

ACQUISITION OF LANGUAGE AND INTERCULTURAL COMPETENCES IN TOURISM AND HOSPITALITY STUDIES THROUGH ACTIVE EXPERIMENTATION IN SECOND LIFE

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Abstract

Living in a global world involves not only mastering languages, but also dealing with different habits and values. It becomes critical with students trained to deal with a multicultural public, such as the group of learners from tourism covered by our research. Our proposal aims to analyze whether the virtual world of Second Life (SL) facilitates the development of English for Specific Purposes and the acquisition of intercultural communication. To cover the objective qualitative and quantitative research were conducted along a four-phased in/out SL instruction. Questioning about the differences between the mean score obtained by experimental and control groups shows no significant differences in the acquisition of language regarding face to face and Second Life interaction, but demonstrates a positive tendency in the case of intercultural competences.

Keywords: Second Life; English for Specific Purposes; intercultural competence

1. Introduction

With the development of information technology, Multi-User Virtual Environments (MUVES) have been subject to a continuous research interest in the field of language learning. Although their potential has been noted for the development of communicative competences (Deutschmann & Panichi, 2009; Dell'Aria & Nocchi, 2010; Wigham & Chanier, 2013; Wang, Deutschmann & Steinvall, 2013), opening chances for professional training in real versus online environments (Good, Howland & Thackray, 2008; Authors, 2010; Blasing, 2010), applied linguistics research on virtual worlds interactions (Wang, 2015; Panichi & Deutschmann, 2012; Peterson, 2011; Thorne, 2008), newer potentialities, pedagogical opportunities and affordances of virtual worlds remain undiscovered (Zheng & Newgarden, 2012; Bull & Wasson, 2016), a big challenge pushing on with the pursuit of effective outcome evaluation (Sadler, 2012).

Accordingly, this paper analyzes how SL facilitates students-like-avatars' interaction as if they were in a real teaching training environment. In our case, it is focused on the development of English for Specific Purposes (ESP) and the acquisition of intercultural communication, identity and diversity awareness in the field of tourism and hospitality studies.

The hospitality field in which our research takes place is a multicultural scenario by necessity, since students must be prepared not simply to be able to communicate linguistically, but also to interact interculturally at some level. Bridging nationalities and cultures through English as a lingua franca for hospitality students should lead language instructors to focus on the importance of intercultural awareness in context, to show respect for diverse identities and avoid cultural miscommunications. In the case of Spain, hospitality studies are especially relevant since the country received more than 25.2 million foreign tourists in the first five months of 2016, 11.4% more than in the same period in 2015, according to data published by the National Statistics Office (INE - *Instituto Nacional de Estadística*). The main continent of origin was Europe (UK - 5.8 million tourists; Germany - 3.7 million, and France - 3.7 million). Analyzing non-European countries, the favorable performance of Latin America is clear, particularly Brazil. North African countries also stand out, as well as Asian, particularly China, South Korea and Turkey. Thus, non-European markets accounted for about 13% of total arrivals, meaning that the Spanish tourism industry needs to understand and adapt to the new international source markets. However, a quick look at Spanish news sources on the topic reveals a lack of language skills of the professionals working in this sector (Baum, 2012).

To get insights into to what extent teaching practices can make students competent for intercultural exchanges, our proposal explores opportunities to use the target language and culture with members of other cultures by means of meaningful tasks.

In the light of this context, our research, conducted with third year undergraduate students of the Tourism degree at the University of Extremadura, presents the results after the completion of in-class and Second Life tasks as the last stage of instruction composed of three previous steps to develop both linguistic and intercultural competences.

Thus, this paper begins by presenting the theoretical framework serving as background support, bearing in mind studies of development of intercultural understanding, as well as the use of virtual worlds to practice tasks in quasi-real contexts. Then, the research study is described, stating objectives, methodology, research phases, content, timing and

administration. The results of the research follow, as well as the discussion and some final conclusions.

2. Theoretical Framework

2.1. Beyond language: language and intercultural communication in Hospitality studies

In the globalised world, the ability to communicate effectively is a challenge, but communication is far more than mastering the target language only, as it involves practices of interpreting meaning, a fundamental relationship between language and the underlying culture. An understanding of language as *open, dynamic and constantly evolving* (Shohamy, 2007:5) comprises the rich complexities of communication, where not only verbal communication plays a major role in cross-cultural interaction, but also knowing the nonverbal code system of a culture (e.g. body movements, gestures, paralanguage and proxemics) is essential in intercultural contexts.

Second and foreign language learning has been reconceptualized over the last decade as a participatory process in which, besides expressing ideas, learners should acquire new ways of thinking, behaving and understanding (Dema & Kramer, 2015). In this sense, even though there has been a variety of methods and approaches for teaching culture, including the development of roleplay scenarios in which students demonstrate appropriate cultural behavior in a given situation (Galloway, 1985; Omaggio, 1986), according to Peterson & Coltrane (2003), there must be opportunities for real interaction. The acquisition of culture, much like that of language, should be changing from teacher lecturing to students discovering culture first hand through projects and activities.

However, teaching language and culture through real-life communicative settings can be intricate inside a traditional classroom where most participants, as in our case, share the same language and cultural background (Spanish) and have few (or none) opportunities to interact with people from other nations and cultures. In contexts like ours, the lack of real interactions makes it difficult to judge to what extent students become competent for intercultural actions. The dynamic nature of culture has consequently brought about a number of challenges to choose relevant teaching environments, materials and activities. Thus, out of the components which may support the incorporation of culture through real interaction in a monolingual and monoculture teaching setting, technology presents an opportunity for learners to experience communication across cultures (Dema & Kramer, 2015). Digital technology can improve the quality of the learning experiences if used as a communicative

tool to support collaboration through online real practices (Cerezo et al., 2014). Thorne, Black & Sykes (2009) claim that digital engagement in/ out-of-school settings, such as virtual environments and online games, allows for language socialization and sophisticated communicative practices. In this context and within synchronous communication, virtual worlds can move beyond real life learning strategies since, with the appropriate approach, they can enhance collaborative learning, promote learning by doing, and develop autonomy.

2.2. Second Life: an open world to develop language and intercultural competences

Baron (2008) describes SL as a multi-player role-play virtual game possessing high quality animation features which enables personal communication through chats (oral and written), as well as linking virtual objects to web pages. Though the potential of Second Life as a language instructional environment has been shown in a plethora of studies (Bueno, 2011; Liou, 2012; Melchor-Couto, 2017; Levak & Son, 2017), research is needed to investigate whether this virtual world can be used to promote language acquisition and cultural understanding. The ability of the user, represented visually by his /her avatar, to act in the world allows them to express their identity, even hiding and amplifying some aspects of their personalities.

