MOTIVATING STUDENTS THROUGH TECHNOLOGY: USING MEDIA AND COLLABORATIVE TECHNOLOGIES IN LANGUAGE TEACHING AND LEARNING

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Abstract

We present a language teaching experience designed according to the principles of blended learning. Participants were a group of students from the Universidad Católica de Valencia (Spain) in interaction with a smaller group of native English speakers. The first group was formed by 14 Spanish learners of English of upper intermediate level enrolled in a face-to-face course which involved two weekly teaching sessions in the classroom. The second group had 4 English native speakers. Both groups had experience of working over the internet using a Moodle Virtual Learning Environment. The aim of the experience was for the Valencian students to work in groups face-to-face and then interact in an asynchronous forum with the native English speakers. The classroom activities followed these steps: a) preparatory work using different media and focusing on content and vocabulary, b) revision of some grammar points, c) an asynchronous discussion in a forum. Participants filled a survey assessing their preferred learning style. In a follow-up interview, participants reported having enjoyed the experience, feeling very motivated, and wanting to repeat it.

Keywords: blended learning, technology, English as a Foreign Language, Moodle, Virtual Learning Environment, ATTLS.

1 INTRODUCTION

Blended learning, the combination of face-to-face teaching and the use of media and collaborative technologies is one of the most prominent pedagogical approaches in the modern languages classroom (see an introduction in Sharma [1]). The blended learning approach encourages teachers to use internet for finding materials such as videos, songs, and texts, and this is highly motivating for learners and teachers alike. Learners are encouraged to work collaboratively in the classroom and to interact outside it using internet and different forms of computer mediated communication (CMC) such as chat rooms and forums. Perhaps one of the most rewarding uses of CMC in the blended learning classroom is the nurturing of learners' communities which in turn can foster learner autonomy and promote feelings of relatedness towards others in the group. CMC can also facilitate contact with native speakers of the target language. All these factors are known to have a huge positive impact on the students’ motivation.

The crucial element in any well-designed blended learning classroom activity is the careful balancing of teacher instruction and technology by means of a well-thought out lesson plan. As argued by Sharma [1] along with many others, a good blended learning lesson plan should ensure that technology blends in smoothly with the learning objectives, complementing and enhancing them but not overpowering them.

The activities developed and tested in this study are directly inspired by the concept of blended learning and by the social model of language learning put forward by Dougiamas and Taylor (e.g. [2]). Working from a social constructivist approach, Dougiamas and Taylor developed an open source virtual learning environment (VLE) called Moodle (http://moodle.com/, see Dougiamas [3]), which has become one of the most widely used VLE systems in the world. Moodle incorporates tools for social learning such as forums, chat rooms, and wikis.

Moodle also facilitates instruments for assessing participants’ beliefs and conceptions of knowledge. One these instruments is the Attitudes Towards Thinking and Learning Survey (ATTLS) which measures participants’ beliefs and attitudes about knowledge. The ATTLS stems from the earlier work of Galotti and collaborators on "ways of knowing", which investigated the gender-specific ways in
which men and women approached the acquisition of learning in interaction with others, as for instance in a forum (see [4] for a review).

The ATTLS has two sub-scales, one measuring "connected knowing" and the other "separate knowing", with 10 items each (see Appendix A). Being a "separate learner" involves a preference for objective and analytical behaviour, and a penchant for argument and debate. Being a "connected learner" involves trying to see things from the other person's perspective, and trying to understand their reasons and arguments. Some previous work that has successfully applied the ATTLS is, for instance, Dougiamas and Taylor [2], Dougiamas [3], and Laghos and Zaphiris [5].

