Objective and Subjective Variables in Two University Classes

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ABSTRACT

The importance of the motivational components in the learning of foreign languages has attracted the interest of teachers, linguists and psychologists in recent decades, giving way to a number of acclaimed studies led by the Canadian psychologist Gardner and his associates. His theories, stressing the role of integrative motivation as a key element in successful language learning, aroused the interest of education researchers, who stressed the need to extend the field of research and include educational factors as well as socio-psychological ones. Oxford & Ehrman in the United States and Dörnyei in Europe have introduced new elements for consideration, and the latter has backed his theories with data emerging from Hungarian classrooms. In the present article we aim to underline the need to consider, on the one hand, the connections between objective variables, associated with the formal learning situation, such as class attendance and participation as well as results in language and other related subjects, and, on the other, affective variables in order to assess the importance of motivation in the language classroom..

Introduction

Language teachers have always been astounded by the various degrees of competence in the foreign language shown by, seemingly, similar students as regards their age, social and family background, culture, etc. Authors on methodology acknowledge the importance of a factor which some refer to as the students's attitude towards the learning process, their

interest in the foreign language or the reasons why they are studying it. These and other aspects are part of a component which has been labelled by applied linguists and psycholinguists as motivation, and which has taken various forms and received various labels over the past three decades.

The starting point in research trying to measure student's motivation is obviously the fact that motivation as such is an extremely elusive component. Other variables, such as age, nationality or belonging to a social group, can be easily translated into figures. Thus we speak of research carried out with children, immigrants, middle-aged professionals, etc, and those groups can be clearly defined in terms of their age, their origin or their income. On the other hand, linguists will avoid stating that they have carried out research with a highly motivated group, unless working precisely on motivation, since they would not be able to provide an accurate description of what they mean by 'highly motivated'. However, teachers and linguists alike still refer to motivated students or students with no motivation, and we all seem to know precisely what these two informal unscientific labels imply. Linguists stress the role of motivation in language learning: "Motivation is the crucial force which determines whether a learner embarks on a task at all, how much energy he devotes to it, and how long he perseveres" (Littlewood, 1984: 53). Even manuals specifically written for TEFL teachers underline the importance of this factor in the learning, and teaching, process, although they tend to make passing comments without much support or clear definition (Campbell & Kryszewska, 1992: 8-9; Harmer, 1983: 7-8; Hubbard, Jones, Thornton & Wheeler, 1983: 199). Let us consider some of these references as the starting-point in our research:

1. Steady improvement will only come from individual motivation and purpose: that personal desire to perfect one's communicative effectiveness which is stimulated by genuine interest in what one is doing. (Rivers & Temperley, 1978: 58).
2. Motivation can be summed up, briefly, as the students's desire and need to learn -the driving force that makes him work hard, pay attention and so on. The teacher's own determination that the students should learn is an important contribution to this, as in encouragement and a sense of progress which should also come from the teacher (Haycraft, 1986: 6).
3. We are interested in what motivates us to adopt certain roles. We are also interested in what motivates or demotivates us when we find ourselves in roles which are imposed upon us. By considering the factors which make us feel positive or negative about doing a certain task we can also gain an understanding of what it is that motivates teachers and learners (Wright, 1987: 28).
4. The abstract term "motivation" on its own is rather difficult to define. It is easier and more useful to think in terms of the "motivated" learner: one who is willing or even eager to invest effort in learning activities and to progress. Learner motivation makes teaching and learning immeasurably easier and more pleasant, as well as more productive (Ur, 1996: 274).

These four extracts from three different decades, which have witnessed a rapid evolution in language teaching procedures, share the same unchanged characteristic: the elusiveness of the factor being defined. However, we also find a number of relevant clues that may, in the end, throw some light on what motivation represents for students and teachers. Rivers & Temperley equate motivation with a desire to communicate and interest in the language. Haycraft's vague definition is implemented with another factor which has been currently adopted to have a great influence on students' motivation in language learning: the teacher's role in encouraging students' interest in the learning process (also supported by Ur, 1996: 280-281). In their zeal to promote the communicative approach, proponents of this method, such as Rivers, go even further by arguing that "motivationally speaking, the aural-oral skills are a good starting point for any general course because most students come to their first language class with the notion that language is something one hears and speaks. Should we disillusion them so soon?" (1981: 56) and goes on to refer to what she labels as "sensitive teachers" (Rivers, 1981: 88) or even "imaginative teachers" (Rivers & Temperley, 1978: 47) to refer to those instructors who make the effort to motivate their students. These linguists quote an ample list of communicative and motivational activities that can attract the student's interest. Wright and Ur avoid a definition, acknowledging its evasiveness, by taking a subtle detour and they speak of motivating factors, and of motivated learners respectively. Additionally, Ur underlines the incidence of motivation in success and in obtaining a relaxed atmosphere in the classroom, whereas Wright speaks of intervening factors to create motivation. However vague, all these references should be given careful thought when attempting a comprehensive definition.

Another important aspect to be considered is the link between motivation and language learning, rather than language acquisition. Since both have been frequently compared by linguists, motivation is an obvious distinction which makes learning a language a unique process and, therefore, quite distinct, from language acquisition: whereas learners of a foreign or second language are usually conscious of the process, children acquiring their mother tongue are not. As Corder points out, there is no evidence to show a link between learning and acquiring a language (1973: 110-111) and, in our view, motivation may be one of the unequivocal differences between both processes. Thus, it may be argued that children develop language in the same way as they develop the ability to open a door or to turn on a television set: they are trying to adapt to the environment in which they live because they need it to survive (even if we accept the difference between biological and psychological motives proposed by some researchers: see Maslow, 1970). Consequently, and although Corder also points out that there are many cases in which parents seem to be acting as teachers when, for example, they correct their children's speech, and, therefore, a link between language acquisition and learning could be established, we will retain the differentiation between language acquisition and learning for future reference.

Therefore, children are inherently and unconsciously forced by their basic needs to acquire a language whereas learners of any L2 might depend, not solely but indeed to a great extent, on their (conscious or unconscious) degree of motivation. However, neither methodology writers nor linguists have been able to provide the language teacher with a

substantial approach to what motivation really is or, at least, which factors contribute to forge motivated students (although attempts at defining the term do exist, see Gardner, 1985 and Crookes & Schmidt, 1991). Some methodology writers avoid any direct reference to the word "motivation" when offering a view of the role of the learner in the teaching/learning process even though they mention factors such as attitude, interest, etc. (see Nunan, 1991: 167-188). Still, motivation is linked to success in the learning process and is believed to allow the student to confront the arduous task of learning a foreign language positively, irrespective of the amount of work necessary to succeed, even though interest may lag at certain moments on account of other external factors which may be a part of motivation itself. Conversely, students failing to feel motivated will certainly find the task not arduous, but intolerable, and success will escape. And again various types of reasons are mentioned: lack of interest in the subject or in the task, the teacher has not succeeded to attract their interest, students had a bad day.

