HOW BLENDED LEARNING CLOSES THE LANGUAGE GAP BETWEEN NATIVE STUDENTS AND SPANISH LANGUAGE LEARNERS

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- Keywords: Spanish language learners, Immigration, Blended learning, Learning Management System, Moodle, Interaction.
- Abstract: Children of immigrant families with little or no knowledge of Spanish are referred to as Spanish language learners (SLL). During their first year in Spain, they spend some hours in pullout groups for learning the language, but many of them do not develop academic Spanish even after four or five years of schooling. As a supplement to those pullout groups and special programs, interactive tasks (integrated in a Learning Management System LMS such as Moodle) can greatly improve the linguistic abilities of SLLs for a number of reasons. First, these tasks often include recordings of academic Spanish. Second, some of these tasks involve working cooperatively with several native speakers. Finally, interactive tasks within an LMS can be done outside the limited framework of school time because they are open and ready to be used 24/365 days a year. The article provides details of an LMS for SLLs being actually used at a secondary school. The school had 15 SLL students enrolled in an experimental project involving the LMS while another group of 15 SLL students went on doing the traditional pullout groups. The results show that those in the first group have learnt faster and deeper than those in the second one.

1 SPANISH LANGUAGE LEARNERS

The last decade has seen a surge in immigration. Whole families have left their countries and moved Western countries in search of better to opportunities. The children of these families join their new schools sometimes without any knowledge of the language in which instruction is given. This has happened very frequently in South Eastern Spain as a consequence of unprecedented economic expansion, where some secondary schools have had up to 30% of Spanish language learners (SLL). Although some of these newly arrived students came from Spanish speaking countries in Central or South America, most were originally from Morocco, from Eastern European countries (such as Romania, Bulgaria, Ukraine or Russia), and also from Asia (mainly from China and Pakistan).

When joining the Spanish educative system, these students often face a double language challenge: they must not only learn Spanish but also the regional dialect (Valencian in our case), which is used in teaching a varying number of subjects (ranging from two to eight). With little or no ability in Spanish and certainly none at all in Valencian, SLLs go through an initial buffer period during which they spend some hours in pullout groups or special programs for learning the language. Then, they share with their native classmates those subjects of a practical nature (arts, sports, technology, and so on) to get used to ordinary lessons in Spanish or Valencian.

To help these students overcome the problems they usually face, we used a Learning Management System (LMS), in our case Moodle. Our project included 15 SLLs while another group of 15 SLLs remained exclusively in the pullout group. Both groups followed the same syllabuses and did similar tasks (the content was identical although the appearance of the exercise may differ). The tasks were numbered to allow for comparison at the end of the project.

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2 AN UNCOMFORTABLE CHASM

However, the fact is that many of these students do not develop academic Spanish even after four or five years in Spain. Academic language is (Hill and Flynn, 2006: 26) "the language of the classroom... [which] students must master... to understand textbooks, write papers and reports, solve mathematical word problems, and take tests". While interviewing teachers of SLLs, once and again we heard the same story: you see newcomers talking to or playing with their classmates, as if the Spanish language was completely natural to them, but as soon as they get into the classroom everything is changed: they seem to recede back to a previous stage of linguistic ability, they showed little or no interest in communicating with others and, when questioned by the teacher, answered with a blank stare.

In order to perform well at school, SLLs must master academic Spanish. When they fail to do so after several years in Spain, the gap between them and their peers widens and widens until it becomes insurmountable. Then, there is a second fact which amplifies the one just explained (Nieto, 2002): many mainstream teachers admit they feel unprepared to work with language learners. These are teachers of instrumental subjects with no linguistic training who, faced with the challenge which SLLs pose, feel overwhelmed and helpless.

Add the first circumstance to the second and you have found the formula of academic failure. With all these things in mind, it goes without saying that SLLs are at the highest risk of dropping out. At the schools we supervised, the number of SLLs who dropped out doubled that of native Spanish students (72% against 34%). It was even higher for boys (81% against 47%) and slightly less grievous for girls (40% against 28%). These figures, obtained by us, offer a glimpse of an uncomfortable chasm between newcomers and native students, as the former, deprived of literacy and with a poor knowledge of the language, leave school early with heavy odds for a life of exclusion and marginality.

