chance. However, that margin of error remains the same throughout the experiment and so should not affect the final outcome which relates to the extent of improvement of each group rather than to the absolute score of any individual.

When all of the tests had been scored, the pre-test and post-test scores of the students in *Group A* were compared. These were also compared with the post-test scores of the students in *Group B* and with the final college examination (grammar section) scores of both groups of students before the course began and at the end of the course.

The test score results are provided in *Appendix 5* alongside the results of college examinations (grammar sections) taken before the course began and at the end of the course. The scores gained in a CSEPT (Common Student English Proficiency Test) taken at the end of the year following the course are also provided⁴ (See *Appendix 5*: Test scores, examination results and CEPT results - Groups A and B).

A summary of the results for those students in *Group A* who completed the pre-test and post-test and the college examinations (grammar section) and for those in *Group B* who completed the post-test and the college grammar examinations (grammar section) follows. Note that results are rounded up to a single decimal point.

Group A

Pre-test – Total number of *incorrect* responses 331

Total number of students 41

Average number of *incorrect* responses **8.1**

Post-test – Total number of *incorrect* responses 127

Total number of students 41

Average number of *incorrect* responses **3.1**

End of course grammar exam (41 students)

Total number of *correct* responses 205 out of a possible 410

Average *correct* responses = **5.0**

Group B

Post-test – Total number of *incorrect* responses 298

Total number of students 47

Average number of *incorrect* responses **6.3**

End of course grammar exam (47 students)

Total number of *correct* responses 234 out of a possible 470

Average *correct* responses = **5.0**

The information available is summarised in a slightly different way in *Table 1* following:

Table 1: Summary of test results (pilot study): Groups A and B

	Pre-test (Average number of <i>incorrect</i> answers)	Post-test (Average number of <i>incorrect</i> answers)	Pre-course college exam (grammar section). Average number of correct responses	End of course college exam (grammar section) Average number of correct responses	Notes
Group A	8.1	3.11	6.159/61.59%	5/50%	41 students
Group B		6.34	5.7/57%	5/50%	47 students

The *Group A* students reduced their average incorrect score in the experimental test from 8.1 to 3.1 and scored an average of just over 61.6% in the end of course grammar examination.

In the **post-test**, the *Group B* students had an average incorrect score of 6.3, within 1.8 of the average incorrect score of students in *Group A* in the **pre-test**.

In the end of course grammar examination (see *Appendix 6*), *Group A* students scored an average of 61.6% and *Group B* students scored an average of 57%. In the CSEPT, *Group B* students also scored lower on average (an average of 55.8%) than did the students in *Group A* (an average of 61.1%). Thus, the students in *Group A* (those who were provided with the self-access resource) scored slightly higher in the post-test, the end of course grammar examination and the CSEPT. In the case of *Group A* students, all except 3 decreased the number of incorrect responses in the post-test (in comparison with the scores in the pre-test). The other three all retained the same score. Six of the students improved their scores by 10 points (over 28%) or more.

Combining the results of the test with gained in the end of semester examination (grammar section) and the CSEPT compensates, to some extent at least, for the fact that the students in *Group A* were unable to take the pre-test. It is, for example, interesting to note that whereas the average number of incorrect responses for students in *Group A* decreased from 8.1 in the pre-test to 3.1 in the post-test, the average number of incorrect responses of the students in *Group B* in the post-test was, at 6.3, within 1.8 points of the average incorrect response score of the students in *Group A* in the pre-test. My tentative conclusion – one that must be treated with caution in view of the fact that *B Group* students did not take the pre-test – is that the self-access instruction guide had a positive effect on students' ability to perform in the test (a test based on aspects of the TOEFL). This does not mean that explicit grammar instruction improves students' overall communicative capacity (such a conclusion would go beyond what can be realistically inferred from the data). Nor does it *necessarily* mean that explicit grammar instruction of the type made available in the self-access resource improves students' chances of performing well in the TOEFL. What it *does suggest*, however, is that explicit grammar instruction of the type made available in the self-access resource provided improves students' chances of performing well in a test designed to directly reflect the grammar points covered in the self-access materials. It is important, however, to stress that the data derived from the pilot study can be regarded as no more than indicative.

The experiment

The experiment, which was carried out in the first semester of 2004, was set up in exactly the same way as the pilot study except for the fact that both groups of students took both the pre-test and the post-test. There were two groups of students involved, both groups taking the same intermediate English course as those students who participated in the pilot study in 2003.

Two groups of students were involved – *Group C* (experimental group: 49 students) and *Group D* (control group: 48 students). In addition to the course, students in *Group C* were provided with the self-access resource pack. Once again, as in the case of *Group A* students in the pilot study, the students in *Group C* were asked to work with the resource pack for four weeks or until they were able to complete all of the associated test materials correctly (whichever was first).

A summary of the results for students in *Group C* (experimental group) and *Group D* (control group) follows. In this case, relevant CSEPT results were not available as the CSEPT is taken at the end of the year. However, the results of two college examinations (grammar sections) were available – one taken before the beginning of the course, and one taken at the end of the first semester of 2004 (and intended to relate directly to the content of the course).

The test scores and college examination (grammar section) results are included here as *Appendix 7*. The relevant sections of 2004 college examinations are included as *Appendix 8*.

Group C (experimental group)

Pre-test – Total number of *incorrect* responses 549

Total number of students 49

Average number of *incorrect* responses **11.2**

Post-test – Total number of *incorrect* responses 240

Total number of students 49

Average number of *incorrect* responses **4.9**

Pre-course college grammar exam

Total number of *correct* responses 315 out of a possible 490

Average *correct* responses = **6.4**

End of course college grammar exam (49 students)

Total number of *correct* responses 300 out of a possible 490

Average *correct* responses = **6.1**

Group D (control group)

Pre-test – Total number of *incorrect* responses 540

Total number of students 48

Average number of *incorrect* responses **11.25**

Post-test – Total number of *incorrect* responses 256

Total number of students 48

Average number of *incorrect* responses **5.3**

Pre-course college grammar exam (48 students)

Total number of *correct* responses 304 out of a possible 480
 Average *correct* responses = **6.3**

End of course college grammar exam (48 students)

Total number of *correct* responses 296 out of a possible 480
 Average *correct* responses = **6.2**

The information available is summarised in a slightly different way in *Table 2* following:

Table 2: Summary of test results: Groups C and D

	Pre-test (Average number of <i>incorrect</i> answers)	Post-test (Average number of <i>incorrect</i> answers)	Pre-course college exam (grammar section): Average number of correct responses	End of course (2004) college exam (grammar section): Average number of correct responses	Notes
Group C	11.2	4.89	6.43	6.12	49 students
Group D	11.25	5.33	6.3	6.16	48 students

Group C (experimental group) students reduced their average incorrect score in the experimental test from 11.2 to 4.9 and scored an average of 6.1 out of 10 (61%) in the end of course grammar examination.

Group D (control group) students reduced their average incorrect score in the experimental test from 11.25 to 5.33 and scored an average of 6.2 out of 10 (just over 60%) in the end of course grammar examination.

As can be seen from the data, the average pre- and post-test results for both groups of students were similar, although the experimental group did improve their performance on the test *slightly* more than did the control group. The average percentage score of *C Group* students was 68% on the pre-test and 86% on the post-test (an improvement of 18%); the average percentage score of *D Group* students was 67.8% on the pre-test and 84.8% on the post-test (an improvement of 17%).

At first sight, the results appear to indicate that the self-access resource had a negligible effect. However, a more detailed examination of the results is interesting. Of the 49 students in the experimental group who completed both the pre-test and the post-test, over a third – 22 (34.7%) – improved their initial score by 20% or more; of the 48 students in the control group who completed both the pre-test and the post-test, fewer than one fifth – 9 (18%) – did so. Furthermore, of the 15 students in the experimental group who improved their score by 25% or more, only 4 – just over a quarter – scored above average on an end of semester college grammar examination, whereas of the 8 students in the control group who improved their score by 25% or more, half – 4 (50%) – also scored above average on the end of semester college grammar examination. This *suggests* that the fact that the greater number of students in *Group A* (than in *Group B*) who improved their test performance by 25% or more

cannot be accounted for simply in terms of the fact that they had a higher level of overall grammatical competence.

Conclusions and recommendations

Introduction

The experiment reported here was conducted in order to test the hypothesis that direct grammar instruction (in the form made available in the self-access resource) has a positive effect on the capacity of learners of English as a foreign language to succeed in a test based on the grammar section of the TOEFL, one that focuses on the same grammar points as those that are focused on in the self-access resource. My tentative conclusion is that they do, but that that effect is far more evident in the case of some students than in the case of others.

Strengths and limitations of the experiment

The grammar resource provided to students was in the form of self-access materials. This means that anyone interested in the experiment can check exactly what was provided rather than, for example, simply taking the word of the researcher that certain structures were taught (without any evidence of precisely how they were taught). The fact that the test is multi-choice in nature with only one correct response for each question and the fact that the administration instructions are standardised and a test scoring guide is provided means that the results can be relied on. Finally, the fact that college grammar examination results are also made available provides for useful supporting evidence in relation to any conclusions drawn from the experimental data.

There are aspects of the experiment that could have been improved upon and any firm conclusions should, I believe, depend upon several re-runs of the experiment in appropriate contexts. One of the main problems experienced in conducting the experiment reported on here related to the time that was available. The research was completed within an eighteen month period. Before conducting the experiment, it was necessary to design the test and the self-access resource that were to be used. In fact, the design of the test and the self-access resource took several months. By the time they were completed, the groups of students who were to be involved were about to begin their classes. Although there was time to explain the nature of the experiment and get the consent of students and staff before the classes began, one of the classes (*Group B*) was underway before the test could be made available. In an attempt to compensate for the fact that *Group B* students were not able to take the test before their course began, I decided to take account of the college examinations (grammar sections) that all of the students took prior to their course and at the end of their course. I also decided to include the results of a CSEPT test – based on the TOEFL – taken by the students. In the post-course examination, *Group B* students performed, on average, slightly better than *Group A* students (55% as compared with 51%). This was useful information to the extent that it suggested that the fact that the performance of *Group B* students on the post-test was close to that of *Group A* students in the pre-test was unlikely to be attributable to the fact that the overall level of grammatical competence of students in this group was significantly higher than that of students in the other group. Overall, then, the data derived from the pilot study suggests that the students in the experimental group did derive some benefit (in terms of test performance) from the availability of the self-access resource.

