While the globalized nature of contemporary society can be empowering for many, it may mean the maintenance of social inequities for others, such as migrant populations. Spain, like many other European countries, has faced a high migration influx in the last decades. As a result, the government has invested in measures orientated toward social inclusion for these populations, including policies for the acquisition of language and culture. To support these efforts, the aim of the present study is twofold: Firstly, to evaluate the design of a cloud-based platform which supports learning authentic language and culture material appearing in media. Secondly, to present the results of a group of 12 trainers teaching language and culture courses through the platform and 63 adult A2-B1 migrants taking the courses offered there. The research examines the main findings of how migrants’ profiles may play a role in the effectiveness of online media as a teaching tool.

Keywords: Migrants, Inclusion, Media, ICT, Language, Culture

Introduction

The rise of the information society, pushed forward by telecommunications and technological development over the last few decades, has been empowering for some individuals. However, for others these advances have not solved the problem of social inequity or exclusion, specifically in the case of migrants. Spain has experienced a high migration influx in the last decades. This growth of the immigrant population has boosted the teaching of Spanish as a second language, a relatively new subject
area in development throughout the last two decades. Still, Spanish for Foreigners (ELE – Español para Extranjeros) initiatives for migrants are scarce and most often run by municipalities, local governments, NGOs, and adult public education centers (EPA – Educación de Personas Adultas). In spite of such initiatives, resources based on everyday language, realia, which are authentic materials designed for purposes other than teaching languages, remain to some extent limited. For this reason, teachers often turn to the Internet to retrieve information (Tanrıverdi & Apak, 2008; Coscarelli, 2014; López-Jiménez, 2014).

In this context, we pose the question: How can we marry the need for social integration with language acquisition in authentic materials as a basis for language learning? How do the varying realities of migrant populations interplay with such materials, such as origin and L1 language skills, or educational level?

We answer these questions by assessing the efficiency of an online platform whose aim is to train a group of migrants for future linguistic tasks (language certification for job training, etc.). We assessed the reception of the platform’s media based resources in two well-differentiated groups of migrants (educated and uneducated). In particular, the research examines how the dynamics of media content and collaboration through social interaction can influence social and labor inclusion. Finally, it also speaks to the extent that migrants’ particular profiles influence the effectiveness of online tools.

Social inclusion and exclusion in migration: A global divide

Broadly, migration is the permanent or semi-permanent relocation of people from one location to another (domestically or internationally), which can affect a society socially, economically, and culturally, among others. We might classify these into three distinct groups. The first, the so called forced migration, represents the negative face of migration, where people leave their countries of origin because of human persecution or exploitation. Though it does not always imply violence, the International Organization for Migration (Sundhaussen, 2010) defines forced migrants as any person who migrates to escape persecution, conflict, repression or other situations that endanger their lives, freedom or livelihood. The second type of migration is reluctant migration, in which individuals are not forced to move, but do so because of unfavorable situations in their current locations. Finally, voluntary migration is migration based on one’s free will and initiative to move. Thus, considering that people migrate under different conditions, these circumstances affect the profile of migrants and the degree of social inclusion or exclusion they may face in host countries.

Social exclusion can be a consequence of migration, and it usually describes a situation where individuals are unable to participate in the economic, social, political and cultural life where they live. This is in contrast with social inclusion, defined as the process of improving disadvantaged peoples’ participation in society. Social inclusion ensures that populations at risk can gain the opportunities and resources needed to enjoy a certain standard of living in the society in which they live. “It ensures that they have greater participation in decision making which affects their lives and access to their fundamental rights” (Council of the European Union, 2003). Similarly, and as described by the United Nations (2016), social inclusion can be defined as a process by which societies combat poverty and social exclusion by understanding the factors working against it.
Employability, ICT and social inclusion

While there has been progress in promoting democratic values and socio-economic development among governments and civil society worldwide in the last 20 years, inequality and exclusion persist. To prevent marginalization, societies must be equipped with strategies and effective policies to assess social realities and work on their challenges. To this end, in February 2013, the European Commission launched the Social Investment Package for Growth and Cohesion (SIP) whose research has focused on providing scientific evidence and policy guidance about how ICT (Information and Communication Technologies) innovation can support employability and inclusivity challenges in the context of the EU policy framework.

Migration and language requirements

A fundamental factor for social inclusion for migrants may be the adoption of language-related requirements in the context of immigration and integration, when used appropriately. Many European countries have made knowledge of their national language a requirement for adult migrants to be allowed to (a) enter the country, (b) be granted permanent residence status or (c) become nationals. In accordance with legal rules governing knowledge of the host country’s language, language learning is often combined with language testing, which is compulsory under the law in some cases. In 2008, 27 European member states out of 45 reported their decision on language requirements (Extramiana, & Van Avermaet, 2011). Some states required language level certification for at least one of the three administrative situations identified above, and some, like Spain at the time, did not establish specific linguistic policies for immigration. Spain has since incorporated such regulations. Language classes are offered by most countries which have made language a condition of legal integration. On a positive note, such regulation of linguistic competence may lead to more funding for such courses, creating an important benefit for migrants.