MacKeracher ([4], pp 165) reviews the literature on ways of knowing and offers a summary of the main differences between separate (or autonomous) learning and connected (or relational) learning. Of special interest for us is her comparison of learning activities [4, pp 168]:

<table>
<thead>
<tr>
<th>Separate learning</th>
<th>Connected learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prefers self-directed activities, competes in group activities</td>
<td>Prefers collective or collaborative group activities or learning partner-ships</td>
</tr>
<tr>
<td>Challenging ideas of others</td>
<td>Listening when knowledge is uncertain</td>
</tr>
<tr>
<td>Convincing others through logic</td>
<td>Convincing others through sharing</td>
</tr>
<tr>
<td>Maintaining order through explicit agreement to abide by rules</td>
<td>Maintaining order through implicit agreement to avoid conflict</td>
</tr>
<tr>
<td>Resolving conflict through detached imposition of rules</td>
<td>Resolving conflicts through reconciling differences</td>
</tr>
<tr>
<td>Doubting or excluding other's ideas until their worth has been proven</td>
<td>Believing others' ideas in order to expand one's own understanding</td>
</tr>
<tr>
<td>Attempting to reveal truth that is general, impersonal, grounded in rational,</td>
<td>Attempting to create truth that is personal, particular, and grounded in first-</td>
</tr>
<tr>
<td>logical thought or generalized perception of reality</td>
<td>hand experiences, unique historical/personal events</td>
</tr>
<tr>
<td>Maintaining objectivity through adopting frame of reference of discipline (e.g.</td>
<td>Maintaining objectivity through understanding frame of reference of other person(s)</td>
</tr>
<tr>
<td>biology, social work or authority (e.g. the instructor)</td>
<td></td>
</tr>
<tr>
<td>Holding thought and feeling separate</td>
<td>Keeping thought and feeling together</td>
</tr>
</tbody>
</table>

MacKeracher [4] stresses that both modes of learning complement each other and that maturing as a learner generally involves acquiring a balanced set of strategies. Both modes of learning should be thus seen as a range of strategies that individuals deploy as they deem appropriate to the situation rather than deep-set cognitive states.

2 AIMS OF THE STUDY AND METHODOLOGY

The driving aim of the study was the assumption that the strongest motivating factor for students to take part in the proposed classroom activities is to interact with each other and with authentic and meaningful materials presented through a variety of media. We thus assumed that our students were "connected learners".

The aim of the classroom activities was to get the students to work in groups and then interact asynchronously in a forum with some native English speakers. The activities followed these steps: a) preparatory work using different media (e.g. video + text on "Ugly Betty") and focusing on content and vocabulary, b) revising grammatical content, c) asynchronous discussion in the forum.

The classroom experience was planned as an extracurricular activity combining face-to-face sessions with an online tele-collaborative component. We used a blended learning approach, via a Virtual Learning Environment (to be used in the classroom or at home), which included a forum, and face-to-face activities using videos and texts from internet.

The use of the collaborative online tools embedded in Moodle afforded social participation and interaction with native language speakers. We believed that this should result in a boost to their
motivation and in the final outcome of achieving "better" learning. The activities were designed to cover all four skills: listening, speaking, reading and writing.

2.1 Context and participants

The teaching and learning experience reported here was carried out at the Faculty of Education, Universidad Católica de Valencia during the academic year 2010-11.

2.1.1 Participants

17 participants, 10 women and 7 men, volunteered to take part in this study. Of them, 14 completed all the stages, including the ATTLS survey. The present study will focus on these 14 participants, and especially, on a case study which is highly representative of the general tendencies exhibited by the participants.

Participants were recruited from a cohort of 38 students enrolled in a module on English as Foreign Language (EFL) which is part of a primary education degree specialising in English Language. Lectures are in English, last for 80 minutes and take place in the late afternoon. The EFL module is taught by the first author. The format is a traditional face-to-face setting in which students are encouraged to use the target language and participate actively.

Although 38 students were registered in this module, only 17-20 of them attended regularly. Over half of the students were mature learners and many of them held another degree and/or were working. Some of them were married and had children. This combination of factors resulted in quite a committed and cohesive group; they tended to participate actively in the class and they helped and supported each other.

2.2 Activity and procedure

The main goal of the activity was to promote the use of the target language, practising all four skills; listening, speaking, reading and writing in a way that was social, fun and engaging and motivating for students. Additionally, we aimed at providing students with a real communicative situation by inviting them to interact online among themselves and with an invited group of native English speakers.