In the first semester of 2004, it was possible to run the experiment in a more effective way in that for both groups of students – *Group C* (experimental group) and *Group D* (control group) – were able to take both the pre-test and the post-test. Even so, there were several respects in which the conditions were not ideal. Each group of students had a different teacher and so it could be that any differences detected were attributable to different levels of success in the teaching. For this reason, reference was once again made to the college grammar examinations that all of the students took before the course and at the end of it. The fact that the average score of both groups of students in these examinations was very similar suggested that any significant average differences in the test scores could be attributed to the fact that the experimental group members were given the self-access resource whereas the control group members were not.

Another area of concern is that it is impossible to be sure that the students in *Group C* did not share the self-access resource materials with students in *Group D*. For this reason, I would, if I were to run the experiment again, confine the use of the resource to supervised sessions. I would also be careful to ensure that the teacher of the control group was unfamiliar with the content of the self-access resource.

In the introduction to the second section of the self-access resource, the emphasis is placed on sentences involving 'asked' and 'told' that are structurally matched (e.g. *I asked her what her name was; She told me what her name was*). However, in the sample sentences, the students are required to supply specific information with 'told' and this involves a greater level of complexity. This reflects an error in the construction of the resource (which was unfortunately not detected during the pilot study). However, only the grammar actually illustrated appeared in the pre-test and post-test.

Finally, only one version of the test was constructed. This was used as both the pre-test and post-test. This means that students could have improved their score in the post-test simply by virtue of the fact that they had encountered the test before. Even though I believe that this is unlikely in that exposure to the test was for a very limited time period on each occasion of use, I would, if I were to run the experiment again, use a different version of the test as a pre-test and post-test even though I recognise that there could be problems associated with attempts to determine the comparability of the two versions. In preparation for this, I have designed a second version of the test, paying very careful attention to possible complicating factors such as, for example, the level of grammatical complexity exhibited in both the correct and incorrect responses to multiple choice questions. This version is very similar to the original version. In each case, the preamble is the same. In each case, there are illustrative examples (which are also very similar). The main part of each version of the test is headed *Grammar Survey* and in each case there are 35 questions. The instructions are also the same in each case. In addition to the fact that the questions in each version of the test make the same demands on students in terms of contextually situated structural competence, the choices available as responses to the questions are as closely matched as possible. Thus, for example, the options available in relation to *Question 35* (including those that are grammatically incorrect) include, in each case, the same structural range: *is washed/ is cleaned; has been washed/ has been cleaned; is being washed/ is being cleaned; has washed/ has cleaned*. In addition, the introductory part of the question is phrased in the same way: *Is the office clean? No, it _____ now; Is the car clean? No, it _____ now.*

Tentative conclusions: The pilot study

Group A students who took both the pre-test and post-test and who were provided with the self-access resource reduced their average incorrect score in the experimental test from 8.1 to 3.1 (by over 50%). They scored an average of 51% in the end of course examination (grammar section). *Group B* students – who took only the post-test and whose members were not provided with the self-access resource – had an average incorrect score of 6.3 in the post-test – an average of 1.8 more incorrect responses than the average incorrect response score of the *Group A* students in the pre-test. They scored an average of 50% in the end of course examination (grammar section). This suggested – but certainly did not indicate conclusively – that the availability of the self-access resource played a role in the improved scores of *Group A* students in the post-test as compared with their scores in the pre-test.

Tentative conclusions: The experiment

Group C (experimental group) students reduced their average incorrect score in the experimental test from 11.2 in the pre-test to 4.9 in the post-test. They scored an average of 61% in the end of course examination (grammar section). *Group D* (control group) students reduced their average incorrect score in the experimental test from 11.25 in the pre-test to 5.3 in the post-test. They scored an average of 61.6% in the end of course examination (grammar section). The average pre- and post-test scores for both groups of students were similar, although the experimental group students *did* improve their performance on the test slightly more than did the control group. The average percentage score of *C Group* students was 68% on the pre-test and 86% on the post-test (an improvement of 18%); the average percentage score of *D Group* students was 67.8% on the pre-test and 84.8% on the post-test (an improvement of 17%). At first sight, the results appear to indicate that the self-access resource had a negligible effect. However, a more detailed examination of the results is interesting. Of the 49 students in the experimental group who completed both the pre-test and the post-test, over a third – 22 (34.7%) – improved their initial score by 20% or more; of the 48 students in the control group who completed both the pre-test and the post-test, fewer than one fifth – 9 (18%) – did so. Furthermore, of the 15 students in the experimental group who improved their score by 25% or more, only 4 – just over a quarter – scored above average on an end of semester college grammar examination, whereas of the 8 students in the control group who improved their score by 25% or more, half – 4 (50%) also scored above average on the end of semester college grammar examination. This *suggests* that the fact that the greater number of students in *Group A* (than in *Group B*) who improved their test performance by 25% or more cannot be accounted for simply in terms of the fact that they had a higher level of overall grammatical competence.

Overall, the results of the pilot test and the experimental test combined suggest that the availability of the self-access grammar resource had some (limited) positive effect on the performance of students in the associated grammar test, but that that effect was more evident in the case of some students than others. This conclusion is, however, a tentative one and I do not believe that it can – without further research evidence – be used to support the view that the direct teaching of grammar has a positive effect on related grammar tests, let alone on proficiency generally. What this research demonstrates above all is, I believe, that experimental results should be treated with extreme caution. Had both groups in the first run of the experiment (later treated as a pilot study) been able to take both the pre-test and the post-test, and had the results still indicated that the experimental group out-performed those in the control group in

the post-test, I would have been tempted to conclude that there was evidence that the availability of grammar-based instructional materials improved students' ability to perform well in grammar tests (if not in genuine proficiency-based tests). However, although this was what appeared to be indicated in the 2003 pilot study, it was not borne out by the full experimental study conducted in 2004. I am not convinced that a re-run of the experiment would produce the same results as either the 2003 pilot study or the 2004 experimental one. I therefore conclude that language-based experiments of this type must be conducted several times in different contexts before any firm conclusions can be reached. This makes me considerably more sceptical about the experimental results reported in the research literature than I would otherwise have been. Carrying out this research project has taught me several important lessons, not the least of which is that teachers need to be very cautious about interpreting research literature on language teaching and learning.

Two other findings are of significance. First, although not designed specifically as a diagnostic test, the test instrument proved to be very useful for diagnostic purposes. If the grammar sections of college examinations were designed in a way that is similar to the design of the test, the results would be more useful to teachers than are those of the current examinations. Secondly, the data from both the pilot study and the experiment indicated that the students were far more successful in relation to the aims and objectives of the course than the end of course examination suggested. Since courses, teaching staff and students are often assessed in relation to the performance of students in examinations, it is important that these examinations should accurately reflect course content. If they do not, the courses, the teaching staff and the students may all appear far less successful than they actually are.

Recommendations for future research

I believe that there would be considerable value in repeating the experiment reported here – or one similar to it – in a range of different contexts and on a number of different occasions, making sure that access to the self-access resource was carefully controlled. Only then would it be possible to reach firm conclusions on the basis of the results. It would also be useful to track, so far as is possible, the teaching focus of the college course itself.

Endnotes

1. Margaret Chen and Diane Johnson: *English Language Proficiency Benchmarking in Taiwan: Issues and problems*. Paper presented at a conference at Minchuan University in Taiwan on March 3, 2004.
2. The illustrations used were created by Joan Oddy and are subject to copyright. For copyright reasons, the self-access resource cannot be used without permission.
3. It was decided to provide students with the self-access resource in paper format rather than on-line for two main reasons. First, it was felt that on-line resources might be more readily passed on to students in *Group B*. Secondly, it was felt that students who received the materials on-line might be tempted to violate copyright restrictions on the illustrations contained in the resource, possibly making use of them for other purposes.
4. The CSEPT is a test that is very similar in design to the TOEFL.

References

- The American Council for the Teaching of Foreign Languages (ACTFL). (1986) *Guidelines USA*: U.S. Department of Education.
- Beretta, A. (1998). Attention to form or meaning? Error treatment in the Bangalore Project. *TESOL Quarterly* 23, 283-303.
- Cazden, C., Cancino, E. Rosansky, E. & Schumann, I. (1975). *Second language acquisition in children, adolescents and adults. Final Report*. Washington DC: National Institute of Education.
- Celce-Murcia, M., Dornyei, Z. & Thurrell, S. (1997). Direct approaches in L2 instruction: a turning point in communicative language teaching? *TESOL Quarterly* 31 (1), 141-152.
- Cook, V. (2000). Linguistics and Second Language Acquisition: One Person with Two Languages. In *Blackwell Handbook of Linguistics*, M. Aronoff and J. Rees-Miller.
- Council of Europe. (2001). *Common European Framework of Reference: Learning, teaching, assessment*. Cambridge: Cambridge University Press.
- Dulay, H. & Burt, M. (1974). Natural sequences in child second language acquisition. *Language Learning* 24, 37-53.
- Dulay, H., Burt, M, & Krashen, S. (1982). *Language two*. New York: Oxford University Press.
- Ellis, R. (1983). Rules and instances in foreign language learning: interaction of explicit and implicit knowledge. *European Journal of Cognitive Psychology* 5, 289-318.
- Ellis, R. (1984). *Classroom second language development*. Oxford: Pergamon.
- Ellis, R. (1990). *Instructed second language acquisition: learning in the classroom*. Cambridge, MA: Basil Blackwell.
- Ellis, R. (1992). On the relation ship between formal practice and second language acquisition. *Die Neueren Sprachen* 91, 131-147.
- Ellis, R. (1994). *The study of second language acquisition*. Oxford: Oxford University Press.
- Fotos, S. and Ellis, R. (1991). Communicating About Grammar: A Task-based Approach. *TESOL Quarterly*, 25, pp. 87 – 112.
- Genesee, F. (1987). *Learning through two languages: Studies of immersion and bilingual education*. New York: Newbury House.
- Hartley, H & Viney, P. (1995). *New American Streamline: Connections*.
- IELTS (International English Language Testing System) site: <http://www.ielts.org/>: visited 16 July, 2003.
- Ioup, G. (1984). Testing the relationship of formal instruction to the input hypothesis. *TESOL Quarterly* 18 (2), 345-350.
- Johnson, D. (2000). *International Languages in New Zealand secondary schools and universities: Coherence, Consistency and Transparency*. PhD thesis. New Zealand: University of Waikato.
- Krashen, S. (1981). *Second language acquisition and second language learning*. Oxford: Pergamon Press.
- Lightbown, P., Spada, N. & Wallace, R. (1980). Some effects of instruction on child and adolescent ESL learners. In Scarcella, R. & Krashen, S. (Eds.). (1980). *Research in second language acquisition*. Rowley Mass.: Newbury House.
- Long, M. H. (1983). Does second language instruction make a difference? A review of research. *TESOL Quarterly* 17, 359-382.