It must be remembered that the recent Spanish Educational Act, known as Organic Law of Education, is inspired by several principles, the second of which is the following (2007: 33): "Equity that guarantees equal opportunities, educational inclusion and non-discrimination and that acts as a compensating factor for the personal cultural, economic and social inequalities, with special emphasis on those derived from disabilities". Therefore, everyone in the school system is under the obligation of fighting against the situation depicted above. The following point explains our contribution.

3 DEVISING THE PLATFFORM

The authors have written papers on the use of blended learning for different target student groups: struggling students (Ortega and Arcos, 2009a), truants (2009e), youths at risk (2009b), special needs students (2009d), as well as for specific purposes, such as homework (2008) and digital storytelling (2009c). The first thing we did was to bring into the platform our own experience as teachers of a second language. Among other things, we planned instruction with the five stages of second language acquisition in mind. These five stages, first posited by Steve Krashen and Tracy Terrell (1983), are:

- 1. Preproduction, which takes the first six months of learning.
- 2. Early production, which goes from the seventh to the twelfth month.
- 3. Speech emergence, which occurs between the end of the first year and the end of the third year.
- 4. Intermediate fluency, which goes from the end of the third year to the end of the fifth year.
- 5. Advanced fluency, which occurs between the end of the fifth year and the end of the seventh year.

Each of these stages demands for its own techniques and strategies, and for that reason we made an initial assessment of all the students in the project. Once they were assigned their own stage of second language acquisition, we selected those in stages 1, 2 and 3 because we thought the tasks at the platform would work best with them. For students in stages 4 and 5, more specific measures were advised, such as one-to-one conversations with their teachers, oral expositions and accuracy exercises designed to correct their individual language errors.

Next we established a time frame: the students in the project would use the LMS for one academic year, at the end of which there would be an assessment of the results. The idea was that, apart from the hours spent in the pullout groups, mainstream teachers would prepare interactive tasks for Moodle in order to promote understanding and the development of academic Spanish. Some teachers who felt uncomfortable or unconfident with SLLs volunteered, hoping that blended learning would solve their communication problems. They taught, among others, such instrumental subjects as Maths, Science or Geography.

The underlying principle to all the tasks was schema theory, according to which learning occurs when we connect the new information being received to background knowledge or knowledge previously acquired, called schemata. Therefore, when we receive a message, we not only use the words in it to obtain its meaning, but also make use of our knowledge of similar messages, which is stored in our memory (internal schemata). According to Omaggio (1986: 102), "there are two basic kinds of schemata used in interpreting messages; content schemata (relating to the individual's background knowledge of the world and expectations about objects, events, and situations) and formal schemata (relating to the individual's knowledge of the rhetorical or discourse structures of different types of texts)".

Being grounded on schema theory, all tasks began with a simple instruction: "Before you begin doing this task, take a couple of minutes to answer the following question: what do you already know about this topic?" The point, as can be imagined, was to activate background knowledge. Next, some advance organizers were given. Advance organizers are (Hill and Flynn, 2006: 31) "organizational frameworks presented in advance of lessons that emphasize the essential ideas in a lesson or unit. They focus student attention on the topic at hand and help them draw connections between what they already know and the new knowledge to be learned."

As an example, these are the instructions given for understanding a Science lesson done with eXeLearning:

1 Skim through the text: make sure you understand the title and the headings; look at the pictures and find why they are relevant to this lesson; can you foresee and foretell some of the main ideas in this lesson?

2 Read the text and select those words you don't understand. Make a list. Check your list with those of your classmates. See how many words from your list they know and how many you know form their lists. Ask the teacher to explain the words whose meaning you couldn't find.

3 Read the text again. Summarize the main ideas. Prepare some questions for your classmates. Ask them your questions and, in turn, answer theirs. Make a group of 3 or 4 and prepare a final outline of the lesson.

