Analysing written production competence descriptors for academic and professional purposes and their calibration to the CEFR

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Abstract

The Common European Framework of Reference for Languages (CEFR) "describes in a comprehensive way what language learners have to learn to do in order to use a language for communication and what knowledge and skills they have to develop so as to be able to act effectively" (Council of Europe, 2001: 1). This paper reports on the findings of two studies whose purpose was to assess written production competence descriptors meant for their inclusion into the Academic and Professional English Language Portfolio (ELP) for students of engineering and architecture. The main objective of these studies was to establish whether the language competence descriptors were a satisfactory valid tool in their language programmes from the point of view of clarity, relevance and reliability, as perceived by the students and fellow English for Academic Purposes (EAP) / English for Science and Technology (EST) instructors. The studies shed light on how to improve unsatisfactory descriptors. Results show that the final descriptor lists were on the whole well calibrated and fairly well written: the great majority was considered valid for both teachers and students involved.

Keywords: higher education competences, second language writing, CEFR, academic and professional ELP.

Resumen

Análisis de los descriptores de competencias de producción escrita con fines académicos y profesionales y su calibración con el MCER

El Marco Común Europeo de Referencia para las Lenguas (MCER) "describe de forma integradora lo que tienen que aprender a hacer los estudiantes de

lenguas con el fin de utilizar una lengua para comunicarse, así como los conocimientos y destrezas que tienen que desarrollar para poder actuar de manera eficaz" (Consejo de Europa 2002: 1). Este trabajo presenta los resultados de dos estudios realizados para analizar los descriptores de la competencia de producción escrita encaminados a formar parte del Portafolio Europeo de Lenguas (PEL) Académico y Profesional para alumnos universitarios de ingenierías y arquitectura. El objetivo principal de estos estudios era establecer si dichos descriptores constituían una herramienta válida y satisfactoria para los programas de las asignaturas de lenguas, desde criterios de claridad, relevancia y fiabilidad, percibidos por los estudiantes y profesores de Inglés con fines académicos y profesionales (IPA) / Inglés para la ciencia y la tecnología (ICT). Los estudios arrojan luz sobre cómo mejorar los descriptores no satisfactorios. Los resultados muestran que las listas con la versión final de los descriptores estaban bien calibradas y bien escritas en su conjunto: los profesores y alumnos implicados consideraron válidos la gran mayoría de los descriptores.

Palabras clave: competencias para la educación superior, producción escrita en segundas lenguas, MCER, PEL académico y profesional.

1. Introduction

As the Bologna process progresses, the Spanish Ministry of Education has restructured university degrees and enforced the implementation of the European Credit Transfer System (ECTS) in the year 2010, in accordance with the directives of the European Higher Education Area (EHEA). The ECTS is a student-centred system, focusing on the student workload required to achieve the objectives of a programme, which are based on the transparency of learning outcomes and learning processes. "Learning outcomes describe what a learner is expected to know, understand and be able to do after successful completion of a process of learning. They relate to level descriptors in national and European qualifications frameworks" (ECTS Users' Guide, 2009: 11). In the area of languages, the *Common European Framework of Reference for Languages: Learning, Teaching and Assessment* (CEFR) is used, because it "provides a common basis for the elaboration of syllabi. It describes in a comprehensive way what language learners have to learn to do in order to use a language for communication and what knowledge and skills they have to develop so as to be able to act effectively" (Council of Europe, 2001: 1). As we can see from both European directives, the descriptions of learning outcomes are defined in terms of what the

learners know and understand, what they are able to do, and the tasks they can perform applying their knowledge. The CEFR's communicative orientation points towards autonomous learning and towards a task-based approach to teaching and learning in which language skills are defined in terms of levels of proficiency. Both documents refer to the learners' capacity to transfer knowledge into practice.

According to Little (2009: 1), the European Language Portfolio (ELP) is "the CEFR's companion piece". Based on the CEFR's language levels, it was conceived partly to foster learner autonomy, to motivate, guide and support learners in their lifelong learning process, and to report language proficiency levels based on its scaled checklists of "I can do" descriptors of language competences (Council of Europe, 2001).

As a response to this new scenario, the Research Group DISCYT[1], within the Universidad Politécnica de Madrid (UPM), has developed an Academic and Professional European Language Portfolio (ACPEL Portfolio)[2] focusing on the linguistic descriptors related to the categories and the skills meant to match the professional and academic needs of engineers and architects. This Language Portfolio conforms to common ELP Principles and Guidelines and is based on two important pillars, which are relevant to establish the basis of conscious and reflective academic and professional language learning for engineering students: the concept of genre (Swales, 1990; Bhatia, 1993; Paltridge, 1997) and the communicative approach of ESP (Hutchinson & Waters, 1987; Belcher, 2006; Fortanet & Räisänen, 2008). Our goal has been to provide a source of language competence descriptors which would pave the way for customized learning paths that both fit the specific domains as well as support real-world performance needs of architects and engineers. Although many versions of the ELP have been developed, a repeated complaint among university instructors, including UPM language teaching staff, was that the existing versions did not take into account the special aspects of language learning and use in the technical university context (Forster Vosicki, 2000; Pierce & Ubeda, 2006; Pierce & Robisco, 2010).