Molka-Danielsen (2009) proposes SL-based teaching through Social Constructivism, Active learning and Action Learning. As examples of Social Constructivism practices, the author cites peer collaboration, reciprocal teaching, cognitive apprenticeships, problem-based instruction, WebQuests, and anchored instruction. She defines Active and Action learning as processes centered on the student, giving responsibility for the learning process. Deutschmann & Panichi (2009) analyze teacher practices in this virtual environment by considering three main concerns: preparatory issues, task design and the teacher's role in fostering learner autonomy (2009:27).

Considering this, the tasks we propose to develop in SL are practical activities based on simulations and role-play activities (phase 2 of our research), where students may consolidate the knowledge previously acquired during the development of the face to face interaction (phase 1).

2.3. Previous studies into intercultural communication through virtual worlds

Intercultural communication has aroused great interest in companies and scholars that have conducted a reasonable sample of empirical studies over the last years (Moore, May & Wold, 2012).

In our case, the hospitality field is multicultural by necessity, since it denotes the business of entertaining or housing guests who hail from both near and far. Hospitality and Tourism students as future professionals in this industry must consequently expect to face cultural difference successfully in order to do their jobs well (Luka, Vaidesvarans & Vinklere, 2013; Yoganjana, Menike & Pathmalatha, 2015). That is why bridging nationalities and cultures through English as a lingua franca for hospitality students has led language instructors to focus on the importance of showing respect to diversity in the field of English Language Teaching (Alsagoff, 2012). Though it has long been recognized that the abilities needed for this work are not simply linguistic, research into intercultural skills has been scarce (Ntukula, 2013; Grobelna, 2016). This intercultural dimension has been also overlooked in situations of monocultural communication among participants of the same linguistic and cultural background. The abstract observation of norms in class does not refer to the interactional dynamics that is set up when participants of different cultural backgrounds engage in verbal communication. Being the geographical barriers the main restriction which hinders linguistic and intercultural interaction in a monocultural context, with the help of ICT similar contexts and situations can be designed to enable users to interact with speakers of other languages and cultures, providing pertinent cultural learning experiences that would otherwise be impossible in real life. As advocated by Siegel (2010) and Nocchi (2012), Second Life encourages cultural intelligence by dealing with different realities through immersive experiences. Interaction is also a key word for Sadler (2012), who analyzes four learning theories, which could be applied to the use of virtual worlds for language learning, stating that successful language acquisition is preconditioned by comprehensible inputs.

In this line, in a study designed to analyze how SL can be effective in increasing learners' fluency in English and providing pertinent cultural information through interaction, Iwasaki (2014) states that language and cultural knowledge can be acquired by using the "five Cs" that occur in this virtual world (Wang et al., 2012): Communication, Culture, Connections, Comparisons and Communities.

This point of view is corroborated by Jauregi & Canto (2012) and Jauregi et al. (2011), who developed a blended learning course to facilitate interaction with native speakers in SL. The authors concluded that the tasks proposed gave rise to meaningful interaction by exchanging social and cultural meaning spontaneously, and, consequently, the value of this interaction results in cultural, linguistic, interpersonal and motivational benefits. On the other hand, there was also a development of motivation and willingness to communicate, especially

with native speakers, decreasing speaking anxiety levels that can occur sometimes (Canto, Jauregi & Van den Bergh, 2013).

3. Research Study

3.1. Objectives

To cover the research objective, aimed at measuring the effectiveness of SL as an immersive virtual world which can assist students and professionals in the acquisition of language and intercultural competences in the hospitality sector within monoculture settings, qualitative in-class observation during the first phase of the research (Appendices 1 & 2), and quantitative research in the second phase of in/out SL instruction were conducted.

A set of hypotheses was also constructed to unfold the general objective (see section 3.5) by questioning whether there were differences between the mean score obtained by experimental and control groups in the acquisition of the competences (specific language domain and intercultural and diversity awareness) under study.

3.2. Participants

Our target population is third year Spanish hospitality students enrolled in the Tourism and Hospitality Management degree at the Faculty of Business and Tourism at Extremadura University (Spain). The total sample (n=72) was distributed for the second phase of the study (see section 3.3) in a control and an experimental group (with 36 students each, respectively), being the members of the experimental group exposed to the action research in Second Life. Most students had a B1+ level of English and by passing this subject, they were supposed to achieve level B2, i.e., an upper intermediate level according to the CEFR (Common European Framework of Reference for Languages) in the target language (English) under study. A small percentage already had official certification in the B2 level (15%), and four of them had even achieved level C1.

3.3. Methodology

Our study follows two phases of instruction and research:

Phase 1: A three-step in-class instruction and action research by applying three phases - experiential, observation and reflection - to carry out specific language instruction and cultural content exploitation - scheme adapted from Kolb's (1984) experiential learning cycle.

In-class observation and analysis were carried out by the completion and further discussion of questionnaire shown in Appendices 1 & 2.

Phase 2: A final phase of active experimentation (step four) through the development of learning experiences and professional simulations in the virtual world of SL (experimental group) and in-class (control group) to see results.

According to Kolb (1984), learning is seen as a process where learners (1) are exposed to specific experiences, (2) observe and reflect on those situations, (3) create abstract concepts, and (4) test learning in future learning or professional situations.

3.4. Research phases

Phase 1

In the first phase the whole population under study (n=72) were exposed to in-class instruction by the exposition to a three-step pedagogy:

Step 1. Learning through experience, in which students were provided with language and cultural content offering new situations and opportunities for learning through videos, games, film trailers, photographs, advertising, social media and face to face instruction from different countries and cultures.

Step 2. Learning through observation and comparison, looking for differences, stereotypes and unfamiliar situations among the content and experiences presented in step 1. This step was aimed at understanding and encouraging respect for people with different cultural affiliations.

Step 3. Learning through reflection by means of in-class discussion through visuals, written, audio or video analysis, giving rise to new ideas, or modification of existing concepts.

Phase 2

In the second phase, based on active experimentation (learning by doing), the population was divided and randomly distributed into a control and an experimental group of 36 students each, being the experimental learners who completed the active simulation in Second Life through oral and written chat with other English speakers (native and non-native). SL interactions were recorded and coded. Observation and field notes were also taken by instructors for later evaluation and interpretation of final results.

