TEACHING FOREIGN LANGUAGES FOR SPECIFIC PURPOSES: UNIVERSITY OF VALENCIA PROJECT

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I. INTRODUCTION

I.1. Setting and Aim

The Spanish university reform proposed by the government represents a challenge for modernization and an attempt for adaptation of university studies not only to the demands of today's society, but also to meet the requirements of the European Community in its attempt at verifying and validating higher education degrees among its member states.

The aim of this project, in its first stage, is to verify the role English plays in higher education within a non-English speaking education system such as ours, and second, to elaborate structured English language courses that would be made available by the University of Valencia to its student population.

I.2. Basic Spanish Legislation

1984 – Educational Reform Act: It involved all education levels: elementary, secondary, university (our concern in this study). One of its aims was to validate university degrees with other European countries/universities. Its first priority was to establish changes in the students' curricula with the following characteristics: credit system, semi-annual modules, flexibility: offering a wide range of "electives".

I.3. Attitude of Government and Local Authorities

The Spanish government stresses the importance of foreign languages in general –and English in particular; its need in business, health, science and technology, etc. Nevertheless, we always seem to be confronted with the same obstacle: lack of resources: financial, human, etc. Some Spanish universities have decided to establish special contracts with private firms/teachers as a means to meet teacher shortage. In addition, nothing is said about an **instrumental approach to foreign language teaching**; in other words, languages applied to science and technology (**ESP**).

I.4. Principal Objective

Faced with this situation, we propose to the University of Valencia Rectorate the elaboration of a **multi-specific-language package (MSLP)** to be offered to the whole campus, in order that students may have a wider range or choices within their elective courses to suit their particular language needs, and thus more adequately complete their curricula.

II. MATERIALS AND METHOD

II.1. University population in the city of Valencia

Two campuses: Polytechnic University: \pm 25,000 students; University of Valencia: \pm 65,000 students. Our survey was carried out within the University of Valencia and among class groups randomly selected.

II.2. Description of materials and method

Our first step was to carry out a survey comprehensive enough to give a clear picture of the situation in terms of students' wants and needs. A questionnaire was distributed among the following:

FACULTIES: Biology* Chemistry Economics**
History & Geography Mathematics Pharmacy*

Philosophy Physics

SCHOOLS: Business* Nursing* Physiotherapy*

* Centers in which ESP is being offered at present.

** Only a special ESP course for students in Erasmus programs is being offered.

II.3. Sample: 876 students, both graduate and undergraduate.

II.4. Materials used a) dBase IV, for data input.

b) SPSS+ package, for statistical treatment.

III. ANALYSIS OF RESULTS

III.1. Gap between secondary school level and university entrance level

The information here was drawn from two different items in the questionnaire, although we're simply getting information from a pre-question, which elicited very general information about knowledge of foreign languages. Four were listed: English, German, French, Italian, and an open category in which they could fill in a fifth one.

They could reply to these four entries:

- a) no experience,
- b) some elementary knowledge,
- c) ability to communicate, and
- d) good knowledge of the language.

The answer to this question, in total numbers, is expressed in the following graph (n = 876):

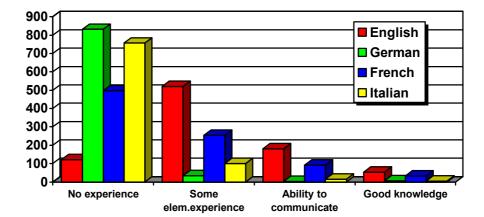


Figure 1. Knowledge of Foreign Languages

Simply browsing through the data we can offer some of the more significant results. When one engages in the process of designing curricula, there are many elements involved in their development. Thus, we decided that the more areas we would cover, more complete would be our scope and coverage, and needs analysis has indeed many nuances that need to be considered.

We were also interested in knowing if in a large scale survey the emphasis students give to different learning skills would coincide with our previous studies (1991). And indeed they did, which also confirms the results obtained in Brazil by Figueiredo and colleagues (1988), at the Universidade de Uberlândia.