This paper is part of a larger study which resulted in the development of the above mentioned ACPEL Portfolio targeted for the use of UPM[3] students (Duran et al., 2009). In this work, we detail two of the initial studies involving university students enrolled in seven different engineering schools as informants. The main objective of these studies was to analyse different

aspects of the learning outcomes developed for the inclusion in the ACPEL Portfolio. We were interested in assessing the descriptions of the learning outcomes for clarity, relevance and significance, and calibration. Hence the research questions put forth were the following:

1. Is the language competence descriptor easily understood by students?

2. Is the descriptor a target area for the students?

3. Does the CEFR level of difficulty assigned by the developers to the specific descriptors correspond with the self-assessment level guidelines established by the Council of Europe?

2. Pedagogical aims of the ACPEL Portfolio writing descriptors

The research group included seven UPM English teaching staff from the following five year degree programmes: Architecture, Civil Engineering, Mining Engineering, and Agricultural Engineering; as well as the three year technical degrees: Technical Aeronautical Engineering, Technical Architecture and Technical Mining Engineering, thus representing a wide range of teaching content areas. This motivated us to develop a bank of language learning competences instead of a set list since different language programmes at different schools emphasize different competences in their respective course objectives.

Regarding competences, the European Qualifications Framework states: "Competence means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development" (ECTS Users' Guide, 2009: 14). Thus, competences and learning outcomes may have different shades of meaning; however, they both relate "to what the learner will know, understand and be able to do": a learning outcome describes what "a learner is expected to know and be able to do", and a competence "means the proven ability to use knowledge" (Durán & Pierce, 2010: 135). Therefore, in this paper we will use both terms interchangeably when talking about the bank of competence descriptors and the learning outcomes implied in such competences.

Two major pedagogical functions can be carried out by the bank of descriptors. The learning outcomes can serve as a pedagogical resource for teachers to set up the objectives of the course and they can also serve as a basis for students to monitor their learning processes under the teacher's guidance. Students need help in becoming self – directed learners as well as opportunities to do so (Bary & Rees, 2006; Durán & Pierce, 2010).

Another purpose for developing the detailed descriptions of language competences is their usefulness in reporting language level proficiency for other educational contexts or future employers, thus facilitating mobility throughout Europe, and internationally. The development of competence descriptors should be done in the context of external reference points i.e. qualification descriptors, level descriptors, benchmark statements, etc. (Figueas et al., 2005).

The CEFR was chosen as our external reference point for calibration since it provides a set of relatively clear benchmarks to be attained at successive learning stages. It divides language learners into three levels: "A. Basic User"; "B. Independent User"; and "C. Proficient User". Each of these levels is divided into two, resulting in a total of six levels. The CEFR also provides abundant examples of descriptors of the five skills at the different six levels, which can be considered as prototypical in the development of new ones. These examples aided us in calibrating our specific written production descriptors.

3. Developing the specific written production descriptors

The development of the written production language competencies underwent several stages according to the recommendations of the developers of the CEFR (Council of Europe, 2001; North, 2002; Schneider & Lenz, 2001; North & Schneider, 1998). First was the intuitive phase, which involved consulting the existing banks of descriptors and selecting those that were considered adequate for our purpose; this implied detecting the gaps in relation to our students' needs. Then, we went through the qualitative phase, which dealt with the revision of the descriptors for clearness and relevance for the learners. Next, came the quantitative analysis which consisted of piloting the newly developed bank with the students. The final stage, the interpretative phase, consisted of recalibrating and rewriting the faulty

learning outcomes as well as taking final decisions on what to include and exclude. The main objective of these series of studies was to ascertain whether the language learning outcome descriptors were a valid tool in higher education language studies from the point of view of clarity, comprehension, calibration, relevance, and reliability as perceived by the students and fellow EAP/EST instructors.

3.1. The intuitive phase

Before the actual writing of the descriptors was undertaken, existing descriptors such as the ones developed in the reference document (Council of Europe, 2001), in the Swiss National Science Foundation Project (Council of Europe, 2001) (North & Schneider, 1998), the UK Model for Adults (2001), as well as the Bank of descriptors (Lenz & Schneider 2004) were consulted. The existing descriptors, since they are already calibrated to the CEFR levels, were extremely enlightening to the research group in that they provided models for our EAP/EST learning outcomes.

The next step was to analyze the prevailing curricular programmes throughout the different schools of engineering and architecture to determine the genres and "pre-genres" (Swales, 1990), both academic and professional, for the skill of written production. Drawing on the descriptor database, some descriptors were adapted while new ones were defined following the requirements set out by Lenz and Schneider (2004). A thorough explanation of the criteria followed, the language domains and genres selected, and the features of the newly developed writing descriptors can be found in Durán and Cuadrado (2007).