- Long, M. H. (1990). The least a second language acquisition theory needs to explain. *TESOL Quarterly* 24, 649-666.
- Martin, G. (1980). English language acquisition: the effects of living with an American family. *TESOL Quarterly* 14, 388-390.
- Meisel, J., Clahsen, H. & Pienemann, M. (1981). On determining developmental stages in natural language acquisition. *Studies in Second Language Acquisition* 3, 109-135.
- Ministry of Education (New Zealand) (2002). *French in the New Zealand Curriculum*. Wellington: Learning Media.
- Newport, E. (1990). Maturation constraints on language learning. *Cognitive Science*, 14, 11-28.
- North, B. (2000). *Development of a Common Framework Scale of Language Proficiency*. USA: Peter Lang.
- Pavesi, M. (1986). Markedness, discursal modes and relative clause formation in a formal and informal context. *Studies in Second Language Acquisition* 8, 38-55.
- Pica, T. (1983). Adult acquisition of English as a second language under different conditions of exposure. *Language Learning* 33, 465-497.
- Pienemann, M. (1984). Psychological constraints on the teachability of languages. *Studies in Second Language Acquisition* 6 (2), 186-214.
- Pienemann, M. (1989). Is language teachable? *Applied Linguistics* 10, 52-79.
- Rutherford, W. (1987). *Second Language Grammar: Learning and Teaching*. London, New York: Longman.
- Schmidt, R. (1994). Deconstruction Consciousness in Search of Useful Definition for Applied Linguistics. *Aila Review*, 11, pp. 11 – 26.
- Schmidt, R. (1995). Consciousness and Foreign Language: A Tutorial on the Role of Attention and Awareness in Learning. In Schmidt (Ed.). *Attention and Awareness in Foreign Language Teaching and Learning*. University of Hawaii at Manoa: Second Language Teaching and Curriculum Center Report, No. 9, pp. 12 – 55.
- Sharwood Smith, M. (1991). Speaking to Many Minds: On the Relevance of Different Types of Language Information for the L2 Learner. *Second Language Research*, 7, pp. 118 – 132.
- Sheen, R. (1994). A critical analysis of the advocacy of the task-based syllabus. *TESOL Quarterly* 28 (1), 127-151.
- Stem, H. H., Burstall, C., & Harley, B. (1975). *French from age eight or eleven?* Toronto: Ontario Institute for Studies in Education.
- Strozer, J. (1994). *Language Acquisition After Puberty*. Washington: Georgetown University Press.
- Swain, M. (1985). Communicative competence: some roles of comprehensible output in its development. In Gass, S. & Madden, C. (1985) (Eds.). *Input in second language acquisition*. Rowley, Mass.: Newbury House.
- Tarone, E. (1990). On variation in interlanguage: a response to Gregg. *Applied Linguistics*, 11, 392-400.
- Test of English as a Foreign Language (TOEFL) (2002). *Official website of the Test of English as a Foreign language*. <http://www.toefl.org>.
- Torlaković, E. and Brook, A. (2004). The role of consciousness in second language acquisition. http://www.cognitivesciencesociety.org/confproc/gmu02/final_ind_files/torlakovic_brook.pdf: visited 16 July 2004.

- Weslander, D. & Stephany, G. (1983). Evaluation of English as a second language program for South East Asian students. *TESOL Quarterly* 1983, 473-480.
- Wode, H. (1978). The L2 acquisition of English negation. *Working Papers on Bilingualism*, 15, 37-57.
- Yiu, C. (2003). Taiwanese Students' English Disappoints. *Taipei Times*. November 7, 2003.

Appendix 1: Content of Relevant Units in *New American Streamline: Connections* by Bernard Hartley & Peter Viney

Unit 42: A court case

Teaching points: Relative clauses:(He's) the (man) (I saw)
Expressions: Are you absolutely sure (about them)?

Unit 46: Making reservations

Teaching points: Reservations; Inquiries; Prepositions of place
Expressions: If you don't mind

Unit 48: Talking about the weather

Teaching points: Will it (rain)?/ It might/ might not (rain)/What will (the weather) be like (in Denver)?/ It depends on . . .

Unit 50: Asking for directions

Teaching points: Location. Prepositions of place/ movement
Expressions: Can you tell me the way/ best route to . . . ?/ Can you tell me when we get (there)?/ Does this bus go to . . . ?/ Don't bother to knock./ Exact change only./ I have an appointment with (Mrs. X)./ Just go right in./ (She)'s expecting you./ Step in./ Turn (left) on (the interstate).

Unit 51: Coast guard rescue

Teaching points: Indirect questions (1): Ask (him) if (he's married)./ Ask (her) where (she lives).
Expressions: Be in pain/ By radio/ Uh-oh.

Unit 52: UFO

Teaching points: Indirect questions (2): Do you know (who) (it is)?/ I don't know if (it's open).
Expressions: Don't ask me!/ Great!/ The engine died./ (They were) on (their) way to (Spain).

Unit 58: On the road

Teaching points: Conditional (type 1) (continued)/ Road travel.
Expressions: . . . buddy/ I don't know if you can help me./ I have no idea./ In that case . . . / It's nothing serious./ That's not necessary./ Will you take a credit card?

Unit 59 Reservations

Teaching point: Format for business letters
Expressions: by fax/ Dear Sir or Madam/ I wish to . . . / Please find enclosed/ Please hold/ That's all/ We are pleased to . . . / We look forward to . . . / Yours (truly)

Unit 60 Emergency – Dial 911

Teaching point: Past perfect (1): He had (done it). + Q + Neg
Expressions: just in time/ 911 (emergency telephone number)

Unit 61: Embarrassing experiences

Teaching point: Past perfect (2)
Expressions: do some shopping/ hand in hand

Unit 62: A ghost story

Teaching points: Past perfect (3); Past Perfect continuous; Emphatic pronouns
Expressions: Don't be silly!/ Go on/ That isn't funny.

Unit 64: Where is it made?

Teaching point: Passive (1): It is/ was made in (America)./ It is/ was imported from exported to . . . (America).
Expressions: I'm doing fine.

Unit 65: A real bargain

Teaching point: Passive (2): It has been (renovated)./ It will be (built)./ Houses
Expression: I guess not.

Unit 66: The Six O'clock Report

Teaching points: Passive (3): It is (being done)/ It had been (done)

Unit 69: Classifieds

Teaching point: Conditional (type 2): If (I) had enough money/ were rich, I'd (do that). + Q

Unit 72: What would you do?

Teaching point: Extension of conditionals (1): (If clauses)

Unit 73: Far Trek

Teaching point: Passive – modals: It can/ cannot has to/ might/ must be done.

Unit 74: Reports

Teaching point: Reported speech (1) – basic tenses: to be, can, have, Present simple, Past simple, Present perfect; Future simple

Unit 75 Oral exams

Teaching point: Reported speech (2) – questions: She asked me what (my name was)./ She asked me if (I was married).
Expressions: Hey (Martha)!/ read out loud/ right away

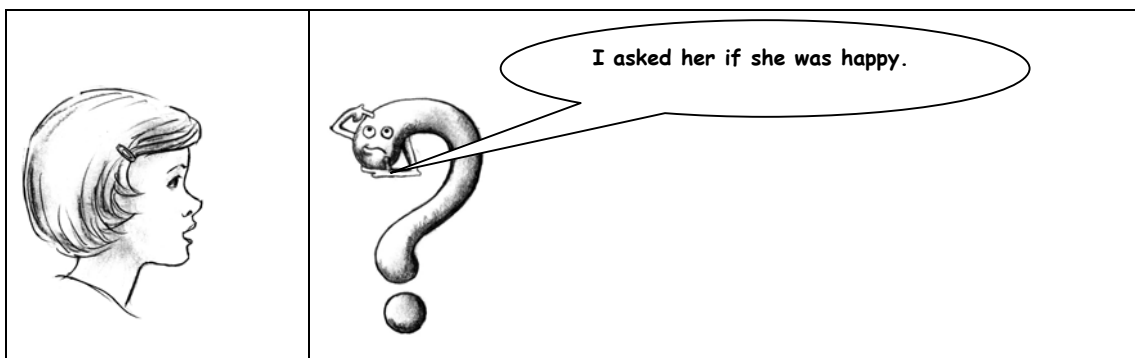
Unit 76: But you said . . .

Teaching point: Extension of reported speech (3)
Expressions: I can recommend it highly./ I'm really sorry (to hear that)./ in fact/ just a minute/ You were so right.