III.2. Need English

But let us preview this with a simple question we asked them: *Have you needed English during your studies?* Here are the results, first by first-, second-, third-, fourth- and fifth-year university students, then by field of study:

200 180 Yes 160 No 140 120 100 80 60 40 20 2nd year 3rd year 5th year 1st year 4th year

Figure 2. Need of English during Studies.

Percentages in affirmative answers: 1^{st} year, 56.84%; 2^{nd} year, 64.36%; 3^{rd} year, 55.30; 4^{th} year, 76.98%; 5^{th} year, 91.54%.

As one approaches this question according to their faculty or school of adscription (in other words, their specialism), we found one big surprise in the Faculty of Economics. Here are the results:

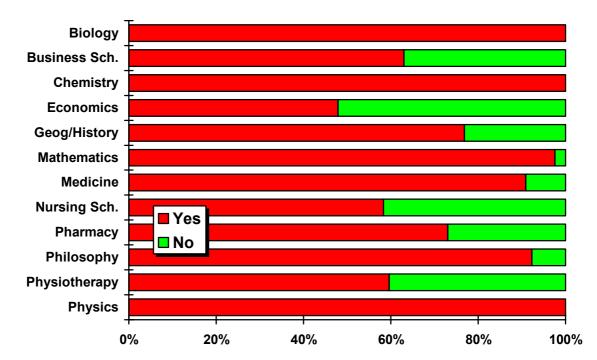


Figure 3. Need of English during Studies (acc. to Specialism)

Worth noticing: 100% need in Biology, Chemistry, Math and Physics. Also important: the percentage shown in Medicine (above 90%).

Why is the percentage in Economics so low (c. 50%)? Too many translations? Perhaps, but not really, since we have as many good [and also bad] translations in other fields, especially in medicine. We believe, the need is created from within. Professors requiring more/less bibliographical research from students.

III.3. Skills

Our study also shows that students are concerned, above all, with "reading comprehension". The results obtained to an item concerning which skills do students consider more important would give the following:

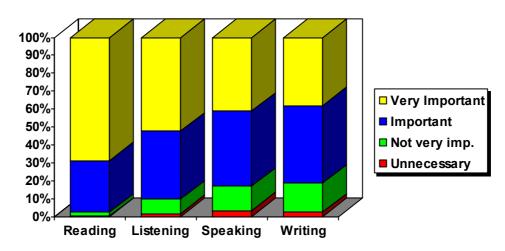


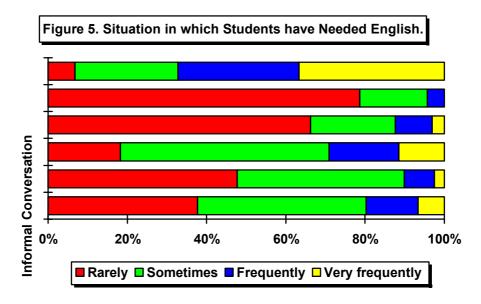
Figure 4. Importance of Skills.

When you analyze these data according to specialism, the importance of "speaking" as well as "reading" should be underscored, especially in fields like Economics. Taking into consideration the categories of "important" and "very important", we obtained the following ranking within each skill (from high to low percentage):

Reading:	Listening:	Speaking:	Writing:	
Medicine	Eonomics	Eonomics	Medicine	
Biology	Medicine	Business	Economics	
Chemistry	Business	Medicine	Business	
Physics	Math	Physics	Biology	
Economics	Physics	Math	Math	
Math	Biology	Biology	Physics	
Business	0.7		•	

III.4. Needs

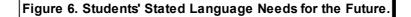
The students' need of English has been made apparent in the bar graph we showed previously (Figs. 2 & 3), especially at the graduate level (i.e., 4th and 5th year students). This need was expressed by students in terms of the following (we take as an example 5th year students; in 100% bars).

