TO PLAY OR NOT TO PLAY: GAMIFYING MOODLE FOR UNDERGRADUATE TRAINEE TRANSLATORS / JUGAR O NO JUGAR: GAMIFICAMOS MOODLE PARA ALUMNOS DEL GRADO EN TRADUCCIÓN E INTERPRETACIÓN

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Abstract: "Gamification" was coined in the early 2000s but received little attention before 2010. Since, it has become a buzzword in marketing, health, sustainability, the media, and education. Definitions include two elements: the use of game elements in non-game contexts and the experiential and behavioural enhancement of that context for users. In the tertiary Translation studies classroom, our learners are "digital natives" who need no persuading to participate in online activities. As Game theory shows that repeated online participation leads to mastery and heightened competence and, because digital natives are bored by conventional learning but keen to participate in online interaction, we believe there may well be benefits in gamifying learning. So, we have gamified learning in Translation and Interpreting by innovating within the scope permitted by Moodle 2.6. Here, we describe our use of badges and the apparently positive consequences for actual learner performance.

Keywords: Translator training; Tertiary education; Blended e-learning; Module design; Gamification.

Resumen: El término "gamificación" se acuñó a principios del siglo 21 pero recibió poca atención antes de 2010. Desde entonces se ha convertido en moda en marketing, salud, sostenibilidad, los medios de comunicación y educación. Se define por la presencia de dos elementos: el uso de elementos de juegos en contextos que no son de juegos y las mejorías experiencial y conductuales que experimentan los usuarios en este contexto. Nuestros estudiantes son "nativos digitales" y participan en actividades en línea de manera espontánea. La teoría de juego demuestra que la participación repetida en estas actividades conduce a la maestría y a una mejoría en las competencias y, debido a que los nativos digitales se aburren con el aprendizaje convencional pero desean participar en la interacción en línea, creemos que la gamificación del aprendizaje puede acarrear beneficios. Por lo tanto, hemos introducido elementos de gamificación en Traducción e Interpretación a través de innovaciones en la plataforma Moodle 2.6. Aquí, describimos nuestro uso de insignias y las consecuencias aparentemente positivas para el rendimiento del alumno.

Palabras clave: Formación de traductores; Educación terciaria; Aprendizaje semi-presencial; Diseño de módulos educativos; Gamificación.

1. Gamification

We will begin by presenting a brief overview of Gamification in which our purpose is to outline the concept and its origins and justify its application in the teaching/learning context.

The simplest definition of Gamification is "the use of game design elements in non-game contexts" (Deterding et al., 2011: 9). Subsequently, authors have distinguished between the systemic elements of games—e.g. the use of roles, the existence of conflicting goals or the uncertain nature of outcomes—and their experiential nature—i.e. the hedonic experience, the presence of suspense as players value the outcome even though or because it is uncertain, and the sensations derived simply from playing, often termed "gamefulness" (Huotari and Hamari, 2012: 17-19; Groh, 2012: 39). To characterize the systemic and experiential elements in games, we need to look at the field of Service marketing, in which Gamification was first developed (Huotari and Hamari, 2012).

Service marketing focuses on offering clients a service in such a way as to stimulate their interest and involvement with that service so that they continue to use it and, if possible, increase their use. In essence, the purpose of service marketing is to motivate customers and gain their fidelity to a given company by enhancing the quality of their experience when interacting with that company. Game design elements are added to customer interaction to increase participation and induce clients to accord a positive value to their interaction with the service company in question beyond the strictly commercial. The client's desire to experience gamefulness is voluntary so the motivation behind gameful interaction is intrinsic. Gamification, therefore, can be considered a tool used to motivate participation and, of especial importance in the classroom, a tool that stimulates or activates intrinsic motivation.

In tertiary education, the dichotomy between intrinsic and extrinsic motivation is seldom discussed. University students are considered by definition to be motivated learners, as indeed are adults engaged in Lifelong Learning experiences. However, the reality of the Spanish university classroom often more closely resembles the secondary school than it does the world at large as the massive scale of tertiary education encourages a primarily 'teaching' university, rather than a 'research' or mixed university. Extrinsic motivation, framed in the simple pressing need to pass the course by achieving a grade, dominates the scene. Accordingly, we consider that if we are at all able to stimulate our learners' intrinsic motivation by gamifying their learning experience we will have gone a long way towards enhancing their experience and empowering them to take control of their learning processes.