Appendix 2: Self-access resource

Part 1: Introducing *Reported Questions and Reported Answers (with 'to be')*

A. Look at the following images.



B. Look at how this works.

present tense of 'to be' Are	subject pronoun you	adjective happy?
--	-------------------------------	----------------------------

I	asked	her	if conjunction	she subject pronoun	was past tense of 'to be'	happy adjective
----------	--------------	------------	--------------------------	----------------------------------	--	---------------------------

Yes	subject pronoun I	Present tense of 'to be' am
------------	-----------------------------	---------------------------------------

She	told	me	that	she subject pronoun	was past tense of 'to be'	happy adjective
------------	-------------	-----------	-------------	----------------------------------	--	---------------------------

C. Here's another example.

<p>A: Are you ill? I asked her if she was ill.</p> <p>B: Yes I am. She told me that she was ill.</p>
--

Does direct grammar instruction improve students' performance?

D. Now try these sentences

1. **A: Are you angry?**
I asked him _____
B: No I'm not.
He _____

2. **A: Are you interested?**
I asked her _____
B: Yes I am.
She _____

3. **A: Is it new?**
I asked her _____
B: No it's not.
She _____

4. **A: Are you too hot?**
I asked him _____
B: No I'm not.
He _____

5. **A: Is he mad?**
I asked her _____
B: Yes he is.
She _____

6. **A: Are they expensive?**
I asked her _____
B: No they're not.
She _____

7. **A: Are you ill?**
I asked him _____
B: Yes I am.
He _____

8. **A: Is it wet?**
I asked her _____
B: Yes it is.
She _____

9. **A: Is it fresh?**
I asked her _____
B: No it's not.
She _____

10. **A: Is it yellow?**
I asked her _____
B: Yes it is.
She _____

11. **A: Are they cold?**
I asked her _____
B: Yes they are.
She _____

Part 2: Introducing: Reported Questions and Reported Answers (with What? Where? How?)

A. Look at these pictures.



I asked her where the kettle was.
She told me where the kettle was.

B. Look at how this works.

Where	is	the	kettle?
-------	----	-----	---------

I	asked	her	where	the	kettle	was.
She	told	me	where	the	kettle	was.

C. Here's another example.

A: What's the time?
I asked her what the time was.

B: Ten o'clock
She told me what the time was.

D. Now try these sentences

1. **A: What's your name?**
I asked her _____
 B: Mary.
She told me _____

2. **A: What's in the box?**
I asked her _____
 B: Apples.
She told me _____

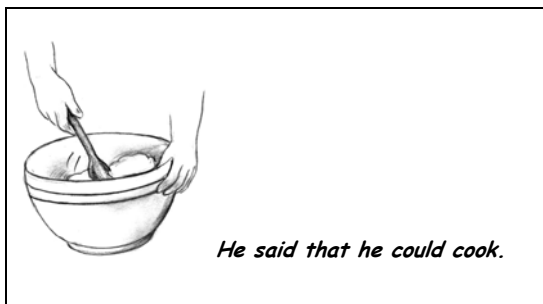
3. **A: Where are the keys?**
I asked her _____
 B: On the table.
She told me _____

Does direct grammar instruction improve students' performance?

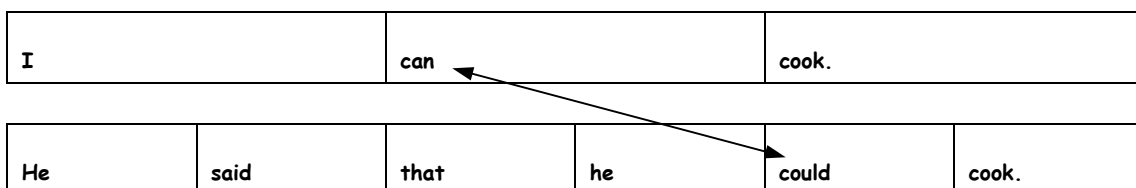
4. **A: How do you feel?**
I asked her _____
B: Good.
She told me _____
5. **A: What's under the table?**
I asked him _____
B: The cat.
He told me _____
6. **A: Where are your books?**
I asked her _____
B: In my bag.
She told me _____
7. **A: Where do you live?**
I asked her _____
B: In Taiwan.
She told me _____
8. **A: How do you feel?**
I asked her _____
B: Good.
She told me _____
9. **A: How angry are you?**
I asked her _____
B: I'm very angry.
She told me _____
10. **A: Where is your umbrella?**
I asked him _____
B: In the car.
He told me _____

Part 3: Introducing *He said that he could . . .*

A. Look at the following picture



B. Look at how this works.



C. Here's another example

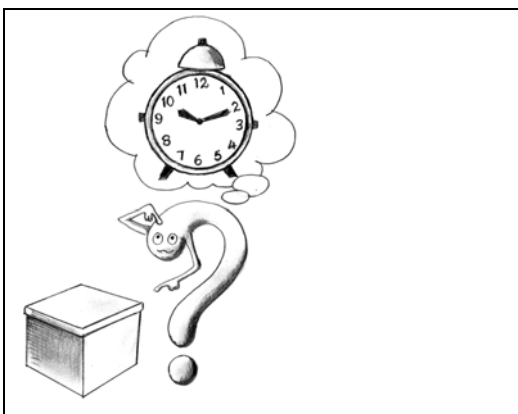
I can read English.
He said that he could read English.

D. Now try these sentences

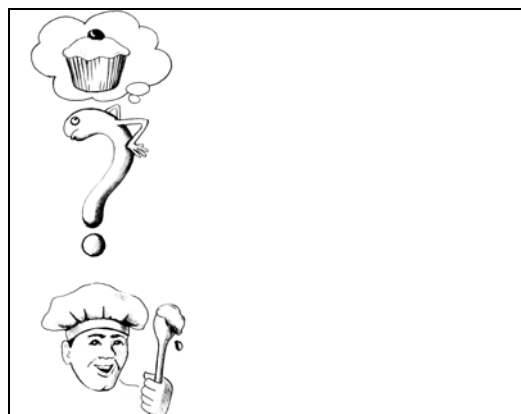
1. I can play the piano.
She said _____.
2. I can swim.
He said _____.
3. I can play tennis.
She said _____.
4. I can hear the train.
She said _____.
5. I can cook rice.
He said _____.
6. I can feed the cat.
She said _____.
7. I can ride a bicycle.
She said _____.
8. I can see Tom.
She said _____.
9. I can do it.
She said _____.

Part 4: Introducing *Do you know if . . . ? Do you know who . . . ?*

A. Look at the following pictures



Is the alarm clock in the box?
Do you know if the alarm clock is in the box?
I don't know if it's in the box.



Who ate the cake?
Do you know who ate the cake?
I don't know who ate the cake.

Does direct grammar instruction improve students' performance?

B. Here's another example

<p>Who bought the apples? Do you know who bought the apples?</p>

C. Now try these sentences

Part (i)

1. **Who has my pen?**
Do you _____?
I don't know _____.
2. **Who took my pen?**
Do you _____?
I don't know _____.
3. **Who is ill?**
Do you _____?
I don't know _____.
4. **Who ate the banana?**
Do you _____?
I don't know _____.
5. **Who had the keys?**
Do you _____?
I don't know _____.
6. **Who has the newspaper?**
Do you _____?
I don't know _____.
7. **Who took the newspaper?**
Do you _____?
I don't know _____.
8. **Who is angry?**
Do you _____?
I don't know _____.
9. **Who saw the accident?**
Do you _____?
I don't know _____.
10. **Who had the keys?**
Do you _____?
I don't know _____.

B. Here's another example

<p>Is the cat ill? Do you know if the cat is ill?</p>
--


C. Now try these sentences

Part (ii)


1. **Is it in the cupboard?**
Do you know _____?
2. **Was he ill?**
Do you know _____?
3. **Is he happy?**
Do you know _____?
4. **Was she late?**
Do you know _____?
5. **Is the water hot?**
Do you know _____?
6. **Was the movie expensive?**
Do you know _____?
7. **Is the movie interesting?**
Do you know _____?
8. **Was the cake good?**
Do you know _____?
9. **Is she nice?**
Do you know _____?
10. **Was the cat hungry?**
Do you know _____?

Part 5: Introducing I'm sure about . ; I'm not sure about .

A. Look at the following pictures



Is the clown clever?
Yes.
Are you sure?
Yes, I'm sure about it.



Is the clown clever?
I think so.
Are you sure?

Does direct grammar instruction improve students' performance?

B. Here's are some more examples


<p>A: Does the train leave at 7 o'clock? B: Yes. A: Are you sure? B: Yes, I'm sure about it.</p>	<p>Is he a doctor? I think so. Are you sure? No, I'm not sure about it.</p>
--	---

C. Now try these sentences

- A: Is the cake good?
B: Yes.
A: Are you sure?
B: Yes, _____.
- A: Is the book expensive?
B: I think so.
A: Are you sure?
B: No, _____.
- A: Is the water hot?
B: Yes.
A: Are you sure?
B: Yes, _____.
- A: Is the book expensive?
B: I think so.
A: Are you sure?
B: No, _____.
- A: Is the cat happy?
B: I think so.
A: Are you sure?
B: No, _____.
- A: Is it an interesting movie?
B: Yes.
A: Are you sure?
B: Yes, _____.

Part 6: Introducing *I don't know if he can . . .*


A. Look at these pictures



Can he find the treasure?
I don't know.
I don't know if he can find the treasure.

Can he find the keys?
I don't know.
I don't know if he can find the keys.

B. Here's another example




Can he play the drum?
I don't know if he can play the drum.