As we have said, the main objective of the study was to establish whether the list of written production competence descriptors that we had developed was a valid tool. Consequently, we started by the peer review of the eight PW (production written categories) lists. Drafts were revised by two or three other researchers involved in the project, different from the first authors and raters, in order to refine the wording and the levels of the descriptors. Five sets of 50 to 92 "can do" statements were developed for the different skills, including 90 written production competence descriptors for the skill of writing. This skill was further classified into eight categories adapted from Lenz and Schnieder (2004) taking into account the genre driven descriptors developed to match the students' academic and professional needs (Durán & Cuadrado, 2007). The percentage for each category is shown below:

PW1: OVERALL WRITTEN PRODUCTION – 6%
PW2: NARRATIVES AND ESSAYS – 8%
PW3: REPORTS – 12%
PW4: INSTRUCTIONS – 6%
PW5: DESCRIPTIONS OF MECHANISMS AND PROCESSES – 10%
PW6: STUDENT APPLICATIONS: CV, FORMS, COVER LETTER – 20%
PW7: ABSTRACTS AND RESEARCH PAPERS – 14%
PW8: WRITTEN INTERACTION: CORRESPONDENCE – 23%

The largest number of descriptors by level correspond to levels B2, B1, and C1 comprising 73% of the total number. The large number of descriptors at these levels is consistent with the levels of our students which will be discussed in a later section. The number of writing competence descriptors in each category is varied, with written interaction comprising 23%, and job applications learning outcomes such as filling out forms, CV and cover letters comprising 20%.

The written production learning outcomes underwent two different studies at this point. One was to pilot them with seven groups of students for clarity (qualitative analysis). The second study dealt with relevance and calibration (quantitative analysis).

3.2. The qualitative analysis: the question of clarity

To answer the first research question as to the clarity of the written production learning outcomes, 90 "can do" descriptors were piloted with the students from the above mentioned schools. Students were asked to note down the learning outcomes that were difficult to understand and to underline specific words. These notations were tallied along with the Oxford Placement level of the student who made the notation. The students' CEFR level was recorded in order to avoid the case where a lower level student, A2 perhaps, would not understand a C2 level outcome, since he/she could be lacking either lexical or syntactic or even pragmatic knowledge to capture the meaning. As the learning outcomes are to be used for student self-assessment as well as guidelines for syllabus design, it is paramount to develop clear and easily understood "can do" statements. Student responses and comments were recorded in a database.

The students marked a total of 43 out of 90 writing competence descriptors for review by the developers. At this point, after a quick review, 23 descriptors were removed from the further analysis for clarity because they

were marked by only 1 or 2 students. Thus, a total number of 20 descriptors were targeted for revision on the basis of students' opinions of their clarity. Table 1 details the top 10 writing descriptors marked unclear, the number of students marking them as unclear and the students' level.

Unclear	ID	Category	Level	Occurrences	Students' CEFR level			
					A1	A2	B1	B2+
1st	14	PW3	A2	22	2	4	12	3
2nd	15	PW3	B1	18	1	4	11	0
3rd	4	PW1	C1	14	2	4	7	0
4th	5	PW1	C2	12		4	6	0
5th	16	PW3	B2	10	1	3	5	1
6th	17	PW3	B2	10	1	2	4	1
7th	10	PW2	B2	10	2	3	5	0
8th	28	PW4	C1	8	2	3	3	0
9th	34	PW5	B1	8	1	1	4	0
10th	25	PW4	A2	7		2	4	0

Table 1. Problematic learning outcomes for clarity.

Lexical items noted by the students as causing problems were: "routine", "factual", "targeted to", "accurate(ly)", "label", "availability", "arrange", "assured", "use of register and conventions", "appropriate", "pre-printer", "mother tongue", "develop an argument", "smoothly flowing", "review-type paper", "genre", "charts", "in note form".

Two processes where employed to remedy the learning outcome. First and most common, was the replacement of the lexical item with a more common synonym. In the case of "logbook", "diary" was used in its place, "short" in place of "brief" etc. Some descriptors were completely revised and rewritten.

Another aspect analysed was the adjustment of calibration to the CEFR level: For example no. 17, B1 was calibrated at B2 removing the last clause so that "I can write technical reports and essays to develop an argument that I have clear opinions about, and argue for what I think, though I must have them checked for linguistic accuracy" (B1) was rewritten as "I can write technical reports and essays to develop an argument that I have clear opinions about, and argue for what I think" (B2).