4 UP TO THE CHALLENGE

The challenge that SLLs pose for the Spanish educational system may have a working answer in blended learning. The present point gives a detailed account of our own LMS.

First, these tasks often include recordings of Spanish together with listening academic comprehension questions, which help SLLs learn skills such as listening for the gist. The activities offer advance organizers so that SLLs can establish a connection between background knowledge and the new information they are receiving. Second, some of these tasks involve working cooperatively with several native speakers so that SLLs are forced to seek information and answer questions in Spanish. Next, interactive tasks within an LMS can be done outside the limited framework of school time because they are open and ready to be used 24/365 days a year. As some of these kids do not have a computer at home, the school kept the computer room open and supervised at certain scheduled periods. Finally, these tasks are divided into levels so that each student can get the one which best suits his or her capabilities.

In our case, organization was of paramount importance ever since there had to be a perfect synchronicity between face-to-face interaction and on-line delivery. Every learning object we devised for the platform had to answer one or more of the following questions (Koper, R., 2003:7):

1. What does a person or group learn (knowledge, competencies, skills, insight, attitudes, intentional behavior) and in which domain?

2. What kinds of activities must be carried out to learn? For example: observing, describing, analyzing, experiencing, studying, problem solving, experimenting, predicting, practicing, exploring and answering questions.

3. How should a learning situation be arranged (context, which people, which objects) and what relationship does the situation have to the teaching-learning process?

4. To what extent are the components of the situation present externally and to what extent are they represented cognitively-internally?

5. How, precisely, do the learning and transfer processes occur?

6. How is motivation stimulated?

7. How is the learning result captured?

8. How should activities be stimulated?

Over the years we have been involved in CLIL (Content and Language Integrated Learning) activity courses for learners of English and indeed our learning objects, we felt, had to be devised in this way; that is, all of the contrived learning events incorporated the contents taught in the mainstream classes with a bias towards language acquisition. Timing and organization was crucial as anyone can imagine. The idea was to go one step in ahead of ordinary face-to-face classes in order that these students had an idea of what was going on in the class and prepare adequate questions which would enhance their efficiency both in the Spanish language and in the subject they were being taught. The weight was naturally laid on the Spanish language and, as the year's course wore on, there was a shift of emphasis from language to content learning. By and by their competence in the classroom increased and so did their confidence in Spanish; consequently the relationship with their classmates also improved. After the first two weeks of training thus, some were over the moon with exhilaration and were really looking forward to the next unit; whereas only a month before they had been haggard, sluggish and discouraged. Seldom have we seen students look forward to the welcoming reprise of activities in the learning system.

Our activities fulfill all of the precepts described by Merrill (2003: 66): "... the most effective learning products or environments are those that are problem-centered and involve the student in four distinct phases of learning: (1) activation of prior experience, (2) demonstration of skill, (3) application of skill and (4) integration of these skills into real-world activities". On the whole our prelesson activities result in a pick-and-mix of the models described by Margaret Driscoll (2003: 30) for blended learning, wrought with the exclusive tools and resources provided by the LMS or those "authoring tools" or SCORM compliant programs integrated in it:

1. To combine or mix modes of web-based technology (e.g., live virtual classroom, self-paced instruction, collaborative learning, streaming video, audio, and text) to accomplish an educational goal.

2. To combine various pedagogical approaches (e.g., constructivism, behaviorism, cognitivism) to produce an optimal learning outcome with or without instructional technology.

3. To combine any form of instructional technology (e.g., videotape, CD-ROM, web-based training, film) with face-to-face instructor-led training.

4. To mix or combine instructional technology with actual job tasks in order to create a harmonious effect of learning and working.

Every one of our units took to this learning scenario with activities deftly crafted and carefully planned:

- 1. Vocabulary.
- 2. Grammar.
- 3. CLIL.
- 4. Summary.