Researchers developed a framework for effective tasks to promote language interaction and intercultural awareness for the FtF in-class and for the Second Life interaction, following the literature on tasks for communicative competence (Doughty & Long, 2003; Ellis, 2003; Gardner et al, 2011; Ware & O'Dowd, 2008; Westhoff, 2004); for intercultural

competence (Byram, 1997; Hauck, 2010; Müller-Jacquier, 2000), and for exploiting the challenges of the virtual world (Deutschmann & Panichi, 2009; Jauregi & Canto, 2012).

3.5. Course content, timing and administration

The three-month course, running from February to May 2015, was divided into 4 units, all related to the tourism sector and covering B2 specific language content in ESP, designed to prepare students for their internship in different areas, namely hotel receptionist, event planner, tourist guide and tourism consultant, and two intercultural dimensions - diversity awareness and understanding, and multicultural acceptance and cultural enrichment. Each unit was composed of 12 sessions of 50 minutes each: 8 sessions for the three steps of phase 1 (the whole group in class); 4 sessions for practice experimentation - phase 2, step 4 - either in-class or in SL. The distribution and timing for each unit (four steps distributed in two phases) are summarized in Table 1.

Table 1. Unit distribution and timing

DISTRIBUTION & TIMING FOR EACH UNIT
<p>Phase 1 (step 1): 3 sessions (50 minutes each). Learning through new experiences /inputs. Phase 1 (steps 2): 3 sessions (50 minutes each). Learning through observations and practice. Phase 1 (step 3) 2 sessions (50 minutes each). Learning through reflection and discussion.</p> <p>Phase 2 (step 4): 4 sessions, 50 minutes each (in-class or SL). Learning through active experimentation (learning by doing).</p>

Following the degree regulation and syllabus (Tourism and Hospitality Management) and the content described in the study plan of the subject (English Language III), the competences covered by this course are as follows:

General Competences (CG)

CG5 - Being fluent in two foreign languages (English compulsory) and communicating in an optional second language in touristic activities and tasks

CT12 - Diversity and multiculturalism recognition

CT15 - Working in international contexts

CT9 - Interpersonal relations skills

Specific Competences (CE)

CE23 - Identifying and managing touristic spaces, destinations and events for multicultural target groups

CE24 - Managing different communicative techniques in a foreign language (English) within the hospitality sector

CE30 - Working and dealing with different sociocultural environments from a linguistic perspective

To cover the competences above, materials and inputs used were taken from the Web and/or designed by the course teachers, with a twofold objective: (1) completing the phases following the hypotheses stipulated before, and; (2) covering the competences included in our course plan (language and culture).

A crucial step toward ensuring student engagement in SL is task design. It is imperative that instructors provide clear guidelines regarding what students should do once logged into SL, tasks to develop and with whom they should interact as they complete the tasks.

Students from the experimental group were asked, at the beginning of the semester, to enroll in several platforms and contact SL users from the target countries /continents, especially from Asia, Africa and the Middle East, nations with major cultural differences. European and American countries were also considered. Three main platforms were recommended to find SL inhabitants interested in joining the experiment and available for weekly interactions: My language exchange (<https://www.mylanguageexchange.com/>); Language for Exchange (<http://www.languageforexchange.com/>), and; Polyglot club (<https://polyglotclub.com/>). Surprisingly, contacting users and organizing the linguistic encounters in English were easier than initially thought; besides completing the arranged tasks (phase 2), they were always keen on solving doubts and clarifying cultural differences.

Examples of materials, sources and tasks are shown in Figure 1.

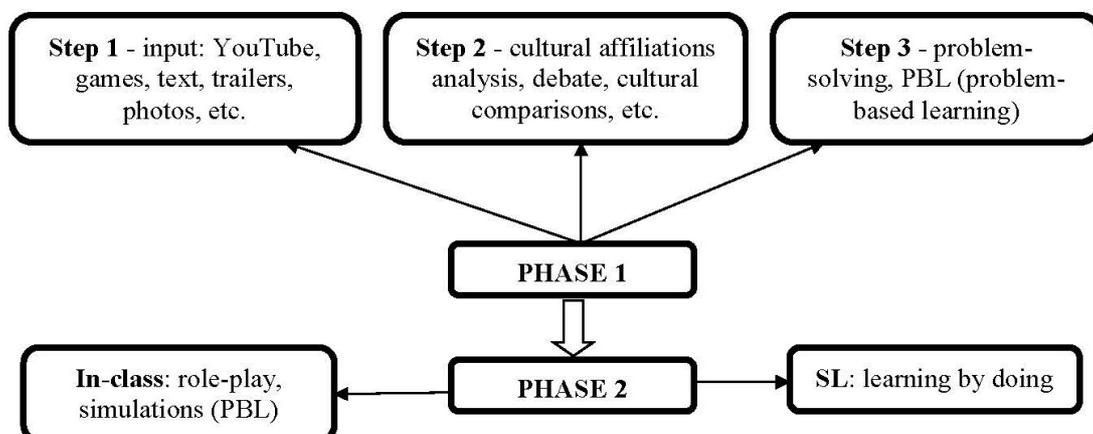


Figure 1. Materials and tasks design

As we can see in Figure 1, unit 1 deals with Hotel Receptionists' tasks. To achieve the purposes of steps 1 and 2 (phase 1 – in-class instruction), videos, texts, presentations and images were introduced and discussed to identify language and functions, hotel receptionists' skills, stereotypes and language to be avoided when dealing with complaints related to cultural differences, among others (see Appendices 1 & 2). Subsequently, in step 3, students were divided into groups to work on activities such as dealing with stereotypes and cultural differences at the front desk. To consolidate knowledge, phase 2 included a roleplay activity where students had to deal with Chinese, Arabic and African clients in a hotel (facilities and services needed, timetable, etc.). As said, two groups were formed, one in class and the other in SL.

Unit 2 covers language and culture considerations when planning international events. In phase 1, steps 1 and 2 are developed through texts, videos, images and event presentations to introduce contents, such as considering culture while organizing events, cultural differences when hiring catering, language analysis on food and menus, planning a multicultural event correctly, etc. The objectives of step 3 were achieved by means of pair and group work with tasks such as planning an event; analysis of different cultures, and organizing specific parties (Greek, Japanese, American, Muslim, etc.). In phase 2 the same groups were formed to develop roleplay activities, one in class and the other in SL – they had to plan a multicultural conference following a set of guidelines.