C. Now try these sentences




Can she play the violin?
I don't know _____



Can she play the triangle?
I don't know _____



Can she cook?
I don't know _____

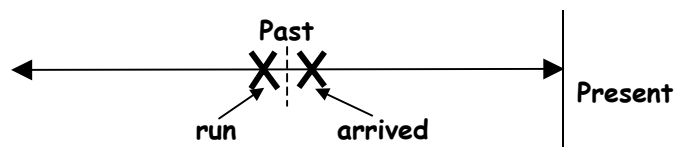
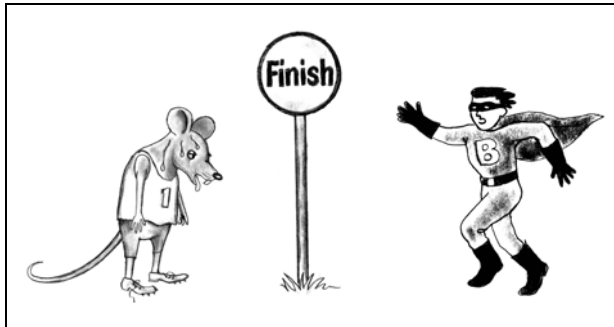


Can he jump high?
I don't know _____

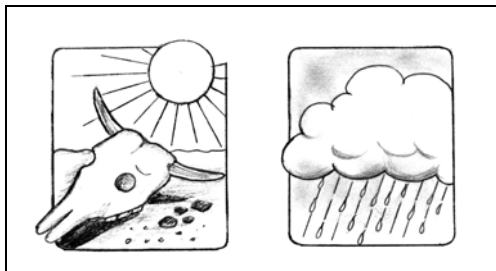
Part 7: Introducing Tense and Time

A. Look at these pictures

Past Perfect + past simple

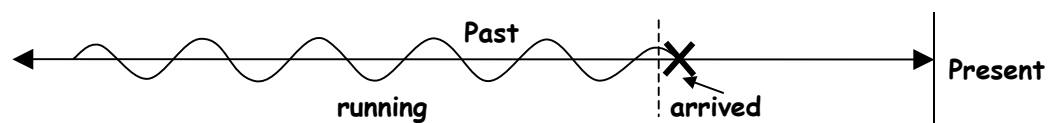
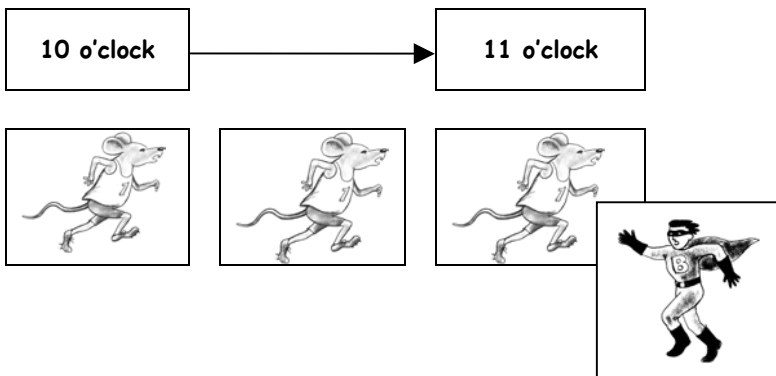


Mouse had (already) run the race when Batman arrived.



It had been dry (for years) when the rain came.

Past Perfect Continuous + past simple



Mouse had been running (for an hour) when Batman arrived.

B. Here are some more examples

They (watch) television for an hour when I (arrive).
They **had been watching** television for an hour when I **arrived**.

John (unhappy) for weeks when he (meet) Sally.
John **had been unhappy** for weeks when he **met** Sally.

When I (arrive) he (eat) dinner.
When I **arrived** he **had already eaten** dinner.

C. Now try these sentences

1. I (wait) for three hours when the train (arrive).

2. He (clean) the house when I (get) home.

3. She (ill) for two weeks when I (call) the doctor.

4. He said that he (work) all day.

5. Mary (read) all day when Tom (phone).

6. The old man (lonely) for a long time when he (meet) Sally.

7. When I (arrive) at the office, the mail (already deliver).

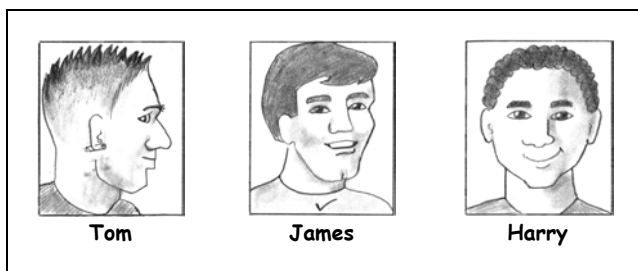
8. The child (excited) for weeks when Christmas (arrive).

9. The child (scream) for hours when I (give) her the doll.

10. He (already leave) when the rain (start).

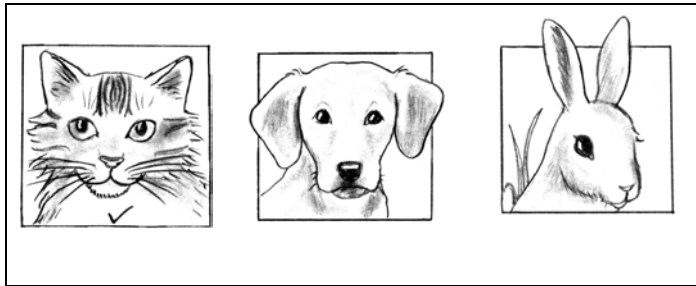
Part 8: Introducing *the one*

A. Look at the following pictures.



Who do you like - Tom, James or Harry?
James is the one I like.

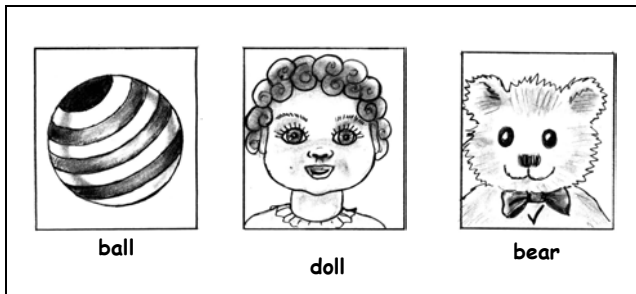
B. Here's another example.



Which animal do you like?
The cat is the one I like.

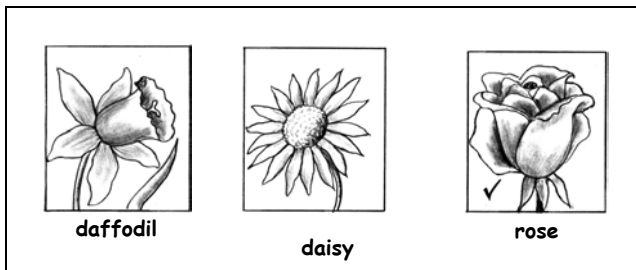
C. Now try these sentences

1. Which toy do you like?



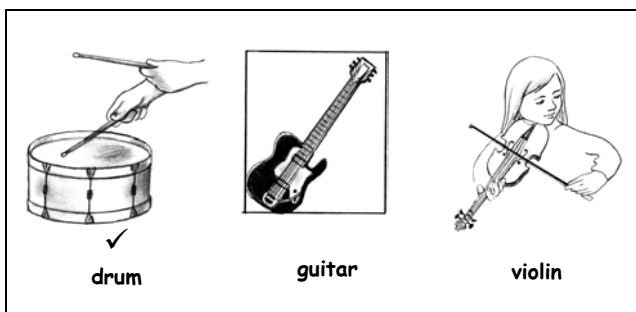
The bear _____

2. Which flower do you like?



The rose _____

3. Which instrument do you like?



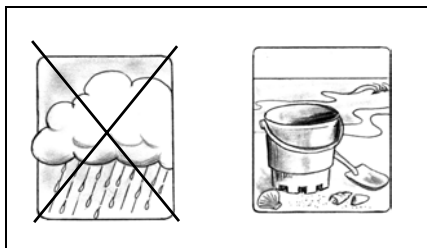
The drum _____

Part 9: Introducing *Conditionals*

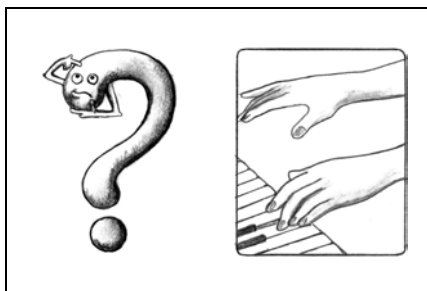
A. Look at the following pictures



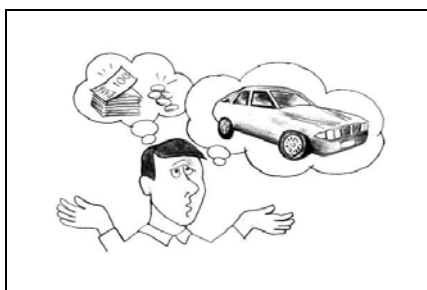
Will it rain? We don't know.
If it rains, we'll visit grandma.



Will it rain? We don't know.
If it doesn't rain, we'll go to the beach.



Can she play the piano? I don't know.
I don't know if she can play the piano.

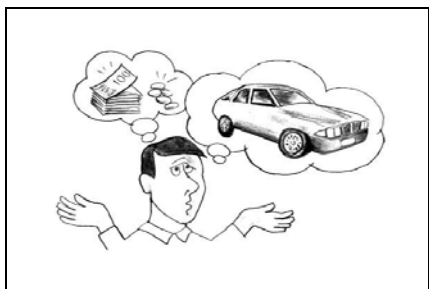


Am I rich?
No.
If I were rich, I'd buy a car.

If I **were** rich, I'd (**I would**) buy a car.

were **buy** **rich**
verb adjective

Does direct grammar instruction improve students' performance?



Do I have money?

No.

If I had money, **I'd** buy a car.

If I **had** money, I'd (**I would**) buy a car.

verb

noun

B. Here are some more examples

If it rains, I (TAKE/UMBRELLA).

If it rains, I'll take an umbrella.

If (~~RAIN~~), I'll walk to the park.

If it doesn't rain, I'll walk to the park.

I don't know if he (ABLE/SWIM).

I don't know if he can swim.

I'm not a builder. If I (BUILDER), I (BUILD/HOUSE)

I'm not a builder. If I were a builder, I'd build a house.

I don't have a garden. If I (GARDEN), I (GROW/FLOWERS).