And although a substantial definition of motivation is still to come, linguists and researchers have defined various subcategories. In their first and seminal acclaimed approach to the issue, Gardner & Lambert, two Canadian psychologists distinguished between *instrumental* motivation and *integrational* motivation (1959: 266-72), implying that, in the first type, language was used for a specific purpose (e. g. because the learner find it useful for a career), whereas in the second type language was used as a means of becoming part of a given community. Wilkins defines it in the following terms: learning a language because one wants to or because one has to (1972: 184). Gardner & Lambert's initial distinction did not remain unchallenged, since the experiments carried out in the 1950s and 1960s, which gave prominence to integrative motivation among English Canadians in their attempt to master French, lacked a breadth of scope, and limited the experience to formal situations in a state linguistically divided and aiming at bridging the gap between two clearly distinct societies. The results of those experiments, which gave prominence to integrative motivation, were limited in space and time, and it might be argued that in present-day Canada, given the new political situation in the country, the same experiments with the same individuals could turn out very differently. Even a study carried out among Canadian francophones by Clément et al. did not quite take the researchers to the same results (1977). In the first studies, Gardner and Lambert, and other Canadian researchers, focused on the relevance of the attitudinal component of motivation, a factor which was challenged as confusing, and led Gardner to a redefinition of both attitudes and motivation (1979). Throughout the years, Gardner has defined a so-called socio-educational model (Gardner & Lalonde, 1983: 1-15; Gardner, 1985) which has changed to incorporate other factors, although integration has remained the key component in second language learning success (Gardner & MacIntyre, 1993b: 159).

However, other researchers in the 1980s and 1990s have cast greater doubts over the abovementioned distinction of instrumental and integrational motivation (Giles & Byrne, 1982), and, while Gardner & Lambert have attempted to adapt the model and have responded that their theories are in no way exclusive, there is a clear move to consider motivation from other than a psychological point of view and examine other elements which

may take a fundamental role in the learning process. Thus, Crookes and Schmidt believe that "alternative concepts have not been seriously considered" (1991: 501) whereas Dörnyei has tried to "foster further understanding of L2 motivation from an educational perspective" (1994a: 273), attempting to integrate previous findings within a socially-orientated theory of L2 learning, following Oxford & Shearin's views that the motivation agenda should be expanded (1994: 12-28). Dörnyei's theories were tested in a study carried out in conjunction with Clément & Noels (1994). Gardner & MacIntyre had already included cognitive factors in their outlining of student motivation (1992: 211-220), thus redefining Gardner & Lambert's previous social-psychological approach (1972). The debate has continued in recent years (Gardner & Trembley, 1994; Oxford, 1994; Dörnyei, 1994b).

Before concluding this introductory section, we must mention two other types of motivation. The second type distinguishes between *intrinsic* and *extrinsic* motivation, which some authors believe to be basically useful for teachers (Ur, 1996: 276), although not all agree on their nature. For Ur intrinsic motivation is related to the urge to engage in the learning activity for its own sake whereas extrinsic motivation involves external incentives. In this sense, extrinsic motivation would depend very much on the teacher's ability to arouse the students' interest or on other external factors which may have an influence on the student. On the other hand, Williams and Burden, following a cognitivist approach, link intrinsic motivation to enjoyment in the activity itself and extrinsic motivation to the need to pass an exam or to obtain financial rewards (1997: 123). Van Els et al. take a different view when they link intrinsic motivation to long-term success and extrinsic motivation to short-term success (1977: 117).

Finally a third distinction has been made between *global*, *situational* and *task* motivation (Brown, 1987). Of the three divisions this has been the least successful. By global motivation, we should understand the general interest of the individual to learn whereas situational motivation would be linked to the conditions in which learning takes place, and task motivation would be related to the interest in the task itself. That is, the last two are connected to external factors, almost wholly dependable on the school, the educational system and/or the teacher, whereas the first one should be understood as internal motivation of whatever kind. These three types, together with previous divisions, clearly show that a high number of factors seem to intervene in the definition of motivation, and, although some of these studies have become classics in their own right, the teacher in a foreign language classroom has yet to understand the reasons why, under the same circumstances, some students succeed whereas others fail, and how this can be related to objective variables.

Working hypotheses

In our introduction we have alluded to motivation promoted by the teacher, which could be a factor of the various types of motivation mentioned above, e. g. it could be integrated within extrinsic motivation, instrumental motivation or situational motivation. Many writers have insisted on the great importance of the role of the teacher to motivate his/her students.

Although our aim is not to challenge the view that the teacher's part can definitely influence the student's attitude towards a given subject or a given teaching style, we *do* believe that the communicative method makes enough demands on the teachers, and on the learners, so as to overstate the importance of his/her role or even victimize the instructor. In 1977, Girard firmly stated that a teacher's job was to motivate his/her students (1-11), a view which we take to be extreme and unrealistic. Ur points out a number of areas which can be affected by the teacher action and, therefore, are liable to arouse student's interest in the language or, at least, an urge to succeed: the importance of making students aware of their success (which would not necessarily imply that they have "done things right"), the need to prevent students from feeling that they have failed, the need to make authoritative demands on the students, the importance of including tests in the curriculum to establish goals in the learning process and the establishment of a competitive atmosphere among the learners (1996: 278-279). Although some of these factors might exert a certain influence among some groups of learners, the fact is that, in our opinion, this influence is rather limited. Our first hypothesis is that under normal circumstances, the teacher's role in motivating the learner is comparatively small if we are to compare it with other factors outside the teacher's influence. Obviously the expression "normal circumstances" could be judged vague and elusive, but by that we refer to a qualified person who has become an educator out of a genuine interest in the teaching profession, not merely as a way of earning a living. He/she should be qualified both in the subject he/she is to teach and in the methodology necessary to put across his/her knowledge and interest for the subject. This "ideal" instructor would correspond closely with Dörnyei's description (1994a: 278).

Thus, we believe that motivation must also be influenced, to a much larger extent, by other factors outside the teacher's control. These could, in fact, be practical reasons (which have been previously labelled as instrumental), a need for achievement, a genuine interest in the language being learned and its culture in order to integrate with the L2 community (also called integrative reasons), or because there exist positive cognitive factors that may also have an effect on the learning process; and, finally, a combination of two or more may occur. Therefore, our second hypothesis is that, together with the affective variables that have been studied in recent decades, there must be other variables which can be measured more objectively than through a battery test to ascertain student's attitudes and views on the language and on the language process, however thorough and carefully thought-out the questionnaire may be. Our hypothesis relates a positive cognitive attitude to the student's results in language and other relevant subjects, both in the same and in previous years, as well as to other factors surrounding the formal learning environment. For this reason, we have designed a two-fold survey in which affective and objective variables are compared and contrasted. Subjective variables are measured through a test whereas objective ones are measured by collecting data related to each informant through the whole academic year.

