LANGUAGE LEARNING DURING A PANDEMIC: STUDENT ENGAGEMENT AND COMMUNICATIVE COMPETENCE DEVELOPMENT THROUGH TECHNOLOGY-BASED ACTIVITIES

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Abstract

In its *Employment Outlook 2019* report, the Organisation for Economic Co-operation and Development (OECD) acknowledged that the world was changing at lightning speed, projecting that one-third of all jobs worldwide would likely be transformed by technology by 2030 [1]. In January 2020, the World Economic Forum reinforced that, consequently, the world was facing a reskilling emergency: due to the inevitable rise of technology, and to ensure the future of our economy, more than 1 billion would need to drive an important reskilling effort – not only in terms of high-tech skills but also specialised interpersonal skills would also be in high demand [2].

Little did we know, that the future would arrive sooner than expected. Digitalisation and globalisation had already been transforming how we lived and worked, but the coronavirus crisis has accelerated changes in a way we could not have imagined before.

The current pandemic has brought unprecedented challenges to many sectors. In the field of education, it has led to the largest disruption in history, affecting more than 95% of the world's student population [3]. Simultaneously, it also forced us to readjust our sails and think of new approaches to lessen the negative impacts. As a result, education has changed dramatically, with the distinctive rise of e-Learning, whereby teaching is undertaken remotely and on digital platforms [4]. Above all, and despite the potential of these technological tools, it has also reminded us of why face-to-face interaction is a fundamental and most effective form of communication, especially in language learning environments.

This paper aims to describe a project-based assignment developed within one of the Business English courses held at the School of Technology and Management of the University of Aveiro, during the 2nd semester of the academic year 2020/2021 and amidst the worldwide outbreak of coronavirus disease. This group activity – a documentary on the impact of technology on life and work – aimed, on the one hand, at contributing to the improvement of students' communicative competence in English and, on the other hand, at the development of key transferable skills, such as i) Digital competence and ii) Personal, social and learning to learn competence (as set out in the *Recommendation on Key Competences for Lifelong Learning*).

In addition to the detailed description of the assignment, this paper also aims to present the results of a survey on students' perception of the carried out activities. The gathered data indicate that students perceived the proposed tasks as highly rewarding and that both technical and interpersonal competencies were successfully addressed.

Keywords: language teaching strategies, English as a Foreign Language, communicative competence, digital competence, covid-19 pandemic, online learning.

1 INTRODUCTION

It is increasingly recognised that education needs to cover more than traditional subjects if learners are to be equipped to flourish now and in the future. Students of all ages need to learn the skills that are critical for lifelong learning and success.

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With the increasing mobility for education, training and work, growing migration from third countries, and the overall global cooperation, it is a fact that, more than ever before, the world has become an interrelated, interdependent global community [5] – a fast-changing world, where breakthrough

technological advances have not just disrupted industries but also changed the way we live, work and learn to a degree humankind has never experienced before.

In its *Employment Outlook 2019* report, OECD projected that one-third of all jobs worldwide would likely be transformed by technology by 2030 [1]. In early 2020, the World Economic Forum (WEF) pointed out that the world was facing a "reskilling emergency" [2] and not long after that, only six months into what became a global pandemic, it reinforced that 50% of all employees will need reskilling by 2025 [6]. To tackle all of these changes, we need to continuously develop competences that allow us to successfully manage the challenges posed by the many transitions taking place in our work, in our personal lives, and in society. Above all, we need too to learn how to deal with uncertainty, nurture resilience, develop on a personal level, build successful interpersonal relations, and learn how to learn [7].

Equipping individuals with the skills, competences and qualifications required to thrive in such an evolving socio-economic environment, however, poses a quite complex question: as teachers, how can we prepare our students for jobs that have not yet been created, technologies that have not yet been invented and problems that we don't yet know will arise? [1].