In the present article, therefore, we intend to describe how we have applied elements of gamification drawn from the field of service marketing in order to encourage our learners' intrinsic motivation to follow a course in Specialized translation. We will now outline the teaching/learning model we apply, discuss the nature of our 21st-century "digital native" learners, and briefly describe an earlier study of trainee translators and their perceptions of the competence-related benefits of participating in online team games.

1.1. The Professional Approach to Translator Training

The Professional Approach to Translator Training (PATT) is a didactic model that combines two well-established approaches to teaching/learning: project-based learning and cooperative/collaborative-learning (Olvera-Lobo et al., 2005, 2007, 2008, among others). At

the University of Granada (Spain), in a long-running series of research projects led by M. Dolores Olvera-Lobo, we have merged and adapted these approaches to the teleworking context of professional translation. Currently, we present our courses through the medium of blended e-learning using the Moodle 2.6 platform operated by the University. In PATT, translator training has embraced the full range of competences specified in the current undergraduate program (Appendix 1). Furthermore, we have invested much time and effort to broaden the learning experience so that it embraces many of the aforementioned competences that are often ignored due to the difficulties inherent either in their teaching or their assessment, or both. For example, instrumental and personal competencies related to teamwork, interpersonal communication skills, decision-making and organization skills are seldom taught or assessed independently. However, Moodle 2.6 offers tutors a range of functions that facilitate the gamification of courses—e.g. badges that can be awarded automatically or manually—and many teamwork options that coincide with the use of roles in gamification and in parallel with the role-based model of the translation process described in PATT (Robinson, 2014; Robinson et al., 2015, 2016).

Elsewhere, we have described the evolution of our teaching/learning model and exemplified much of our work. So, in the present paper we will center on the key issue of describing our 21st-century trainee translators.

1.2. Learners

Undoubtedly, today's learners are "digital natives" while many of us, their tutors, are at best "digital immigrants" (Prensky, 2001a, 2001b). Typically, our learners are accustomed to receiving information quickly, prefer visuals to text, enjoy parallel processes and multi-tasking, prefer random access to content—as in the use of hypertext links—function well when involved in networked communication, thrive on instant gratification and frequent rewards, and prefer games to 'serious' work (Prensky, 2001a: 2–3).

In this context, GRAMTRADI, an innovative teaching project financed by the University of Granada, designed and conducted by M.A. Arrufat Pérez de Zafra and coordinated by M. Dolores Olvera-Lobo, experimented with "The Gamification Challenge". The principal objective of the "Challenge" was to determine the potential benefits to be derived from using entertainment video games as a vehicle for the implicit learning and acquisition of competences included in the undergraduate program in Translation and Interpreting. The participants were involved in playing online video games using laptop or personal computers, or smartphones, and participating in teams to do so. Pre- and post-study surveys revealed that participants perceived improvements as a direct result of the online game-playing activity in a substantial number of these competences. These included 12 of the 20 target competences for the module in question: specifically, numbers 7, 8, 9, 13, 14, 15, 16, 17, 18, 20, 21, and 25 (Appendix 1) (Arrufat Pérez de Zafra, Unpublished data). In addition, they reported as a positive experience their total mental absorption in the activity, which we would associate with the experience defined as "flow" in Positive Psychology (Csikszentmihályi, 2008).

Given these encouraging results, we designed modifications to our blended e-learning input and established the following initial objectives.

1.3. Objectives

In the present study, we have attempted:

- To select specific competences susceptible to gamification within our teaching/learning context
- To apply elements of gamification practice to these competences
- To determine what, if any, influence gamification may have on actual performance
- To project further applications in the light of our results.

2. Method

To take advantage of the functions available to us in the Moodle 2.6 platform, we have selected one of the characteristics drawn from game theory and applied in the gamification of learning and of other fields: the awarding of badges, an experiential aspect of games given the intrinsic hedonic pleasure of receiving a reward (Grant and Betts, 2013).

2.1. Badges

Moodle 2.6 enables tutors to create badges as rewards and/or incentives for their learners. In technical terms, a badge combines an image file with a title and a set of criteria on which it can be earned (Figure 1). Image files that are not subject to copyright are widely available and can easily be located (e.g. http://moodlebadges.com/ Accessed 30/03/2017).