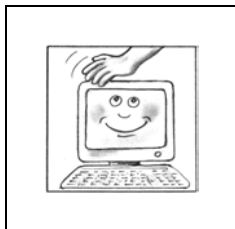
I don't have a garden. If I had a garden, I'd grow flowers.

1. I (WEAR/COAT) if it snows.
I _____ if it snows.
2. I don't know if she (ABLE/SKI).
I don't know if she _____
3. I'm not an artist. If I (ARTIST), I (PAINT) a picture of you.
I'm not an artist. **If I _____, I _____ a picture of you.**
4. I don't have a pen. If I (PEN), I (WRITE) the instructions.
I don't have a pen. **If I _____, I _____ the instructions.**
5. If it is a sunny day, we (HAVE/PICNIC).
If it is a sunny day, we _____
6. She doesn't have a cell phone. If she (CELL PHONE), she (PHONE) you.
She doesn't have a cell phone. **If she _____, she _____ you.**
7. ~~If it (RAIN), we (VISIT) Taipei.~~
If it _____, we _____
8. I don't know if he (ABLE/SING).
I don't know if he _____
9. I don't know if he (ABLE/DANCE).
I don't know if he _____

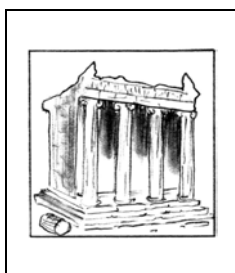
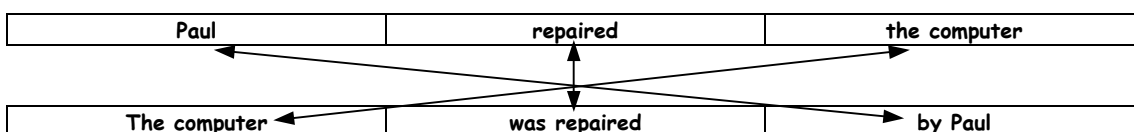
10. My cat isn't a hunter. If he (HUNTER), he (CATCH) that mouse.
 My cat isn't a hunter. **If he** _____, **he** _____ **that mouse.**

Part 10: Introducing *Passive*

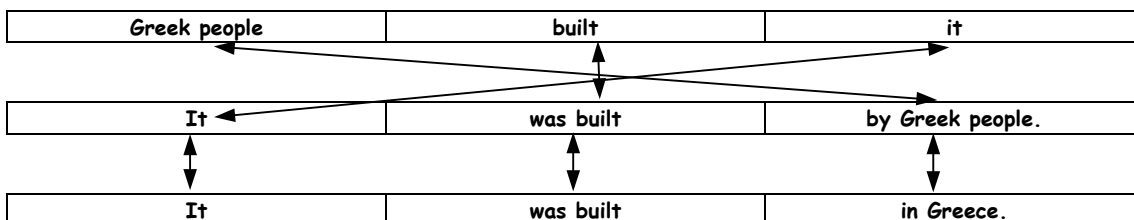
A. Look at the following pictures and see how the sentences work



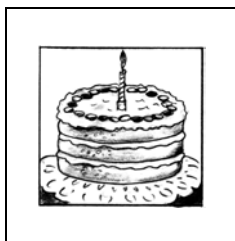
Paul repaired the computer.
The computer was repaired by Paul.



Greek people built it.
It was built by Greek people.
It was built in Greece.

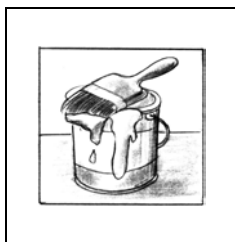


B. Here are some more examples



Can I make the birthday cake?
 No. **It has been made (already) (by Sally).**
The birthday cake already exists.

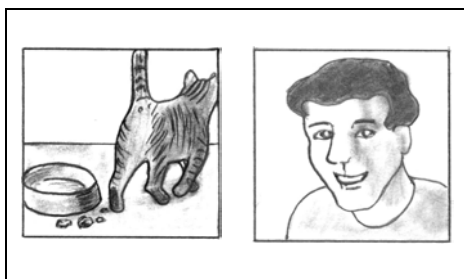
Does direct grammar instruction improve students' performance?



Can I paint the kitchen?

No. **It has been painted (already) (by Tom).**

Tom has already painted the kitchen.



past

past (later)

The cat had (already) been fed when John arrived home.

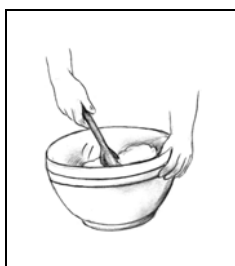


Shall I read to the children?

No. Sally is doing it.

It is being done (by Sally) (now).

Sally is reading to the children.



Shall I cook dinner?

No. Tom is cooking it.

It is being cooked (by Tom) (now).

Tom is cooking dinner.

It (made/was made/might made) in New Zealand.

It _____ in New Zealand.

It was made in New Zealand.

Tom made it.

Passive: It _____ Tom.

It was made by Tom.

Tom posted it yesterday.

Passive: It _____ Tom.

It was posted by Tom.

Can I post the letter? No, it (posted/has posted/has been posted) already.

Can I post the letter? No, it has been posted already.

Is my car clean? No, it (wash/is washing/is being washed) at the moment.

Is my car clean? No _____ at the moment.

No it's being washed at the moment.

C. Now try these sentences

1. **That computer (made/had made/had been made) in England.**
That computer _____ in England.
2. **The doll (broken/ can broken/ could broken/ was broken) by Mary.**
The doll _____ by Mary.
3. **That car (made/was made/could made)**
That car _____ in Taiwan.
4. **Your room (is cleaned/ is being cleaned/was cleaned) at the moment.**
Your room _____ at the moment.
5. **The meal (had cooked/had been cooked/ cooking) when I arrived.**
The meal _____ when I arrived.
6. **The mouse (had caught/was caught/ is caught) by the cat.**
The mouse _____ by the cat.
7. **All the T-shirts (had sold/were sold/had been sold) when I got there.**
All the T shirts _____ when I got there.
8. **The computer (was being mended/mended/could mended) by an electrician.**
The computer _____ by an electrician.
9. **The dish (is broken/had broken/had been broken) by my mother.**
The dish _____ by my mother.
10. **Tom's sport shirt (washed/can being washed/is being washed) by his mother.**
Tom's sport shirt _____ by his mother.

Appendix 3: The test

Grammar Survey

Name/ number: _____

Class: _____



In this grammar survey, you will find a number of sentences that have missing sections. Below the sentence are 4 possible choices for completing the sentence. Read the sentence, consider the choices, then put a tick (✓) in the box next to the best choice to complete the sentence. Here are two examples to show you what to do.

EXAMPLE 1:

He ran _____.

<input type="checkbox"/>	A	quick
<input type="checkbox"/>	B	the plant
<input checked="" type="checkbox"/>	C	quickly
<input type="checkbox"/>	D	him

EXAMPLE 2:

I like _____ apples.

<input checked="" type="checkbox"/>	A	eating
<input type="checkbox"/>	B	eat
<input type="checkbox"/>	C	buy
<input type="checkbox"/>	D	him

If you change your mind about your answer, put a cross through the first answer and then tick another box. Here is an example to show you what to do.

EXAMPLE 3:

The sun is _____.

<input checked="" type="checkbox"/>	A	shine
<input type="checkbox"/>	B	shone
<input checked="" type="checkbox"/>	C	shining
<input type="checkbox"/>	D	shined

Grammar Survey

Now begin the survey. There are 35 questions. Remember, you will find a number of sentences that have missing sections. Below the sentence are 4 possible choices for completing the sentence. Read the sentence, consider the choices, then put a tick (✓) in the box next to the best choice to complete the sentence.

1. I am absolutely sure _____ .

<input type="checkbox"/>	A	that
<input type="checkbox"/>	B	about that
<input type="checkbox"/>	C	it
<input type="checkbox"/>	D	him

2. Do you know _____ .

<input type="checkbox"/>	A	is it's there
<input type="checkbox"/>	B	it there
<input type="checkbox"/>	C	if it's there
<input type="checkbox"/>	D	is it there

3. He asked me _____ I was happy.

<input type="checkbox"/>	A	that
<input type="checkbox"/>	B	if
<input type="checkbox"/>	C	what if
<input type="checkbox"/>	D	nicely

4. Ask her where _____ .

<input type="checkbox"/>	A	she works
<input type="checkbox"/>	B	she work
<input type="checkbox"/>	C	work
<input type="checkbox"/>	D	worked

5. I don't know _____ .

<input type="checkbox"/>	A	he like it
<input type="checkbox"/>	B	if he likes it
<input type="checkbox"/>	C	if he like it
<input type="checkbox"/>	D	he likes it

6. He _____ me where the garage is.

<input type="checkbox"/>	A	said
<input type="checkbox"/>	B	argued
<input type="checkbox"/>	C	says
<input type="checkbox"/>	D	told

7. Ask her _____ it's raining.

<input type="checkbox"/>	A	is
<input type="checkbox"/>	B	if
<input type="checkbox"/>	C	that
<input type="checkbox"/>	D	if that

Does direct grammar instruction improve students' performance?