By assuming that "in a rapidly changing and highly interconnected world, each person will need a wide range of skills and competences and to develop them continually throughout life" [8], the *Recommendation on Key Competences for Lifelong Learning,* adopted in 2018 with the aim of laying out a set of core skills necessary to work and live in the 21st century, is an important reference tool for education and training stakeholders. As defined in the reference framework, key competences

are those which all individuals need for personal fulfilment and development, employability, social inclusion, sustainable lifestyle, successful life in peaceful societies, health-conscious life management and active citizenship. They are developed in a lifelong learning perspective, from early childhood throughout adult life, and through formal, non-formal and informal learning in all contexts, including family, school, workplace, neighbourhood and other communities [9].

Most importantly, by laying a foundation for achieving equal and more democratic and inclusive societies, the identified eight competences aim to respond to the increasing need for sustainable growth, social cohesion and further development of the democratic culture: 1) Literacy competence; 2) Multilingual competence; 3) Mathematical competence and competence in science, technology and engineering; 4) Digital competence; 5) Personal, social and learning to learn competence; 6) Civic competence; 7) Entrepreneurship competence; and 8) Cultural awareness and expression competence. The EU Member States are, thus, encouraged to prepare their citizens for changing labour markets and active citizenship in more diverse, mobile, digital, and global societies, and to develop learning at all stages of life [8] [10].

The complexity of the above-posed question increases, even more, when immediate responses are required, namely in circumstances like the one we are presently living in: how can we prepare our students for a future that arrived much sooner than anticipated? How can we keep learners motivated and engaged through the extraordinary times we are all experiencing?

Indeed, the Covid-19 pandemic has brought unprecedented challenges to many sectors. In the field of education, in particular, it has led to the largest disruption in history, affecting nearly 1.6 billion learners in more than 190 countries. Closures of schools and other learning spaces have affected 94% of the world's student population, up to 99% in low and lower-middle income countries [3]. Simultaneously, it also forced us to readjust our sails and think of new approaches to lessen the negative impacts. As a result, education has changed dramatically, with the distinctive rise of eLearning, whereby teaching is undertaken remotely and on digital platforms [4], and with the many initiatives swiftly set in motion by several education institutions to gear their teaching staff with new teaching methodologies and tools to help them meet the challenge.

As alluded to before, the new reality brought by the Fourth Industrial Revolution calls for a reskilling effort, which to be meaningful requires individuals in general, and HEIs in particular, to adjust and focus on the fastest-growing professions of the future. Alongside engineering, cloud computing, data and AI – all obvious examples of professional areas that will soon be most sought after – people and culture-related jobs, where foreign languages (FL) command and specialised interpersonal skills are fundamental, will be equally crucial [2] [6] [11] [12].

Considering it is a "key factor not only for social inclusion, workforce mobility, but it also contributes to a cohesive, culturally enriched Europe" [13], the multilingual competence, the ability to communicate in a language other than one's mother tongue, is acknowledged as one of the key competences that citizens

should seek to acquire. In the *Recommendation on a Comprehensive Approach to the Teaching and Learning of Languages* [14], the Council recommends that EU Member States explore ways to help citizens acquire foreign language (FL) competences in at least one other European language, up to a level that allows them to use the language effectively for social, learning and professional purposes. The acquisition of an additional (third) language, to a level that allows them to interact with a degree of fluency, is also strongly recommended. Above all, this recommendation seeks to reinforce that language skills are a valuable asset that provides competitive advantages for both businesses and job seekers, while simultaneously providing a better understanding of other cultures, thus contributing to the development of citizenship and democratic competences. With this respect, OCDE also stresses the role of this key competence by calling for a global competence education, where knowledge, skills, attitudes and values successfully applied to global issues or intercultural situations are combined [15].

On the other hand, personal, social and learning to learn competences are defined as "the ability to reflect upon oneself, effectively manage time and information, work with others in a constructive way, remain resilient and manage one's own learning and career. It includes the ability to cope with uncertainty and complexity, learn to learn, support one's physical and emotional well-being, empathise and manage conflict" [9]. This key competence comprises what is often coined as "soft skills", i.e. any skill or quality that can be classified as a personal characteristic and that can shape how individuals communicate and relate with others. Personal and interpersonal skills such as adaptability, creativity, critical thinking, effective communication, organisation, problem-solving, and teamwork, among others (Fig. 1), are all important pieces in the set of transferable skills that can be applied in nearly every setting in today's fast-paced global economy and that should be, therefore, strongly fostered [16] [17]. Furthermore, according to a recent study conducted by the WEF, critical thinking and problem-solving in particular top the list of skills employers believe will grow in prominence in the next five years; newly emerging are also skills in self-management such as active learning, resilience, and flexibility [6].