With Unit 3, we introduced tourist guides' tasks by using leaflets, videos, presentations and photographs to achieve the aims of phase 1, steps 1 and 2. The contents covered were, among others: handling cultural differences and using language to avoid cultural misunderstandings; employing body language effectively; explaining cultural habits and customs; making a tour in a museum, analyzing cultural implications and art metaphors, and; explaining regional festivities. Step 3 – consolidation and acquisition of contents – was developed through pair and group work by undertaking the following activities: how to become an ideal tour guide; which body language to avoid with a multicultural crowd; how to explain Western traditions and art, and; how to organize a tour to a Spanish city. Phase 2 comprised group activities in class and SL, namely designing, organizing and implementing a tour to a multicultural group.

Finally, Unit 4 dealt with tourism consultant attributions. Phase 1, steps 1 and 2, was accomplished by texts, videos, images, presentations and webpages. The goals were to introduce topics such as the definition of a tourism consultant and specific language used in the profession; sustainable tourism and ecotourism, their benefits and specific language of

environment and ecology; sustainable means of transport, both in rural and urban areas, and importance of homemade food and vocabulary of agriculture and livestock. Practice was developed in phase 2 with roleplay activities in class and in SL, namely developing a sustainable tourism project with local inhabitants of a little village.

For further information on materials and SL interaction, see Appendix 3.

3.6. Administration and research instruments

The research study was based on quantitative and qualitative research methods. Materials, research surveys tools and data were analyzed with content analysis, instruction, data coding and data interpretation.

Data were collected and analyzed through questionnaires and in-class observation to analyze the development of phase 1, whereas face to face and SL interactions (phase 2) were recorded, coded and analyzed with the statistical package SPSS. The completion of role-plays in class and in SL was evaluated using a 1 to 10 grading scale, in which 1 is the lowest, 10 the maximum grade and 5 the minimum pass mark. The use of this scale is motivated by the familiarization students have with grades ranging between these values, once they are used to measure exams in all subjects at the university. Planning carefully the development amongst students is important for teachers or those in charge of facilitating instruction. In our case, the following research actions were taken:

Phase 1 (in-class action. Population= 72)

Step 1. Learning through experience

1. Warming up questionnaire (Appendix 1): Analysis of the role played by language and nonverbal communication to achieve a successful intercultural communication in the hospitality sector.
2. Students' exposure to text and audio-visual material (videos, photographs, texts, advertisements, etc.) presenting language and cultural situations which may lead to a lack of communication and understanding among cultures.

Step 2. Learning through comparison to encourage language acquisition in specific contexts cultural awareness, understanding and respect for diversity

1. A teacher-made evaluation sheet to analyze the content shown in the first step (see Appendix 2). The evaluation form included three main dimensions, subdivided into a set of indicators, measured on a Likert scale, ranging from 1 to 5 points, with 1 being totally disagree and 5 totally agree. The form validity was obtained by requesting

commentary and suggestions from two experts in the field of education and cultural studies, both familiar with the constructs and the purpose of intercultural research. It was tested for reliability using Cronbach's alpha to test internal consistency of items. The calculation performed concluded with a 0.75 alpha, that is 0.15 points above the 0.6 standard. The reliability of the opinions and beliefs questionnaire can be consequently considered appropriate.

Step 3. Learning through analysis. In-class oral discussion and in-depth analysis through the completion of wikis, blogs entries to keep track of their learning (Appendix 2).

Phase 2. In-class (Control) versus SL interaction (Experimental) = 36 students each

The three steps above are followed by a last assessment of participation and students' performance in-class and in SL (peer observation and analysis of the recording from the in-class and SL practices were carried out).

Statistical Analysis (Phase 2)

To reach our objective aimed at measuring the effectiveness of SL as an immersive virtual world to train professional practices for the acquisition of language and intercultural competences in the hospitality sector (Phase 2), we proposed the following hypotheses:

Hypothesis 1: In the dimension "interpersonal communication through English", there is a significant difference between the mean score obtained by the experimental group and the mean score obtained by the control group ($X_E \neq X_C$) in Phase 2.

Hypothesis 2: In the dimension "cultural awareness and diversity understanding" there is a significant difference between the mean score obtained by the experimental group (X_E) and the mean score obtained by the control group (X_C) ($X_E \neq X_C$) in Phase 2.

Hypothesis 3: In the dimension "multicultural acceptance and cultural enrichment", there is a significant difference between the mean score obtained by the experimental group and the mean score obtained by the control group ($X_E \neq X_C$) ($X_E \neq X_C$) in Phase 2.

To contrast the hypotheses, we carried out an analysis of difference between means (means of control group versus experimental group) for the variables under study, by performing the t-Student test for independent samples. Before performing this test, we checked the normality distributions in both groups. Normality of the scores was tested using the Kolmogorov-Smirnov test. The level was set at 0.05 for all analyses.

4. Results: In-Class versus SL Interaction (Phase 2)

To address the research hypotheses and examine whether students included in the experimental group (those using SL) obtained higher scores than those in the control one (those interacting in class), we analyzed the differences in the three hypotheses by conducting a Student's t-test for two independent samples. According to the Levene test for equality of variances, the P-value associated with an F contrast statistic is higher than 0.05 for the three dimensions analyzed at a 0.05 level of significance and, therefore, we cannot reject the hypotheses of equal variances for such dimensions. Considering this, tables 2 and 3 show the results obtained for student's t-tests.

Hypothesis 1: *In the dimension "interpersonal communication through English", there is a significant difference between the mean score obtained by the experimental group and the mean score obtained by the control group ($XE \neq XC$).*

We focused our analysis on students' language interaction by analysing the transcripts during the role-playing activities, counting the total number of general concepts generated in the two environments, the turn-taking and the language used in both the SL and the FtF role-playing activities.

Table 2 shows that at a 0.05 level of significance the t-test does not support hypothesis 1 ($p > 0.05$), that is, there is no significant difference in the linguistic performance – language used to perform the interaction in the field of tourism between both groups.