We ensured that both sets of participants had worked on a similar topic; in this case, the topic was gender stereotypes, related to physical appearance and work competence. This was a topic considered of interest to all students and which did not require extensive preparation.

The experience took place over three days. On the first and second day students worked in groups preparing and discussing the topic (see section 2.2). On the third day they answered the ATTLS survey (presented in Spanish, see Appendix A) which measures their attitudes towards connected and separated learning. On this session they posted and answered messages in a forum (see section 2.3). For this and for the survey, we used Moodle. Students regularly use Moodle at the university, so they did not have any difficulty.

We used the well-known Jigsaw classroom methodology developed by Elliott Aronson and collaborators (see [6]). This is a cooperative learning technique, which places great emphasis on authentic communication and work in groups or pairs. Some of the benefits of this method are: students learn from each other; they communicate and negotiate; and, they share difficulties.

2.2.1 First session

17 students, 10 female and 7 male, attended this first session. We formed 3 groups of 4 members and one of 5. Since the topic we were dealing with was gender stereotypes, it was vital that the groups were mixed. Groups were organised so that all of them had at least one male student.

Step 1, Introduction. Students listened to the song *If you want to be happy* [7](see Appendix B), which provided a first contact with the topic and an opportunity to revise the first conditional. Students gathered around two tables, forming a circle. The text of the song was divided into small fragments (2 to 4 verses) and these were distributed randomly. Students then listened again to the song and reordered the verses. Finally, the original text was distributed amongst the students and they sang along. We show here the first stanza:

If you wanna be happy for the rest of your life
Never make a pretty woman your wife
So from my personal point of view
Get an ugly girl to marry you

Step 2, Awareness raising. First students discussed the theme of the song and how this was conveyed by the choice of words. Some students were familiar with the song, but not necessarily with the actual words or with the message. Students were invited to express their opinions about the meaning of the song and to discuss it among themselves. This provided an opportunity for revising the use of expressions for agreement and disagreement.

Step 3, Introducing a text on "Ugly Betty". The text was taken from a blog on "Ugly Betty" [8] (see Appendix B) which comments on the main social and gender stereotypes in this television show. First, some hints were given and students were encouraged to guess which show the text was about.

Step 4, Jigsaw work. Students were divided into groups of 4 and one group of 5. Group members were numbered 1 to 4 (or to 5 in one group). Students with the same number formed new groups and moved to different parts of the classroom. Students read the text quickly, each group focusing in one specific section. Difficult vocabulary was marked in bold and each group received an envelope with the definitions of those words. Students discussed the words in English until they reached an agreement about the appropriate definitions. The instructor supervised the group work and helped out when needed.

2.2.2 Second session

Step 1, Vocabulary exercises. Practise of vocabulary related to jobs and profession.

Step 2, Re-introduction of "Ugly Betty" followed by short discussion on jobs and gender.

Step 3, Jigsaw work. The groups resumed work on the text on "Ugly Betty". Finally, the groups reconvened and the "experts" for each section returned to their original group and explained to the other members of the group what they have just learnt. The instructor walked from group to group, making herself available to answer questions, and checking on progress of the work.

2.2.3 Third session

This session took place in a multimedia room with computers for every student and a digital board.

Step 1, Moodle. Students logged on to Moodle and filled their profile with information about themselves, their hobbies, etc. Then they answered a questionnaire on learning styles (ATTLS, see Appendix A).

Step 2, Forum activity on Latin American telenovelas. Telenovelas (culebrones, Spanish soap-opera) are long-winded Hispanic television shows. A prompt showed two points of view: telenovelas as a tool to promote Hispanic language and culture vs. telenovelas as a glorification of sexism, easy money or even violent crime. Students posted comments in reaction to the prompt and replied to other students' comments.

3 RESULTS

First of all, the results of the ATTLS survey were computed automatically by Moodle, which also provided detailed analyses (item by item, student by student, etc.) and graphic displays. We exported the scores onto an Excel spreadsheet to apply tests of statistical significance. Then we analysed the participation in the forum, noting the number of interventions and whether these were in response to a previous posting or, on the contrary, they initiated a new discussion.

