

Self-made *Psychology of Groups* bilingual glossary: A participative computer-based methodology

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Resumen

En los contextos de aprendizaje universitario el aprendizaje de nuevos términos resulta fundamental para distinguir al profesional del profano. Se expone el diseño y presentación de una actividad de clase enmarcada en la gamificación con el propósito de elaborar un glosario de términos de la asignatura, que es cursada en la línea de docencia en inglés. Una muestra de 146 estudiantes de primero ubicados en tres hordas distintas, participaron en una tarea propuesta colectiva en la docencia de primer curso en *Psychology of Groups*, del Grado en Psicología. Cada estudiante tuvo que buscar 5 términos y luego subir en grupo 24 de ellos al programa-tipo “Pasapalabra” diseñado en formato Scratch. El glosario final contó con 306 entradas que quedan en constante renovación a través del blog de la asignatura. Se muestran ejemplos de la producción obtenida tras la experiencia pedagógica, así como datos de su eficacia pedagógica y propuesta de mejora.

Palabras clave: *Glosario, Gamificación, Educación Universitaria, NTIC, Internet,*

Abstract

Learning the jargon of a discipline is commonplace in University course assessments. As future professionals, we must distinguish ourselves from the nonprofessional by using technical words and scientific terms link to the field. When it comes to foster discipline-related terminology learnings in tertiary students, teaching initiatives are welcome if they soften this process, mainly tedious and time-consuming. This study informs about an innovative procedure to teach new technical words in order to build a self-made bilingual glossary in the *Psychology of Groups* course/discipline. So far, we have not encounter clear-cut glossary nor dictionary of *Psychology of Groups*. Throughout the academic course, a total of 146 University fresh(fe-)male CLIL students took active part in the process of selecting, defining, contextualizing, and designing a discipline glossary. Each student was asked to locate 5 terms related to the discipline and to design the glossary entries after class selection. Multivoting procedure and nominal group technique were being used to select glossary entries, which were late shown in a series of computer-based game programmes with Scratch in a “pass the word” format. A shortlist of 306 entries from the initial pool finally enabled the construction of 10 “pass the word” games that, considering their launch at the Internet, would certainly ease any on-line student learning process on the matter in a fun way. Nevertheless, the value of the glossary rests greater on the building process than on the final didactic materials.

Keywords: *Glossary, Gamification, Tertiary Education, NTIC, Internet.*

1. INTRODUCTION

What best distinguishes the non-professional talk from the expert one is being knowledgeable in scientific or professional terms dealing with the work field. Medical staff, for instance, have long used rare terminology between them and their patients in a clear attempt to increase power distance (Foucault, 1989; Garman, 1990; Crain, 1992; Clark, 1993). Moreover, specific field terminology can be managed to avoid professional intrusion in a desire to benefit from never-ending years of study. In order to reinforce the learning of new terms, University syllabi should include distinct vocab activities throughout the units because the use of subject terminology is embedded in many academic competences. Paradoxically, the construction of field-related dictionaries or glossaries in a single, close-hand document is nowadays rare due to the existence of general on-line dictionaries in a growing tendency to abandon sequential (versus digital) searches. Many institutions are uploading *their* selection of terms related to their subjects. Just to mention some of them, term-list in group dynamics (<https://facultystaff.richmond.edu/~dforsyth/pubs/terms.htm>), general psychology (<https://psychologenie.com/glossary-of-psychology-terms-definitions>), or social psychology (https://higher.ed.mheducation.com/sites/0072413875/student_view0/glossary.html). However, many of these glossaries are being built from books or handbooks sections rather than classroom notes or tuition. A self-made glossary brings upon student's relevant direct benefits such as (1) cognitive efforts to provide own definition of a term after content comprehension, (2) personalized glossary design that suits course methodology, and (3), precise selection of terms closely related to the course syllabus.

University teachers are encouraged to motivate students' learning with the aid of new technologies of information and communication (NTIC) whose application are nowadays vast and riveting (Hamari, Koivisto, & Sarsa, 2014; Sillaots, 2014). Today's active methodologies and computer-based procedures can assist us in the apprehension of new, to-be-learnt terminology. Moreover, new available software –within a constructive learning methodology-, can embed the learning process in a more natural, exciting, and contextualized approach. NTIC may then turn the annoying task of acquiring terms and definitions into a pleasant game both done individually or in groups. In this sense, today's loyalty programmes have been framed in the so-called field of Gamification.