Table 2. Independent samples test

		Levene's Test for Equality of Variances	t-test for equality of means					
		F	Sig.	t	gl	Sig. (bil)	Mean Difference	Std. Error Difference
HP1_Unit4_Phase2_Step4	Equal variances assumed	.521	.473	-.860	60	.393	-.452	.525
	Equal variances not assumed			-.860	58.50	.393	-.452	.525

However, there are some differences in the mean values between both groups (6, 10 versus 6, 55 in the case of the experimental group). In this sense, and even though the number of concepts generated by each group suggested no significant differences, most role-playing tasks in SL lasted longer than in FtF (9 versus 7 minutes respectively - students were asked to

complete 6-8 minutes activities). Likewise, we could observe that the participants from the experimental group took more conversational turns (engaged in more dynamic interaction) than those in the FtF class, but produced fewer numbers of words per turn than in the FtF interaction, although there were no significant differences in the total number of words produced in the two types of conversations. The results could be partly derived from the novelty and interest in computer-based training, the strategy that could have positively enhanced participation. There are also some students who tried and/or carried out phase 2 in SL, even when they had not completed some of the previous steps of phase 1 in class. The individualized learning of SL by which students can work at their own pace could have also promoted participation. Besides, the anonymity provided by SL may have helped reduce the fear to increase social interaction, promote uninhibited behaviour and enhance participation.

Hypothesis 2: According to the t-test (Table 3), in the dimension “*cultural awareness and diversity understanding*”, there is a significant difference between the mean score obtained by the experimental group and the results obtained by the control group ($p \leq 0.05$). That is, results support hypothesis 2, meaning that the students who carried out phase 2 simulation tasks of unit 1 and 3 in SL (dealing with international guests at the front desk and making a guided tour to a multicultural group respectively) showed a higher awareness and better understanding of cultural diversity than those completing the role-play tasks in class.

Table 3. Independent samples test

		Levene's Test for Equality of Variances	t-test for equality of means					
		F	Sig.	t	gl	Sig. (bil)	Mean Difference	Std. Error Difference
HP2_Unit3_Phase2_Step4	Equal variances assumed	.034	.854	-1.997	65	.050	-1.033	.517
	Equal variances not assumed			-1.996	63.47	.050	-1.033	.518

In this case, there exist significant differences in mean values between the two groups of students (6, 16 versus 7, 19, control and experimental group respectively). The results could imply that virtual environment interaction and cultural difference understanding were more productive than the ones occurring in-class, place in which all students shared the same

mother tongue and culture. SL activities offered opportunities for experiential learning within a more collaborative learning environment. Thus, the higher number of conversational turns led to pose more direct questions and reasoning about differences in timetable, hotel services preferences (room services, leisure centre, souvenirs, etc.), food and restaurants in town, main attractions and monuments to visit, among others. Besides, and in agreement with Kiesler's seminal studies (1985: 81), Computer-Mediated Communication can decrease self-awareness and reduce concern about how other interlocutors will react and think. The effects of telecommunication media on communication play an important role in how people interact and the degree of social presence – i.e. quality or state of being there- among speakers (Short, Williams & Christie, 1976:65).

Hypothesis 3: In the dimension “*multicultural acceptance and cultural enrichment*”, there is a noticeable difference between the mean score obtained by the experimental group and the results obtained by the control group. As evidenced by Table 4, the p value associated with a t-Student test is lower than 0.05 for this hypothesis, which means that results support the third hypothesis, that is, students who completed phase 2 simulation tasks of unit 2 and 4 in SL (planning a cultural event and developing a sustainable tourism project respectively) developed a better social relations and multicultural acceptance.

Table 4. Independent samples test

		Levene's Test for Equality of Variances	t-test for equality of means					
		F	Sig.	t	gl	Sig. (bil)	Mean Difference	Std. Error Difference
HP3_Unit4_Phase2_Step4	Equal variances assumed	.444	.508	-1.999	64	.050	-1.021	.511
	Equal variances not assumed			-2.007	63.78	.049	-1.021	.509

In this sense, the results show that through interaction with people from other cultures, students showed a greater sense of respect and understanding, which are the basic pillars to thrive in an ever growing global world, shown by the possibility to discuss the premises to plan a multicultural event among members from different cultures (location, schedule, solving language barriers, food and beverages taboos, etc.) or the insights gained about the concept

sustainability (preserving the environment by avoiding the exploitation of natural and cultural resources).

There also exist significant differences in mean values between both groups of students (6.06 versus 7.09 in the case of the experimental group, scores in a grading scale ranging from 0 to 10 points, with a minimum pass mark of 5 to achieve the minimum acceptance level of competence).

In Table 5, we show the overall contrast of means between control and experimental groups.

Table 5. Descriptive statistics: experimental group versus control group

Descriptive statistics ^a				
Control group				
	Means	Standard deviation	N	
HP1_Unit 1_Phase1_Step3	6.42	2.248	31	
HP1_Unit1_Phase2_Step4	6.16	2.252	31	
HP1_Unit 2_Phase1_Step3	6.42	2.157	31	
HP1_Unit2_Phase2_Step4	6.10	2.300	31	
HP1_Unit 3_Phase1_Step3	6.42	2.233	31	
HP1_Unit3_Phase2_Step4	5.97	2.198	31	
HP1_Unit 4_Phase1_Step3	6.52	2.189	31	
HP1_Unit4_Phase2_Step4	6.10	2.226	31	
HP2_Unit1_Phase1_Step3	6.65	1.872	31	
HP2_Unit1_Phase2_Step4	6.26	2.113	31	
HP2_Unit3_Phase1_Step3	6.61	1.944	31	
HP2_Unit3_Phase2_Step4	6.16	2.115	31	
HP3_Unit2_Phase1_Step3	6.48	1.947	31	
HP3_Unit2_Phase2_Step4	6.19	2.167	31	
HP3_Unit4_Phase1_Step3	6.58	2.062	31	
HP3_Unit4_Phase2_Step4	6.06	1.999	31	
Experimental group				
	Means	Standard deviation	N	
HP1_Unit 1_Phase1_Step3	6.03	1.816	31	
HP1_Unit1_Phase2_Step4	6.32	1.833	31	
HP1_Unit 2_Phase1-Step3	6.68	1.759	31	
HP1_Unit2_Phase2_Step4	6.77	2.202	31	
HP1_Unit 3-Phase1_Step3	6.84	1.695	31	
HP1_Unit3_Phase2_Step4	6.39	1.606	31	
HP1_Unit 4_Phase1_Step3	6.77	2.028	31	
HP1_Unit4_Phase2_Step4	6.55	1.895	31	
HP2_Unit1_Phase1_Step3	6.87	1.628	31	
HP2_Unit1_Phase2_Step4	7.48	1.877	31	

HP2_Unit3_Phase1_Step3	7.03	1.722	31
HP2_Unit3_Phase2_Step4	7.68	1.833	31
HP3_Unit2_Phase1_Step3	6.58	1.945	31
HP3_Unit2_Phase2_Step4	7.10	1.814	31
HP3_Unit4_Phase1_Step3	6.97	1.888	31
HP3_Unit4_Phase2_Step4	7.55	1.786	31

a. Case selection: V2 = 2

The biggest difference is observed in the second hypothesis (HP2 - cultural awareness and diversity understanding), the dimension in which those interacting in SL got an average score that exceeds 1 point to the results obtained by those that completed the tasks in class. Similar results are observed in the third hypothesis (HP3 - multicultural acceptance and cultural enrichment); the statistical analysis also shows differences higher than 1 point between the experimental group and the control group.