Different activities or "learning objects" (Arcos, F., Ortega, P., Amilburu A., 2007: 2) were implemented to be included underneath our four headings, and summarized here:

- -Comprehension exercises made from audio or video clips.
- -Comprehension exercises made from texts. -Dictations.
- -Grammatical and lexical exercises.
- -Rephrasing and rewriting exercises.
- -Essay writing (assignments and workshops in Moodle).
- -Write glossaries for the subjects (activity in Moodle).
- -Digital stories (handed in and assessed through Workshops in Moodle)
- -Create a FAQ for each subject.
- -Have a "useful links" sections to be used in the classroom (Spanish newspapers, magazines, dictionaries, etc.).

5 CONCLUSIONS

As explained at the beginning, in order to assess the results of our project accurately, 15 SLLs were included in it, while another group of 15 SLLs kept on doing the traditional immersion program. Table 1 offers a register of some of the tasks both groups did, with individual marks and averages for comparison. The marks range from 0 to 100, the latter equivalent to perfection. Nine lessons were covered, each including between 10 and 14 tasks. Data for the first three (columns L1, L2, L3) and the total average (column (AVG) are given. It should be pointed out that all the exercises were done and improved in the group that used the LMS (data was collected in the "grades" module) whereas not everybody handed in the exercises in the other pullout group. This was either because they didn't do it, or because they missed out a class that day and did not have the opportunity to hand it in later. Also, they did not have the chance of improving the mark by doing it again; something the students who used the LMS had. Diagrams showing the performance of both groups are also enclosed below.

Group 1	L1	L2	L 3	AVG
Student A	88.44	68.98	81.85	86.58
Student B	85.03	63.84	84.74	84.19
Student C	87.96	64.58	90.31	81.54
Student D	84.4	64.33	85.42	79.42
Student E	88.26	53.58	92.83	79.28
Student F	91.34	54.69	73.31	79.27
Student G	86.71	58.41	80.33	78.47
Student H	87.76	59.98	94.66	78.25
Student I	83.12	60.69	77.64	77.8
Student J	85.98	60.84	86.58	77.7
Student K	81.21	64.62	81.51	77.69
Student L	89.69	57.79	79.74	77.38
Student M	76.53	65.44	77.6	77.36
Student N	86.09	56.19	74.87	77.18
Student O	85.87	61.09	88.95	76.86
Group 2	L1	L2	L 3	AVG
Student 1	67.64	55.34	L 3 61	66.59
-			_	
Student 1	67.64 61.1 67.64	55.34	61	66.59 61.97 61.85
Student 1 Student 2	67.64 61.1	55.34 63.81	61 98.6	66.59 61.97
Student 1 Student 2 Student 3	67.64 61.1 67.64	55.34 63.81 52.22	61 98.6 54.1	66.59 61.97 61.85
Student 1Student 2Student 3Student 4	67.64 61.1 67.64 62.82	55.34 63.81 52.22 40	61 98.6 54.1 38.5	66.59 61.97 61.85 61.23
Student 1 Student 2 Student 3 Student 4 Student 5	67.64 61.1 67.64 62.82 80.24 65.86 78.22	55.34 63.81 52.22 40 39.66 29.38 36.69	61 98.6 54.1 38.5 32.67	66.59 61.97 61.85 61.23 56.17 54.77 52.91
Student 1 Student 2 Student 3 Student 4 Student 5 Student 6	67.64 61.1 67.64 62.82 80.24 65.86	55.34 63.81 52.22 40 39.66 29.38	61 98.6 54.1 38.5 32.67 73.13	66.59 61.97 61.85 61.23 56.17 54.77
Student 1 Student 2 Student 3 Student 4 Student 5 Student 6 Student 7	67.64 61.1 67.64 62.82 80.24 65.86 78.22	55.34 63.81 52.22 40 39.66 29.38 36.69	61 98.6 54.1 38.5 32.67 73.13 63.5	66.59 61.97 61.85 61.23 56.17 54.77 52.91
Student 1 Student 2 Student 3 Student 4 Student 5 Student 6 Student 7 Student 8	67.64 61.1 67.64 62.82 80.24 65.86 78.22 63.84	55.34 63.81 52.22 40 39.66 29.38 36.69 37.36	61 98.6 54.1 38.5 32.67 73.13 63.5 93.35	66.59 61.97 61.85 61.23 56.17 54.77 52.91 52.84
Student 1 Student 2 Student 3 Student 4 Student 5 Student 6 Student 7 Student 8 Student 9 Student 10 Student 11	67.64 61.1 67.64 62.82 80.24 65.86 78.22 63.84 35.65	55.34 63.81 52.22 40 39.66 29.38 36.69 37.36 43.14	61 98.6 54.1 38.5 32.67 73.13 63.5 93.35 40.56	66.59 61.97 61.85 61.23 56.17 54.77 52.91 52.84 52.04
Student 1 Student 2 Student 3 Student 4 Student 5 Student 6 Student 7 Student 8 Student 9 Student 10	67.64 61.1 67.64 62.82 80.24 65.86 78.22 63.84 35.65 79 67.88 59.61	55.34 63.81 52.22 40 39.66 29.38 36.69 37.36 43.14 36.41	61 98.6 54.1 38.5 32.67 73.13 63.5 93.35 40.56 75.48	66.59 61.97 61.85 61.23 56.17 54.77 52.91 52.84 52.04 51.29
Student 1 Student 2 Student 3 Student 4 Student 5 Student 6 Student 7 Student 8 Student 9 Student 10 Student 11	67.64 61.1 67.64 62.82 80.24 65.86 78.22 63.84 35.65 79 67.88	55.34 63.81 52.22 40 39.66 29.38 36.69 37.36 43.14 36.41 33.97	61 98.6 54.1 38.5 32.67 73.13 63.5 93.35 40.56 75.48 35.55	66.59 61.97 61.85 61.23 56.17 54.77 52.91 52.84 52.04 51.29 50.31
Student 1 Student 2 Student 3 Student 4 Student 5 Student 6 Student 7 Student 8 Student 9 Student 10 Student 11 Student 12	67.64 61.1 67.64 62.82 80.24 65.86 78.22 63.84 35.65 79 67.88 59.61	55.34 63.81 52.22 40 39.66 29.38 36.69 37.36 43.14 36.41 33.97 47.86	61 98.6 54.1 38.5 32.67 73.13 63.5 93.35 40.56 75.48 35.55 69.74	66.59 61.97 61.85 61.23 56.17 54.77 52.91 52.84 52.04 51.29 50.31 49.88