3.1.1 Learning styles: connected and separate learning

The analysis of the ATTLS survey showed that the group overall preferred a connected learning style over a more separate learning. Of the 14 participants, 10 showed a clear preference for connected learning (2 male and 8 female) and just 4 (1 male and 3 female) for separate learning. We see the mean scores for the group and for one particular student representative of the general tendency, Pedro.
Figure 1 – Mean scores (with standard deviation bars) in the ATTLS survey for Pedro

The dark blue lines in Figure 1 shows the mean scores of student Pedro (not his real name) against the means of the group (light blue lines for the scores and light blue rectangles for the standard deviations).

Pedro is a representative example of the general tendencies in this group and for this reason we have chosen him as a case example. We invited him to a follow-up interview and he kindly accepted. In what follows, we will analyse Pedro's performance in the survey, in the forum, and explore his views on the experience in an in-depth interview.

Pedro's profile corresponds to the average profile of students in this group. Overall, the group showed a clear preference for connected learning. As we see in Figure 1, the survey items measuring connected learning received much higher scores than those measuring separate learning and this difference was statistically significant at the \( p < .05 \) level (\( p = .02 \)).

There was one student (Xavi, not his real name), with very high scores in connected learning and very low scores in separate learning. A third student (Pol, not his real name) had very high scores on both sub-scales. With the exception of Xavi and Pol, students in general showed a very balanced profile, a profile similar to that of Pedro.

Below we see how Pedro scored in each of the sub-scales. Figure 2 and 3 display the mean scores for Pedro and for the group in the connected learning sub-scale and in the separate learning (see the items in each sub-scale in Appendix A).
Figure 2 – Mean scores (with standard deviation bars) in the connected learning sub-scale for Pedro

Figure 3 – Mean scores (with standard deviation bars) in the separate learning sub-scale for Pedro

Figure 2 shows that Pedro strongly agrees with the 7 of the 10 items in the connected learning sub-scale and he agrees to some extent with the remaining 3 items. Overall, he shows a strong tendency towards connected learning, a tendency that he shares with the rest of the group. Figure 3 shows that Pedro strongly agrees with 4 items in the separate learning sub-scale. He believes in arguing and the power of discussion.
### 3.1.2 Participation in the forum activity

There were 33 interventions in total between the 14 participants, which means an average of 2 or 3 interventions per student. Table 2 displays the number of interventions per student and per group.

<table>
<thead>
<tr>
<th>Separate learners</th>
<th>Initiates discussion</th>
<th>Replies</th>
<th>Connected learners</th>
<th>Initiates discussion</th>
<th>Replies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cecilia</td>
<td>1</td>
<td>5</td>
<td>Emilia</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Mariana</td>
<td>1</td>
<td>1</td>
<td>Fidel</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Emilio</td>
<td>-</td>
<td>3</td>
<td>Xavi</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Pamela</td>
<td>-</td>
<td>1</td>
<td>Mireia</td>
<td>-</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mona</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Federico</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pol</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Carolina</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pedro</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 2 – Participation in the forum measured in number of turns initiating or continuing a discussion. Students are divided into separate and connected learners according to their results in the ATTLS.

The separate learners made 12 interventions, 3 each on average, whereas the connected learners made 21 interventions, 2 each on average. There is also a difference in the distribution of the responses according to whether they were initiating a discussion or replying to a previous posting. Separate learners initiated 2 discussions and replied to 8 previous postings (25% of discussion-prompting postings). Connected learners initiated 7 discussions and replied to 15 (50% of discussion-prompting postings).

Although it is tempting to interpret such differences as coming from the specific orientation to learning and knowledge of each participant, we must exert some caution because there were important individual differences within both separate and connected learners.