The lower differences between the mean scores from both groups are obtained in the first dimension (the language used) with a difference of about a quarter of a point. Though the type of interaction differs, both activities show a similar degree of students' language proficiency, contributing to their productions and understanding of key concepts.

5. Discussion

As demonstrated by the research, virtual worlds offer opportunities to communicate and negotiate meaning with other online inhabitants in a social and authentic context, which proves helpful, considering learners' need to be exposed to and to produce the target language and culture through authentic outputs, mainly in contexts where students share the same language and cultural background. Said that, students interact with speakers with different first language and cultural backgrounds, providing solutions to a basic demand in language teaching and learning: access to authentic, rather than simplified, teaching materials and to real communicative situations. Intercultural and pragmatic aspects implicit in SL have helped foreign language learners become more culturally competent, since culture is embedded in specific communicative acts. Likewise, the potential to simulate real interactions has fulfilled our teaching expectations of promoting intercultural exchanges and addressing competences required for the hospitality students and professionals under study. These advantages have to do with social and intercultural interaction, the development of users' experimentation and role-playing tasks in quasi-real environments. In this sense, SL opens up new grounds for interactive learning conditions by means of learning by doing and collaboration among multicultural groups.

In agreement with Molka-Danielsen (2009), it can be stated that effective teaching in SL should be based on careful task construction, proposals promoting constructivism, problem-based instruction, active and action learning, tandem and group work. Likewise, as stated by Deutschmann & Panichi (2009), teacher practices should follow a careful design process in virtual environments, taking into account thoughtful planning, learners' profiles, affordances and technological limitations that may influence learning.

As for the research hypotheses, the analysis of the mean values for the acquisition of language and cultural competences in both groups of students reveals that values obtained are slightly higher for the experimental group than those for the control one ($XE \neq XC$), indicating that those students that had received SL experimentation did better than those who had completed similar role-play tasks in-class. The possibility to express their identity without fear to social feedback, the anonymity provided by avatars and the multi-dimensional nature of the environment could motivate students to participate in phase 2.

Bearing in mind Hypothesis 1, and although specific language outcomes between control and experimental groups may not be significant in this case, the mean score, produces a slight positive difference in students performing the phase 2 tasks in SL. Results also show that even though both environments seem equally suited for developing course tasks in English, the conversation and type of interaction can take different forms (more conversational turns in the SL role-playing activities, but with shorter contributions on each one).

Applications which simulate real contexts and bridge gaps to bring nationalities and cultures together can be a potential cultural training for educational contexts as ours in which students share the same language and cultural background (Chen, 2016). In line with Zheng et al, 2005; Deutschmann & Panichi, 2009; Dell'Aria & Nocchi, 2010; Wigham & Chanier, 2013; Wang, Deutschmann & Steinvall, 2013, SL proves its potential for the development of communicative competences, considering communication as a skill which involves much more than mastering the target language only, but interpreting meaning within a cultural context. In hypotheses 2 and 3 of our study, the mean of the two groups (control and experimental) awards a difference of 1 point to students who performed the task in SL, meaning a slight improvement of the experimental group in the intercultural related competences.

As stated in Good, Howland & Thackray (2008) and Blasing (2010), SL opens new chances for professional training of ESP students as well; apart from eliminating geographical and time barriers, it allows the combination of language use and professional development

through authentic simulations and real users, important competences which must be considered when looking for a job in the hospitality sector.

6. Concluding remarks

SL facilitates student-like-avatars' interaction among users and the world around them, affordances which include the facilitation of tasks that lead to enhanced spatial representation, and opportunities for experiential multicultural interaction within an environment where variables such as anxiety minimization, anonymity, motivation are key for successful language learning. Some of the most important barriers preventing students from using a foreign language effectively are related to inhibitions and fear of negative criticism.

In the case of our study, the experience has proven to be rewarding due to its immersive reality, real-life scenarios and sense of co-presence, encouraging the development of English for Specific Purposes and the acquisition of intercultural communication and diversity awareness in a monolingual and monocultural education setting.

The experimental learning methodology followed in our research (Kolb, 1984), based on a cyclical process that results in active experimentation from previous phases of observation and reflection, can be applied to a great number of interactions in SL, in which learners can observe language and behavior and interiorize culture of other virtual world inhabitants.

References

- Alsagoff, L. (2012). Identity and the EIL learner. In L. Alsagoff, S. L. McKay, G.Hu, and W.A. Renandya (Eds.), *Principles and Practices for Teaching English as an International Language* (pp. 104-122). New York: Routledge.
- Baum, T. (2012). Human resource management in tourism: a small island perspective. *International Journal of Culture, Tourism and Hospitality Research*, 6(2), 124-132.
- Blasing, M. T. (2010). Second language in Second Life: Exploring interaction, identity and pedagogical practice in a virtual world. *SEEJ*, 54(1), 96-117.
- Bueno Alastuey, M. C. (2011). Perceived benefits and drawbacks of synchronous voice-based computer-mediated communication in the foreign language classroom. *Computer Assisted Language Learning*, 24(5), 419-432.
- Bull, S., & Wasson, B. (2016). Competence visualisation: Making sense of data from 21 st-century technologies in language learning. *ReCALL*, 28(02), 147-165.
- Byram, M. (1997). *Teaching and Assessing Intercultural Communicative Competence*. Clevedon: Multilingual Matters.
- Canals, C. (2014). China y Rusia: los nuevos emergentes en emisión de turismo. *Informe Mensual. La Caixa*, 379, 32-33.