The setting, the characteristics of the learning environment, the informants and the procedure

The starting point of our two surveys is the assumption that our students should be genuinely motivated since tertiary education is not compulsory: if they have become language learners, we shall infer that they are interested in the subject of their choice and, therefore, taking that class conditions are the same for all students, they should be equally motivated. In our case, we are dealing with Spanish university students of English who should have completed two years and should be in a position to pass a Cambridge CPE exam in English at the end of the third year. In the Spanish scenario, English was a booming language in the 1980s, as French fell into oblivion as a foreign language. The national curriculum included English as a compulsory subject from the age of 12 (the new curriculum obliges primary schools to include the language from a much earlier age, but those students had not reached tertiary education at the time the surveys were carried out). Therefore, they have studied English for at least eight years. In our study, none of the students was bilingual or had English-speaking parents. None of them had studied abroad (although twelve had done one-month courses in private language schools in the UK; that period of time seems negligible to us, except to measure the affective non-objective ATEC variable below). All of them belonged to the same age group, 20 to 25 years, with one exception in the second survey, which will be mentioned in the appropriate section. Their social background was equally similar: they belonged to middle-class families, and, as stated above, they were not obliged to take a degree in English.

The classes were conducted within a communicative approach to language teaching, incorporating grammatical explanations whenever students required them. As regards the learning environment, we aimed at creating a positive atmosphere in the classroom throughout the academic sessions 1996-97 and 1997-98 by means of peer and group-work, which tend to be more relaxing for the students (Campbell & Kryszewska, 1992: 7-9; Morgan, 1993: 73-74). We put into practice a varied number of exercises to observe the student's response. These included, as stated, traditional grammar tests and grammar explanations as well as writing sessions, listening exercises with audiotapes and videotapes (featuring a number of attractive and current issues, such as shopaholics, the release of recent films, etc.), dictations, debates, role-playing speaking activities, etc. The teacher offered the possibility of additional classes on certain specific difficulties, such as register problems in written tasks, in an attempt to promote confidence in the instructor as someone on whom they could rely, not merely as someone who would evaluate and mark them at the end of the academic year. Following Ur and Girard, we fostered self-confidence by congratulating the learners on success and by toning down failure, although we reminded them of the importance of working on mistakes, unacceptable in a third year university course. We must also bear in mind that accuracy and fluency are equally important since most of our graduates will start a career as teachers of the language, translators, interpreters, etc. and, therefore, we expect them to reach a high level of proficiency in English.

We judged it essential that the teacher should have no previous knowledge of the students' academic background and could not form an opinion about whether they would fail or succeed in their English exams. Confidential information on their academic records was sought and obtained on request after the course was finished.

The second important aspect of the study was to measure students indirectly (Corder, 1973: 204) by means of a questionnaire concerning their attitude towards the language, although we avoided any questions related to their parents' attitude towards the culture of the language, which we consider irrelevant. Again we should underline that the Spanish situation differs considerably from the Canadian situation in which languages are learned in a highly politicized context. In Spain, Catalan and Basque are the languages to arouse strong feelings in non-Catalan and non-Basque areas, whereas foreign languages are considered from a rather more distant viewpoint. It is also important to notice that, traditionally, Spaniards, and, in this sense they can be compared to native speakers of English, have made poor language learners, since Spanish is spoken worldwide, as opposed to the language of the Norwegians or the Dutch.

The study was carried out during two academic years, 1996-97 (33 informants) and 1997-98 (28 informants), by means of a two-fold survey in each case: one measuring subjective variables in which students were administered a test, and a second survey of objective variables related to their academic background, class attendance and participation. In a first stage we shall compare the results of the two groups as regards attitudes to the language and the culture and appreciation of the classes. We shall, then, proceed to offer a comparison of the objective variables in the two groups and, finally, the findings will be discussed.

Subjective variables

The group of affective variables relates to attitudes towards the language, the culture, language learning and the reasons why students are taking a degree in English. We labelled them as "subjective" in the sense that we had to rely on the students' answers to each of the questions, which, in our view, do not necessarily reflect an unchangeable reality, but rather the informants' attitude or mood at a given time. Students were asked to rate each of the following from 0 to 10 since this is the marking system they are used to. These were the points being rated:

A TEC. Rate your interest in the English culture (understood not only as English literature, but also as any other aspect of English-speaking societies that may come to your mind, such as interest in sports, eating and drinking habits, punctuality, shopping hours, customs, etc.).

INE. Rate your interest in English as an international language of communication.

INLE. Rate your interest in learning English, including its grammar, vocabulary, pronunciation, intonation, etc.

CA. Rate how you usually feel when the English class starts, from 0 (very relaxed and willing to start working) to 10 (very worried hoping that you will pass unnoticed)¹.

EUA. Rate how you feel when, for some reason or other, you are forced to use English in a situation in real life from 0 (you do not feel anything in particular) to 10 (you fear that the native speaker may think that your English is poor).

INT. You are learning English because you think you may go to live to an English-speaking country and you want to speak the language fluently.

(Spanish students do not normally move to other countries and they will use English in very limited cases, basically on exchanges within the European SOCRATES/ERASMUS scheme).

INST. You are learning English because you believe it will be of great use for a future career in the teaching profession, as a translator, etc.

TR. Your teacher has helped you throughout the year to improve your command of the language and has boosted your interest in the language.

INEC. The classes have been of great interest and you feel they have helped you to improve your English.

Although we acknowledge that the questionnaire has been simplified with respect to the analysis of affective variables in previous studies, which may partly undermine its validity, its main goal was to obtain a first spontaneous approach to the subjective variables so that we could compare the students' answers with a complementary survey in which non-subjective variables were taken into account. The result of this part of the study in the two groups can be compared below:

Variable 2 (INE): Group 2

Variable 2 (INE): Group 1

Variable 3 (INLE): Group 1

Variable 3 (INLE): Group 2

Variable 4 (CA): Group 1

Variable 4 (CA): Group 2

Variable 5 (EUA): Group 1

Variable 5 (EUA): Group 2

Variable 6 (INT): Group 1

Variable 6 (INT): Group 2

Variable 7 (INST): Group 1

Variable 7 (INST): Group 2

Variable 8 (TR): Group 1

Variable 8 (TR): Group 2

Variable 9 (INEC): Group 1

Variable 9 (INEC): Group 2

Objective variables

For the second survey, we wanted the informants to remain ignorant of the fact that they were being observed, that they were part of an experiment which, in their view, might influence the teacher's own attitude towards them. For this reason, the information was to be obtained in the most unobtrusive way, and this is connected with the second hypothesis of the present study. Following a cognitivist approach (as discussed by Oxford & Shearin, 1994), we believe that success in language learning may be linked to success in other subjects, notably the subjects they have taken in previous years. In Spanish universities, students have a limited number of options available to them. This implies that students taking a science degree have a number of science options, but few humanistic subjects at their disposal. Therefore, students taking a degree in English are bound to study humanistic subjects, notably literature and linguistics. Thus, information on these other subjects may also throw some light on the informants' final success or failure. We have considered these points, together with other observable classroom data, to produce the tables of objective variables:

1. Year in which the student started university. In Spain students can take as many years as they wish to complete their degree. Theoretically this would imply that they could finish a subject per year, and, consequently, take thirty years to do the thirty subjects of a given degree.

2. Had they completed all their subjects in the first two years? Subjects are grouped in years. Consequently, students can take six subjects in their first year, six in the second, etc. This variable attempts to examine whether they have managed to do the corresponding twelve subjects in the expected period of time (two years). Students can also take subjects from the fourth and fifth years, or they can move on to the next year even if they have not passed all their subjects in previous years.