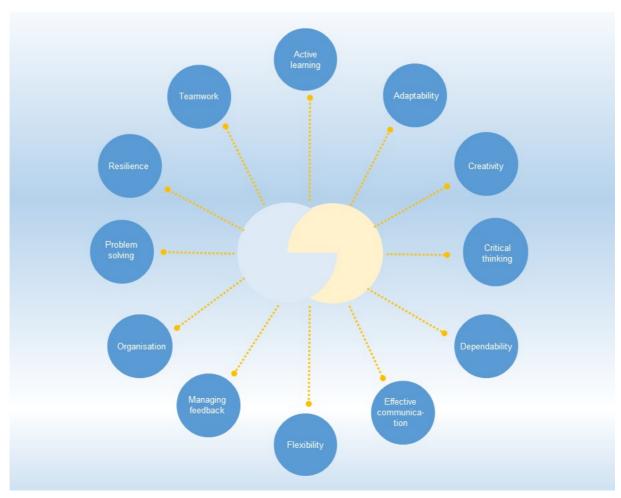


Figure 1. Critical personal & social skills for the 21st century Source: Own elaboration, based on [16] [17].

The objective of this paper is to present a group activity that was based upon the combination of research and development of a practical assignment, which was then presented in video format and discussed in a Business English online class. On the one hand, considering the broad skillset it requires, conducting research is not only an important component for the development of scientific thinking but also a very relevant skill in any business-related context [18] [19]. On the other hand, teamwork is one of the key competencies that students must develop to meet the needs and skills of the labour market, as recognised by the European Higher Education Area.

Collaborative learning – an umbrella term for the different approaches involving a joint effort by students or students and teachers together to seek understanding, a solution, a meaning or a product creation [20] – can be quite demanding. In fact, effective collaboration goes beyond the notion of grouping students together to learn; it requires that students handle complex skills such as commitment, time management, negotiation, adopting different roles and responsibilities planning, and taking into account other views [21]. In this instance, in particular, it became even more challenging since all communication and collaboration occurred online.

Overall, the activity to be presented next sought to integrate knowing and doing while developing important competences such as communicative competence in English, relevant digital skills, as well as important personal and interpersonal skills, namely organisation, responsibility and collaboration, as well as adaptability and resilience. Finally, by analysing students' perceptions, this paper also aims to assess the effectiveness of the pedagogical activity.

2 CONTEXT

The undergraduate academic degree in Office Management and Business Communication (OMBC), awarded by the Higher School of Technology and Management of the University of Aveiro (ESTGA-UA), aims at training qualified professionals capable of assisting and providing support to board or administrations members of public and private companies or agencies, at both national and international levels. Since its adaptation to the Bologna Process principles and objectives, in academic year 2007/2008, the course structure of this six-semester degree (180 ECTS) covers different disciplinary areas such as Languages, Secretarial Studies and Business Communication, Social Sciences, Information Technology, among others. Due to its multi- and interdisciplinary training, graduates are prepared to manage complex communication flows, contributing thus to the management process and development of organisations.

Aware of the importance of mastering foreign languages in an ever more global and competitive labour market, the study programme in OMBC includes nine 60-hour FL courses – five courses of English (mandatory) and four courses of a second FL (in their first semester students can opt for French or German). Moreover, in their sixth semester, students have the opportunity to complete an internship in an organisation; during this period, business writing and oral interactions with different stakeholders in one or two of the learned FL are also frequent activities integrated into students' work plans.