3.3. The quantitative analysis: the question of relevance and calibration

Since the whole bank of learning outcomes including the five skills had to

be piloted with the students, different courses from different schools were chosen to inform on learning outcomes so as not to overload any one group of students. At the beginning of the semester the students were given the Oxford Placement Test, which is calibrated to the CEFR levels. The results can be seen in Figure 1. Under the new ECTS system currently being implemented throughout the UPM, the chancellor's office is requiring that all UPM students attain the B2 level before obtaining their engineering or architecture degree. We can see from Figure 1 that over 72% of the students from the seven schools did not reach B2 level at the time of the study. Although the number of students in this study is relatively small (187), the Oxford Placement Test has been given over the years throughout the schools at the UPM and these findings are quite representative of the whole student population. However, it is gratifying to note that each year students enter the UPM with a slightly higher level of English.

	A1	A2	B1	B2	C1-C2
% of students	2.1	35.8	45.5	13.4	3.2
nº of students	4	67	85	25	6
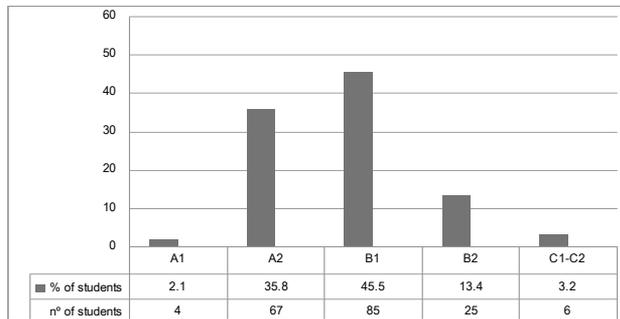
Figure 1. Results of student Oxford placement test

A total of 187 students volunteered to partake in this study: 85 students from mining engineering coming from two different courses, 38 from technical mining engineering and 21 from civil engineering, 11 from technical architecture, 20 from architecture and 12 from agricultural engineering. The purpose as noted earlier was to compile a bank of descriptors allowing each teacher to use the learning outcomes most suitable for his/her course and for his/her level of students. Consequently in this study each instructor chose the learning outcomes for their course to pilot. Six learning outcomes, all from the category PW8, were left out of the study since no teacher chose them for piloting in their courses. Hence eighty-four written production learning outcomes were included in this study. Table 2

details the number of students piloting the learning outcomes by school and the number of learning outcomes selected by the instructor. The table also details the levels of the student in percentages at each school. For example, at the school of Architecture, twenty students piloted seventy-five descriptors. The levels of the students were 11% A2, 56% B1 and 33% B2+.

School	Students	Descriptors piloted	Level of student in %			
			A1	A2	B1	B2+
Mining	85	50	2	32	47	19
Tech. Mining	38	42	5	53	38	5
Civil	21	51	0	23	77	0
Tech. Architecture	11	40	0	30	30	40
Architecture	20	75	0	11	56	33
Agriculture	12	25	0	55	36	9

Table 2. Breakdown of no. of students, no. of learning outcomes piloted, and student level by degree

To answer the second and third research questions, the students were asked to reflect on the written production learning outcome and to fill out the questionnaire. Students were given a short explanation of the self assessment learning outcomes and were asked if they would voluntarily fill out the written production checklists. On the right of each descriptor three empty boxes were placed and the students were asked to mark only one of the three. Although the written production descriptors were presented in English, all instructions were in Spanish. Below is the translation:

- Column 1. "I can do this".

- Column 2. "I am working on this but haven't reached it yet (either in class or personally)".

- Column 3. "This is not an objective at the moment".

Hence each student read the descriptor and marked the appropriate box. Time allotted for the student to fill out the questionnaire varied according to the number of selected learning outcomes.

3.3.1. The question of relevance

Is the descriptor a target area for the students? We have tried to answer this research question by looking at data in two ways. One is to analyze which descriptors were most popular, that is, which ones were selected for piloting

by the teacher. The other is to analyze the results of columns two and three: "I am working on this but haven't reached it yet (either in class or personally", and "this is not an objective at the moment". The most popular or most selected written production learning outcomes from the teacher's point of view can be seen in Table 3. They tend to belong to the lower levels and to the categories of overall written production, narratives, and the genre of job applications.

It is also interesting to look at the unpopular learning outcomes. The first column in Table 3 is the ranking, the second the descriptor number, the third the category or genre, the fourth the calibrated level to the CEFR and finally the number of students that piloted the outcome. We have chosen to illustrate the top ten and bottom ten according to rank. However, the complete list of descriptors, ordered and numbered, can be seen in the appendix where the learning outcomes have been divided into three ranked sections, from the most tallied *** to the least * for each of the analyses.

Rank	Number	Category	Level	Selected for piloting
1st	w1	PW1	A2	190
2nd	w8	PW2	B1	189
3rd	w7	PW2	B1	189
4th	w3	PW1	B2	189
5th	w6	PW2	B2	188
6th	w2	PW1	B1	188
7th	w9	PW2	B2	177
8th	w33	PW5	B1	175
9th	w47	PW6	B1	175
10th	w40	PW6	B1	174
75th	w60	PW7	B2	13
76th	w68	PW7	B1	13
77th	w57	PW7	B1	13
78th	w69	PW7	C1	13
79th	w56	PW7	C1	13
80th	w63	PW7	B2	12
81st	w58	PW7	C2	12
82nd	w71	PW7	C2	12
83rd	w84	PW8	B2	10
84th	w83	PW8	B2	10

Table 3. Highest and lowest outcome rankings selected by teachers.