Gamification is the art of using game mechanics in a non-game environment in order to enhance or change behavior (Kapp, Blair, & Mesch, 2013). In the realm of gamification, games are basically proposed to increase individual commitment towards someone or something. The game is subjected to the expression of unequivocal to-be-learnt or to-be-shown behaviours. For instance, employees taking part in gamification programmes are encouraged to active participate in the daily tasks/objectives and in their inner assessments. Their gaming involvement enables a continuous self-assessment behavior that provides clarification, justice, and comprehension of the working system. Many past theories have stressed the benefits of constant behavior feedback on individuals, especially for those with a highly activated need of achievement (*see* McClelland, 1987; Drucker, 1974).

In education, the purpose of gamification is to increase student engagement and motivation through the introduction of game elements such as tokens, tallies, leaderboards, badges and levels. There are certain characteristics on the use of play that are culturally dependent. While in Western countries we are prone to compete between each other, Eastern communities set games for the sake of individual progress and improvement. Probably, a balance between these two attitudes of competitiveness should be promoted in society and, specifically, in

educational settings. Gamification is used as a way to increase student's engagement and learning. From long ago, evolutionary psychologists have stated the importance of playing in the development of brain functions and social maturity. The joy and excitement of gaming are useful ingredients to foster positive social interactions between individuals regardless their age. Thus, play is a crucial component of cognitive development from birth and through adulthood (Piaget 1962; Vygotsky 1962). Although gamification primarily promotes individual pace of learnings, this study present the use of a game mechanism to be fulfilled both individually and in teams.

2. OBJETIVES

The aim of this study is to prove the didactical and predictable value of a proposed classroom task embedded in the framework of gamification. The purpose of the task was to increase student's knowledge about course professional terminology and their competences to work in groups.

3. METODOLOGÍA

3.1. A-B-C task: Game design

A-B-C task is part of a course activity for fresh(wo)men at Psychology Degree inside the subject of Psychology of Groups. As we are dealing with tuition in a foreign language – English-, it is annually put forward at the beginning of the academic year for students to create a glossary of professional terms. The objectives of the task refer to the:

- (1) Increase student's collaboration to work in group-class.
- (2) Help them to learn complex terminology in a motivational way.
- (3) Foster both individual and collective assignments.
- (4) Learn to learn an specific software proposed.

The task was made up of two phases. The first one consisted on searching for 5 terms related to the realm of *Psychology of Groups* starting from the letter of the student name (or surname). Individually, the terms had to be defined with the following structure:

- (1) Term (in English)
- (2) Pronunciation (non-IPA phonetic transcription)
- (3) Term (in Spanish)
- (4) (Self-made) Definition
- (5) Word-in-use comments

Students had to send them by end of course to collaborate with the completion of the Glossary of Psychology of Groups. Within the process, they could upload their entries at the course blog Excel page (<http://groupapg09.blogspot.com/>) to discuss on them with class. In a second phase, so-called collective task, students were clustered in groups of 5-6 members. Then, they had to arrange and select 24 terms previously defined and to upload them in a “pass-the-word” ring made at Scratch software. Scratch is a free programming language and online community where you can create your own interactive stories, games, and animations. The process of learning the use of Scratch is rather intuitive but students are free to excel in the

elaboration of the ring. The best 10 rings are uploaded for the joy of students that can test their knowledge themselves both individually and in-group competitions. Teacher can then mark students in their individual and group outcomes.

3.2. Sample

A total number of 146 students belonging from three academic years took part in the present study. Considering the three hordes, 86% of participants were female and had 19.3 years old, in average. They were all in second Semester. Deadlines for completing the tasks were accomplished and the class had three sessions in order to control their knowledge by reading / studying the self-made Glossary and to play with Scratch rings.

4. RESULTS

Being a voluntary task, the sample accounted for the 89% of students in average. All participants sent their terms but only 55% of the groups (15 out of 27) completed their Scratch ring. Although students indicated that the task was interesting enough, they did find quite a few difficulties in performing it. First, the adequate selection of the terms within the field whose contents were mixed with different or common areas of Psychology, thus wrongly selected. Surprisingly, teacher's clear hints during the academic sessions in relation to the A-B-C task did not helped much and many of the entries had to be corrected in the process. Secondly, as most important, students show many problems in accessing and completing the ring at Scratch. In strict assessment, only six of the presented rings were 'decently' done.