The activity described next took place within the CEFR level C1 (Common European Framework of Reference for Language – Advanced level) English Documentation (ED) course. Primarily directed to 2nd-year OMBC students, the English Documentation (ED) curricular unit aims, on the one hand, at consolidating and improving previously acquired language skills, and, on the other hand, at promoting activities that are consistent with students' future professional needs. Built around three main themes – 1. Technological Changes; 2. Business Written Communication; 3. Official and Administrative Documentation –, the proposed activity aimed precisely at addressing unit 1, where the impact of technology and digital transformation on everyday life, work and careers is extensively discussed. Due to Covid-19 lockdown measures, during the first 6 weeks of the semester teaching was undertaken remotely, with Zoom and WhatsApp being the selected platforms for the synchronous ED classes. As mentioned above, the impact of "Technological Changes" on life and work is the kick-off unit of the ED programme. Considering the effect of the global pandemic on everyone's lives, and how technology has assumed such a crucial role in ensuring that society could still operate, students were challenged to work on an assignment where they'd conduct a deeper reflection on this topic, namely by linking it to the current circumstances.

3 PRESENTATION OF THE ACTIVITY

On March 15, in the first (online) class of the new semester, students were presented the course programme and given guidelines for the project work they were required to develop over the following

six weeks. For this assignment, which weighted 30% in the overall grade, students were asked to organise themselves in groups of three and conduct research on the broad topic of "The impact of technology on life and work"; the conceptual study should also be complemented with a more practical/applied analysis, for example, by developing and applying a questionnaire, conducting interviews or reflecting on the way students themselves were dealing with current reality.

Students' findings should be presented in a 15-minute video documentary. No substantial voice-overs were advised, rather they were encouraged to be on screen and present the information more spontaneously. Resorting to creative and impactful visuals and delivery/editing techniques was also strongly recommended. Overall, the objective was to combine the development of communicative competence in English with competences previously acquired in other courses, namely in Electronic Office Applications I / II (1st and 2nd semesters) and Data Analysis (3rd semester). During the preparatory stage of the activity, support and feedback on the ongoing work were provided by the teacher; this formative assessment proved to be quite important not only because it offered an opportunity to engage and reassure students during these uncertain times, it also allowed for some necessary adjustments/improvements. As initially defined, the class met on Zoom on April 26, and each group shared their video and responded to the teacher and colleagues' questions. Fig. 2-4 are screenshots of three of the nine submitted videos.



Figures 2-4. Some examples of the created video presentations

After students have shared and discussed their videos with the class, a quantitative grade (from 1 to 20), was given to each project work. The following partial scores were defined for each criterion:

- a) Video > content and design: 10 points, if the content is fully compliant with the topic, well-organised (interesting introduction, well-developed main section, clear conclusion), with complete, creative and relevant information/perspectives/applied study. Materials are creative, have an appropriate/professional layout and are error-free;
- b) Fluency: 3 points, if the student's speech is effortless and smooth, with only rare repetition or self-correction, if topics are fully and appropriately developed, also if the student uses appropriate vocabulary and expresses ideas eloquently;
- c) Pronunciation: 2.5 points, if there are no obvious mispronunciations and when intonation reinforces communication:
- d) Accuracy: 2.5 points, if the student uses a full range of structures naturally and accurately, maybe only with rare minor 'slips' that do not break down communication;
- e) Body language: 2 points, if the student maintains eye contact and is relaxed and engaged.

The score for criterion a) is the same for every group member; the scores for criteria b), c), d) and e) depend on each student's individual performance. Moreover, a table with the adopted criteria was presented to students in their first class, as well as published in the course's work area of their eLearning platform.

4 GAUGING STUDENTS' PERCEPTIONS

At the end of the semester, the 26 students enrolled in the ED course were invited to answer an online questionnaire, which was anonymous and included 5 questions that aimed at assessing the overall learning experience as well as the development of specific competences. Answering the questionnaire was not mandatory and data from 25 students were collected. The questionnaire was divided into two sections: I. Used tools and resources, and II. Developed competences & skills.

In section I, in response to the first question – "Which collaborative tools did you use to meet/work in group and complete your assignment?" – Zoom, Google Docs and WhatsApp were students' preferred platforms/tools to meet, plan, assign tasks and discuss their work while in progress (Fig. 5).

