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Coordinadores

Estefanía CARIDAD DE OTTO
Alejandro F. LÓPEZ DE VERGARA MÉNDEZ

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PRESENT YOUR CASE:
COMBINING CASE METHOD
AND COLLABORATIVE TEACHING

Guillermo Azuara Guillén
Claus-Peter Neumann
Universidad de Zaragoza

ABSTRACT

In the course of adapting the subjects of our School of Engineering to the European Higher Education Area —and encouraged by the success of a previous experience in innovative teaching (Azuaa Guillén, 2007)— we decided to combine the case method (Reyes, 2005) with interdisciplinary, collaborative teaching and apply the two approaches to students of Computer Sciences enrolled both in the compulsory subject “Computer Networks” and in the elective “English”. The main objective of this experiment was to integrate the students’ content-oriented cognitive and critical thinking skills, on the one hand, with their interpersonal and communicative competence, on the other, both components mutually reinforcing each other. In order to give the students ample class time to both work on the case and improve their oral competence in English, we opted for non-co-presential collaboration, teaching the students separately but in parallel, as recommended by Dudley-Evans for non-English medium situations (Dudley-Evans, 2001: 236-237). To implement our project, we adopted a complementary approach (Bauwens & Hourcade, 1997): the Networks instructor presented his students with a networks-related case on which they had to work in teams and eventually present their result orally to their fellow students, while the language instructor provided training in the corresponding discursive and generic conventions in English, both related to the process of discussion and negotiation and to the result, i.e. the final presentations. The final presentations were videotaped and compared with presentations from previous years, given separately in the two respective subjects, so as to measure the degree of improvement. Also, the presentations given in English were compared with presentations in Spanish (of students not enrolled in “English”) in order to determine the impact of the collaborative approach.

KEY WORDS: Collaborative Teaching, Case Method, Oral Presentations.

1. INTRODUCTION

Taking a collaborative approach, our project¹ aimed to combine two subjects from quite different disciplines —“Computer Networks” and “English”— both

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of which form part of the degree in Computer Sciences and Management taught at the Escuela Universitaria Politécnica at Teruel, University of Zaragoza, Spain. “Computer Networks” is a compulsory subject while “English” is an elective; both are taught in the fourth term. The frame used for the project was that of the case method, a method that allows the students to develop multiple competences simultaneously (Reyes, 2005). After working on the case in groups, the students had to present their results orally to the rest of the class. The students enrolled in both subjects had to debate the case and give their oral presentations in English. The students were filmed in order to compare this year’s presentations with those of previous years (given in Spanish) to see whether the collaborative project had introduced any qualitative change.

Apart from developing cognitive skills and acquiring essential knowledge related to the content subject “Computer Network”, the main learning aims of the sequence we put into practice were:

- To improve the ability to work in a team and become actively involved in dialogue and negotiation.
- To develop the competence of speaking English in public.
- To learn to work in uncertain environments, developing a necessary tolerance towards ambiguity.
- To acquire discursive conventions appropriate to academic contexts.

Taking heed of Dudley-Evans’s insight that “an approach based less on actual team-teaching in the classroom but on collaboration outside the classroom [...] may be a more appropriate and effective model” for non-English-speaking environments (Dudley-Evans 2001: 237), we opted for non-co-presential collaboration. This led us to adopt a complementary approach (Bauwens & Hourcade, 1997), each instructor using the teaching strategies deemed most suitable to develop the competences associated with his subject, as described in chapters 2 and 3 below.

2. “COMPUTER NETWORKS”

The general frame for the teaching sequence was that of the case method, a method of instruction that first appeared at the beginning of last century, around 1920, in business and law schools. One famous example is the Harvard Business School, which still, after 80 years of experience, bases more than 80% of their teaching on this method (Reyes, 2005).

This type of instruction consists in designing a case to be studied by the students. The case should be formulated in as great a detail as possible so as to immerse the students in a decision-making situation that is close to reality. Thus, they are provided with the same kind of information that they might find in a

future job in real life. In addition to this information, the case should also define a context, peopled with adequately described characters and scattered with clues that should enable the students to complete their learning process by solving the problem with which the case confronts them.

Active teaching methods are conditioned by the number of students since it might limit the possibilities of interaction, control, supervision and individual feedback. According to Fernández (2006), groups can be classified as small (1-15 students), medium-sized (15-30 students), big (30-60 students) and large (more than 60 students). Fernández recommends small and medium-sized groups as adequate for the case method. The “Computer Network” group consisted of 10 students (9 of which were also enrolled in “English”), which proved ideal for student-teacher and inter-group communication.

The case of our project involved the problem of network security, an issue that always turns out to be considerably motivating for our students. Prior to the present project, the case was presented two years before in “Computer Networks”, but that year all students worked on it exclusively in Spanish (Azuara Guillén 2007). The success of this experience—and especially the high motivation shown by the students—made us think that the subject of network security represented an ideal topic for our interdisciplinary venture.