3. How often had they resorted to resits? In Spain students can take the same exam as many as six times. This variable includes the number of resits and the number of subjects passed so far, that is 6/17 implies that the student has needed more than one exam to pass six out of seventeen subjects.

4. How many times have they taken the first year English Language Exam and which mark did they obtain? Legend: S=Fail, A=Pass, N=70 out of 100, SS=85-90 out of 100 marks.

5. How many times have they taken the second year English Language Exam and which mark did they obtain?

6. Have they taken the third year English Language Exam in the academic session 1996-97, and which mark did they obtain?

7. Percentage of the classes attended. The instructor kept an attendance log, although the informants were unaware. The purpose was to avoid imposing attendance on the students.

8. Percentage of late evening classes attended. At the beginning of the year, we decided to set a varied timetable which included a class at three o'clock, another one at five o'clock

and a final one at eight o'clock. We believed that a number of students may be put off by the late hour and we wanted to ascertain how many and who would attend these classes. Students were provided with a comprehensive schedule of each term in which the content of each class was explicated. Consequently, they knew well in advance the type of exercise or task that would be carried out in the late evening classes. An attempt was made at using varied tasks and/or exercises in these classes so that class attendance did not depend on the type of exercise being used in those hours.

9. Did they take an active role in the classes? The answer to this question will imply that the instructor did not need to incite the student to participate in the classes, but rather than the informant did so freely, if not enthusiastically.

The results can be compared below (see also the Appendix).

Findings of the academic session 1996-97

Although the number of informants was relatively small, the two tables seem to establish clear connections between a genuine interest in the language learned, the culture and the formal learning environment, defined through a series of affective variables, and what we have defined as objective variables. According to this combination of factors, we have divided the students in the study into three groups:

1. Students who had started their degrees recently, and who had completed all the years so far, i. e. S9, S13, S16, S18, S26, S31, S32 and S33. These students had finished the

previous two years and, in most cases, attended classes regularly, including late evening classes, although they did not obtain top marks except in one case (S13). Five of them participated in the classes without being asked. The connection with their answers in Table 1 of the Appendix, that is, their subjective approach to the language, the classes and the teacher, establishes a clear interest in the target language and culture, although their objective was not necessarily to live in an English-speaking country. All of them were fairly or very interested in the English culture, language or in the fact that English was an international means of communication. In the CA column, most of them felt some degree of anxiety when the class started although this was obviously overcome since most of them participated voluntarily in speaking activities or by asking and answering questions (as shown in Table 2, column 9), whereas all of them admitted feeling uneasy when they had to use English in real situations. Instrumental motivation is acknowledged in that English may help their future careers, whereas none of them seemed particularly keen on living abroad (none of them rated this variable over 6). Finally, they all acknowledged to be fairly satisfied with the work done in the class during the academic year.

2. The second group is formed by students who had started their degrees between 1985 and 1993. This is a rather heterogeneous group which includes a number of peculiar cases. For this reason and for the sake of clarity, we have subdivided this group into two. Both groups share some components but differ considerably in many aspects. Obviously, they had not completed their first three years, and they had also had to resit a number of other subjects, including Spanish Language, Latin, British History, Phonetics (Table 2, column 3). In the vast majority of the cases they just passed English Language I and II, and all of them had to resit at least one exam. However, there are three important differences which have to be considered: late evening class attendance, general class attendance and class participation.

In the first group we include the bigger number (S1, S3, S5, S6, S8, S11, S12, S17, S22 and S30), with students who stopped attending classes from the very first week of the academic year or who rarely attended them. Thus, we may infer that their reason to stay away from the classes cannot be the teaching method, the tasks, etc since they barely had time to shape an opinion about them. In fact, in eight cases they never attended the late evening classes, irrespective of the exercises or the grammatical input provided in the session, which seems to imply a clear lack of interest in the subject, the language or the classes themselves whenever an extra effort unrelated to the development of the course was required. To ascertain this point we decided to allocate the explanation and practice of English inversions to a late evening class, since Spanish students have difficulties with this structure: students usually need a comprehensive explanation of how inversions work in English and the different types and contexts in which they are used. In the schedule for the year the explanation and additional exercises were to be presented in a late evening class. However, none of the students of this group turned up. The same occurred when a speaking activity or a video was scheduled. Nothing moved them to stay for the last class of the day.

Equally interesting is the fact that they also failed to attend more "normal" hours. They scarcely ever participated in the classes, unless directly asked by the teacher, and eventually

8 out of 10 failed the final exam or did not take it at all. These data are clearly related to the affective variables in Table 1. The students in this group stated that they were not very keen on the English culture (they rated their interest between 2 and 6), although they answered they had a reasonable interest in English as an international language. Few of them believed the classes were of some use, which must be toned down taking into account their very poor class attendance: e. g. S11 was very critical of the classes, although his/her class attendance was minimal (23 %). The same applies to most of the individuals in this group. As does the fact that they did not feel at ease in the classroom and they felt no interest in living abroad. Paradoxically, they hoped English would improve their future prospects, so an instrumental factor could be considered.

Conversely, the second group includes five students (S14, S20, S21, S23 and S29) with similar problems to the former but with a different approach altogether to the classes, at least in the academic year we are examining. It is true that these five students had had difficulties in previous years, which were still present in the session 1996-97. However, they attended classes regularly as well as tutorials in order to discuss their learning difficulties with the teacher. All of them attended the totality of the classes, including the evening classes and participated (except S21) actively in all tasks. Eventually they passed their exams (again except S21). As regards their answers in Table 1, their interest in the language and culture, as reflected in ATEC, INE and INLE, is average, they did not seem to feel particularly anxious about using the language, except S21. As for their interest in learning English for the future, they were not inclined to live abroad, but they hoped that their degree in English would help them in their future careers. Unlike the first subdivision of the students in this section, all of them appreciated the classes and felt they had been helped by their teacher.

3. Finally the third group includes those students who had started their degree in 1994 but were already being left behind by their classmates in Group 1 (S2, S4, S7, S10, S15, S19, S24, S25, S27 and S28). None of them had completed the first two years, and had had to resit exams for English and other subjects between 2 and 17 times. Only one (S2) had reasonably good marks in English and participated in class voluntarily. The other variables did not apply to all of them as a group. Thus, class attendance ranged between 12 % and 100 %, and late class attendance between nil and 100 %.

These data are again connected with the answers given by the students in the test on affective variables. S2 was to give the most positive answers throughout, showing a good attitude towards the classes, the language and the culture, although he/she acknowledged to be less inclined to use the language. The rest gave rather heterogeneous ratings. Interest in the target culture is clearly below average, although some felt more interest in the language itself. Class anxiety was also high among these students who, consequently, hardly ever participated in class activities. They acknowledged some hope in using the language in their careers, but no special interest is shown in living abroad (except S27 and S28).