- Canto, S., Jauregi, K., & van den Bergh, H. (2013). Integrating cross-cultural interaction through video-communication and virtual worlds in foreign language teaching programs: Is there an added value? *ReCALL*, 25(1), 105-121.
- CEFR. Available in: http://www.coe.int/t/dg4/linguistic/cadre1_en.asp
- Cerezo, L., Baralt, M., Suh, B. R., & Leow, R. P. (2014). Does the medium really matter in L2 development? The validity of CALL research designs. *Computer Assisted Language Learning*, 27(4), 294-310.
- Chen, J. C. (2016). The crossroads of English language learners, task-based instruction, and 3D multi-user virtual learning in Second Life. *Computers & Education*, 102, 125-171.
- Dell'Aria, C. & Nocchi, S. (2010). Will Second Life help me survive in Italy? *Proceedings of the ICT for Language Learning*, 3rd, Florence, Italy, November, 2010.
- Dema, O. & Kramer, A. (2015). *Teaching Culture in the 21st Century Language Classroom*. DigitalCommons@University of Nebraska.
- Deutschmann, M., & Panichi, L. (2009). Talking into empty space? Signalling involvement in a virtual language classroom in Second Life. *Language Awareness*, 18(3), 310-328.
- Deutschmann, M., Panichi, L., & Molka-Danielsen, J. (2009). Designing oral participation in Second Life: A comparative study of two language proficiency courses. *ReCALL*, 21(2), 206-226.
- Deutschmann, M., & Panichi, L. (2009). Instructional design, teacher practice and learner autonomy. In J. Molka-Danielsen & M. Deutschmann (Eds.), *Learning and Teaching in the Virtual World of Second Life* (pp. 27-44). Trondheim: Tapir Academic Press.
- Doughty, C., & Long, M. (2003). Optimal psycholinguistic environments for distance foreign language learning. *Language Learning & Technology*, 7(3), 50-75.
- Edwards, P., Rico, M., Dominguez, E. & Agudo, J. E. (2010). Second language e-learning and professional training with Second Life. In H. Hao Yang & S. Chi-Yin Yuen (Eds.), *Collective Intelligence and Elearning 2.0: Implications of Web-Based Communities and Networking* (pp. 207-227). Hershey: Information Science Reference.
- Baron, N. (2008). *Always on: Language in an Online and Mobile World*. Oxford: Oxford University Press.
- Ellis, R. (2003). *Task-based Language Learning and Teaching*. Oxford: Oxford University Press.
- Galloway, V. B. (1985). A design for the improvement of the teaching of culture in foreign language classrooms. ACTFL project proposal.
- Gardner, M., Gánem-Gutiérrez, A., Scott, J., Horan, B., & Callaghan, V. (2011). Immersive Education Spaces using Open Wonderland from Pedagogy through Practice. *Multi-User Virtual Environments for the Classroom: Practical Approaches to Teaching in Virtual Worlds*, 190-205. Retrieved February 27, 2015 from http://dces.essex.ac.uk/staff/vic/papers/2011_IGI11%28ImmersiveEducationSpaces%29.pdf.
- Good, J., Howland, K., & Thackray, L. (2008). Problem-based learning spanning real and virtual worlds: A case study in Second Life. *Research in Learning Technology*, 16(3), 163-172.
- Grobelna, A. (2016). Intercultural challenges facing the hospitality industry. Implications for education and hospitality management. *Journal of Intercultural Management*, 7(3), 101-117. Retrieved 11 Nov. 2016, from doi:10.1515/joim-2015-0023.
- Hauck, M. (2010). Telecollaboration: At the interface between multimodal and intercultural communicative competence. In S. Guth & F. Helm (Eds.), *Telecollaboration 2.0* (pp. 219-248). Bern: Peter Lang.

- Instituto Nacional de Estadística (Spanish Statistical Office): <http://www.ine.es/>
- Iwasaki, I. (2014). Exploring Second Life for effective English as a Foreign Language and Culture Learning (竹中暉雄教授退任記念号). 桃山学院大学人間科学, (45), 205-220.
- Jauregi, K. & Canto, S. (2012). Enhancing meaningful oral interaction in Second Life. *Procedia - Social and Behavioral Sciences*, 3(4), 111-115.
- Jauregi, K., Canto, S., de Graaff, R., Koenraad, T., & Moonen, M. (2011). Verbal interaction in Second Life: Towards a pedagogic framework for task design. *Computer Assisted Language Learning*, 24(1), 77-101.
- Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development* (Vol. 1). Englewood Cliffs, NJ: Prentice-Hall.
- Kramsch, C. (1994). *Context and Culture in Language Teaching*. Oxford: Oxford University Press.
- Kiesler, S., Siegel, J. & McGuire, T. W. (1984). Social psychological aspects of Computer-Mediated Communication. *American Psychologist*, 39(10), 1123-1134.
- Kyriacou, C. & Zhu, D. (2008). Shanghai pupil's motivation towards learning English and the perceived influence of important others. *Educational Studies*, 34(2), 97-104.
- Levak, N., & Son, J. (2017). Facilitating second language learners' listening comprehension with Second Life and Skype. *ReCALL*, 29(2), 200-218. doi:10.1017/S0958344016000215.
- Liou, H. C. (2012). The roles of Second Life in a college computer-assisted language learning (CALL) course in Taiwan, ROC. *Computer Assisted Language Learning*, 25(4), 365-382.
- Luka I., Vaidesvarans & S., Vinklere D. (2013) Educating tourism students for work in a multicultural environment. *Journal of Teaching in Travel and Tourism*, 13(1), 1-29.
- Melchor-Couto, S. (2017). Foreign language anxiety levels in Second Life oral interaction. *ReCALL*, 29(1), 99-119. doi:10.1017/S0958344016000185
- Menike, H. & Pathmalatha, K. (2015). Developing foreign language competencies of tourism industry oriented undergraduates in Sri Lanka. *Tourism, Leisure and Global Change*, 2(1), 74-87.
- Moore, S., May, D., & Wold, K. (2012). Developing cultural competency in engineering through transnational distance learning. *Transnational Distance Learning and Building New Markets for Universities*, 210-228.
- Müller-Jacquier, B. (2000). Linguistic awareness of cultures: Principles of a training module. In J. Bolten (Ed.), *Studien zur internationalen Unternehmenskommunikation* (pp. 20-49). Leipzig: Popp.
- Nocchi, S. (2012) . Come si fa? can virtual worlds help us to promote intercultural awareness In *The Call Triangle: Student, Teachers and Institution: Proceedings of Eurocall 2011*, University of Nottingham, 2011.
- Ntukula, A. (2013) *Diversity in the Workplace: Managing a Culturally Diverse Workforce in the Irish Hospitality Sector*. Masters thesis, Dublin, National College of Ireland.
- Omaggio, A. C. (1986). *Teaching Language in Context: Proficiency-Oriented Instruction*. Boston: Heinle & Heinle.
- Panichi, L., & Deutschmann, M. (2012). Language learning in virtual worlds: Research issues and methods. In Dooly, M. and O'Dowd, R. (Eds.), *Researching Online Foreign Language Interaction and Exchange: Theories, Methods and Challenges* (pp. 205-232). Bern: Peter Lang.