### 3.1.3 Semi-structured interview

In the follow-up interview, Pedro (28, male, and an agronomist) expressed a strong tendency towards connected learning. His answers highlighted a marked participative attitude: he was keen on participating both expressing his ideas and listening to his classmates. He also showed his likeness for game or game-like related activities when learning a second language. He reported that when he was doing his first degree, he had enjoyed using forums in his English and French lessons.

Pedro placed emphasis in the importance of a good choice of topics to foster discussion, so all students can get involved and stimulated to give their opinion. He pointed out he was especially pleased with the chosen topic, gender stereotypes. He liked the topic and the way it was introduced in the classroom, since it was different from typical classroom exercises. Also, he liked the different activities involving group participation. These answers coincided with his answers in the ATTLS survey: “make an effort to extend” (19), “insight from empathy” (18), “put myself in their shoes” (15), “try to understand” (13), and “interact with variety” (5) (see items in Appendix A).

With regard to the text on "Ugly Betty", he admitted it had a reasonable degree of difficulty. The text was challenging enough to learn new structures and vocabulary. The activities were designed in a way that allowed students to understand the text with the collaboration of the group.

He also underlined that working in a small group favours communication in the target language. It helped to feel less embarrassed speaking in a second language with classmates to whom he is used to speak in the shared first language. This can also be seen in his answers to questions 8, 13, 18 (in which he “strongly agreed”), and 11 and 15 (where he “somewhat agreed”).

Furthermore, he stressed the effort made to communicate with the classmates, listen to them and try to speak accurately. This corresponds with his ATTLS answers related to “empathy” (18), “put myself in their shoes” (15), “try to understand” (13) and “enjoy hearing opinions” (6).

Finally, Pedro said that he enjoyed working in class, but he did not feel very motivated to get more involved in the forum activity because of some ongoing personal difficulties. This explains why despite showing eagerness, both in the questionnaire and in the interview, he did not participate much in the forum.
4 DISCUSSION

We have developed and tested a set of classroom activities for learning EFL. The activities were designed according to the guiding principles of the blended learning approach and were also inspired by the tenets of social constructivism. Making use of the internet, we searched for videos, music and texts that were engaging and exciting for the learners and teachers alike. We organised three consecutive lessons that blended technology and media and that required maximal collaboration and interaction among the students. To ensure this, we used the Jigsaw technique, which creates a real communication gap that forces students to perform collaboratively to the maximum of their abilities. As revealed in the ATTLS survey and on the follow-up interviews, participants reported a strong tendency towards a connected mode of learning.

We have seen this very clearly in the case study of student Pedro. His results in the survey showed a preference for learning in collaboration with others - he was a clear example of connected learning. However, as any mature and experienced learner, he also had some traits of the separate learner. In this, his results were in line with those of the rest of the group. Furthermore, Pedro's results were supported and clarified by the follow-up semi-structured interview where he reported having enjoyed working collaboratively.

REFERENCES


**APPENDIX A**

English version of the ATTLS items (participants received a Spanish version).

Connected learning is measured by items 3, 4, 5, 6, 8, 11, 13, 15, 18 and 19. Separate learning is measured by items 1, 2, 7, 9, 10, 12, 14, 16, 17, and 20.

Responses: Strongly disagree, Somewhat disagree, Neither agree nor disagree, Somewhat agree, Strongly agree

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*The purpose of this questionnaire is to help us evaluate your attitudes towards thinking and learning. There are no 'right' or 'wrong' answers; we are interested only in your opinion. Please be assured that your responses will be treated with a high degree of confidentiality, and will not affect your assessment.*