Findings of the academic session 1997-98

Before referring to the second session, we should underline a few differences with regards to the previous one. The second part of the study was carried out during the academic session 1997-98, which was the last year in which English Language III was taught in the so-called "1984 Plan", to be extinguished this year (2000). We thought it was fundamental to carry out the second survey under the same circumstances as the first one, so that we could alter other aspects of the teaching programme in order to elicit comparisons with the first survey, since with the new "1996 Plan", students would not be able to register and attend classes in English Language III if they had not passed the previous two English Language subjects. In this sense a pass in English Language II was the key to have access to this subject.

Thus, we decided to introduce an optional system, that of continuous assessment, as the main innovation concerning the teaching, *and* marking programme of this second survey. This system would exempt the informants from taking the abhorred four-hour final exam. The procedure was explained in detail at the beginning of the course, and students had to agree to take this option and state it clearly as well as to make a number of commitments if they wanted to be eligible for an exemption. First and foremost, exercises would be collected for correction, as in previous years, but the marks obtained would be the base of the final mark. Exercises would be collected randomly, that is, without giving prior notice of the day when an exercise would be assigned for correction, which, in fact, implied that students had to attend the majority of the classes in order to avoid missing out on the number of requested marks. In this sense they would be forced to attend classes, even though university regulations do not oblige them to. We believed this new element could help us consider possible differences with the first survey as regards late evening class attendance.

The second importance difference concerned mid-term grammar tests, since in the previous academic session students had not taken any. This year, students would have a grammar exam at the beginning of the second term and another one at the beginning of the third term. Passes in both tests would be required to gain exemptions from the final exam, that is a top mark in the first exam would not compensate a very low mark in the second one.

We should also mention the case of informant E6 because of certain differences with respect to the members of the previous group and of her own classmates: she was slightly older than the rest and had lived a year in an English-speaking country.

Bearing all these differences in mind, we sustained that some of the results obtained in the first survey would be unlikely to be repeated this time and, in consequence, they might not throw any light on the connections between objective variables and the interest in the language or the subject, since, to some extent, there was an implicit obligation to take part in the classes as well as to attend most of them, even the late evening ones. To some extent, we expected a degree of contradiction with respect to the first survey, since an additional gradual and individual reward or achievement (in our case in the shape of an exam exemption) could be viewed as capable of boosting motivation (Locke & Latham, 1990).

We shall use E1, E2 and so on to differentiate these informants from the ones in the previous group.

The initial expectations before considering the data led us to believe that the changes introduced in the teaching and marking programme for the academic session 1997-98 would alter some of the objective and might undermine our hypothesis that there is a connection between the influence that a combination of subjective and objective variables can have on the student's motivation. The final results are, in our view, unexpected. For the discussion of the tables, we shall follow the same division as for the first survey.

1. The number of students who had completed their previous two years was clearly smaller: only E14, E20, E21 and E23 had successfully reached their third year. The four of them attended classes regularly, although one did not take an active part in the classes. The other three regularly volunteered for blackboard work, took the initiative in speaking activities and showed a clear interest in the subject by attending tutorials. Additionally, and unlike their counterparts in the previous year, two obtained good marks, with one of them obtaining top marks (SS).² As for the subjective variables, they were all very keen on the English language, less so on the English culture. They acknowledged feeling anxious about the English classes, but they participated in them, except E14. This could be related to the ratings for anxiety in real life situations, since, while E14 rated it 7, the other three answered they felt more relaxed. They were all satisfied with the work done in the classes and expected to benefit from their English for their future careers, although no interest in using the language in a natural environment was shown.

2. The second subdivision also includes those students who were taking a longer time to complete the various courses. These students had begun their degrees between 1990 and 1994, that is, the time span is reduced by five years in comparison with the group in the previous year. However, and unlike our expectations concerning the continuous assessment programme, we can still maintain the distinction between a group of learners who did not attend regularly and those who did. Informants E3, E8, E16, E26 and E28 form the first section, although a difference should be noted with respect to the previous year. All of them attended classes regularly for a short period of time, and one of them even took an active part in the classes, but they gradually dropped out and/or relaxed their class attendance. They obviously preferred to avoid the final exam by opting for continuous assessment, but abandoned their preferred choice as the course moved on. It is noticeable that four of them had not passed their English Language II and that all of them failed the first grammar test. E28 stopped attending classes altogether after that, and the rest did attend, although sporadically. In the end, they were not exempted from the final exam and they did not take it that year either.

As regards their answers to the questionnaire, students were less critical concerning the instructor and the classes, although that could have been due to the positive influence that a continuous assessment process and its ultimate implications could have on them. However, the rest of the answers were similar. Interest in the language and culture was

average except in the case of E26. Both class and real life anxiety were rated high or very high and they admitted that the reason to study English was to further their future careers rather than to integrate within an English-speaking society, on which, as stated, they were not particularly keen.

The second subdivision responds to the type mentioned in the previous year, although only two had registered for English Language III four or five times before, and had begun their degree in 1990. The rest started either in 1993 or 1994 (E1, E2, E6, E9, E11, E12, E13, E18 and E22): All of them had resat between four and fourteen subjects, and they had had to take an English Language (I, II or both) final exam, at least, more than once. In fact, E12, E18 and E22 had not passed their English Language II when they started the course, although they did pass it in the February resit, half way through the English Language III course. Although class attendance varied, it was never below 70 % and the average would rise to 85-90 %. As regards class participation, only three (E1, E2 and E6) seemed to be inclined to take the initiative in the classroom, whereas their classmates preferred to remain silent and answered only when required. Continuous assessment must have played an importance role in forcing them to attend classes, but it was not a sufficient reason to make them participate. Although the majority were exempted or passed the final exam, it is also noticeable that it was not the first attempt for E1, E2, E11 and E13. On the other hand, E22, who attended but did not participate, failed to gain an exam exemption. This informant had passed English Language I the second time, and passed English Language II only in 1999. English Language III was still pending in 2000.

E22 is a rather noticeable informant because most of her answers in the affective questionnaire were positive, and she also showed a genuine interest in the classes by attending them regularly, even though no spontaneous participation took place (class anxiety was rated very high): Integrative motivation is also present, unlike the rest of the informants in this group, including E6, who did not seem particularly prone to return to an English-speaking country. Instrumental reasons led them to decide on taking a degree in English. Class anxiety is average to high, whereas they declared to be less worried about using English in real life situations. Most of them rated the classes and the instructor's role average or above average.

3. Finally, in the third group, we include, as in the previous academic session, those students who had started their degrees two years before, but were already lagging behind. They had had to resit some of their subjects (between 1 and 6): However, and unlike the corresponding group in the first survey, we need to make a difference between two clearly distinct sections. On the one hand, there are four students who, even if they had not completed the previous two years, seemed to be working slowly but surely: informants E15, E17, E24 and E25 had resat between 1 and 4 subjects, but had passed most of them, including English Language I and II, and were eventually exempted from the final exam, since they had attended regularly and class exercises were average. They did not take part in classes voluntarily (and acknowledged a degree of class anxiety in the questionnaire), but they did when asked. They appreciated the instructor's role and valued the classes. Their

interest for the language and culture varied, but they all declared to expect English to help their careers. Finally, they admitted having no integrative reasons to study English (rated 2 or 3):

Conversely informants E4, E5, E7, E10, E19 and E27 faced greater difficulties both in English and other subjects, and all of them had at least one of the two previous English Language subjects pending. None of them received an exam exemption and they did not even take it in the end. They did not participate in the classes they attended, not many in the case of E27 (around 30%) and most of them in the case of E7. Again surprisingly enough, as in the first year, the informants in this group were more critical of the teacher's role and classes, specially those who attended fewer of them. E27 stands out in that this informant soon dropped out and did not even take the final exam.