As can been seen from the lower part of the table, the least piloted learning outcomes are high level ones and correspond mostly to the genre of research articles. The school of architecture was the only school to pilot abstracts and research articles learning outcomes. This could be due to the fact that the CEFR level of Architecture students is notably higher than the CEFR level of students at other schools, as can be seen in Table 2.

From the student questionnaires, the results obtained from column two can also help to answer the question as to the target area of the descriptor. We can assume that descriptors with a high percentage of students marking "I am working on this but haven't reached it yet (either in class or personally)" would signify that the students are particularly interested in this learning outcome. Only the descriptors that were piloted with more than 50 students were included in this analysis since we assumed that descriptors piloted with only 12 or 13 students could skew the results.

The results in the fifth column represent the percentage of students marking "I am working on this" divided by total number of students piloting the learning outcome. Table 4 shows the top 10 learning outcomes marked by the students as working on the corresponding descriptor. The column head (%) details the percentage of students marking this learning outcome. The final column shows the raw number of students out of the total answering the survey. Not only do we have a wide range of categories or genres but also a range of levels, with B2 being the most frequent. This is one level higher than most of our students which seems to be in keeping with the student's decision to mark these B2 descriptors as "I am working on this". Descriptor no. 9 "I can write about academic and professional topics using the special language appropriate for a theme (e.g. a cultural visit to a place of interest such as a professional firm or a museum" marked by 70% of the students seems to have the most relevance, as well as descriptor no. 3 (67%) "I can write clear and detailed texts such as short essays, reports and texts of presentations on topics related to my academic and professional field".

Finally, the results of column 3 "This is not my objective at the moment" could be interpreted as having the least interest for the students, at least at the time of filling out the questionnaire. We assumed that the high level learning outcomes C1-C2 would be marked for this. Again in this analysis as in the last, only the learning outcomes that were piloted with at least 50 students were included, assuring more valid results. The descriptors have been ranked according to the percentage of students marking it as "not an

objective" out of the total number of students piloting the learning outcome. Table 5 shows the results of this analysis.

Rank	Number	Category	Level	%	No. of students
1st	w9	PW2	B2	70	113/177
2nd	w3	PW1	B2	67	112/189
3rd	w43	PW6	B2	67	98/162
4th	w10	PW2	B2	66	91/137
5th	w19	PW3	B2	65	90/143
6th	w18	PW3	B2	64	84/149
7th	w37	PW5	C1	63	84/129
8th	w34	PW5	B1	63	82/171
9th	w16	PW3	B1	60	82/169
10th	w45	PW6	C1	60	81/135

Table 4. Rank by percentage of students marking "I am working on this".

Rank	Number	Category	Level	%	No. of students
1st	w38	PW5	C2	51	31/61
2nd	w22	PW3	C2	45	26/58
3rd	w29	PW4	C2	37	22/59
4th	w21	PW3	C1	33	20/60
5th	w45	PW6	C1	31	42/135
6th	w11	PW2	C1	31	23/75
7th	w4	PW1	C1	30	33/109
8th	w10	PW2	B2	28	38/137
9th	w37	PW5	C1	27	35/129
10th	w12	PW2	C2	27	31/115

Table 5. Ranked by percentage of students marking "not an objective".

As expected, the outcomes are all high level but the categories are very mixed, not allowing us to conclude that some categories are less targeted than others. The number of students marking this column is much lower than other two columns "I am working on this" and "I can do this". Therefore we can then assume that the learning outcomes are interesting and relevant for students.

3.3.2. The question of calibration

To answer the third research question as to whether the written descriptors were well calibrated to the Common European Framework, they were

ranked by percentage of students marking "I can do this". Table 6 details the ten most and least marked as reached.

Rank	Number	Category	Level	%	No. of students
1st	w77	PW8	A2	92%	83/90
2nd	w31	PW5	A2	90%	150/167
3rd	w25	PW4	A2	89%	145/163
4th	w1	PW1	A2	86%	163/190
5th	w39	PW6	A2	85%	135/158
6th	w72	PW8	A2	85%	56/66
7th	w6	PW2	A2	81%	152/188
8th	w32	PW5	B1	81%	105/130
9th	s26	PW4	B1	79%	135/171
10th	w52	PW6	B1	77%	122/158
52nd	w9	PW2	B2	13%	23/177
53rd	w36	PW5	C1	11%	7/64
54th	w4	PW1	C1	10%	11/109
55th	w45	PW6	C1	8.9%	12/135
56th	w20	PW3	C1	8.5%	6/71
57th	w21	PW3	C1	8.3%	5/60
58th	w37	PW5	C1	7.8%	10/129
59th	w11	PW2	C1	6.7%	5/75
60th	w10	PW2	B2	5.8%	8/137
61st	w38	PW5	C2	0%	0/61

Table 6. Ranking "I can do this" top 10 and bottom 10.

