

WHEN ENGLISH IS JUST AN OPTION: THE CASE OF STUDENTS OF *ENGLISH FOR SCIENCE*

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RESUMEN

En este artículo, presentamos y analizamos los resultados de una encuesta realizada a alumnos del primer ciclo de las facultades de Veterinaria y Ciencias del Mar de la Universidad de Las Palmas de Gran Canaria, en cuyo nuevo plan de estudios se ha introducido recientemente la asignatura optativa *Inglés científico*. Dado que era la primera vez que se impartía esta asignatura, consideramos imprescindible conocer, de primera mano, los motivos que llevaban a los estudiantes a escogerla, qué esperaban de ella y, sobre todo, cuál era el nivel general en relación con las distintas destrezas lingüísticas. De esta manera, se pudo elaborar el proyecto docente de la asignatura de una manera más realista y eficaz, teniendo en cuenta no sólo nuestro enfoque como docentes, sino también las necesidades y sugerencias de los propios estudiantes.

Palabras clave: necesidades de los estudiantes, actitudes de los estudiantes, destrezas lingüísticas

ABSTRACT

The aim of this paper is to present and analyse the results of a survey carried out among students of the first cycle of Veterinary Medicine and Oceanography (University of Las Palmas de Gran Canaria). Since *English for Science* had been introduced for the first time as an optional subject in the new curricula of these studies, it was essential to know why learners had decided to choose this subject and what was expected of it. We were also especially interested in testing their command of all language skills. Thus, the syllabus could be designed in a more realistic and

effective way, taking into account not only our perspective as teachers, but also the needs and suggestions of the students.

Key Words: students' needs, students' attitudes, language skills

INTRODUCTION

As Spanish academic authorities have become aware of the undeniable importance of English in research and international communication among scientists, this language has been included as a subject in the curricula of most university studies which had traditionally refused to do so. Since the need of being proficient in English in today's competitive professional world is a fact that can no longer be ignored, *Scientific English* and *Technical English* are now common subjects in any studies related to science or technology.

In the case of the University of Las Palmas de Gran Canaria, English has had this status for years in studies such as Engineering and Medicine, where at the moment it is a compulsory subject at least in the first cycle. The faculties of Veterinary Medicine and Oceanography, however, have only included it in the new curricula (1999 and 2000, respectively). *English for Science* is just offered as an option in one semester during the first cycle and it is got to compete with other attractive options:

- Veterinary Medicine: *Atmósfera, clima y medioambiente, Técnicas de cultivo de animales marinos y alimentación y nutrición de animales, Anatomía aplicada por técnicas de imagen, Diagnóstico por imagen y biopatología clínica, Biología y Patología de los mamíferos marinos.*
- Oceanography: *Introducción al Tratamiento de la Información en las Ciencias Marinas, Muestreo y Diseño de Experimentos, Experimentación en Química Marina, Introducción a la Meteorología.*

In the academic year 2001-2002 English was taught in the first semester to students of the third year (around 21 out of 40) in Veterinary Medicine and students of the second year (around 30 out of 70) in Oceanography. These figures of students' registration are quite high if we take into consideration the offer of other options more related to the studies involved. Being challenged with teaching *English for Veterinary Medicine* and *English for Oceanography*, we decided to carry out a research of the real needs and attitudes of the students who took this subject, so the syllabus could be adapted to their level and expectations.

1. Methodology and results

We carried out a survey at the beginning of the academic year before the classes had even started. The first problem we had to deal with was to decide which language was most suitable for the questionnaire English or Spanish. Students were expected to have an intermediate level of English, but considering that most of them were likely to be tense and intimidated the first day of class after so long without official training in this language, they might not feel relaxed to produce reliable answers if they could not read and write in their mother tongue to talk about themselves. Therefore questions were written in Spanish, as they are presented below:

1. Considero que mi nivel general de inglés es:
 - bajo
 - medio
 - alto
2. Estudios anteriores de lengua inglesa:
3. A la hora de enfrentarme con un texto especializado en inglés, considero que:
 - entiendo la totalidad del texto, excepto algún concepto terminológico muy específico
 - entiendo sólo parcialmente el texto, ya que no domino del todo la morfología sintaxis inglesa
 - me resulta muy complicado entender algo, ya que tengo dificultades graves de comprensión en inglés
 - otros:
4. A la hora de escribir un texto en inglés:
 - no tengo dificultades de ningún tipo
 - lo que más me cuesta es encontrar los términos adecuados en cada con texto, pero domino la morfología sintaxis
 - puedo llegar a escribir algo coherente con la ayuda de gramáticas y diccionarios, aunque con algunas dudas
 - tengo muchas dificultades que me impiden escribir un texto con un mínimo de cohesión y coherencia
 - otros:
5. Cuando oigo hablar en inglés:
 - suelo entenderlo todo
 - entiendo, al menos, la idea general