Once again instrumental reasons to study English were given, and low ratings for integrative motivation may be connected with little interest in the culture of English-speaking countries.

Comparison of the two years and conclusions

As already stated, we anticipated that the main shortcoming of the study would be related to the two different methods used to assess and mark the students who took part in the two academic sessions. We believed that, in the first year, attendance would drop as the academic year passed, since the nature of the tasks used in the classroom made demands on the students. They were requested to participate actively without any practical compensation as regards the marking process, since they would have to take a final exam, the same as for the rest of the subjects, where they were expected to take notes, read a set number of literary works and, in some cases, write a dissertation (which would imply, in some subjects, to give a single oral presentation), where in English Language classes they would be constantly exposed to activities with a strong oral component without prior notice.

Conversely, in the second year, the students were duly informed of the different, and, to some extent, experimental nature of the assessing and marking process: class participation and corrected exercises and tests would be the elements used to assess their work, which, in turn, might exempt them from the final exam. Thus, the informants could have felt obliged to attend and participate in the classes if they aimed at getting the exemption as a reward. Otherwise, the conditions in which the classes were held were similar, both as regards the number of students and organization of the time. And many of the tasks and class activities were the same, since we aimed at reproducing the same class conditions for both years. An attempt was made at creating a relaxed atmosphere in which students could participate whenever they felt like it, and a variety of contextualized exercises dealing with current issues which could have attracted most students' interest, if not all, was used.

The students's response and their attitude could not have been more varied, but our two surveys lead us to a first unexpected but definite conclusion: the different assessing and

marking process, which should have encouraged class attendance and participation in the second year was not considered a sufficient reward. That is, an exam exemption was not a genuine extrinsic reason to induce the students to cooperate. The only external reason that moved informants both years (second subdivision of Group 2 in both cases) was the fact that most of them had done the same course twice or more times and were approaching the limit number of resits for a subject, leaving them with the choice of abandoning the degree altogether or moving to a different university.

As regards our first hypothesis, the instructor's role was particularly influential in the case of students who admitted being genuinely interested in the language and the culture, and who also obtained the best results in the final exams in the first survey or in the continuous assessment process in the second one. These students stood out in the rest of the subjects they had taken in the previous academic years, passing the exams the first time they took them and obtaining good marks in many of them. They form the first section in both surveys. The rest of the informants constitute a rather heterogeneous group, with a majority of students who appreciate the role of the teacher, even if they do not eventually pass the subject. A smaller percentage of them was highly critical of the classes and the instructor, but this coincides with those informants who hardly ever attended the classes, such as the commented case of SII. Therefore, and although our findings do not undermine the view that the teacher can have a great influence on the language learner, the results do imply that other factors must play a far more important role, at least in the case of those who failed or decided not to take the exam.

As for the second hypothesis, there is also a connection between success and/or interest in other subjects and success in English, with the exception of five students who may have felt forced to study and work hard in order to pass the exam (but these informants do not weaken that hypothesis: they show that external factors can also intervene in final success): In fact, students who passed the final exam easily also passed most other subjects, and the same can be applied to those who were exempted from the final exam in the academic session 1997-98. This would certainly imply that cognitive variables are of immense importance in acquiring a foreign language. Conversely, students who had had to resit other subjects in the previous three years had also failed one or more English Language exams and failed their English Language III exam or decided not to take it all.

As regards other objective variables, such class participation and attendance, there are three clearly distinct groups: those who attended and participated (coinciding with the best marks), those who attended, but hardly ever participated, and, finally, the abovementioned group of those who were not even tempted by explanations of difficult grammatical points, communicative tasks, videos or any other type of exercises (coinciding with those who failed the exams or did not take them at all): Additionally, and linking this to the point made in the previous paragraph, although the teacher's role may be fundamental in the learning process, and can have a great influence on the students, the teacher's efforts can prove utterly useless in the case of students who are reluctant to participate or even attend the classes. Their answers in Tables 1 and 3 do not indicate a negative attitude towards the language or their culture, although it may be unenthusiastic in some cases; therefore, it

seems obvious to us that the reasons for their failure are unrelated to the language itself or to the formal learning environment, or at least not wholly. These reasons may be cognitive, since those students who failed their English exam or dropped out altogether, also failed other subjects. Or else, social factors, which we have not considered in the present study, could also play a central role: students may feel forced to start a university degree due to social or family pressure, and, consequently, will fail to do it out of genuine interest. Therefore, in the first stages, they may feel that their university degree will allow them to have access to a stable well-paid job, that is for instrumental reasons, but their interest will lag, as they move on, influenced by social or economic factors (high unemployment rates, as is the case in Spain for Arts students at the moment; awareness of the good economic status of the family, which renders studying useless, etc.):

Whatever the case, the factors that can affect the success or failure of university students when learning a language differ considerably from those affecting other groups in previous studies. Without denying the role of the instructor in motivating the students, without refuting findings in previous studies as regards affective variables and language learning, more objective measurable elements also have an influence on the final outcome and we believe that they should be studied in connection with affective variables in order to obtain a deeper understanding of the learner as an individual, not merely as the member of a group.

Notes

1. The effect of anxiety on student motivation has also given way to an interesting controversy in recent years. See Sparks & Ganschow, 1991, 1993a, 1993b, MacIntyre & Gardner, 1994 and MacIntyre, 1995 for its latest developments and references

2. S20 would have increased the number of top marks in this group (an asterisk in the table). Sadly, he died before ending his third year. This article is dedicated to Raúl Torre Pérez, the name behind that number.

Works Cited

- Brown, H. D. (1987): *Principles of Language Learning and Teaching*. Englewood Cliff, New Jersey: Prentice Hall.
- Campbell, C. & H. Kryszewska (1992): *Learner-based Teaching*. Oxford: Oxford U. P.
- Clément, R., L. Major, R. Gardner & P. Smythe. (1977): "Attitudes and Motivation in Second Language Acquisition: An Investigation on Ontario Francophones." *Working Papers on Bilingualism* 12: 1-20.
- Clément, R., Z. Dörnyei & K. A. Noels (1994): "Motivation, self-confidence and Group Cohesion in the Foreign Language Classroom." *Language Learning* 44(3): 417-448.
- Corder, S. P. (1973): *Introducing Applied Linguistics*. Harmondsworth: Penguin Books.
- Crookes, G. & R. W. Schmidt (1991): "Motivation: Reopening the Research Agenda." *Language Learning* 41(4): 469-512.