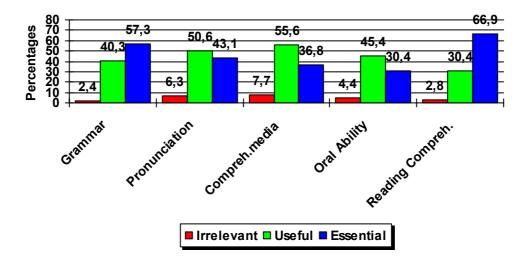


Although the question of their need of English for the writing of a scientific essay was not directly asked, their judgment on the importance of scientific bibliography can help in this direction. Again, in this item, the specialism of the students as well as their year of studies has a special bearing on the results. While in Biology, Physics, Chemistry and Mathematics it would be considered as being "very important", in percentages ranging from 60 to 95%, in Health Sciences averaging around 60%, and, surprisingly enough, it does not even reach a mere 15% in Economics and Business.

Another aspect we investigated had to do with the students' own understanding of needs. The highest category, again, was "reading comprehension", a skill which was understood by 66.9% of the students as being an "essential" skill in their learning, and as an expression of their needs for the future.

a) In terms of General Needs of English





b) In terms of more specific English Needs

According to students, most professors would give them specific texts (chapters taken from manuals in their speciality and general reference books in their specialism). The students' main difficulty, however, lies in their understanding of "technical vocabulary" and "comprehension of complex ideas" (this category would amount to about 68.6% of the answers), but a 31.4% of them would simply recognize the need of a better knowledge of the language itself (i.e., language structure).

In another item, in which we insisted again on how they felt about their personal needs and wants in terms of the future, besides considering **"reading comprehension"** as essential in 66.9% of the answers, the second runner-up category was, again, **"technical vocabulary"** with a close 63.4%.

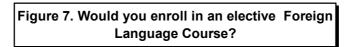
III.5. English in the Curriculum

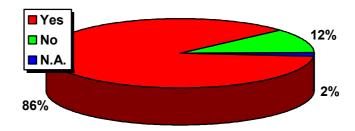
How about *English within the university curriculum?* **83.7%** of the students feel it should be included. No major differences in terms of specialism or year of study.

At this point, when Spanish university officials are deciding whether foreign languages should or should not be included, we think it would have been extremely positive to consider opinions such as this. The truth remains, however, that some centers have decided not to include a foreign language as an elective course.

Through this project we are proposing the possibility of offering instrumental foreign language courses as part of the students' curricula.

There is, however, an important question that had to be answered, and it is the following: Given the situation in which specific university faculties and schools do not offer foreign languages as electives to complete the students' curricula, and given the possibility that the university would offer foreign language courses on campus, available to all students and applied to different specialisms, would you enroll in one or more of these elective courses as part of your curriculum?



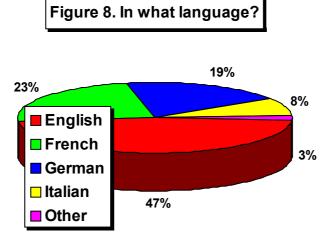


The difference between graduates and undergraduates proved to be negligible:

	UNDERGRADUATE		GRADUATE		TOTALS	
	n	%	n	%	n	%
Yes	459	86.28	302	87.80	761	86.87
No	66	12.41	35	10.17	101	11.53
N.A.	7	1.31	7	2.03	14	1.60

The next obvious question was going to be: *In what foreign language would you enroll?* he results are offered in the next graph (Figure 8).

As can be seen, about half of this big pie graph (fig. 8) is taken up by English. It must be pointed out, however, that the data, especially in regard to the percentages of both French (23%) and German (19%), do not seem to correspond to our present situation. As shown by the results, students selected more than one foreign language, although English was a generalized first choice (over 80 %). Furthermore, in the students' different curricula there isn't much room for more than one foreign language (there is a credit limitation for elective courses from other departments and/or specialisms other than their own).



IV. CONCLUSION

Data seem to prove the need of ESP structured courses. If educational authorities heed the call, this will only be a first major step in our research. We are ready to proceed with it, and we believe our ESP Unit is also capable of organizing it.