**In discussion...**

1. In evaluating what someone says, I focus on the quality of their argument, not on the person who’s presenting it.
2. I like playing devil's advocate - arguing the opposite of what someone is saying.
3. I like to understand where other people are 'coming from', what experiences have led them to feel the way they do.
4. The most important part of my education has been learning to understand people who are very different to me.
5. I feel that the best way for me to achieve my own identity is to interact with a variety of other people.
6. I enjoy hearing the opinions of people who come from backgrounds different to mine - it helps me to understand how the same things can be seen in such different ways.
7. I find that I can strengthen my own position through arguing with someone who disagrees with me.
8. I am always interested in knowing why people say and believe the things they do.
9. I often find myself arguing with the authors of books that I read, trying to logically figure out why they're wrong.
10. It's important for me to remain as objective as possible when I analyze something.
11. I try to think with people instead of against them.
12. I have certain criteria I use in evaluating arguments.
13. I'm more likely to try to understand someone else's opinion than to try to evaluate it.
14. I try to point out weaknesses in other people's thinking to help them clarify their arguments.
15. I tend to put myself in other people's shoes when discussing controversial issues, to see why they think the way they do.
16. One could call my way of analysing things 'putting them on trial' because I am careful to consider all the evidence.
17. I value the use of logic and reason over the incorporation of my own concerns when solving problems.
18. I can obtain insight into opinions that differ from mine through empathy.
19. When I encounter people whose opinions seem alien to me, I make a deliberate effort to 'extend' myself into that person, to try to see how they could have those opinions.
20. I spend time figuring out what's 'wrong' with things. For example, I'll look for something in a literary interpretation that isn't argued well enough.
APPENDIX B

If you wanna be happy

http://letras.terra.com/skatalites/1259846/

<table>
<thead>
<tr>
<th>If you wanna be happy for the rest of your life</th>
<th>(Chorus)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never make a pretty woman your wife</td>
<td>Say man!</td>
</tr>
<tr>
<td>So from my personal point of view</td>
<td>Hey baby!</td>
</tr>
<tr>
<td>Get an ugly girl to marry you</td>
<td>I saw your wife the other day!</td>
</tr>
<tr>
<td>If you wanna be happy for the rest of your life</td>
<td>Yeah?</td>
</tr>
<tr>
<td>Never make a pretty woman your wife</td>
<td>Yeah, an’ she’s ug-leeed!</td>
</tr>
<tr>
<td>So from my personal point of view</td>
<td>Yeah, she’s ugly, but she sure can cook, baby!</td>
</tr>
<tr>
<td>Get an ugly girl to marry you</td>
<td>Yeah, alright!</td>
</tr>
</tbody>
</table>

A pretty woman makes her husband look small
And very often causes his downfall
As soon as he marries her then she starts
To do the things that will break his heart

But if you make an ugly woman your wife
you’ll be happy for the rest of your life

An ugly woman cooks meals on time
And she’ll always give you peace of mind

(Chorus)

Don’t let your friends say you have no taste
Go ahead and marry anyway
Though her face is ugly, her eyes don’t match
Take it from me, she’s a better catch

If you wanna be happy for the rest of your life
Never make a pretty woman your wife
So from my personal point of view
Get an ugly girl to marry you

Ugly Betty

Due to space constraints we just show a pair of representative paragraphs (for the whole text see [8]
'You’ve Got The Look!' Representation and Gender in Ugly Betty http://www.fanpop.com/spots/ugly-
betty/articles/15147/title/youve-look-representation-gender-ugly-betty)

Representation refers to the way people, places etc are portrayed, especially in context of the media and how they are viewed by the audience, which is us. Because they are representations, this means therefore that characters and people on TV and film are branded, shaped, dressed and shown as they are on screen by the producers. In studying these representations, we are decoding them and then drawing on a range of meanings---be it fictional or real; implicit or explicit. By viewing media representations of certain characters and people, we then decide afterwards whether these representations either challenge notions of identity and how certain social and minority groups in society behave, talk and act in real life... or whether they seek to highlight and reflect those cultures, lifestyles and trends. [...]}

[...] The use of stereotypes in TV shows, particularly in Ugly Betty is evident. The male characters are outnumbered by the female ones and yet they are all either stereotypes or display stereotypical traits in their personality. Daniel is the sex addict; Marc is the flamboyant, effeminate gay male; teenager Justin has shown signs of coming out of the closet later on in the series [...]. As for the women, Amanda is the bitchy blonde receptionist, who later finds out she was adopted as a child; Christina is the Scottish seamstress, Claire is a former alcoholic and Hilda is a single mother/ ex-high school drop-out. [...]