Digital economy: The technological divide

Rapid advances in ICT have resulted in a new social order that is having a profound effect on the daily activities of individuals, organizations and society (Warschauer & Matuchniak, 2010). Computers and ICT digital literacy are more important than ever for communication, leisure and labor market activity, as well as simply for remaining informed about daily news and events (Buckingham, 2015). Yet, the digital age is not the same for everyone because there is a significant “digital divide” worldwide with respect to access to digital technologies (Migliorino, 2010; Alam & Imran, 2015), their use and their repercussions (OECD, 2000). It is not merely a problem of access: there is also a visible dearth of competencies needed to access, analyze and use digital information. In the aforementioned study, for example, forty-two percent of people who had no computer experience were unemployed, compared to a 17% rate of unemployment in digitally-skilled people (ibid). A second digital divide implies that regular users of digital technologies develop skills that are often only useful for things like watching videos, using social networks or listening to music, while these users lack the skills which employers need in the workplace.

This gap is even more noticeable in terms of migration where multiple divisions can co-exist, including socio-economic, age, class status, and geographical divides. Exclusion
from technology can lead to poorer quality of life, such as those faced by migrants in Canada who were unable to navigate public information presented digitally for such basic needs as housing, employment, health and education (Caidi & Allard, 2005). Many factors can influence migrants’ ability to engage with digital technologies, including familiarity with these, language proficiency, and communication preferences (Bianco, Cunningham, & McCombe, 2010; O’Mara, Babakan, & Borland, 2010). Of particular importance to the present study, language proficiency has been singled out by experts as an important cause for social exclusion within migrant groups (Aspinall, 2007; Bigelow, 2010; Colic-Peisker, 2005). What is more, an inclusive society is based principally on the basis of public education, linked to values such as equality, social justice, democracy and respect for diversity. Inclusion implies consequently ensuring educational standards for all, which involves considering and integrating technological advances.

In the framework of the MASELTOV project (“Mobile Assistance for Social Inclusion and Empowerment of Immigrants with Persuasive Learning Technologies and Social Network Services - http://www.maseltov.eu/-”) we also find the recognition of lack of language skills as a major contributory factor to the social exclusion of many immigrants (Kukulska-Hulme, 2012). The project identifies the potential of mobile technology for supporting language learning, integration, social inclusion and cultural diversity by increasing immigrants’ ability to move around unfamiliar societies, facilitating communication and language learning using smart phones.

Digital inclusion for the migrant population then is multi-faceted. Firstly, it includes the basic necessity of having access to digital tools like the Internet and technological devices. It also contemplates the need for technological skills and competencies for putting these resources to use in a context that is beneficial to migrants: to cover basic needs (housing, job searches, etc.) as well as within a labor context for job purposes. Integral to these needs is that migrants have the linguistic skills to use and access digital resources in the host language.

**Literature Review**

**Spanish context: Who are Spanish migrants and what is their ICT use?**

Spain, once an exporter of emigrants, has become host to multiple nationalities. There are now more than 5 million foreigners living in Spain (officially registered by INE – Statistics National Institute), giving rise to a complex and heterogeneous population (Ministerio de Empleo y Seguridad Social, 2017). Among the different foreign nationalities, the most prominent are: Romania, Morocco, Ecuador, Colombia, UK, Italy, China, Bulgaria, Bolivia, Peru, and Portugal (ibid).

Among these, according to Reichel and Siegel (2015), the number of Spanish immigrants using the Internet for online learning or educational activities is quite low. About 70–78% of those surveyed had never done online courses to increase employability, to learn the language or for other purposes. According to the same study, migrants in Spain are capitalizing on internet use, in particular on their mobile phones, for social and communicative purposes and as well as to search for courses or jobs, but not necessarily to actually gain further education, training or official certification. Ninety-two percent of the Spanish sample had received no generic skills training and eighty-four percent had received no job-related training skills in the twelve months prior to the study (Reichel & Siegel, 2015).
Digital media remains important for language acquisition, being a powerful resource which offers real interaction with the target language and culture, as well as valuable instructional material that is superior to the simplified language in textbooks. It includes such linguistic realia as newspapers, photographs, how-to videos, promotional leaflets, blogs, and advertisements, among others. For this reason, digital media and ICT are increasingly employed to communicate, disseminate, and learn foreign languages and culture. Smartphones, tablets and computers have become an indispensable tool as they support and bring together a great deal of media and resources. Online learning is growing by leaps and bounds for Spanish nationals as a way to mitigate the lingering economic crisis by obtaining education and skills in a more flexible environment (Ministerio de Cultura, Educación y Deporte, 2016), yet migrants are not also increasing their training and professional skills at the same rate. We must ask why, given that they are increasingly more connected and in need of skills, including linguistic and cultural skills, to improve their employability. While digital inclusion is becoming synonymous with social inclusion, finding a job, or accessing public services can be made almost impossible for people who are left out of the digital society because of linguistic boundaries.