Figure 1. Competence-related badges awarded manually and/or automatically

Tutors can create badges as part of the initial construction of a course or as the need arises while they are actually teaching. Badges can be awarded to learners automatically when they meet all or any of a particular set of criteria. For example, they can be linked to completing a specific task by a pre-set deadline or achieving a minimum score in an assignment. Alternatively, badges can be awarded manually when the tutor considers it appropriate. This enables the tutor to consider individual learner performance in a class session, say, and reward achievement *ad hoc* at the end of the class. In this study we have used both methods of delivery and have created badges both to reward achievement in continuous assignment tasks and as incentives to encourage performance during in-class activities like group discussions. The vast majority of the badges employed have been directly linked to competences defined in the course study guide although we have added other badges to, for example, reward learners who attend class on an unpopular day such as the last day before the Christmas vacation or a day that falls between two national holidays.

2.2. Rewarding achievement

The achievement of specific grades has been linked to the awarding of badges via the assessment structure of the course.

Assessment on all translation modules in the undergraduate program is divided into 60% continuous assessment and 40% summative assessment. On the courses we teach, continuous assessment comprises four separate assignments: three are team tasks and the fourth is an individual midterm paper. The overall balance is 45% teamwork and 55% individual work (Table 1). This ties teamwork competences into the course design and has a substantial effect on the course final grade.

Continuous assessment	60%
Team tasks	45% (3 x 15%)
Midterm examination	15%
Final examination	40%

Table 1. Breakdown of module assessment structure

2.3. Teamwork competences

Personal competences 18, 20 and 21 (Appendix 1) focus on the awareness of diversity and intercultural processes, the ability to work in a team, and the ability to work in an international context. To this end, learners are randomized into teams guaranteeing that Spanish and non-Spanish exchange students are integrated together (Robinson et al., 2015). Thus, all Spanish learners are typically in contact with at least one exchange student and all exchange students find themselves in teams with Spanish native speakers and, as far as possible, users of foreign languages other than their own. This offers all learners, whether Spanish or incoming exchange students, exposure to the need to develop these personal competences. Furthermore, all learners are presented with an outline of small group learning behavior patterns drawn from the fields of Psychology and Business management practice, and from the experiences of learners on previous editions of the course.

2.4. Automated badges as a function of scores

As we have said, when creating a badge on Moodle 2.6, we can establish one or more criteria on the basis of which a learner can obtain that badge. When a badge is automatically awarded, the learner receives it once he or she has completed one or more actions online. For example, a badge can be awarded to all learners who achieve a score at least 50% and less than 70% for a specific assignment. So, we have automated the awarding of badges for Pass (50%-69%), Credit (70%-89%) and Distinction (90%-100%) scores on all continuous and summative assessment assignments. When learners achieve a score within a pre-established range, they receive a message on the platform directing them to open a link on the same screen as the assignment itself. They are then directed to "My latest badges" in the course menu where they can see the badge and the congratulatory message that accompanies it.

2.5. Incentives to encourage competence-related behavior

To reward learners for interventions or behaviors we want to encourage we make use both of the automated approach as described above and we manually award badges. Critical thinking skills underpin many of the competences targeted on this course yet often it is difficult to discern their application and even more difficult to motivate learners individually to encourage their use. To stimulate learner curiosity, which we consider highly desirable, we have created a simple game: "Where's Wally hiding in…?" As learners are shown an average of one PowerPoint presentation per week - uploaded onto Moodle in pdf files - they are encouraged to look carefully at the presentations to locate a Clipart image file of the character Wally. These images are hyperlinks that take learners to a Quiz question which, when answered correctly, rewards them with a badge.
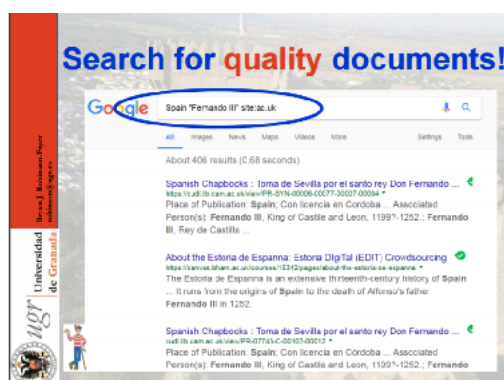

Figure 2. "Where's Wally hiding in…?" to encourage learner curiosity

3. Results

To determine whether the gamification of this module had any influence on learner perceptions and learner performance, we conducted an end-of-course survey and compared achievement data with other learning groups which did not experience the gamified version of the course.