8. Do you know _____ bought the dress?

- | | | |
|--|---|---------|
| | A | whose |
| | B | why |
| | C | who |
| | D | why not |

9. I don't know _____ to the party.

- | | | |
|--|---|----------------|
| | A | if he come |
| | B | if he can come |
| | C | if he can came |
| | D | if can came |

10. She doesn't _____ if John passed the exam.

- | | | |
|--|---|-----------|
| | A | knew |
| | B | knows |
| | C | know |
| | D | knowledge |

11. When I arrived he _____ already eaten dinner.

- | | | |
|--|---|--------|
| | A | has |
| | B | could |
| | C | should |
| | D | had |

12. Does Mary know _____ .

- | | | |
|--|---|------------------------|
| | A | who was at the party |
| | B | was at the party |
| | C | which was at the party |
| | D | who at the party |

13. The train _____ when I reached the station.

- | | | |
|--|---|------------|
| | A | must left |
| | B | has left |
| | C | had left |
| | D | could left |

14. Jean's the _____ I like.

- | | | |
|--|---|-------|
| | A | who |
| | B | that |
| | C | one |
| | D | dress |

15. They _____ television for an hour when I arrived.

- | | | |
|--|---|--------------------|
| | A | had been watch |
| | B | had been watching |
| | C | have been watching |
| | D | have watched |

16. The book _____ by Paul.

- | | | |
|--|---|-------------|
| | A | written |
| | B | was written |
| | C | write |
| | D | wrote |

17. It 's _____ I like.

- | | | |
|--|---|-----------|
| | A | the which |
| | B | one |
| | C | which |
| | D | the one |

18. It _____ in Taiwan.

- | | | |
|--|---|----------|
| | A | was made |
| | B | made |
| | C | make |
| | D | has make |

19. We _____ for twenty minutes when the bus arrived.

- | | | |
|--|---|-------------------|
| | A | had been waiting |
| | B | were waiting |
| | C | waited |
| | D | have been waiting |

20. I'll ask him _____ .

- | | | |
|--|---|--------------|
| | A | is he sick |
| | B | if he's sick |
| | C | he is sick |
| | D | he was sick |

21. It _____ to you by Paul.

- | | | |
|--|---|-----------------|
| | A | is posted |
| | B | posted |
| | C | has posted |
| | D | has been posted |

22. When I saw the toy, it had already _____.

- | | | |
|--|---|-------------|
| | A | broke |
| | B | break |
| | C | been broken |
| | D | be broke |

23. The work _____ when I arrived.

- | | | |
|--|---|---------------|
| | A | had be done |
| | B | done |
| | C | had been done |
| | D | has been done |

Does direct grammar instruction improve students' performance?

24. Is the car clean? No, it _____ now.

- | | | |
|--------------------------|---|-----------------|
| <input type="checkbox"/> | A | is being washed |
| <input type="checkbox"/> | B | has been washed |
| <input type="checkbox"/> | C | is washed |
| <input type="checkbox"/> | D | has washed |

25. If I _____ enough money, I'd buy that car.

- | | | |
|--------------------------|---|------------|
| <input type="checkbox"/> | A | have |
| <input type="checkbox"/> | B | would have |
| <input type="checkbox"/> | C | did have |
| <input type="checkbox"/> | D | had |

26. If I _____ a police officer, I'd arrest him.

- | | | |
|--------------------------|---|----------|
| <input type="checkbox"/> | A | would be |
| <input type="checkbox"/> | B | am |
| <input type="checkbox"/> | C | were |
| <input type="checkbox"/> | D | can be |

27. It has already _____ built.

- | | | |
|--------------------------|---|------|
| <input type="checkbox"/> | A | be |
| <input type="checkbox"/> | B | been |
| <input type="checkbox"/> | C | was |
| <input type="checkbox"/> | D | has |

28. Your meal _____ now.

- | | | |
|--------------------------|---|------------------|
| <input type="checkbox"/> | A | is being cooked |
| <input type="checkbox"/> | B | was being cooked |
| <input type="checkbox"/> | C | has being cooked |
| <input type="checkbox"/> | D | had being cooked |

29. We'll go if it _____.

- | | | |
|--------------------------|---|---------------|
| <input type="checkbox"/> | A | couldn't rain |
| <input type="checkbox"/> | B | didn't rain |
| <input type="checkbox"/> | C | rain |
| <input type="checkbox"/> | D | doesn't rain |

30. He said that his daughter _____ for a week.

- | | | |
|--------------------------|---|---------------|
| <input type="checkbox"/> | A | had been sick |
| <input type="checkbox"/> | B | be |
| <input type="checkbox"/> | C | is |
| <input type="checkbox"/> | D | has be sick |

31. She said that he _____ early.

- | | | |
|--------------------------|---|-------------|
| <input type="checkbox"/> | A | has leave |
| <input type="checkbox"/> | B | could leave |
| <input type="checkbox"/> | C | could left |
| <input type="checkbox"/> | D | had leave |

32. She asked me what _____.

- | | | |
|--------------------------|---|--------------|
| <input type="checkbox"/> | A | his name was |
| <input type="checkbox"/> | B | his name is |
| <input type="checkbox"/> | C | is his name |
| <input type="checkbox"/> | D | was his name |

33. I asked her if _____.

- | | | |
|--------------------------|---|--------------|
| <input type="checkbox"/> | A | she is sick |
| <input type="checkbox"/> | B | is sick |
| <input type="checkbox"/> | C | she was sick |
| <input type="checkbox"/> | D | was sick |

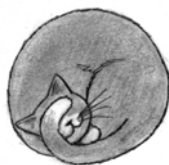
34. She asked me how _____.

- | | | |
|--------------------------|---|--------|
| <input type="checkbox"/> | A | I felt |
| <input type="checkbox"/> | B | feel |
| <input type="checkbox"/> | C | I feel |
| <input type="checkbox"/> | D | felt |

35. Is the car clean? No, it _____ now.

- | | | |
|--------------------------|---|-----------------|
| <input type="checkbox"/> | A | is washed |
| <input type="checkbox"/> | B | has been washed |
| <input type="checkbox"/> | C | is being washed |
| <input type="checkbox"/> | D | has washed |

This is the end of the grammar survey. Now check your answers.



Appendix 4: Test answer key

Example	Answer	Example	Answer
Example 1	C	17.	D
Example 2	D	18.	A
Example 3	C	19.	A
1.	B	20.	B
2.	C	21.	D
3.	B	22.	C
4.	A	23.	C
5.	B	24.	A
6.	D	25.	D
7.	B	26.	C
8.	C	27.	B
9.	D	28.	A
10.	C	29.	D
11.	D	30.	A
12.	A	31.	B
13.	C	32.	A
14.	C	33.	C
15.	B	34.	A
16.	B	35.	C

Appendix 5: Test scores, examination results and CSEPT scores - Groups A and B

Group A	Correct (pre-test)	Incorrect (pre-test)	Correct (post-test)	Incorrect (post-test)	Final Exam Grammar 10 Jan. 2003	Final Exam Grammar 10 June 2003	CSEPT NOV 2003
1	31	4	33	2	8	6	
2	23	12	33	2	6	4	62
3	30	5	32	3	7	3	65
4	31	4	34	1	7	7	89
5	14	21	28	7	3	3	
6	33	2	34	1	5	7	86
7	33	2	35	0	7	3	72
8	25	10	29	6	8	8	62
9	32	3	32	3	5	8	43
10	29	6	31	4	8	6	65
11	30	5	30	5	6	4	50
12	29	6	30	5	7	4	46
13	30	5	34	1	8	5	48
14	24	11	32	3	4	3	38
15	20	15	24	11	4	1	48
16	25	8	33	2	5	5	60
17	21	14	28	7	4	4	43
18	34	1	35	0	10	7	106
19	30	5	33	2	4	4	84
20	27	8	34	1	5	5	67
21	28	7	30	5	5	5	46
22	28	7	33	2	7	4	48
23	17	18	32	3	5	5	53
24	26	9	34	1	5	7	60
25	30	5	32	3	6	5	60
26	25	10	32	3	7	4	34
27	30	5	34	1	6	3	50
28	27	8	32	3	6	7	67
29	24	11	35	0	7	6	70
30	28	7	34	1	6	7	62
31	21	14	33	2	7	6	53
32	33	2	35	0	8	3	89
33	19	16	29	6	6	4	38
34	27	8	32	3	6	7	55
35	27	8	34	1	7	5	60
36	30	5	33	2	8	8	67
37	25	10	34	1	5	7	89
38	25	10	26	9	4		
39	30	5	28	7	9	5	
40	28	7	33	2	5	8	
41	23	12	29	6	5	2	
	26.87804	8.07317	31.90243	3.09756	6.12195	5.125	61

Does direct grammar instruction improve students' performance?

Group B	Correct	Incorrect	Pre-course grammar exam	End of course grammar exam	CSEPT-Grammar
1	32	3	6	8	70
2	29	6	6	4	72
3	26	9	4	2	50
4	31	4	6	4	60
5	30	5	6	5	53
6	31	4	6	6	62
7	26	9	3	4	
8	34	1	7	6	72
9	31	4	7	5	62
10	31	4	5	6	77
11	32	3	6	6	46
12	30	5	8	5	58
13	32	3	7	10	77
14	30	5	6	6	65
15	25	10	4	3	38
16	26	9	5	3	46
17	28	7	6	8	62
18	24	11	4	8	62
19	30	5	5	1	34
20	26	9	6	3	60
21	31	4	7	8	67
22	30	5	8	7	48
23	32	3	6	5	70
24	32	3	7	4	58
25	30	5	7	4	48
26	27	8	6	4	46
27	33	2	7	6	70
28	29	6	5	5	41
29	28	7	3	6	41
30	32	3	6	8	62
31	19	16	6	5	50
32	30	5	7	4	50
33	34	1	8	6	72
34	31	4	6	5	48
35	29	6	4	6	58
36	27	8	3	3	62
37	35	0	4	1	46
38	24	11	6	3	62
39	32	3	7	8	70
40	30	5	5	5	55
41	30	5	7	4	46
42	29	6	6	5	55
43	20	15	6	3	19
44	27	8	2	4	48
45	27	8	7	8	70
46	25	10	5	2	46
47	10	25	4	2	29
	28.6595	6.3404	5.7021	4.9787	55.7173

Appendix 6: 2003 college grammar examinations

Final college exam 2003 (pre-course)

Part A: Choose the right statement for each question.

1. A. I already have saw that movie.
B. How many new friends have you been knowing since you came here?
C. I have written my wife a letter every other day for the last two weeks.
D. Since the beginning of the twentieth century, medical scientists made many important discoveries.
2. A. I used to be fat, but now I'm not.
B. I am used to be fat.
C. I didn't used to be fat.
D. I never use to be as fat as I am now.
3. A. Those aren't Fred's books, are they?
B. She'll help us later, will she?
C. There is a meeting tonight, isn't it?
D. Life in Wenzao is wonderful, isn't that?
4. A. They are the ones that won the race.
B. Alexander Bell was the man invented the telephone.
C. What was the name of the man whom lent you money?
D. He is the one saved the little girl from the fire.
5. A. She asked me call her back later.
B. Ask Paul do not interrupt me while I am working.
C. The doctor told me to stay in bed for a few days.
D. Tell Fanny to not use the copy machine for personal materials.