**Spanish context: Language learning and social inclusion**

As noted, language is central to many of the challenges posed by migration, especially integration and the maintenance of social cohesion. Migrants’ access to education and training in the host country is particularly important, as recognized in 1997 by Article 14.2 of the European Convention on the Legal Status of Migrant Workers (1977) (Council of Europe):

> To promote access to general and vocational schools and to vocational training centers, the receiving State shall facilitate the teaching of its language or, if there are several, one of its languages to migrant workers and members of their families.

In the case of Spain, it was not until October of 2015 that foreigners applying for Spanish nationality had to undergo a test to show their knowledge of Spanish language (A2 or higher) and culture. Despite this legislation, public funding for courses to help migrants in Spain reach these goals is scarce.

Thus, mastering the host country’s language and training are prerequisites to avoiding the problems of an under-qualified labor force. As such, linguistic regulations must be supported with adequately funded language teaching and testing in any appropriate response to the challenges of migration and their integration into Spain.

Part of this response should include ICT training in today’s digital world. The revised Lisbon Agenda, the policy framework ‘i2010: A European Information Society for Growth and Employment’ (European Commission, 2005) has clearly established digital inclusion as an EU strategic policy goal. Everyone living in the EU should have the opportunity to use and master digital competences and ICT. Policy needs in fact go hand-in-hand with the application and effectiveness of ICT programs for these populations, as Selwyn (2008) indicates. The author identifies two trends in current policymaking in the UK, i.e. i) educational provision focused policies which seek to use technologies to promote equality educational opportunities and outcomes; and ii) technological access focused policies which seek to use education to ensure social inclusion in terms of technological opportunities and outcomes. Previous research also highlights other dominant themes in the literature surrounding ICT and immigrants, though much points to a dearth of quantitative data on the
effectiveness of learning programs or on participants’ experiences (Taylor & Packham, 2016). One of the most prominent conclusions is that technology alone cannot resolve social exclusion issues, but that it must be combined with other educational models or service approaches. This includes the need for retaining physical classroom spaces or direct learner-instructor contact combined with online education tools (Hiller, 2016). This may be related to an underlying need for person-to-person contact. A study in ESOL centers in England (Taylor & Packham, 2016) found that technology is insufficient to overcome existing inequalities in access to learning in minority groups with traditionally difficult access to language resources. The study reinforced the need for blended learning to maintain tutor or instructor contact with migrant students, a point other studies have highlighted (Mervyn, Simon, & Allen, 2014).

Language learning and media

The affordances of media and technology use in learning, and language learning in particular, are manifold (Chapelle & Voss, 2016). The educational potential of technology is derived from its portability, ubiquity, social interactivity, context sensitivity, connectivity and individuality. These suggest an array of unique modes of interacting, such as distributed, collaborative, peer-to-peer networking or coupling physical space with virtual space in instruction. Additionally, research indicates that audiovisual and electronic media increases communicative and cultural competences, as well as strategies of mediation, independent learning and self-evaluation in foreign and second language learners (Colpaert, 2006). It also increases motivation (ibid).

In this sense, the last decade has witnessed a coming-of-age for research in ICT applied to language learning and research, from meta-analytic to qualitative approaches. The field has turned from examining questions about whether technologies are effective to how the affordances of technology might best be exploited to provide learners with optimal language learning opportunities (Plonsky & Ziegler, 2016). For example, a recent synthesis by Golonka, Bowles, Frank, Richardson, and Freynik (2014) examined over 350 studies encompassing research on a wide range of technologies, including classroom-based programs and independent learning tools that improved a variety of L2 skills, such as pronunciation, vocabulary, and reading comprehension.

To incorporate these varied and interactive benefits, our approach is based on an ecological or holistic view, where the actions and activities of teachers and learners form a multilayered network of interactions and language use in social, physical and even symbolic levels (Van Lier, 2010; Colpaert, 2006). In this approach, media are vehicles of learning that can be used productively as tools to support learners’ cognition and interaction with the environment, as well as to allow them to focus on the construction of knowledge (Chan et al., 2006: 9)

Research objectives

With the purpose of gaining insight on how to use authentic material to enable the migrant population to acquire linguistic and cultural skills for improving social inclusion, our research is two-fold:

- To analyze evaluators’ perceptions of the online platform (a cloud-based platform for language and culture acquisition)
To measure students’ perceptions of the resources and tasks included

Research Design and Methods

Materials

LiMe Educational Platform: Language and Media. In this light LiMe, the Languages in Media (http://www.languages-in-media.eu/) project, financially supported by the Lifelong Learning European Program, contributes to the enhancement of teaching and learning a foreign language and its culture and as a result hopes to strengthen social inclusion in education among migrants. LiMe was developed to counteract some of the aforementioned issues instructors of Spanish as a Second Language have in teaching migrant populations, in particular finding adequate and authentic materials, and presenting these in a blended learning models that combine both group and individual work.