2.3.1 Glossary of Psychology of Groups

A first PG Glossary (PGG) was composed of 192 entries that were selected from a sample of 730. Redundant or wrong selected entries were consequently, eliminated. In addition, a Glossary section of 114 Collective nouns related to groups was also considered for translation and validation. The final Glossary – named PGG18- was made of 306 entries (*Table 1*). As language is a living body of knowledge, the Glossary is explained and shown in class as a temporary document subjected to constant modifications and improvements.

Workflow (of a team)	Flujo de trabajo (en equipo)	Weerk flou	The amount, sequence and rate order of operations in a particular team.	Workflows are normally represented on flow charts.
Basking In Reflected Glory (BIRG)	Vanagloriarse del éxito ajeno	<i>Básking in relfléktid gloori</i>	Stressing association with successful groups	Opposite effect is named Cutting off reflected failure (CORF)

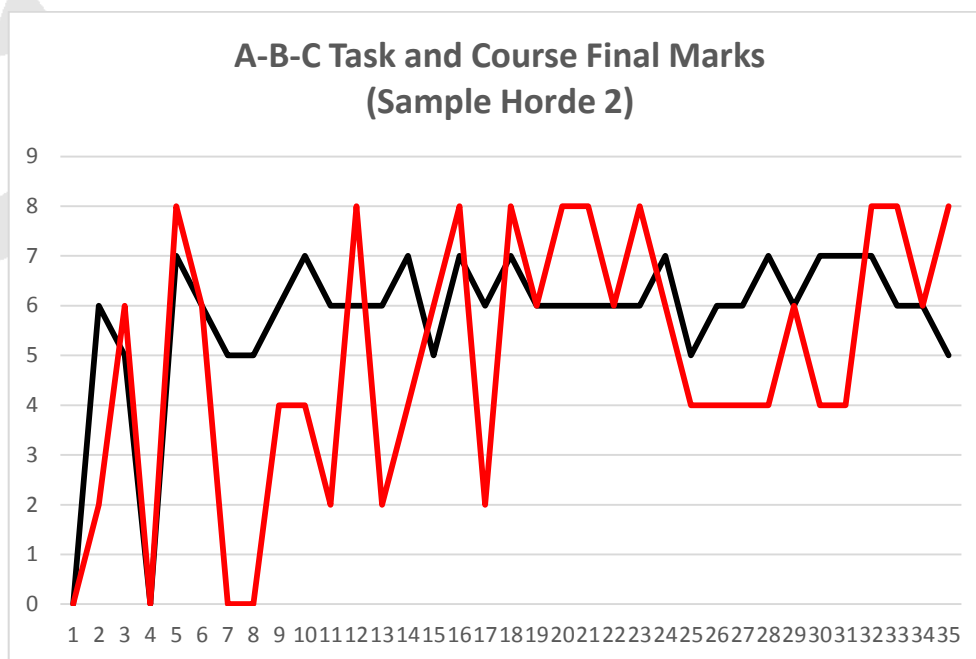
Table 1. Examples of PG18 Glossary entries.

Adjourning (stage)	(Fase de) Suspensión	<i>Adyuurnin</i> (<i>esteich</i>)	Final stage in some models of group development indicating the "temporary" end of the group.	To adjourn: To suspend until a later stated time or to move from one place to another.
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Students are urged to study and understand basic concepts of the subject while developing this task. On a daily basis, they can improve their pronunciation in an informal code by recalling third column and they can also learn to contextualized the term in the last column devoted to additional comments.

2.3.2 Students learning process

In average, students were able to identify and define 2.52 words of the requested five correctly. Half of their answers (glossary terms) were retrieved from other scientific fields, though related to Psychology, other were too broadly defined, and/or did not fulfilled the proposed glossary entry format. Marks from A-B-C task were transformed to match total course mark on a 10-point scale in order to estimate the predictive power of this class activity (see *Graphic 1* for Horde 2). Average score were 4.91 (SD= 2.25) and 5.77 (.92), respectively, and the correlation between variables was 0.51 (n=146). Dependent-sample mean contrast between them was statistically significant ($t=2.19$, $p<.035$) showing weak value of the task to predict final mark. Bering in mind the variability of the marks, we can conclude that ABC task was a complex task for some students although they had plenty of time to perform and monitor on it.