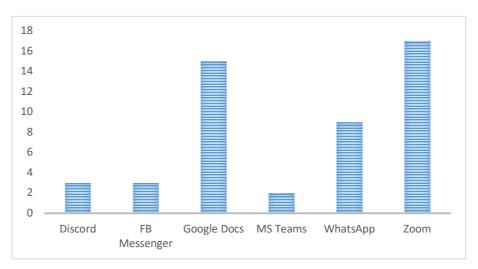


Figure 5. Collaborative tools used by students

As for question 2 – "Which digital tools and other technological resources did you use for the creation of your video?" – Zoom's in-built recording feature, the graphic design platform Canva, a video camera, PowerPoint and the cloud-based animation software for creating animated presentations and videos Powtoon were the most used solutions for video recording, graphics creation and video editing (Fig. 6). It should be noted that students were already familiar with some of these tools and apps (namely, Canva and Powtoon) since the production of creative materials and videos had been already explored in previous courses, but the use of other tools results from students' initiative, research and autonomous learning – which ultimately contributed to the development of their "learn to learn" competence.

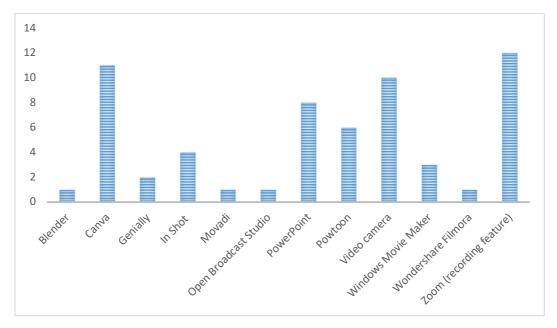


Figure 6. Digital and technological tools used by students

Section II aimed to assess how this activity contributed to the development of specific competences. A Likert-like scale from 1 to 5 was used for every item and data analysis shows that, on average, students consider the accomplishment of the activity as being positive.

As can be observed in Fig. 7, some competences of a more cognitive and functional nature are assessed with mean values above 4.0. According to students' perception, the use of digital tools and technological resources is the most developed item (4.4), followed by information selection skills (4.1) and the development of specific terminology (4.0).

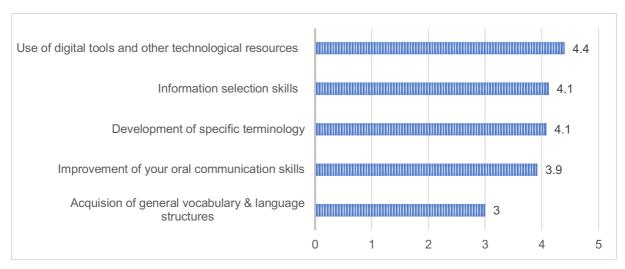


Figure 7. Developed technical/cognitive skills: students' perception (mean values)

As shown in Table 2, for every assessed item, the values that occur the highest number of times (mode) are 4 and 5. Information selection skills (standard deviation 1.1) and Improvement of oral communication skills (standard deviation 0.8) are the items were opinions most diverged, which can be justified with the group's heterogeneity in terms of background: whereas the majority are OMBC students – a degree where researching, writing and presenting in English are rather frequent activities –, the six Information Technology students who chose to attend ED as an optional course might find such tasks more challenging. In terms of the indicator Acquisition of general vocabulary & language structures, the results are consistently not very high, which can be based on the fact that from the outset this class demonstrated a very good/above-average command of the English language already, hence the perception that they didn't progress much.