LiMe is a cloud-based platform which runs on mobile devices and supports multimedia learning objects based on authentic material appearing in media – e.g. film trailers, online newspapers, advertisements, social networks, YouTube videos, songs etc., aimed at migrant learners, their language acquisition and their cultural integration. The platform can be accessed at: http://lms.languages-in-media.eu/

Based on the results of the research and technological implementation carried out by the partner countries involved in the project (Germany, Italy, Spain, Poland and the UK), the platform combines authentic media-based input in diverse formats. The online teaching program is divided into 12 sections, each one corresponding to a type of digital media and represented by an icon (see Figure 1, below). Because the participants were of distinct origins, it seemed wise to utilize the target language for instructions and icon descriptions.

From the resources shown above, in this study 6 types of media were analyzed (movie trailers, TV soap operas, radio news, music videos, YouTube videos, and social networks). Twelve (12) teachers and sixty-three (63) students participated in the evaluation of the platform.
Each unit starts with a didactic explanation of the content included, as seen in the example of social networks, https://youtu.be/eSzTYn_e92w, below. After this introduction, students select their level (A2, B1 or B2) by clicking on the corresponding button, as shown in the image below (Figure 2), which is the unit on social networks for A2. Level A2 was the lowest level offered in the LiMe project, a minimum established by the Lifelong Learning European Program.

![Figure 2 Social Networking: Level A2](image)

Each resource lesson plan follows a similar layout. It begins with a warm-up activity, which may include group discussion (face-to-face or through a course forum) or an individualized activity devised to make students focus on the unit content. This is followed by authentic input taken from the selected media mentioned above. Then follows activity tasks to work different language skills, tailored to each level. Through audio, video, visuals or reading passages, the related tasks vary in length, skills, competence and content and range from discussion topics (wikis, oral and written forums), matching activities, short writing pieces, filling the gaps, mind maps, grammar, vocabulary and pronunciation exercises. This is accompanied by a cultural component (food, festivals, history, holidays, timetable and the like). Each unit concludes with an extension/homework activity, which is a task-based activity putting together the key concepts, grammar, vocabulary, and cultural knowledge developed throughout the lesson. The extension/homework activity is designed to be done either in class or as homework to check their intercultural understanding as well as language learning. Again, in this design we were guided by an ecological approach which understands the learning process as a whole, so that the various actions and activities of teachers and learners in both language and culture form a multilayered network of interactions throughout the unit in a blended learning environment.

In detail, the methodological approach followed includes using various types of media during a block of lessons. Thus, as homework (warm-up) students can be asked to prepare a set of definitions on a given topic (for example, use of social networks for personal and professional purposes). The next day in class and after presenting the collected information, they are invited to compare the different definitions among themselves. The instructor then shows them a presentation on the given topic (in this case, focused on analyzing the layout, the language used and the benefits of social networking sites both for personal
and professional purposes). When this first input is completed, students are encouraged to complete specific tasks and start a group discussion, putting together all the different perspectives and insights. Additionally, and as homework, they can be asked to look for further information through the analysis of related images, texts, audio, video or social networks. The following day in class, students present the new information and are asked to create a short presentation which can be used to evaluate their levels of content acquisition.

Participants

Members of the LiMe team and associate partners piloted the evaluation of the platform and its resources for three months with the migrant population under study. All evaluators were native Spanish speakers and belonged to different institutions throughout Spain. Eight of them were teachers (Official School of Languages teachers: 4) and teacher trainers (4), while the other four worked as social integration specialists and coordinators for Integral Action with Migrants (the Red Cross: 1), CEPAIM (Consortium of Entities for Integral Action with Migrants: 1) and Fundación Ruy López: 2), a foundation for cultural awareness and social integration. The migrant sample includes sixty-three students from the aforementioned institutions.

In detail, our piloting is represented by two well-differentiated groups of migrant populations: Educated (those who had secondary or higher education degrees) and Uneducated (participants who did not have primary school certification). A wide range of nationalities was involved, as seen in Table 1.

Table 1. Migrant student participants

| Country of origin | Number of participants | Educated(E)/ Course level | Uneducated(U)/ Course level |
|-------------------|------------------------|---------------------------|-----------------------------|
| Ukraine           | 2                      | 2 /A2                     | 0                           |
| Brazil            | 3                      | 1/B1-B2                   | 2/A2                        |
| Morocco           | 12                     | 1/B1-B2                   | 11/A2                       |
| Romania           | 9                      | 1/B1-B2                   | 8/A2                        |
| Africa            | 9                      | 1/B1-B2                   | 8/A2                        |
| US                | 3                      | 3/ B1-B2                  | 0                           |
| Germany           | 3                      | 3/ B1-B2                  | 0                           |
| France            | 2                      | 2/ B1-B2                  | 0                           |
| Italy             | 4                      | 4/ B1-B2                  | 0                           |
| Philippines       | 1                      | 0                         | 1/A2                        |
| Poland            | 5                      | 2/ B1-B2                  | 3/A2                        |
| Bulgaria          | 3                      | 0                         | 3/A2                        |
| China             | 4                      | 2/ B1-B2                  | 2/A2                        |
| Hungary           | 1                      | 0                         | 1/A2                        |
| Australia         | 2                      | 2/ B1-B2                  | 0                           |

As shown, the lowest level (A2) was taken by those who had not completed compulsory education – Uneducated (N=41) – and who represent the largest migrant population in Spain. They come from countries such as Morocco, Romania, Ukraine, Poland, among
others, typically in search of better living conditions, so that we might call them reluctant, or forced migrants.