Ranking the learning outcomes marked as "I can do this" from the highest percentage to the lowest gives us a good idea about the calibration of our learning outcomes as a whole. From this analysis, we found that many students had marked "I can do this" for descriptors above their level causing us to re-calibrate numbers 26, 32, and 52 at a lower level (A2) which seems in retrospect more appropriate for the learning outcome.

Figure 2 shows the linear progression of the piloted descriptors marked by the students as "I can do this". The results were obtained by calculating the mean of the number of descriptors marked "I can do this" by students at each level.

We can see a steady progression: the higher the level of the student, the higher the number of descriptors marked "I can do this". This consistent progression of higher level students marking more written production descriptors is an indicator that the descriptors, on a whole, are well
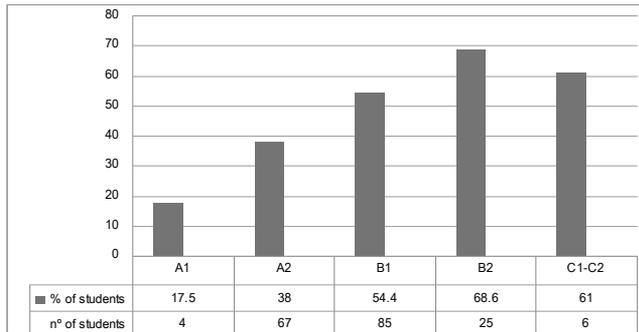
Figure 2. Mean for level and descriptor marked as "I can do this".

calibrated. The only data which do not follow the progression are the C1-C2 band. The discrepancy between the B2 and C1-C2 levels (C1-C2 achieving 61% and the B2 achieving 68.6%) could be due to the small number of students at the highest band (only 6) making the mean less significant.

4. The interpretation phase

The interpretation stage consisted in reviewing the learning outcomes for clarity, calibration and interest, following the qualitative and quantitative analyses. Concrete modifications in both the wording and the level of the descriptors have already been explained in 3.2 and 3.3.

Another decision we made was that all self-assessment descriptors be translated into Spanish to avoid problems of clarity. Students can then choose to reflect on the learning outcome in either language according to their level, interest etc. Asking the students' opinion not only on clarity but reflecting on their idea of what things they can already do, what things they are interested in doing and not doing has given the developers an insight into how well the learning outcomes have been constructed in terms of clarity and calibration. This allowed us to make changes before including them in the final draft of the bank of descriptors published in Durán et al. (2009).

5. Concluding remarks

In this article, we have dealt with two studies carried out in relation to the written production competency descriptors designed for the development of

an Academic and Professional European Language Portfolio (ACPEL). With the involvement of experienced educators and students enrolled at our Engineering schools, our aim has been to detect those learning outcomes which were unclear, and not well calibrated in accordance with the CEFR, in order to rewrite and to refine them. Additionally, we have tried to determine which factors are involved in a well-written, well-calibrated, or an unsuccessfully described learning outcome. We have emphasised in this work the descriptions of outcomes that were not successful in order to enlighten future calibration studies for ELPs. From the results, we found that the descriptors were on the whole well calibrated and fairly well written. A large majority of the descriptors were interesting for the English for Specific Purposes teachers as well as for the students.

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NOTES

Appendix

***	most frequently tallied section in this analysis
**	middle section of tallied frequency in this analysis
*	least frequently tallied section in this analysis

number	category	level	Wording of Descriptors	piloted	reached	working on	not objective
1	PW 1	A2	I can write simple sentences using adequate connectors, though with some errors influenced by mother tongue.	***	***	*	*
2	PW 1	B1	I can write simple connected texts on familiar topics within my field, linking a series of shorter elements into a linear sequence with the help of a dictionary and other reference sources.	***	***	*	*
3	PW 1	B2	I can write clear and detailed texts such as short essays, reports and texts of presentations on topics related to my academic and professional field.	***	*	***	**
4	PW 1	C1	I can write clear, well-structured texts on complex subjects related to my academic field, supporting my arguments, giving relevant examples and rounding off with an appropriate conclusion.	**	*	***	***
5	PW 1	C2	I can write clear, smoothly flowing complex texts relating to my academic or professional field in an appropriate style, following a logical structure.	**	**	**	***
6	PW 2	A2	I can describe an event using simple sentences, present and past activities and personal experiences.	***	***	*	**
7	PW 2	B1	I can write descriptions of people, places or things, real or hypothetical, within my field of interest.	***	***	*	**
8	PW 2	B1	I can write simple descriptions reporting on visits to places of my academic and professional interest. (e.g. museums or field work visits).	***	**	**	**