- Dörnyei, Z. (1994a): "Motivation and Motivating in the Foreign Language Classroom." *The Modern Language Classroom* 78(iii): 273-284.
- (1994b): "Understanding L2 Motivation: On with the Challenge!" *The Modern Language Classroom* 78(iv): 515-523.
- Ehrman, M. E. & R. L. Oxford (1995): "Cognition Plus: Correlates of Language Learning Success." *The Modern Language Journal* 79: 67-89.
- Gardner, R. C. (1979): "Social psychological aspects of second language acquisition" in Giles, H. et al., eds., *Language and Social Psychology*. Oxford: Oxford University Press.
- (1985): *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. London: Arnold.
- Gardner, R. C. & R. N. Lalonde (1983): "The Socio-Educational Model of Second Language Acquisition: An Investigation Using LISREL Causal Modeling." *Journal of Language and Social Psychology* 2: 1-15.
- Gardner, R. C. & E. W. Lambert (1959): "Motivational Variables in Second Language Acquisition." *Canadian Journal of Psychology* 13: 266-272.
- (1972): *Attitudes and Motivation in Second-Language Learning*. Rowley, Mass.: Newbury House.
- Gardner, R. C. & P. D. MacIntyre (1992): "A Student's Contributions to Second Language Learning. Part I: Cognitive variables." *Language Teaching* 25: 211-220.
- (1993): "A Student's Contributions to Second Language Learning. Part II: Affective variables." *Language Teaching*. 26: 1-11.
- (1993b): "On the Measurement of Affective Variables in Second Language Learning." *Language Learning* 43-2: 157-194.
- Gardner, R. C. & P. F. Tremblay (1994a): "On Motivation, Research Agendas, and Theoretical Frameworks." *The Modern Language Journal*. 78(iv): 524-527.
- (1994b): "On Motivation: Measurements and Conceptual Considerations." *The Modern Language Journal* 78(iii): 359-368.
- Giles, H. & J. L. Byrne (1982): "An Intergroup Approach to Second Language Acquisition." *Journal of Multilingual and Multicultural Development* 3-1.
- Girard, D. (1977): "Motivation: the Responsibility of the Teacher." *ELT Journal* 21-1: 1-11.
- Harmer, J. (1983): *The Practice of English Language Teaching*. Harlow: Longman.
- Haycraft, J. (1986 [1978]): *An Introduction to English Language Teaching*. Harlow: Longman.
- Hubbard, P. , H. Jones, B. Thornton & R. Wheeler (1983): *A Training Course for TEFL*. Oxford: Oxford U. P.
- Littlewood, W. (1984): *Foreign and Second Language Learning*. Cambridge: Cambridge U. P.
- Locke, E. & G. Latham (1990): "Work Motivation and Satisfaction: Light at the End of the Tunnel." *Psychological Science* 1: 240-246.
- MacIntyre, P. D. (1995): "How Does Anxiety Affect Second Language Learning? A Reply to Sparks and Ganschow." *The Modern Language Journal* 79: 90-99.
- MacIntyre, P. D. & R. C. Gardner (1994): "The subtle effects of Language Anxiety On Cognitive Processing in the Second Language." *Language Learning* 44: 283-305.
- Maslow, A. H. (1970): *Motivation and Personality*. New York: Harper & Row.
- Morgan, C. (1993): "Attitude Change and Foreign Language Culture Learning." *Language Teaching* 26: 63-75.
- Nunan, D. (1991): *Language Teaching Methodology*. London: Prentice Hall.

- Oxford, R. (1994): "Where Are We Regarding Language Learning Motivation?." *The Modern Language Journal* 78: 512-514.
- Oxford, R. & J. Shearin (1994): "Language Learning Motivation." *The Modern Language Journal* 78: 12-28.
- Rivers, W. (1981 [1968]): *Teaching Foreign-Language Skills*. Chicago: The University of Chicago Press.
- Rivers, W. M. & M. S. Temperley (1978): *A Practical Guide to the Teaching of English as a Second or Foreign Language*. New York: Oxford U. P.
- Sparks, R. L. & L. Ganschow (1991): "Foreign Language Learning Differences: Affective or Native Language Aptitude Differences?" *The Modern Language Journal* 75: 3-16.
- (1993a): "The Impact of Native Language Learning Problems on Foreign Language Learning: Case Study Illustrations of the Linguistic Coding Deficit Hypothesis." *The Modern Language Journal* 77: 58-74.
- (1993b): "Searching for the Cognitive Locus of Foreign Language Learning Difficulties: Linking First & Second Language Learning." *The Modern Language Journal* 77: 289-302.
- Ur, P. (1996): *A Course in Language Teaching. Practice and Theory*. Cambridge: Cambridge U. P.
- Van Els, T. et al. (1981 [1977]): *Applied Linguistics and the Learning and Teaching of Foreign Languages*. London: Edward Arnold.
- Wilkins, D. A. (1972): *Linguistics in Language Teaching*. London: Edward Arnold.
- Williams, M. & R. L. Burden (1997): *Psychology for Language Teachers: A Social Constructivist Approach*. Cambridge: Cambridge U. P.
- Wright, T. (1987): *Roles of Teachers and Learners*. Cambridge: Cambridge U. P.

Appendix

First Survey (1996-97)

Table 1-Subjective Variables

	ATEC	INE	INLE	CA	EUA	INT	INST	TR	INEC
S1	5	6	4	8	8	4	6	5	4
S2	8	9	8	6	4	8	7	7	7
S3	5	5	4	9	9	6	7	4	3
S4	4	5	5	10	9	3	6	5	5
S5	4	6	3	6	6	4	7	4	3
S6	3	4	3	6	6	4	4	7	3
S7	5	4	3	7	5	2	5	2	2
S8	4	3	4	5	6	2	6	3	1
S9	7	9	9	6	7	5	8	8	9
S10	5	6	5	9	6	4	7	6	6
S11	6	7	5	6	6	2	5	5	2
S12	5	6	5	6	7	3	6	5	5
S13	7	8	9	6	6	5	8	8	9
S14	5	5	7	5	7	4	8	8	9
S15	4	3	3	6	7	2	6	5	5
S16	5	6	6	7	6	5	9	6	6
S17	3	3	6	3	4	2	8	2	2
S18	6	7	8	5	4	3	7	8	8
S19	3	3	6	3	4	2	8	2	2
S20	6	7	8	5	6	6	8	8	9
S21	7	6	7	10	8	2	9	7	7
S22	6	7	7	7	5	6	8	6	8
S23	5	6	7	5	4	3	7	6	6
S24	3	6	7	5	5	3	6	5	4
S25	6	7	5	7	6	2	8	6	5
S26	7	8	8	9	6	5	9	8	9
S27	6	7	5	8	8	6	6	5	4
S28	5	7	8	9	8	6	6	5	4
S29	3	6	7	6	6	8	6	7	9
S30	2	5	4	8	8	3	7	3	2
S31	6	7	7	8	6	4	6	6	7
S32	7	8	8	6	5	5	7	7	6
S33	6	7	7	2	7	6	8	6	8