- para entender algo, tienen que hablarme muy despacio y repetirlo todo varias veces
 - tengo problemas graves de comprensión oral
 - otros:
6. Cuando tengo que hablar en inglés:
- no tengo dificultades de ningún tipo
 - tengo algunos problemas a la hora de encontrar el vocabulario necesario, pero más o menos puedo hacerme entender
 - me resulta imposible comunicarme en inglés
 - otros:
7. Los aspectos de la gramática inglesa que me gustaría reforzar son (numerar por orden de importancia):
- el sistema verbal
 - las preposiciones
 - la construcción y uso de la voz pasiva
 - otros:
8. Del contenido de esta asignatura espero...
9. Motivos por los que he elegido la asignatura:

We tried to test how students felt about their own level of English (question 1) in the main skills, i. e., reading comprehension of specialized texts (qu. 3), writing (qu. 4), aural comprehension (qu. 5) and speaking (qu. 6). Since students came from very different backgrounds, question 2 could provide us with valuable information about the number and quality of previous language courses, while questions 8 and 9 were basic as far as the attitude of students towards the subject was concerned. We avoided *Yes-No questions* and included the open section *otros*, so informants could make suggestions and write freely about their language problems, expectations and perspectives.

We questioned 16 students of Veterinary Medicine and 24 students of Oceanography¹. All of them were within the same age group, 20 to 21 years and were supposed to have chosen English out of interest, as it is not a compulsory subject in their studies. None of the informants was bilingual or had English-speaking parents. The results were as follows:

¹ In this section the abbreviations VM and OC will be used to refer respectively to the studies of Veterinary Medicine and Oceanography.

Only one student of *VM* claimed to be proficient, while 3 declared to belong to the group of speakers with a low level of English and the majority (12) considered themselves as speakers of intermediate level. The results were similar in the case of informants of *OC*, since most of them (13) were in the group of intermediate level, 7 admitted being low-level speakers and only one regarded himself/herself as a proficient speaker.

Answers related to previous training in English are better illustrated in the following table²:

Results show that although only a few informants studied in bilingual or angloamerican schools, most admitted having had some kind of private tuition

<i>Train. in Engl.</i>	<i>VM</i>	<i>OC</i>
Only primary and secondary school	5	11
Summer courses in England	3	5
Private tuit. (teachers or schools of lang.)	8	9
Bilingual or Angloamerican sch.	2	1
<i>English for Science</i> in earlier studies	1	0

of English with native teachers or in schools of languages. Less than half of students had only learnt English in primary and secondary school.

Answers related to skills were also relevant as they threw some light on which ones were more difficult for students and should consequently be reinforced in class:

- *Reading comprehension* (qu. 3.). None of the informants of *VM* and *OC* chose answer 3, therefore no really serious problems to understand specialised texts were recognized. Surprisingly enough, exactly half of students of *VM* (8) thought they were able to understand most part of texts, with the exception of very specific terms, while the other half said they could only

² Note that some of them claimed to have taken part in many training courses (in schools of languages, in England, in bilingual schools, etc.) and therefore the same people appear in more than one section.

understand them partially due to their lack of command of morphosyntax and vocabulary. In contrast, most students of *OC* (16) confessed some problems of vocabulary and grammar that prevented them from understanding a text completely. We reproduce literally some of their comments:

- “Suelo entender los textos. Mi problema es de vocabulario, pero con un diccionario me arreglo bastante bien”.
- “Entiendo, en general, el texto, siempre que no tenga un vocabulario muy específico”.
- “A veces la morfosintaxis me resulta dificultosa, pero suelo sacarla por el contexto”.
- “Tengo algunas dificultades con algunas construcciones gramaticales”.

– *Writing* (qu. 4). Only one person (*OC*) chose answer 1 (no problems at all to write) and no one claimed to be unable to write in English, while having doubts and difficulties was recognized by 5 informants of *VM* and 12 of *OC*, which in the last case is significant, being the answer of half the students. On the other hand, 11 informants of *VM* and 9 of *OC* said they could manage with the morphosyntax, though were at a loss to find the appropriate words in each context. Here are some examples of their most common remarks:

- “Puedo escribir un texto y expresar más o menos lo que quiero decir, pero a veces tengo fallos tontos, porque no me acuerdo de algunas cosas básicas”.
- “En realidad, hace algunos años que no practico, por lo que me costará un poco recordar algunas cosas. Creo que en unas cuantas semanas podré recuperarlo”.