- Peterson, M. (2011). Towards a research agenda for the use of three-dimensional virtual worlds in language learning. *CALICO Journal*, 29(1), 67-80.
- Peterson, M. (2012). EFL learner collaborative interaction in Second Life. *ReCALL*, 24(1), 20-39.
- Peterson, E., & Coltrane, B. (2003). Culture in second language teaching. Retrieved from <http://www.cal.org/resources/digest/0309peterson.html>.
- Sadler, R. (2012). *Virtual Worlds for Language Learning: From Theory to Practice*, New York, NY: Peter Lang.
- Shohamy, E. (2007). *Language Policy: Hidden Agendas and New Approaches*. New York: Routledge.
- Siegel, S., (2010). Gaining cultural intelligence through Second Life learning interventions. *The International Conference on E-Learning in the Workplace 2010*, www.icelw.org.
- Short, J., Williams, E., & Christie, B. (1976). *The Social Psychology of Telecommunications*. London: John Wiley & Sons.
- Thorne, S. L. (2008). Transcultural communication in open internet environments and massively multiplayer online games. In S. Sieloff Magnan (Ed.) *Mediating Discourse Online* (pp. 305-327). Amsterdam: John Benjamins.
- Thorne, S. L., Black, R. W., & Sykes, J. (2009). Second language use, socialization, and learning in internet interest communities and online games. *Modern Language Journal*, 93, 802-821.
- Van Lier, L. (2002). An ecological-semiotic perspective on language and linguistics. In C. Kramsch (Ed.), *Language Acquisition and Language Socialization: Ecological Perspectives* (pp. 140-164). London: Continuum.
- Wang, A., Deutschmann, M. & Steinvall, A. (2013). Towards a model for mapping participation: Exploring factors affecting participation in a telecollaborative learning scenario in Second Life. *The JALT CALL Journal*, 9(1), 3-22.
- Wang, A. (2015) Facilitating participation: teacher roles in a multiuser virtual learning environment. *Language Learning & Technology*, 19(2), 156-176.
- Ware, P., & O'Dowd, R. (2008). Peer feedback on language form in telecollaboration. *Language Learning & Technology*, 12(1), 43-63.
- Westhoff, G. (2004). The art of playing a pinball machine: Characteristics of effective SLA tasks. *Babylonia*, 12(3), 58-62.
- Wigham, C. R. & Chanier, T. (2013). A study of verbal and nonverbal communication in Second Life: The ARCHI21 experience. *ReCALL*, 25(1), 63-84.
- Wigham, C. R. & Chanier, T. (2015). Interactions between text chat and audio modalities for L2 communication and feedback in the synthetic world Second Life. *Computer Assisted Language Learning*, 28(3), 1-30. Doi:10.1080/09588221.2013.851702
- Zheng, D. & Newgarden, K. (2012). Rethinking language learning: Virtual worlds as a catalyst for change. *International Journal of Learning and Media*, 3(2), 13-36. Available at <https://dmlcentral.net/wp-content/uploads/files/2.pdf>.

Appendix 1. Warming-up Questionnaire

Warm-up questions to make students familiarize with the topic before each unit. The items include:

1. Introduction (personal information, previous experience with people from different cultures).
 2. Mention behavior and attitudes which could help us enhance intercultural communication.
 3. What do you understand by *cultural diversity* and *diversity understanding*?
 4. Give examples of multicultural acceptance.
 5. In what sense could intercultural knowledge be enriched?
-

Appendix 2. Evaluation Sheet

Set of criteria to analyze texts and audio-visual material. Analyzing the language and functions and culture dimensions from 1 (*totally disagree*) to 5 (*totally agree*).

- (1) Language and functions in-class analysis (phase 1)
- (2) Cultural Dimensions in class analysis (phase 1)

Intercultural awareness

Tick the aspects appearing on the material which may allow us to understand communication among different cultures.

• Body Language	1	2	3	4	5
• Customs/Traditions	1	2	3	4	5
• Compliments	1	2	3	4	5
• Habits (food, drinks...)	1	2	3	4	5
• Timetable (punctuality)	1	2	3	4	5
• Table manners	1	2	3	4	5
• Gestures (smile, etc.)	1	2	3	4	5

Diversity Understanding

• Speaking other languages	1	2	3	4	5
• Understanding other cultures	1	2	3	4	5
• Tick ways to understand diversity					
• Observing behavior and body language	1	2	3	4	5
• Appreciating differences	1	2	3	4	5
• Respecting individuals (avoid stereotypes)	1	2	3	4	5
• Being calm, patient, tolerant, respectful	1	2	3	4	5

Multicultural acceptance and Enrichment

○ Treating people equally across cultures	1	2	3	4	5
○ Not discriminating race, sex, religion ...	1	2	3	4	5
○ Being sensitive to situation and people	1	2	3	4	5
○ Giving people equal opportunities	1	2	3	4	5
○ Travelling	1	2	3	4	5
○ Studying/working in a multicultural context	1	2	3	4	5
○ Indirect sources (Reading, movies...)	1	2	3	4	5

Appendix 3. Phase 2. Tasks. In-Class- SL activities**PRACTICE ACTIVITIES (PHASE 2)**

	In class	In SL
Hotel receptionist	Roleplay: dealing with guests from different nationalities at the front desk	Gexcall site in AvalonLearning: dealing with Chinese, Arabic and African clients at the front desk
Event planner	Planning a cultural event on Mediterranean diet	New York island: planning a cultural event on Mediterranean diet for American citizens
Tourist guide	Roleplay: making a tour to a multicultural group	Kamimo Island: making a tour to LanguageLab* students
Tourism consultant	Choosing a destination and developing a sustainable tourism project taking into account national guidelines	Visiting VIRTLLANTIS: developing a sustainable tourism projects with LanguageLab students and other visiting avatars

* A group was created for Hospitality and tourism, joining students from Europe, the USA, Turkey, China and Japan.