3.1. Achievement

Learners were asked to report their final course grade for a previous course module that also measured translation from Spanish into English, and to predict their final grade for the present course. We compared these predictions with actual performance (Figure 3) and with actual performance of other learners following the non-gamified version of the course with different tutors and learners from a previous version of the course taught by the same tutor (Figure 4).
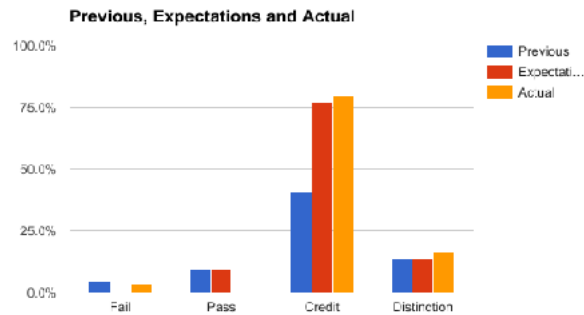
Figure 3. Previous course results versus learner expectations versus actual performance
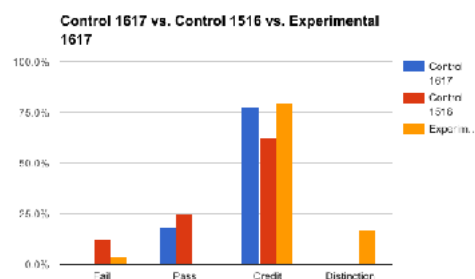

Figure 4. Experimental group performance versus a previous cohort and a parallel cohort

The mode for all three measures—previous course grade, current course expectations and current course achievement—was the same: within the 7.0-8.9 range (Credit). However, the percentages of Credit scores and Distinctions (9.0-10) rose and there were no Pass grades (5.0-6.9) in the course results for the gamified learning group. So, performance overall could be said to have been slightly better but obviously this is insufficient to indicate that the gamification of the course could have influenced learners in any way.

Comparison of the gamified learning group's performance with other learning groups provides similar encouraging data. Again, the mode lies within the Credit range and there are no Pass grades in the current group whereas up to 25% of learners in the previous academic year obtained scores in this range. The current group also differs in that a small number of learners achieved Distinctions. However, we clearly cannot find any data to support the hypothesis that the gamified version of the course had influenced final course grades.

4. Conclusions

While the present study can by no means be considered conclusive, we do feel that we have successfully identified a range of competences susceptible to gamification within our teaching/learning context. Having applied one of the elements of gamification practice—the use of badges to stimulate a hedonic experience—to these competences and analyzed objective indicators of performance, we believe that we are now in a position to design a future quantitative study to enable us to fully determine what, if any, influence gamification may have on actual performance. We are encouraged by our learners' perceived responses to this experience and intend to pursue this line of investigation by introducing further elements of gamification practice into our teaching/learning context.

Given that this intervention has apparently had no quantitative influence on learner performance, we propose to replicate the use of the elements of gamification described here on the same and other similar courses in the future and, as deemed possible, continue in the gamification of our courses. Ideally, we would begin to extend the use of these features to courses and/or learning groups taught by colleagues in order to gather more information about their influence in the hope of obtaining qualitative and quantitative data that would shed further light on their effects.

Acknowledgements

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APPENDIX 1

Instrumental competences
7. To be able to organize and plan 8. To be able to solve problems 9. To be able to analyze and synthesize 9a. To be able to analyze texts in order to translate them 10. To identify issues arising from the relation between language and text genre 13. To be able to manage information 13a. To be able to document themselves for a translation 14. To be able to make decisions 15. To know how to clearly present and defend the objectives and results of their work 15a. To know the metalanguage of translation
Personal competences
16. To adopt an ethical approach to professional practice 17. To be able to develop critical reasoning 18. To learn to recognize diversity and intercultural processes 20. To be able to work in a team 21. To be able to work in an international context 21a. To be aware of the translator and interpreter's role as a mediator in promoting a culture of peace and democratic values
Systemic competences

23. To revise thoroughly and to check, assess and guarantee quality
23a. To be able to apply the norms of the target language's typographic syntax and the stylistic norms for presenting a translation
24. To be able to work independently
29. To organize work and design, manage and coordinate projects

Appendix 1. A selection of the competences included in the undergraduate program in Translation and Interpreting taught at the University of Granada [Author's translation]. The original Spanish-language text is available at http://grados.ugr.es/traduccion/pages/infoacademica/estudios. Accessed 10/01/2015.