– *Aural comprehension* (qu. 5). A variety of answers could be found in the case of *VM*. One student claimed he/she was able to understand everything, while another recognized serious problems of aural comprehension. Most informants (10) said they could at least grasp the general idea and a few (4) declared that the speaker should talk slowly and everything should be repeated more than once for them to understand something. Most students of *OC* (11), however, claimed to understand the general idea, none admitted having serious problems and 6 answered that they usually understood everything. Some of their statements in this section are as follows:

- “Los telediaros me resultan difíciles de entender, pero también es cierto que no suelo ver versiones originales de películas ni nada parecido”.
- “Suelo oír mucha música en inglés y me intereso por saber qué es lo que quiere decir la canción.
- “No los entiendo cuando hablan muy rápido”.

- “Suco entender algo, pero no siempre”.
- *Speaking* (qu. 6). It is noticeable that no students of *VM* and only one in *OC* claimed to have no difficulties to speak in English. The majority of *OC* informants (19) and all students of *VM* but one recognized they had some problems to find the vocabulary needed when speaking, but could more or less manage to do so. 3 *OC* informants and one student of *VM* acknowledged they could not communicate in English. We underline the fact that this has been the skill with the highest number of negative answers, which confirms the experts’ criticism of the little attention paid to speaking in Spanish primary and secondary schools as it is still one of the domains where students seem to show more problems. Here are some of their observations:
 - “Dependiendo del tema, puedo expresarme mejor o peor”.
 - “Me cuesta construir las frases para luego decirlas”.
 - “Puedo hacerme entender, pero con más problemas que facilidades”.
 - “Hablo, pero como una india”.
 - “Mi problema es que me da vergüenza, pero espero superar esto con paciencia”.

As regards question 7, in which informants were requested to arrange in hierarchical order some aspects of the English grammar (verbs, prepositions, passive voice) to be reinforced in class according to their relevance, a wide variety of answers was to be found. The most repeated combination among *OC* informants was prepositions (first place), verbs (second place) and passive voice (third place), but there were answers for all possible combinations. The majority of students of *VM*, however, preferred to choose verbs in the first place, then passive voice and finally prepositions. All the same, it should be pointed out that almost all informants of both studies, taking for granted that “aspects of English grammar” meant everything related to language, included in the section “others” the need to brush up their vocabulary. The importance of learning new words, especially phrasal verbs, links, idioms and scientific terms, was also emphasized.

Questions 8 and 9 were completely open in a way that would enable us to find out the real expectations of students and why they have taken up *English for Science*, instead of choosing any of the other options available. As answers to both questions are closely connected, we summarize below the general ideas found in the observations of all students about the reasons why they have chosen this subject and what was to be expected:

- Brush up their knowledge of English and improve their general level.
- Learn useful scientific terminology and therefore be able to understand the texts they have to work with.
- Be able to have a conversation in English and write essays without using dictionaries and grammar books all the time.
- Be able to understand talks in English in international conferences.
- Be able to take up courses at universities abroad on Erasmus or other international exchange programmes.
- Be able to work abroad and compete with foreigners.
- Have access to all scientific books and journals when writing a doctoral dissertation in the future.

Many informants also stated that their personal feelings, tastes and interests had an important influence on their final decision (they love English and England, they do not have to pay expensive private tuition any more, it is very important for their professional future, it is something different from their usual subjects, they take advantage of this knowledge to understand the lyrics of songs they like so much and so on).

2. Conclusions

In this paper we have analysed in depth the real needs and expectations of science students when choosing English offered as an option for the first time in their studies. The survey carried out for that purpose, however limited, provided us with reliable information which could be used as a guideline to design the syllabus of the subject. In our view, we must consider not only our aims as teachers but also our students' perspective and, thus, come to a more balanced method which allows both teachers and learners to achieve common objectives.

Not surprisingly, the results of the survey indicate greater concern of informants about speaking and aural comprehension skills, since they have been traditionally undervalued in the Spanish education system. The importance of learning general and specialised vocabulary is also emphasized, but most students claim to have no serious problems to grasp the general ideas when reading a text. In consequence, taking into account that the efforts of most ESP teachers seem to be particularly devoted to improve students' reading comprehension, perhaps a new approach oriented to develop their weaker skills should be considered.