Table 2-Objective Variables

	1	2	3	4	5	6	7	8	9
S1	1992	NO	6/17	1(A)	3(A)	-	40%	-	NO
S2	1994	NO	6/12	1(N)	1(N)	1(N)	80%	90%	YES
S3	1993	NO	8/14	1(A)	2(A)	1(A)	50%	-	NO
S4	1994	NO	4/12	1(A)	1(A)	1(S)	75%	60%	NO
S5	1989	NO	14/28	2(A)	5(A)	1(A)	50%	-	NO
S6	1992	NO	9/16	1(A)	3(A)	-	53%	-	NO
S7	1994	NO	3/4	2(A)	-	-	42%	-	NO
S8	1993	NO	8/15	4(A)	1(A)	-	47%	-	NO
S9	1994	YES	0/12	1(A)	1(A)	1(A)	100%	100%	YES
S10	1994	NO	5/12	1(A)	1(A)	1(S)	95%	90%	NO
S11	1991	NO	4/7	5(A)	-	-	23%	-	NO
S12	1993	NO	4/11	1(A)	1(A)	-	65%	10%	NO
S13	1994	YES	1/12	1(SS)	1(N)	1(N)	100%	100%	YES
S14	1986	NO	10/19	3(A)	4(A)	6(A)	100%	100%	YES
S15	1993	NO	6/14	2(A)	1(A)	1(S)	83%	60%	NO
S16	1994	YES	4/12	1(A)	1(A)	1(S)	100%	100%	NO
S17	1991	NO	7/22	3(A)	2(A)	3(N)	80%	60%	NO
S18	1994	YES	1/12	1(N)	1(A)	1(A)	90%	60%	YES
S19	1994	NO	2/8	1(A)	1(A)	1(S)	12%	-	NO
S20	1990	NO	13/22	1(A)	1(A)	6(A)	100%	100%	YES
S21	1991	NO	5/15	2(A)	1(A)	1(S)	100%	100%	NO
S22	1991	NO	5/23	1(A)	2(A)	-	62%	40%	YES
S23	1990	NO	11/19	2(A)	5(A)	1(N)	100%	100%	YES
S24	1993	NO	3/13	1(A)	2(A)	-	62%	10%	NO
S25	1993	NO	2/12	1(A)	1(A)	1(S)	62%	10%	NO
S26	1994	YES	1/12	1(A)	1(A)	1(A)	100%	100%	YES
S27	1994	NO	3/16	1(A)	1(A)	1(S)	50%	-	NO
S28	1994	NO	17/28	3(A)	4(A)	1(A)	100%	100%	NO
S29	1989	NO	15/29	4(A)	1(A)	6(A)	100%	100%	YES
S30	1985	NO	4/10	2(A)	1(A)	-	50%	-	NO
S31	1994	YES	2/12	2(A)	2(A)	1(A)	100%	90%	NO
S32	1994	YES	0/12	1(A)	1(A)	1(A)	100%	100%	NO
S33	1994	YES	6/12	3(A)	2(A)	1(N)	100%	100%	YES

Second Survey (1997-98)**Table 3-Subjective Variables**

	A TEC	INE	INLE	CA	EUA	INT	INST	TR	INEC
E1	5	6	4	8	8	4	6	5	4
E2	8	9	8	6	4	8	7	7	7
E3	5	5	4	9	9	6	7	4	5
E4	4	5	5	10	9	3	6	5	5
E5	4	6	3	6	6	4	7	4	4
E6	3	4	3	6	6	4	4	7	3
E7	5	4	3	7	5	2	5	7	6
E8	4	3	4	5	6	2	6	3	4
E9	7	9	9	6	7	5	8	8	9
E10	5	6	5	9	6	4	7	6	6
E11	6	7	5	6	6	2	5	5	4
E12	5	6	5	6	7	3	6	5	5
E13	7	8	9	6	6	5	8	8	9
E14	5	5	7	5	7	4	8	8	9
E15	4	3	3	6	7	2	6	5	5
E16	5	6	6	7	6	5	9	6	6
E17	3	3	6	3	4	2	8	7	6
E18	6	7	8	5	4	3	7	8	8
E19	3	3	6	3	4	2	8	5	4
E20	6	7	8	5	4	6	8	8	9
E21	7	6	7	3	5	2	9	7	7
E22	6	7	7	7	5	6	8	6	8
E23	5	6	7	5	4	3	7	7	7
E24	3	6	7	5	5	3	6	5	6
E25	6	7	5	7	6	2	8	6	6
E26	7	8	8	9	6	5	9	8	9
E27	6	7	5	8	8	6	6	5	4
E28	6	5	5	8	8	6	6	5	4

Table 4-Objective Variables

	1	2	3	4	5	6	7	8	9
E1	1994	NO	5/13	1(A)	1(A)	2(A)	80%	70%	YES
E2	1990	NO	12/16	1(A)	1(A)	5(A)	90%	90%	YES
E3	1994	NO	7/12	5(S)	1(S)	-	50%	40%	YES
E4	1995	NO	6/9	4(S)	2(S)	-	80%	80%	NO
E5	1995	NO	5/12	4(A)	2(S)	-	55%	55%	NO
E6	1994	NO	5/11	1(N)	1(A)	1(A)	90%	80%	YES
E7	1995	NO	6/12	3(A)	2(S)	-	100%	100%	YES
E8	1994	NO	6/13	5(A)	1(S)	-	55%	40%	NO
E9	1994	NO	5/13	2(A)	3(A)	-	90%	90%	YES
E10	1995	NO	2/11	3(S)	1(S)	-	50%	40%	NO
E11	1994	NO	7/12	2(A)	3(A)	-	90%	90%	NO
E12	1994	NO	6/14	3(A)	1(A)	2(A)	90%	80%	NO
E13	1990	NO	14/27	2(A)	3(A)	4(A)	95%	90%	NO
E14	1995	YES	0/12	1(A)	1(N)	1(N)	100%	100%	NO
E15	1995	NO	1/9	1(A)	1(A)	1(A)	95%	90%	YES
E16	1993	NO	5/10	2(A)	2(S)	-	30%	20%	NO
E17	1995	NO	1/7	1(A)	1(A)	1(A)	80%	80%	NO
E18	1993	NO	6/13	5(A)	3(A)	1(A)	90%	90%	NO
E19	1995	NO	3/11	3(S)	1(S)	-	40%	40%	NO
E20	1995	YES	1/12	1(N)	1(SS)	*	100%*	100%*	YES
E21	1995	YES	1/12	1(A)	1(A)	1(A)	90%	90%	YES
E22	1994	NO	8/12	2(A)	4(S)	-	90%	90%	NO
E23	1995	YES	0/12	1(SS)	1(SS)	1(SS)	100%	100%	YES
E24	1993	NO	4/16	1(A)	1(N)	1(A)	100%	100%	NO
E25	1995	NO	4/12	3(A)	1(A)	1(A)	100%	100%	NO
E26	1992	NO	11/22	2(S)	3(S)	-	60%	50%	NO
E27	1995	NO	3/11	1(A)	2(A)	-	40%	30%	NO
E28	1995	NO	4/12	1(A)	2(A)	-	40%	40%	NO