Our second major step will be to identify different needs in different fields more accurately through a second questionnaire to be administered in those centers where foreign languages are already taught. This will allow us to establish the goals in order to link target needs with course design and materials production, which ultimately means to apply the concept of ESP itself.

Acknowledgments

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References

ALLWRIGHT, JOAN; ALLWRIGHT, RICHARD (1977). "An approach to the teaching of medical English". In: HOLDEN, SUSAN [ed.]. *English for Specific Purposes*, pp. 58-62. London: Modern English Publications.

BERWICK, RICHARD (1989). "Needs assessment in language programming: from theory to practice." In: JOHNSON, R. K. [ed.], *The Second Language Curriculum*, pp. 48-62. Cambridge: Cambridge University Press.

BRINDLEY, GEOFFREY P. (1984). Needs analysis and objective setting in the adult migrant program. AMES. [Sydney, New South Wales; draft- not for citation] [rev. ed. in 1991]

BRINDLEY, GEOFFREY P. (1989). "The role of needs analysis in adult ESL programme design." In: JOHNSON, R. K. [ed.], *The Second Language Curriculum*, pp. 63-78. Cambridge: Cambridge University Press.

CHAMBERS, FRED (1980). "A re-evaluation of needs analysis in ESP." The ESP Journal 1/1: 25-33.

COLEMAN, HYWEL (1988). "Analysing language needs in large organizations." *English for Specific Purposes* 7/3: 155-69.

CUNNINGSWORTH, ALAN (1983). "Needs analysis-A review of the state of the art." System 11/2: 149-54.

FIGUEIREDO, C. A.; RIBEIRO, E. B.; KURTZ, J. G.; DA SILVA, K. M. (1988). "A Student-Centred Approach: needs and Uses of English at UFU". *The ESPecialist* 9/1-2: 55-70.

HOLMES, JOHN (1981). "Needs analysis: A rationale for course design." The ESPecialist 3: 10-23.

HUGHES, ARTHUR (1988). "Introducing a needs based test of English for study in an English medium university of Turkey." In: HUGHES, A. [ed.]. *Testing English for University Study*, pp. 134-53. Modern English Publications and The British Council. ELT Document 127.

HUTCHINSON, T.; WATERS, A. (1987). English for Specific Purposes: A learning-centred approach. Cambridge: Cambridge University Press.

JACOBSON, WAYNE H. (1986). "An assessment of the communication needs of non-native speakers of English in an undergraduate Physics lab." *English for Specific Purposes* 5/2: 173-187.

KENNEDY, CHRIS (1985). "Formative evaluation as an indicator of student wants and attitudes." *The ESP Journal* 4: 93-100.

MACKAY, RONALD (1978). "Identifying the nature of the learner's needs." In: MACKAY, RONALD & MOUNTFORD, ALAN [eds.]. *English for Specific Purposes*, pp. 21-37. London: Longman.

MACKAY, RONALD & BOSQUET, MARYSE (1981). "LSP Curriculum Development-From Policy to Practice." In: MACKAY, R. & PALMER, J. P. [eds.]. *Languages for Specific Purposes. Program design and evaluation*, pp. 1-28. Rowley, MA: Newbury House.

MUNBY, JOHN (1978). Communicative Syllabus Design. Cambridge: Cambridge University Press.

OLIVEIRA, SARA REJANE DE (1988). "Consciousness-raising in ESP situations." *The ESPecialist* 9/1-2: 45-54

RICHTERICH, R. [ed.] (1982). Case studies in identifying language needs. Pergamon.

RIDDING, MAGGIE (1987). "An account of a project carried out in 1985-86 involving an analysis of lectures and student listening difficulties in the Faculty of Allied Health Sciences and Nursing, Kuwait University." *EMP Newsletter* 4/2: 7-15.

SHAW, PETER A. (1982). "Ad Hoc needs analysis." Modern English Teacher 10/1: 12-14.

Addenda – Needs analysis surveys provided by:

- * Lancaster University (IELE Institute of English Language Education)
- * Liverpool University (English Language Unit)
- * Researchers involved in the Brazilian ESP Project