number	category	level	Wording of Descriptors	piloted	reached	working on	not objective
9	PW 2	B2	I can write about academic and professional topics using the special language appropriate for a theme (e.g. a cultural visit to a place of interest such as a professional firm or a museum.	***	*	***	***
10	PW 2	B2	I can write long, detailed narratives that are clearly organised, following the conventions of the genre concerned.	**	*	***	***
11	PW 2	C1	I can write clear, detailed and well-structured descriptions and imaginative texts in an assured, personal, natural style appropriate to the reader in mind.	**	*	***	***
12	PW 2	C2	I can write well-developed narratives about professional experiences in a clear, fluent style appropriate to the genre.	**	*	**	***
13	PW 3	A2	I can write a simple and clear lab report on an experiment related to my academic subjects.	***	***	*	**
14	PW 3	A2	I can keep a simple logbook with a systematic record of events or performance, e.g. of a car, a ship or an aircraft.	**	***	*	**
15	PW 3	A1	I can write very brief reports to a standard conventionalised format, which pass on routine factual information.	***	**	**	*
16	PW 3	B1	I can write clear well-structured simple technical reports with reasonable accuracy in familiar contexts.	***	**	**	*
17	PW 3	B2	I can write technical reports and essays to develop an argument that I have clear opinions about, and argue for what I think, though I must have them checked for linguistic accuracy.	**	**	***	**
18	PW 3	B2	I can write a technical report or an essay which develops an argument, giving reasons to support or negate a point of view, weighing pros and cons, using appropriate language with occasional errors.	***	*	***	***
19	PW 3	B2	I can write a report evaluating different ideas or solutions to a problem, using polite, academic language with occasional errors.	**	*	***	**
20	PW 3	C1	I can write compositions describing problems and giving my opinion about possible solutions on a complex technical issue.	**	*	***	***
21	PW 3	C1	I can write clear, well-structured expositions of complex subjects, making reference and giving examples to underline the most relevant issues.	*	*	***	***
22	PW 3	C2	I can decide upon content, language, organization and length of a report, according to the intended reader.	*	*	**	***
23	PW 3	C2	I can write each of the subsections of a technical report as an independent entity observing, however, the relationship between different sections.	*	/	/	/
24	PW 3	C2	I can write clear and readable complex reports and essays on topics of my speciality (e.g. progress or research reports).	*	/	/	/
25	PW 4	A2	I can write simple instructions from clear pictorial illustrations on familiar topics.	***	***	*	*
26	PW 4	B1	I can write simple instructions telling how to do things that I often do.	***	***	*	*
27	PW 4	C1	I can write instructions following a well-structured logical sequence.	***	**	*	*

number	category	level	Wording of Descriptors	piloted	reached	working on	not objective
28	PW 4	C1	I can write instructions with reasonable accuracy on familiar topics; generally good control though with noticeable mother tongue influence.	***	**	**	**
29	PW 4	C2	I can write clear and detailed instructions for a process or apparatus with which I am familiar.	*	*	**	***
30	PW 5	A2	I can use pictorial illustrations and label them correctly when describing a mechanism or a process.	***	***	*	*
31	PW 5	A2	I can use simple concrete categories in my descriptions: colours, size, shape, materials.	***	***	*	*
32	PW 5	B1	I can make comparisons to help descriptions.	**	***	*	*
33	PW 5	B1	I can write short simple basic descriptions of natural processes related to my field.	***	***	*	*
34	PW 5	B1	I can provide accurate physical categories and measurements (e.g. temperature, height, weight, depth, length, moisture, and volume) in my description of mechanisms and processes.	***	**	**	*
35	PW 5	B2	I can show the reader a basic description of a natural process clearly. Errors may occur but I can show clearly what I am trying to express.	**	**	**	**
36	PW 5	C1	I can identify the parts of a mechanism, describe them, give their function and explain how they fit and work together for a purpose.	*	*	***	***
37	PW 5	C1	I can write clear, detailed, well-structured and smoothly flowing descriptions of a natural process.	**	*	***	***
38	PW 5	C2	I can describe a complex mechanism explaining accurately and precisely how it works.	*	*	***	***
39	PW 6	A2	I can write a simple cover letter using the conventional format (date, address, salutation and closing remarks), following standard models.	***	***	*	*
40	PW 6	B1	I can use an appropriate academic register when writing a covering letter.	***	**	**	*
41	PW 6	B1	I can write a brief statement of introduction explaining why I am writing and describing my motivations.	***	**	**	*
42	PW 6	B2	I can write a cover letter marking relationship between ideas and connecting paragraphs.	**	**	**	*
43	PW 6	B2	I can clearly and correctly express my availability for an interview in my covering letter.	***	*	***	**
44	PW 6	B2	I can write clear and correct sentences making reference to my enclosed CV.	**	*	***	**
45	PW 6	C1	I can write a clear and correct cover letter showing evidence of my motivation, academic preparation and professional experience to support my case for a given position.	**	*	***	***
46	PW 6	A2	I can write a brief and clear CV following standard models (CVs in database, etc.).	***	***	*	**
47	PW 6	B1	I can write simple phrases and sentences in reference to the different sections of my CV (e.g. about my education, skills, hobbies and experience).	***	***	*	**