However, higher levels (B1 & B2) were taken by specialized workers from countries such as the US, Germany, Italy, Australia, France, etc., coming to a total of 22 students with secondary or higher education degrees.

**Data collection and analysis**

To obtain data from teachers and students, we used questionnaires composed of 17 and 9 Likert items, respectively, and open questions where respondents could make additional comments. Items were measured on a 5-point Likert-type scale (Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree).

Questionnaires were administered face-to-face during the period of time in which the experiment took place, over 8 sessions, which took place over 6 days, one for each assessed media resource, plus an introductory and a concluding session, distributed over 4 weeks.

We proceeded to carry out an analysis of the internal consistency reliability of the questionnaires through the Cronbach alpha test, for which the total of the 17 and 9 closed items were 0.985 and 0.904, respectively, which confirms the instruments’ high reliability.

For the treatment of the questionnaire data, the statistical package SPSS version 22 was used. Basic descriptive analysis was carried out (frequencies, percentages, measures of central tendency and dispersion for the variables under study).

The application of the Kolmogorov-Smirnov goodness of fit test to the parametric conditions of the closed items of the survey indicates that none is normally distributed (p-value < 0.005), so it is necessary to use the Mann-Whitney U test to compare differences between two independent groups; in our case, to check the heterogeneity of two samples (educated/uneducated), that is, to verify whether the whole group belongs to the same population.

**Results**

The results obtained through the questionnaire analysis are structured in two sections according to each objective. In the first, we present the teachers’ scores regarding the general effectiveness of the platform, its materials and resources and how these might be useful in future teaching with migrant populations (Objective 1). In the second section, we present the results of the differences in the students’ perception of the language and culture teaching platform (Objective 2), showing the items in which we found significant differences and the reasons for these.

**Objective 1. Results**

As seen in Table 2 below, most of the responses from the instructors positively evaluated the platform and its resources, where 55% or higher (most being around 75%) of the overall responses fell in the Agree and Strongly Agree categories. However, item P16 *I feel confident that I can develop my own language learning resources based on the use of media examples* merits attention given that here responses were less positive: around 30% of the responses were Strongly Disagree (25%) or Disagree (8.33%). In addition, item P10, *The materials and activities presented could be incorporated effectively into my current language teaching syllabus (or program)*, is interesting in that it showed a somewhat negative (8.33% Disagree) and
### Table 2. Item results for instructors’ assessment

| #Item | Question                                                                 | Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree |
|-------|--------------------------------------------------------------------------|-------------------|----------|----------------------------|-------|----------------|
| P1    | The level of the materials and activities presented are appropriate to the specified level(s). | 1 (8.33%)         | 2 (16.67%) | 5 (41.67%)                 | 4 (33.33%) |
| P2    | I found that there was appropriate progression between the different levels (if you tested resources across levels). | 1 (8.33%)         | 1 (8.33%) | 4 (33.33%)                 | 6 (50%)   |
| P3    | The materials and activities presented are likely to lead to effective language learning | 1 (8.33%)         | 1 (8.33%) | 1 (8.33%)                 | 4 (33.33%) | 5 (41.67%) |
| P4    | The materials and activities presented provide relevant cultural knowledge |                  |          | 5 (41.67%)                 | 7 (58.33%) |
| P5    | The materials and activities presented are likely to engage learners and increase motivation | 1 (8.33%)         | 2 (16.67%) | 3 (25%)                   | 6 (50%)   |
| P6    | I found the materials and activities presented to be interesting          | 1 (8.33%)         | 1 (8.33%) | 4 (33.33%)                 | 7 (58.33%) |
| P7    | The materials and activities presented make good use of media examples    | 3 (25%)           | 2 (16.67%) | 7 (58.33%)                 |          |
| P8    | The materials and activities presented make effective use of the interactive platform | 1 (8.33%)         | 2 (16.67%) | 3 (25%)                   | 6 (50%)   |
| P9    | The way that the materials and activities have been designed and presented is innovative. | 1 (8.33%)         | 1 (8.33%) | 3 (25%)                   | 7 (58.33%) |
| P10   | The materials and activities presented could be incorporated effectively into my current language teaching syllabus (or program). | 1 (8.33%)         | 4 (33.33%) | 2 (16.67%)                 | 5 (41.67%) |
| P11   | There is a good balance between teacher-led activities and student-led activities. | 1 (8.33%)         | 2 (16.67%) | 3 (25%)                   | 6 (50%)   |
| P12   | The resources inspired me to develop similar activities.                  | 2 (16.67%)        | 3 (25%)   | 7 (58.33%)                 |          |
more neutral response (33.33% Neither Agree or Disagree). This was also seen in some of the written comments on the questionnaire. For example, one teacher wrote: For some teachers, the wide range of activities with different purposes can be quite confusing, since they are not sure whether they should use the platform in class or for autonomous learning.