The case proper takes its starting point from a story given to the students in written form. This story takes place in a clearly defined work environment: a company has just employed a new network administrator to replace the old one, who has been fired because of the theft of highly sensitive information. In groups of three, our students had to assume the role of this new network administrator in order to detect the company’s security problems and suggest solutions. The story text contained clues, hidden in interviews with the company’s employees, and a detailed description of the network, together with a whole series of items, such as server access lists (IP address, username and starting time), data on physical access control etc. Explanatory material on network security was also provided, which had to be consulted by the students so as to acquire the knowledge necessary to solve the case. This explanatory material was also used as a way of introducing security-related topics (confidentiality, authentication, integrity, and non-repudiation), the assimilation of which was also tested by a number of questions the students had to answer along with their solution of the case.

Each consecutive year, new elements were added to the task. Thus, the second time this case was used in “Computer Networks”, the students had to work with two different bibliographies provided by the instructor, and evaluate and compare them. That was also the first time the groups had to deliver their results by way of an oral presentation, adhering to a strict time limit. This year, the third time the case has been used, the students enrolled in the elective “English” had to give their presentation in that language.

In “Computer Networks” the following work schedule was used:

- First unit: (1 hour): the case and case methodology were introduced, the work schedule was established, the bibliography distributed and the students were divided into groups of three (thus, the nine students enrolled in “English” formed three groups).
- Second unit (2 hours): the students organized their work autonomously in their respective groups and started to resolve the case.
- Third unit (2 hours): after agreeing upon their answers in each group, an inter-group debate was organized using the forums of a moodle-based virtual learning platform of the University of Zaragoza.
- Final unit (1 hour): the presentations (all members had to speak for an equal amount of time, using PowerPoint slides as visual support). Both the subject teacher and the English instructor were present. For the purpose of evaluating both the students and the project, the presentations were filmed and compared to each other as well as to last year’s presentations, which had all been given in Spanish (without any specific instructions as to the format of presentations). At the end of each presentation, each group member anonymously filled in a questionnaire in order to evaluate the whole experience.

3. “ENGLISH”

From the beginning of the term the English instructor had students work once every two weeks on brief computer-related written tasks, which they then had to present in English in front of the class. These mini-presentations never took longer than a minute per student. Their purpose was two-fold: to familiarize the students with the sensation of speaking a foreign language in front of an audience while giving the teacher a chance to observe any weak spots he might need to focus on during the case sequence. Apart from the typical grammar errors and inadequate expressions, the problem areas thereby established were:

- the pronunciation of particular English phonemes
- lack of cohesion
- voice projection
- posture
- a general sense of shyness

These trouble spots became the guiding points for some of the work units of the English component of our collaborative teaching sequence. Thus, the work schedule was as follows:

- *First unit* (4 hours): the students were trained in the pronunciation of phonemes that in their mini-presentations had threatened to make them incomprehensible. These were:

- the sibilants
- the open, near-open and open-mid vowels
- /b/ vs. /v/ vs. /w/
- /h/
- the realization of final –g
- the realization of plural and third-person singular ‘-es’ after sibilants and sibilant affricates
- and the realization of final –ed

The four hours dedicated to this training mixed more physiological explanations with drills and games that turned this part of the sequence into one of the most entertaining sections of the subject. Indeed, pronunciation improved considerably afterwards (and the students even started correcting each other, imitating the sometimes exaggerated model provided by the instructor).

- *Second unit* (1 hour): specific language proper to presentations, i.e. signposts, importance markers, sequencers and connectors. While the former two were introduced by the instructor frontally, sequencers and connectors were elicited from the students in a brainstorming session, which showed that most students were familiar with a wide variety of adequate expressions but did not really know how to use many of them correctly. More traditional grammar homework was provided to remedy that problem.
- *Third unit* (1 hour): To try and make the students understand the importance of an adequate projection of the voice, the students had to sit in the final row in a hall that seats 80 students. Then, each student had to come to the board and read aloud a passage on network theory in English while the remaining students had to copy it. In case of doubt or non-comprehension, the students had to interrupt the reader and ask for clarification or, in the case of unknown words, for their spelling. Meanwhile the teacher checked the students’ notes and stopped the reader whenever he noticed that the students had misunderstood something. The activity proved rather successful since the students made increasingly bigger efforts at making themselves understood. What is more, despite its frontal and dictating character, the activity turned out to be surprisingly motivating.
- *Fourth unit* (1 hour): in order to work on the students’ body language and at the same time do something about the students’ sense of shyness when standing in front of a group, two half-sessions of 30 minutes each were dedicated to drama activities, in which the students had to perform individually for their fellow students.
- *Fifth unit* (30 minutes): general advice was given with respect to the PowerPoint presentations the students had to include. In order to elicit the students’ own ideas, the instructor had prepared three badly done slides for which the students had to suggest improvements.