Table 1: Developed cognitive and functional skills: mean, standard deviation, minimum and maximum, mode and median values

	Acquisition of general vocabulary & language structures	Improvement of your oral communication skills	Development of specific terminology	Information selection skills	Use of digital tools and other technological resources
Mean	3.0	3.9	4.1	4.1	4.4
SD	0.0	0.8	0.6	1.1	0.6
Min.	3.0	3.0	3.0	1.0	3.0
Max.	3.0	5.0	5.0	5.0	5.0
Median	3.0	4.0	4.0	4.0	4.0
Mode	3.0	4.0	4.0	5.0	5.0

Concerning the self-assessment of the developed personal and social competencies, Creativity (4.3), Time management (4.2) and Autonomy (4.2) received the most positive ratings (Fig. 8). As shown in Table 2, for every assessed item, the values that occur the highest number of times (mode) are 4.0 and 5.0. With minimum and maximum values between 1.0 and 5.0 and a standard deviation of 1.4, Teamwork seemed to be the most difficult aspect to navigate, despite all of the collaborative tools at students' disposal. (Could this result be a subtle reminder of the importance of face-to-face communication?) On the other hand, Critical thinking and Problem solving – two of the most critical skills to succeed in the 21st century [6] –, also present lower and divergent values, which demonstrates that more practical assignments are necessary to more adequately prepare learners for the demands of the current and future workplace.

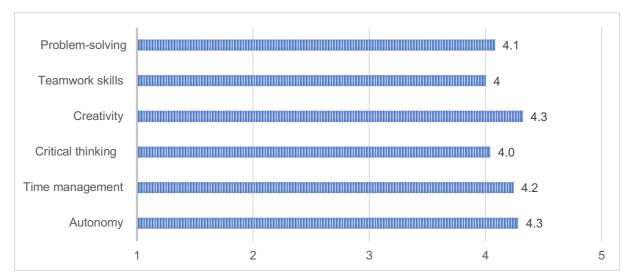


Figure 8. Developed personal and social skills: students' perception (mean values)

Table 2: Interpersonal and social skills: mean, standard deviation, minimum and maximum, mode and median values

	Autonomy	Time management	Critical thinking	Creativity	Teamwork skills	Problem-solving
Mean	4.3	4.2	4.0	4.3	4.0	4.1
SD	0.7	0.8	0.9	0.7	1.4	0.9
Min.	3.0	2.0	2.0	3.0	1.0	1.0
Max.	5.0	5.0	5.0	5.0	5.0	5.0
Mode	4.0	5.0	5.0	5.0	5.0	4.0
Median	4.0	4.0	4.0	4.0	4.0	4.0

As a final question (open question), students were also asked whether there were any other skills/competences that this assignment in particular helped them develop or consolidate. Data analysis, graph creation and data description were aspects mentioned by several students.

5 CONCLUSIONS

For the completion of the proposed activity, different approaches that are considered to work well in developing key competences [9] were adopted, namely: i) learning through involvement in active, authentic, collaborative tasks; ii) cross-curricular approaches where learners experience contexts that combine a few subject areas; iii) a combination of individual and collaborative learning opportunities; iv) a combination of learner-centred and teacher-led approaches; iv) learning experiences inside and outside school; v) relevant use of digital resources and virtual learning platforms.

Considering students' concrete performance in terms of the conducted research, presented content and final product and oral performance (video and class discussion), as well as their positive feedback on the developed activities, it can be concluded that this activity was effective, with a beneficial impact in terms of both academic achievement and personal growth. On the one hand, not only several course objectives were successfully addressed, the proposed assignment also allowed students to develop their communicative competence in English through teamwork and collaboration, which contributes to the development of a broader set of critical knowledge and competences. In fact, some of the key competences for lifelong learning were addressed, namely literacy and multilingual competences, digital competence, and personal, social and learning to learn competence. Regarding the latter, communication and interaction skills, organisation skills, initiative and creativity, assertiveness and problem-solving techniques, or negotiation and conflict resolution skills – all attributes that are highly valued by employers – were, on a level or another, developed/consolidated through the presented activity, even despite the hurdles posed by remote work and communication.

All in all, by assuming an active rather than passive role in the learning process, such assignments represent an opportunity for students to enter the workforce with experience in the areas of research, team cooperation, even critical thinking and project management, which will constitute a competitive advantage once these graduates enter the labour market. The global pandemic helped strengthen the sense of adaptability and resilience that are equally crucial in the fast-changing world we are living.

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