As seen, the answers to the platform questionnaire are significantly positive. Teachers also noted in their written comments to the open questions that the platform was easy to navigate, due to the accessibility of its resources and the helpful and necessary instructions included. They mentioned it was a good interactive learning tool that they would strongly recommend. However, instructors also made further written comments on the open questions concerning students’ inherent difficulties with the platform, stating that the low cultural, linguistic and technological level of students made proper use and evaluation of the platform difficult. They mentioned that instructions were difficult to understand for the less proficient students, indicating that the level should be lower than A2 for many of their migrant students, as noted in two instructors’ comments: It is difficult to use this kind of platform if students lack a minimum knowledge and the platform should be adapted to lower levels... Women in this center can hardly read and write.

**Objective 2. Results**

A notable first fact is that the students participating in the study show a favorable opinion toward the platform in practically all the items (see Table 4). The analysis of the learners’ responses revealed that all types of media help them in many different ways in and outside the classroom. Participants also stated that media materials were very useful in developing other language and socio-cultural skills, like better understanding of host country culture,
traditions, customs and behavior. This is observed in the median obtained which stands at 4 out of 5 (see Table 3).

Table 3. Students’ perceptions statistics

|     | P1   | P2   | P3   | P4   | P5   | P6   | P7   | P8   | P9   |
|-----|------|------|------|------|------|------|------|------|------|
| Mean| 2.95 | 3.52 | 3.92 | 3.59 | 3.67 | 3.60 | 3.56 | 3.68 | 3.79 |
| Median| 3.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Standard deviation| 1.275 | 1.306 | 1.195 | 1.200 | 1.191 | 1.238 | 1.305 | 1.216 | 1.220 |

In a detailed analysis for each item, we can examine their responses more closely. In the table below (Table 4), we can see the global mean, compared with the mean item response for the students who did not finish compulsory education (Uneducated), and those who did (Educated).

Table 4. Item analysis students’ perception

| #item | Question                                                                 | Global mean | Uneducated mean | Educated mean |
|-------|--------------------------------------------------------------------------|-------------|----------------|--------------|
| P1    | The level of the resources is suitable to my level                        | 2.95        | 2.6            | 3.8          |
| P2    | The resources will improve my process of language learning (in general)   | 3.52        | 3.22           | 4.09         |
| P3    | The resources can teach me a lot about culture through the use of media   | 3.92        | 3.68           | 4.36         |
| P4    | The resources made me want to learn more                                 | 3.59        | 3.39           | 3.90         |
| P5    | The resources and their subjects are interesting to me                    | 3.67        | 3.5            | 4.04         |
| P6    | The resources help me to learn languages (Spanish) through the use of media | 3.60        | 3.27           | 4.22         |
| P7    | The resources are good examples of interactive / computer learning        | 3.56        | 3.4            | 3.90         |
| P8    | The resources take an innovative approach to learning                     | 3.68        | 3.415          | 4.182        |
| P9    | I would recommend these resources to my friends                           | 3.79        | 3.49           | 4.409        |

In general, both groups, those who completed compulsory education and those who did not, consider that the LiMe educational platform is motivating and positively value the didactic resources (all items except P1 were over 3.5 on a 5-point scale). The items with the highest mark for both groups were P4 The resources made me want to learn more and P7 The resources are good examples of interactive / computer learning. They also indicate that the LiMe platform is a good example of computer-based interactive learning. However, there were significant differences for the educated group (those who finished compulsory studies),
who rated the platform more positively than the less educated students, which will be further analyzed in the Discussion section.

The results of the Mann-Whitney U-test for 2 independent samples made between educated and uneducated subjects confirm this and show that there are significant differences \((p<0.05)\) in the following items \(P1\) (level suitability), \(P2\) (level improvement), \(P3\) (culture teaching), \(P6\) (language improvement), \(P8\) (innovation) and \(P9\) (would recommend). These can be observed in the table below (Table 5).

| Item | Mann-Whitney U | Asymp. sig (2-tailed) |
|------|---------------|----------------------|
| P1   | 204           | .000                 |
| P2   | 265           | .006                 |
| P3   | 317           | .042                 |
| P4   | 330,5         | .068                 |
| P5   | 339           | .086                 |
| P6   | 252,5         | .003                 |
| P7   | 344           | .111                 |
| P8   | 295,5         | .020                 |
| P9   | 268           | .006                 |

Skills and competences (in the case of the educated group) are perceived to have a larger impact than any other factor on social inclusion. Inequalities due to lack of education, digital skills and language competences limit the access to basic needs, specialized jobs and an effective social integration.