Part B: The following sentences contain errors. Choose only one mistake for each question below.

1. I admit that I have got older since I last saw you, but with any luck at all, I also got wiser.
D A B C
2. Last night while we were walking home, we saw an unidentified fly object.
A B C D
3. The baby is crying. She has been cried for almost ten minutes. I wonder what's wrong.
A B C D
4. Linda is the one that has been interesting in astrology since she was a little girl.
A B C D
5. Would you mind tell me how to get to the President Department Store? You can tell me
A B C
what bus I should take.
D

Final college exam (post-course)

Part A. Finish the sentence with the correct answer. (2 points each)

1. I won't go to the party this weekend . . .
A. if I will feel sick.
B. if I couldn't finish all of my homework.
C. if my sweetheart doesn't come with me.
D. All of the above.

Does direct grammar instruction improve students' performance?

2. If I were the President of Taiwan, . . .
- A. I must give all students more holidays.
 - B. I could have a nice office in Taipei.
 - C. I will pay teachers more money.
 - D. Both A and B.
3. When I got home last night, . . .
- A. it was started raining.
 - B. it already started raining.
 - C. it was raining.
 - D. Both B and C.
4. . . . before I saw the UFO fly past me in the night sky.
- A. I had been driving on the road for about half an hour . . .
 - B. I have never believed that aliens were real . . .
 - C. I talked on my cell phone with a friend . . .
 - D. Both A and C.
5. I saw the new James Bond movie last weekend . . .
- A. because I ever seen all the other James Bond movies.
 - B. when the cinema started burning.
 - C. although I haven't liked most of his previous films.
 - D. None of the above.

Part B. Write the correct form of the verb in parentheses. Be sure the tense is correct too! (2 points each)

- 1. He thinks that cars which (make) in Italy are better than French cars.
- 2. The alien told the captain, "First, you (take) by my crew to our spaceship and then we will eat you!"
- 3. The popular movie (watch) by ten million people since it opened last month.
- 4. Almost one billion bottles of tat soda (sell) last year.
- 5. A new highway (build) right now near my house. I hope there isn't a lot of traffic noise when it is finished!"

Appendix 7: Test scores and examination results - Groups C and D

Group C	Correct (pre-test)	Incorrect (pre-test)	Correct (post-test)	Incorrect (post-test)	Pre-course college grammar exam	End of course college grammar exam
1	22	13	22	13	5	4
2	21	14	26	9	5	4
3	24	11	30	5	6	8
4	25	10	31	4	6	5
5	20	15	25	10	6	6
6	18	17	30	5	6	3
7	23	12	30	5	5	8
8	19	16	31	4	6	5
9	23	12	32	3	4	6
10	25	10	30	5	10	9
11	17	18	26	9	6	5
12	21	14	32	3	4	7
13	29	6	33	2	6	6
14	32	3	34	1	10	9
15	29	6	34	1	9	9
16	24	11	34	1	6	3
17	23	12	30	5	7	9
18	19	16	28	7	8	5
19	24	11	33	2	7	7
20	24	11	32	3	6	5
21	25	10	29	6	6	3
22	21	14	30	5	7	4
23	29	6	32	3	8	6
24	29	6	32	3	10	9
25	23	12	30	5	7	5
26	18	17	32	3	5	5
27	25	10	32	3	6	9
28	34	1	35	0	9	9
29	29	6	32	3	6	6
30	24	11	29	6	6	7
31	17	18	30	5	7	9
32	19	16	32	3	6	5
33	25	10	31	4	5	6
34	21	14	32	3	7	5
35	31	4	33	2	9	9
36	21	14	29	6	5	7
37	22	13	27	8	5	8
38	22	13	30	5	6	6
39	30	5	31	4	7	7
40	29	6	29	6	7	5
41	30	5	29	6	6	4
42	22	13	24	11	6	3
43	17	18	28	7	6	6
44	28	7	34	1	6	7
45	18	17	23	12	7	4
46	24	11	33	2	7	8
47	28	7	31	4	6	6
48	25	10	32	3	6	6
49	18	17	21	14	3	3
	23.79591	11.20408	30.10204	4.89795	6.42857	6.12244

Does direct grammar instruction improve students' performance?

Group D	Correct (pre-test)	Incorrect (pre-test)	Correct (post-test)	Incorrect (post-test)	Pre-course college grammar exam	End of course college grammar exam
1	21	14	29	6	7	8
2	27	8	31	4	5	9
3	26	9	27	8	7	7
4	24	11	29	6	8	8
5	31	4	34	1	8	9
6	25	10	28	7	8	8
7	23	12	29	6	7	4
8	31	4	34	1	6	9
9	25	10	30	5	4	4
10	19	16	21	14	8	7
11	17	18	29	6	7	6
12	23	12	30	5	7	4
13	22	13	27	8	6	4
14	22	13	31	4	7	6
15	22	13	32	3	6	7
16	21	14	23	12	6	5
17	25	10	33	2	6	6
18	20	15	25	10	7	6
19	27	8	29	6	7	6
20	26	9	31	4	7	8
21	23	12	31	4	6	7
22	24	11	29	6	3	4
23	24	11	32	3	5	4
24	21	14	26	9	6	4
25	29	6	35	0	9	8
26	31	4	33	2	7	5
27	9	26	26	9	5	4
28	21	14	32	3	8	9
29	29	6	34	1	9	8
30	21	14	28	7	7	4
31	23	12	29	6	7	7
32	20	15	29	6	7	7
33	27	8	33	2	5	8
34	25	10	33	2	7	6
35	24	11	27	8	8	4
36	30	5	33	2	2	7
37	20	15	33	2	8	9
38	23	12	30	5	5	7
39	16	19	22	13	4	2
40	30	5	35	0	8	10
41	25	10	32	3	5	6
42	26	9	30	5	5	5
43	25	10	34	1	9	9
44	27	8	32	3	8	7
45	30	5	26	9	4	2
46	22	13	35	0	7	5
47	15	20	20	15	3	5
48	23	12	23	12	3	2
	23.75	11.25	29.66	5.3333	6.3333	6.16666

Appendix 8: 2004 college grammar examinations

Final college exam 2004 (pre-course)

Part A: Choose the **right** statement for each question.

1. A. I already have saw that movie.
B. How many new friends have you been knowing since you came here?
C. I have written my wife a letter every other day for the last two weeks.
D. Since the beginning of the twentieth century, medical scientists made many important discoveries.
2. A. I used to be fat, but now I'm not.
B. I am used to be fat.
C. I didn't used to be fat.
D. I never use to be as fat as I am now.
3. A. Those aren't Fred's books, are they?
B. She'll help us later, will she?
C. There is a meeting tonight, isn't it?
D. Life in Wenzao is wonderful, isn't that?
4. A. They are the ones that won the race.
B. Alexander Bell was the man invented the telephone.
C. What was the name of the man whom lent you money?
D. He is the one saved the little girl from the fire.
5. A. She asked me call her back later.
B. Ask Paul do not interrupt me while I am working.
C. The doctor told me to stay in bed for a few days.
D. Tell Fanny to not use the copy machine for personal materials.

Part B: The following sentences contain errors. Choose only one mistake for each question below.

1. It's amazing that Dan and Dave taught himself to play the guitar. They both enjoy themselves when playing it.
A B C D
2. Last night while we were walking home, we saw an unidentified fly object.
A B C D
3. The baby is crying. She has been cried for almost ten minutes. I wonder what's wrong.
A B C D
4. Linda is the one that has been interesting in astrology since she was a little girl.
A B C D
5. The movie that I saw last night isn't frightened at all. In fact, I find it amusing.
A B C D

Final college exam 2004 (post-course)

Part A: Finish the sentence with the correct answer.

1. I won't go to the party this weekend...
A. if I will feel sick.
B. if I couldn't finish all of my homework.
C. if my sweetheart doesn't come with me.
D. All of the above

Does direct grammar instruction improve students' performance?

2. If I were the President of Taiwan, ...
 - A. I must give all students more holidays.
 - B. I would have a nice office in Taipei.
 - C. I will pay teachers more money.
 - D. Both A and B

3. When I got home last night, ...
 - A. it was started raining.
 - B. it already started raining.
 - C. it was raining.
 - D. Both B and C

4. ...when I saw the UFO fly past me in the night sky.
 - A. I had been driving on the road for about half an hour
 - B. I have never believed that aliens were real
 - C. I talked on my cell phone with a friend
 - D. Both A and C

5. I saw the new James Bond movie last weekend. ...
 - A. because I ever seen all of the other James Bond movies.
 - B. when the cinema started burning.
 - C. although I haven't liked most of his previous films.
 - D. None of the above

Part B: Choose the correct sentence or the best answer of each item.

1.
 - A. People in Taiwan are grown rice.
 - B. Bananas are exported from Taiwan to Poland.
 - C. I'm not sure where are my shoes made.
 - D. He thinks that cars which made in Italy are better that French cars.

2.
 - A. By the time the doctor arrived, the patient had died.
 - B. I rushed my teeth before I had gone to bed.
 - C. He had been to Japan last Sunday.
 - D. After he went jogging, he had taken a bath.

3.
 - A. I had lived in Kaohsiung for two years old.
 - B. He had been lived in Kaohsiung for fifteen years.
 - C. She was watching TV when her teacher visited her.
He had come while we were eating dinner.

4.
 - A. My car was died last week.
 - B. The new computer works very well.
 - C. Are the old computers worked well?
 - D. Our classroom needs to clean every day.

5.
 - A. When was the accident happened?
 - B. A hospital was been built around the corner.
 - C. Where do stamps have to be placed on the envelope?
 - D. That book should return to the library as soon as possible.