number	category	level	Wording of Descriptors	piloted	reached	working on	not objective
48	PW 6	B1	I can arrange my CV following a given style (chronological or functional, skills-oriented).	**	**	**	***
49	PW 6	B2	I can write a presentable and accurate CV targeted to the needs of a particular position.	***	*	***	***
50	PW 6	C1	I can write a clearly organised CV presenting my skills and qualities in a way that shows I understand the requirements of a specific organization.	**	*	***	***
51	PW 6	A2	I can fill out a simple application form or questionnaire giving personal, educational and experience references.	***	***	*	**
52	PW 6	B1	I can complete an application form correctly with the use of a dictionary.	***	***	*	*
53	PW 6	B2	I can complete an application form correctly, following all the instructions.	**	**	**	**
54	PW 6	C1	I can adapt my style of writing to the type of application form.	**	*	***	**
55	PW 6	C1	I can use adequate phrases and sentences to fit the requirements included in the application form and the implied expectations of the receiver.	*	/	/	/
56	PW 7	C1	I can write a descriptive abstract for a review-type paper in which different ideas or solutions to a problem are evaluated.	*	/	/	/
57	PW 7	C1	I can write an informative abstract for an experimental research paper.	*	/	/	/
58	PW 7	C2	I can write complex abstracts in a clearly organised way, defining the problem, the objectives of the project, the methodology and the results, and its potential impact.	*	/	/	/
59	PW 7	B2	I can synthesise basic technical information and arguments from a number of sources when writing my research paper.	*	/	/	/
60	PW 7	B2	I can describe precisely the steps that were followed in carrying out the experiment clearly.	*	/	/	/
61	PW 7	B2	I can state and define the research problem accurately.	*	/	/	/
62	PW 7	B2	I can explain the conclusions drawn.	*	/	/	/
63	PW 7	B2	I can present tabulation of data, equations, charts and figures of the research paper.	*	/	/	/
64	PW 7	B2	I can describe the experiment conducted and show experimental details clearly and precisely.	*	/	/	/
65	PW 7	B2	I can reflect in the title the content of the project described in the report clearly and concisely.	*	/	/	/
66	PW 7	B2	I can state the hypotheses clearly and precisely.	*	/	/	/
67	PW 7	B2	I can explain the conclusions drawn clearly and precisely.	*	/	/	/
68	PW 7	C1	I can describe experiments devised to test the hypothesis of the research paper.	*	/	/	/
69	PW 7	C1	I can describe the steps that were followed in carrying out the experiment in my research paper.	*	/	/	/

number	category	level	Wording of Descriptors	piloted	reached	working on	not objective
70	PW 7	C2	I can summarise and quote sources of information, make references and compile the bibliography using the conventional format, when writing a scientific paper or report.	*	/	/	/
71	PW 7	C2	I can write scientific papers in my field, stylistically appropriate, with a view to being published.	*	/	/	/
72	PW 8	A2	I can write short notes relating to matters in areas of immediate need, occasionally with small errors.	**	***	*	*
73	PW 8	B1	I can exchange information by writing on abstract or concrete topics related to my field of interest, though I may need to confirm certain points.	**	**	**	**
74	PW 8	B2	I can express news and views effectively in writing, and relate to those of others.	**	**	**	**
75	PW 8	C1	I can express myself effectively, adapting my style to the addressee and the situation.	*	/	/	/
76	PW 8	A1	CORRESPONDENCE (letters and e-mails).	*	/	/	/
77	PW 8	A2	I can write a simple postcard or e-mail (for example with birthday or holiday greetings).	**	***		*
78	PW 8	A2	I can write short letters or e-mails, telling about everyday things to people I know.	**	***	*	*
79	PW 8	A2	I can write very basic formal letters requesting information using a correct format (e.g. about summer jobs, courses, accommodation, etc.).	**	**	*	**
80	PW 8	B1	I can write simple, short letters expressing thanks and apology, using adequate conventional expressions.	**	**	**	*
81	PW 8	B1	I can write personal letters and e-mails describing events, experiences and opinion adapting language to the situation.	**	**	***	***
82	PW 8	B2	I can write personal letters expressing thoughts about abstract or cultural topics within my field of interest.	**	**	**	***
83	PW 8	B2	I can write standard formal letters requesting or communicating relevant information, with appropriate use of register and conventions.	*	/	/	/
84	PW 8	B2	I can reply in written form to advertisements and ask for more specific information (for example about an academic course or a software product).	*	/	/	/