**Discussion**

Improving language and cultural skills in migrant populations through digital learning looks toward the larger goal of improving social inclusion. As noted in the literature review, ICT training for migrant populations is necessary to bridge the digital divide and positively intervene in the social exclusion present in educational, professional and cultural spaces. The global world is connected largely, if not wholly nowadays, through digital technology. Those that remain disconnected from it lose important opportunities for advancement. This is especially important taking into consideration that the digital divide is more pronounced within migrant populations than in others, where additional barriers to social inclusion must be considered such as: language proficiency, accessibility, and socio-emotional needs.

To investigate how to best approach digital learning and language acquisition for migrant populations in Spain, we began this project with two key objectives:

1. To gain insights into the evaluators’ perceptions of the LiMe online platform
2. To measure students’ perceptions of the resources and tasks included (the format and spacing of the student satisfaction surveys did not allow for an area for additional comments).

In terms of the first objective, the data reveal that instructors’ assessment of the platform was acceptable (50–75% across the items) overall, which was also reflected in the instructors’ written comments. However, instructors responded less positively to two items on the questionnaire, both related to how teachers might incorporate LiMe examples into their own teaching. The less positive responses from instructors here may have to do with an uncertainty about how to incorporate the authentic media into different class structures, especially for lower levels, for example into individual, group, online and autonomous classes, which was mentioned in some of the teachers’ written comments on the “confusing” variety of activities. So, the reason teachers were less positive in their responses here may
be due to the fact that there is a need for clarity on how to use the platform for longer-term objectives. Instructors may need more information on how to insert these resources into their classroom teaching, as well as how such courses and activities fit into an overall curriculum.

Another result seen from the instructors was their indication that the low language proficiency and educational experience of some migrant students in this group were an obstacle to using the platform and its authentic material, which would affect students’ possibilities for assimilating the language input and cultural content. This is surely related to the fact that Spain had no specific language policy up until only recently: only since 2015 must applicants for Spanish nationality be tested for a certain level of linguistic and cultural knowledge. This recent change in legislation is a double-edged sword: it makes the possibility of immigrating to Spain legally much more difficult, but it also puts into place the need for the government to support Spanish language and culture training programs to ensure this objective is possible. Up until this point, the lack of government support and resources for these communities was widespread. What is more, the language level requisite itself, though realistic at an A2 (pre-intermediate) level, might be misunderstood in the context of academic or training purposes, when some students actually need to begin their studies from a much more basic premise.

In terms of the second objective, which was to measure students’ perceptions of the resources and tasks on the platform, overall their responses are also positive. However, student responses were significantly different for the two groups (Educated / Uneducated) for the following items (p <0.05): P1 (level suitability), P2 (level improvement), P3 (culture teaching), P6 (language improvement), P8 (innovation) and P9 (would recommend). In all cases the Educated group significantly valued these aspects more positively than the Uneducated group.

In particular, the significant difference between the two groups on the item “The level of the resources is suitable to my level,” reveals that fewer students consider the material too complex for them given their language levels. This is related to the significant differences for the other items “The resources will improve my process of language learning (in general)” and “The resources help me to learn languages (Spanish) through the use of media.” We understand that the uneducated group, who more significantly indicated that the level was too high for them, also do not consider that these can help them acquire language skills or improve through the use of media, for similar reasons. Relatedly, their responses to the item “The resources take an innovative approach to learning” is also significantly less positive, since they may not feel they can recommend resources that are too complex for them or that they have not understood.

This less positive response among the Uneducated group may be associated with the difficulty in understanding the different activities, perhaps in particular the authentic materials that formed the base of the media input, due to less familiarity with learning activities in general, which can affect migrants ICT use (Bianco et al., 2012; O’Mara et al., 2010) as well as issues with language proficiency, which was also signaled as important in other studies (Aspinall, 2007; Bigelow, 2010; Colic-Peisker, 2005). The lack of language proficiency and educational experience of some of these students was, as mentioned in the discussion point on Objective 1, highlighted by the instructors themselves.

Finally, the significant difference between the groups on the item “The resources can teach me a lot about culture through the use of media” is interesting. It may be reflective of students’ responses to the previous items, where lower educational levels and language
proficiency are important. It might also be interesting to consider other factors at play here, such as country origin and migrant type, which affects how migrants may view the host culture into which they should integrate. The students in the Educated group, who largely came from more developed countries when compared to the majority of students in the Uneducated group, were most probably voluntary migrants (Sundhaussen, 2010), who did not have an obligation to leave their home countries. This would in theory affect their desire to integrate into the host country, and so might also be reflected here in their more positive response to this item. Respectively, students in the Uneducated group, coming largely from countries of more economic difficulty (Romania and Morocco) might be more reticent to integrate into the culture and assimilate the language as reluctant or even forced migrants. It is important to note again that these nationalities make up the majority of migrants in Spain (Ministerio de Empleo y Seguridad Social, 2017).