Table 1:Results of both groups compared.

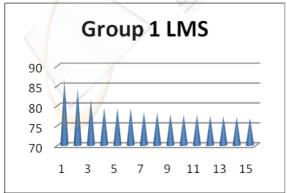


Figure 1: Averages for the LMS group in fifteen tasks.

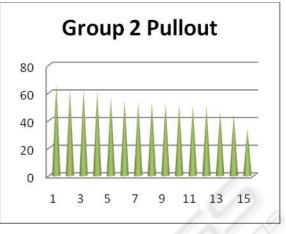


Figure 2: Averages for the Pullout group in fifteen tasks.

After analyzing the enclosed figures, it was agreed by all parts involved that the first group have progressed further and faster than the second one. We talked to teachers and students, who mostly expressed their favourable opinions of the Moodle platform. Teachers said that tasks were finely tuned to the actual students' needs and thus clearly helped them improve their language skills. Ample opportunities for using academic language in relevant contexts were provided. They added that some of the students have revealed themselves as adroit language users, something they didn't expect judging from their experiences in previous years. The LMS had been received with a certain degree of reticence, as it usually happens with new tools. Then, there is the fact that starting off is always hard: the LMS took a lot of time and effort for something which they saw, at its best, as an uncertain promise. However, at the end of the project, they all considered that the LMS had given much better results than they had expected. One of them exclaimed: "Not even in my wildest dreams did I ever anticipate such fruitful achievement!"

As for the students, they felt grateful and proud at a time. On the one hand, they were vividly conscious of their progress, something which boosted their self-esteem and which made them thank their teachers once and again. On the other, they took a more active role in mainstream subjects thanks to their new language confidence. They expressed their wish to keep on moving ahead, and now dreamt of... who knows, maybe even university. Even their parents came to the school and overwhelmed teachers with their gratitude, having the impression that their children were now making their own way.

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