- *Sixth unit* (3 hours): in one of the school's computer labs, the students worked on the "Computer Networks" case in their respective groups under the supervision of the English instructor. Mono- and bi-lingual dictionaries (both general and specialized) were provided so that the students could work autonomously. Three quite different approaches were observed: One group debated in English at all times and started writing their presentation script and PowerPoint slides in English from the very beginning. Another group had prepared script and slides in Spanish before class and now dedicated class time trying to summarize the main ideas in English, with more or less acceptable results. A third group had written their entire presentation in Spanish and had used an automatic translator on the Internet for their English version—with disastrous consequences. The teacher had to intervene and encourage the students to prepare a completely new script in English, which they eventually managed to do.
- *Seventh unit* (1 hour): in the last English lesson before the day of the presentations, the instructor had each student present samples from their presentations. This was done so as to give the students some final feedback on voice projection, articulation, intonation, and posture.
- *Final unit* (1 hour): the presentations (see chapter 2 above).

4. RESULTS

Both teachers' first impressions were positive since most students managed to get their main points across with an appropriate degree of comprehensibility. When viewing the tapes and comparing them to those of previous years, a number of weak and strong points were established.

- *Weak points*: in general terms the pronunciation was not as good as expected, although it seriously affected intelligibility only in two out of the nine cases (both students had missed some of the pronunciation sessions). The fact that the pronunciation was worse than expected was at least partly due to the high degree of nervousness suffered by all students. Indeed, in personal conversations many students pointed out that their nervousness had made them pronounce much worse than during their final rehearsals. This high level of anxiety was another weak spot, proving that the students had not been prepared enough to overcome their stage fright and speak to an audience comfortably.
- *Strong points*: the comparison with the older recordings showed that this year's students were much better prepared in terms of voice projection, intonation and clarity of articulation. Furthermore, the presentation discourse turned out to be much more cohesive since most students had very effectively employed transition and importance markers, sequencers and connectors.

- No significant changes were observed with respect to the students' body language and the quality of their PowerPoint presentations.

As to the questionnaire, 100% of the students confirmed that the collaborative teaching sequence had been useful for their education, 70% asserted that the methodology employed was more motivating than customary teaching methods, and the average punctuation given the sequence by the students was 8.66 out of 10, all of which reveals a high degree of satisfaction. On the other hand, in answer to an open question, 50% complained about having been given too little time to work on the case and prepare the presentations. Although only 20% wrote that their nervousness had made them perform at a much lower level than the one they had actually achieved during their final rehearsals, personal interviews revealed that this opinion was shared by almost all the students.

TABLE 1: THE STUDENTS' SELF-EVALUATION OF THEIR SPEAKING SKILLS BEFORE AND AFTER THE TEACHING SEQUENCE

LEVEL	Nº OF STUDENTS BEFORE THE SEQUENCE	Nº OF STUDENTS AFTER THE SEQUENCE
B1	0	4
A2	5	5
A1	4	0

Before the start of this teaching sequence, the students had been asked to use the descriptors of the European Framework of Reference in order to anonymously evaluate their level of spoken English. After the presentations, they were asked to evaluate themselves anew. Table 1 compares the results:

Six students rated their speaking skills at one level higher than before the sequence. One student actually considered that s/he had advanced two levels (from A1 to B1) while two students had the impression they had remained on the same level as before (A2).

5. CONCLUSIONS

Our overall evaluation of the project is that it has been successful. Most of the students have assimilated the necessary knowledge to solve the case and have acquired the competence needed to transmit their results to an audience in English. Their responses to the questionnaire and the self-evaluation of their English speaking skills show that most of the students themselves consider the

sequence a success —although they would have appreciated more time and might have needed more training in controlling their anxiety.

If compared to past presentations, the biggest improvements achieved were those related to voice (projection, intonation and articulation) and discourse (signposts, importance markers, sequencers and connectors). The area that should be focused on most in future repetitions of our collaborative project is that of fostering the students' confidence when speaking English in front of an audience, an issue of special importance since it has proved to have negative effects on the students' pronunciation and their general performance.

WORKS CITED

- AZUARA GUILLÉN, G. (2007). "Aplicación del método del caso a una parte de la asignatura de Redes de Computadores." In XIII Jornadas de Enseñanza Universitaria de Informática: JENUI 2007. Teruel: AENUI, 257-261.
- BAUWENS, J. & J.J. HOURCADE. (1997). "Cooperative Teaching: Pictures of Possibilities." *Intervention in School and Clinic* 33: 81-85, 89.
- DUDLEY-EVANS, T. (2001). "Team-teaching in EAP: Changes and adaptations in the Birmingham approach." In J. Flowerdew & M. Peacock (eds.), *Research Perspectives on English for Academic Purposes*. 225-238. Cambridge: Cambridge University Press.
- FERNÁNDEZ MARCH, A. (2006). "Metodologías activas para la formación de competencias." In *Educatio Siglo XXI* 24: 35-56.
- REYES, E. (2005). *Introducción al estudio de casos como método de enseñanza*. Zaragoza: Prensas Universitarias de Zaragoza.