Conclusions

We sought to gain insight into instructors’ perceptions of one digital tool for migrants, the LiMe platform, as well as to measure students’ perceptions of the learning resources and tasks therein. Our findings reveal how the dynamics of authentic media content and collaboration through social interaction in a digital space can be an effective tool for migrants, but this is, to some extent, dependent on the migrant profile in question. The authentic input (movie trailers, commercials, soap opera, social networks and other authentic material) utilized in the LiMe platform responded to certain gaps in instructional materials available (Tanrıverdi & Apak, 2008) and it differentiated the program from other language and culture instructional materials. However, we found that such resources were less accessible to some types of migrants, in particular those with lower educational and linguistic levels.

A new line of research in this sense would be working on non-literate migrant adults’ participation and understanding of language and culture through instructional material development. Taking into account that linguistic repertoire responds to different social roles and contexts (communicating within family, with neighbors or at work, expressing cultural identity, etc.), further research should look for the linguistic strategies which best suit their current and future needs, as well as their strengths and weaknesses. However, this diversification should not lead us to underestimate the fact that migrants are in everyday contact with the host language and that they need to use it in real life. In this sense, our teaching proposal on a digital platform enhances the use of language in everyday situations. This is why we have created a social learning environment to develop competences which promote the use of information resources migrants need in their host country (TV, newspapers, social networks, popular music, etc.).

The results of evaluators’ opinions in this study affirm one of the most persistent problems in connecting migrant populations with digital literacy: language proficiency and basic education, which goes hand in hand with the need for basic cultural literacy (including digital literacy) to understand the context in which language occurs. Students’ opinions seconded this. In particular students with lower educational levels found the resources more complex, of a higher level, and less helpful to them than the educated group, a significant difference. This indicates that the quality of digital resources is only as good as our understanding of where the student we aim to teach is. Future platforms of this sort should consider how to reach migrants at different levels of educational, digital and linguistic literacies. But though technology can facilitate access to literacy practices (language, culture,
visual language and so forth), a significant line for future research could be to assess how parents, as educational home leaders for their children, can be encouraged to initiate reading and/or writing activities with their children at home. In other words, to measure how the improvement of parents’ digital, language and culture literacy can play an important role in promoting children’s literacy and language development, in turn. Finally, another area for future research includes looking more deeply into instructors’ perceptions of online programs and media resources, to determine the causes of their reluctance for using these. A related research line might be how to aid ELE instructors in the incorporation of media and on-line course components into their everyday lessons as well as their overall curriculums to the benefit of students at their individual levels. On-line programs in fact should be the go-to area for treating level differences in class populations, since it affords students the unique opportunity to study at their own, individual pace.

In this respect, we conclude that ICT training and the development of digital literacy should be accompanied by specific training in language and culture acquisition that respond to students’ true levels. This includes: (1) ICT training to be connected in the globalized nature of contemporary society and its digital economy and (2) the language and culture knowledge to better process the authentic media information filtered through this digital world in terms of information updates, entertainment, leisure and professional integration and promotion, and finally (3) educational literacy for working within a learning context for those students with less experience in these settings. All these contribute to a successful integration into the interwoven connections of the host country.

Additionally, study results here showed that migrants coming from some countries, primarily those of greater economic difficulty, might not have the same educational gains in terms of the cultural content of such authentic digital resources perhaps due to the difficult conditions in which they have migrated, and this should be taken into consideration for how to incorporate intercultural content. This takes on greater importance when we consider that this population makes up the majority of migrants in Spain.

In a global sense then, this study also affirms the importance of linguistic policies for migrant populations. Specifically, the investment in language and culture training courses to enhance social inclusion and prevent social iniquities for those groups who are forced to live beyond the confines of their local communities and families, the type of migrant which, according to our study, coincides with being less educated, or not having completed compulsory studies, is important. Particularly, this research reveals the urgent need to go beyond the A2 level requisite in place by immigration legal policy to offer language and culture courses at beginner levels, with an eye to helping students with less educational or intercultural experience. The very recent incorporation of linguistic requirements to immigrate to Spain (2015) has pushed to the forefront the need for government-supported language training and certification needs, yet a good deal of work must be done to further organize and structure this support to the real benefit of these migrant communities. ICT training in languages and culture is necessary, but it alone is not the panacea for migrants’ problems. Future digital training resources, such as this platform offering a unique focus on authentic media of the sort migrants see daily, can only be as effective as efforts to understand how and when to integrate such technology. Our data pointed specifically to the need to work with instructors and trainers on how to incorporate such authentic input, in particular in terms of how to structure these (individual, group, autonomous classes) and ensure basic messages like instructions get through to migrant students. Importantly, future ICT language learning programs must consider how to make these truly accessible.
to different types of migrants, keeping in mind that the most difficult and thus most in need of consideration, may be those at the beginner’s levels.

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