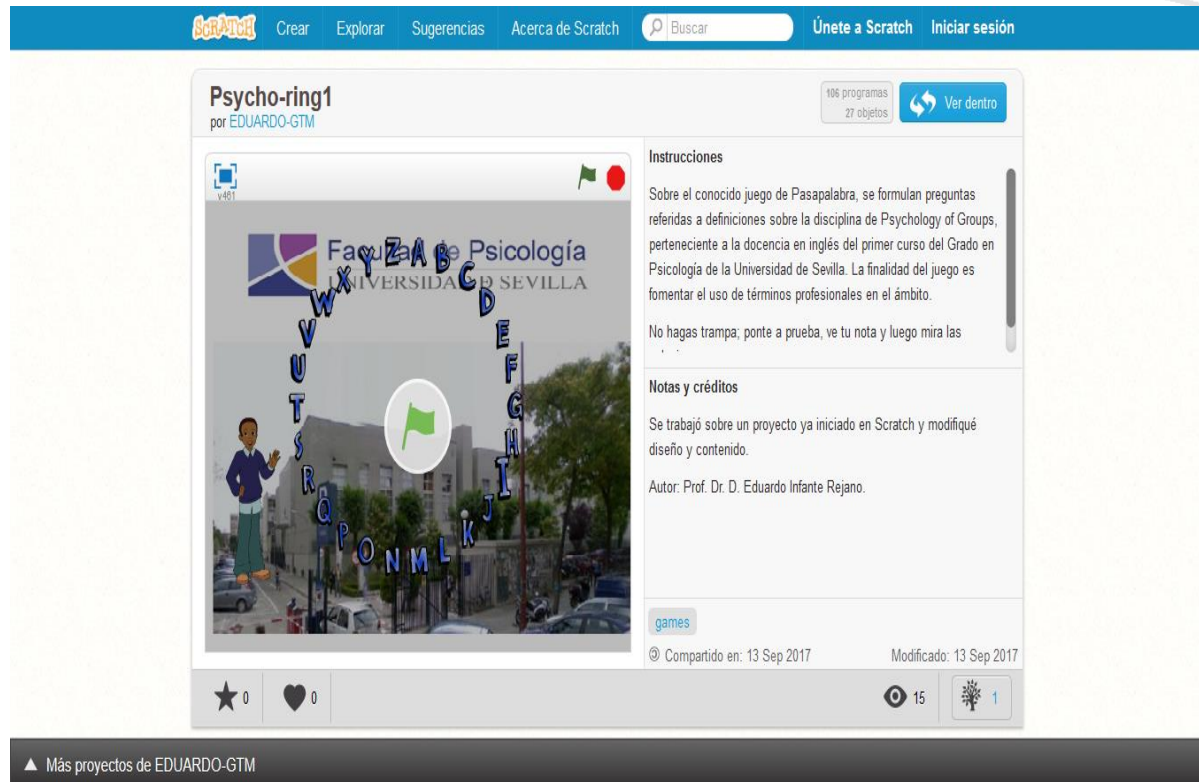


Graphic 1. Estimation of A-B-C task (black line) of the final course mark (in red).

2.3.3. Scratch rings

Many students found difficulties in completing rings at Scratch software. To be performed in groups, students were unable to guess how Scratch programme works (*Graphic 2*). Some of the PGG18 rings were uploaded for the joy and curiosity of worldwide, intellectual internauts

(see <https://scratch.mit.edu/projects/173172328/>).



Graphic 2. FrontPage of the game Psycho-ring1 at Scratch.

5. DISCUSSION AND CONCLUSIONS

As part of a *Psychology of Groups* University course, a common gamification activity was proposed in three different periods (3 hordes). The activity was aimed at developing a course self-made glossary and later using its contents to elaborate “pass-the-word” rings at Scratch software. A total 306 selected and assessed entries composed the PGG18 document which was collectively made by the 89% of the students. However, the proposed task was not useful to predict final course mark of students who did enjoy using Scratch rings. Student’s feedbacks encourage making some modifications to foster their leanings. First, example of Glossary entries should be given in advance and student’s terms should be better monitored during the course. Secondly, ABC task should be a mandatory class activity with an important weight in the final mark. Finally, students should also be rewarded in their final mark with the results of the gaming period which was perceived as rather short in this case.

It might also be suggested that gamification could be proposed for the whole process of ABC task including assessments of previous stages prior Scratch phase, i.e. term selection, term definition, active participation in the nominal group technique and/or multi-voting procedure, and so on. Needless to say that the amount of data received in the consideration of multiple-criteria per task in a student group size of around 50 is vast enough to consider the support of big data analyses.

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