

1. Academic Language MOOCs: from needs analysis to implementation

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Abstract: This article focuses on two Language MOOCs created within the LMOOC4Slav project – Romance languages for Slavic-Speaking University Students, whose main objectives are promoting Slavic students’ linguistic fluency in Italian and/or Portuguese and intercultural awareness in academic contexts, improving their strategic learning skills and digital competencies. In this context, we discuss to what extent an analysis of the linguistic profile and the consideration of previous pedagogical experiences, and the learning styles of the target audience are of utmost importance and must be the base for the instructional design of LMOOCs, regarding the learning contents, the proposed activities and the technological resources used. The needs analysis considered two sources. First, a review of literature, aiming to briefly describe the Slavic languages present in the project, namely Czech, Polish, and Macedonian, to understand better their differences from the target learning languages, Italian and Portuguese, specifically in an academic context. Secondly, we conducted two surveys for each language to understand the sociolinguistic profile of students, both in immersion and non-immersion contexts, their learning strategies, and their communication needs. This article presents some of the main results of those surveys, answered mostly by Slavic students of Italian and Portuguese as a foreign language or second language, respectively, regarding cultural experiences, linguistic issues and learning strategies.

Keywords: Lmooc; Design Framework; Academic Discourse; Survey; Italian; Portuguese.

1. Introduction

Language Massive Open Online Courses (LMOOCs) – are a specific type of MOOCs, whose creation implies a complex process determined by the characteristics of the specific learning environment (Cherchi, 2022) and that requires taking in consideration multiple factors and a multidisciplinary team (a.o. Read, 2014; Alario-Hoyos, 2014).

Creating effective LMOOCs can be challenging due to the diverse nature of learners. A critical first step to overcome this challenge is a thorough analysis of the target audience (a.o. Troncarelli, 2020). This includes understanding their linguistic profile, past educational experiences, and preferred learning

styles. Without this information, course designers risk developing content, activities, and using technology that does not resonate with the learners, leading to lower engagement and poorer outcomes.

This article focuses on the designing process of two LMOOCs created within the LMOOC4Slav project – Romance languages for Slavic-Speaking University Students whose primary target audience consists of university students, mainly with Slavic languages as their mother tongue (L1), learning Romance languages, specifically Italian and Portuguese, and who intend to do a mobility period at a university in Portugal or Italy. Overall, they intend to facilitate the integration and the success of university mobility students by helping them to acquire the needed linguistic and sociocultural skills and knowledge required for communication in academic contexts while fostering their autonomy and ability to learn how to learn.

In this context, using questionnaires, our goal is to investigate how examining the linguistic profile and taking into account the target audience's past and current pedagogical experiences and learning styles shape the instructional design of LMOOCs, including learning materials, suggested activities, and used technological resources.

To do this, we follow the ensuing path. In §2, we contextualize the LMOOCs within the framework of the LMOOC4Slav Project, briefly presenting its primary objectives, stages, products, and outcomes. In §3, we present the Italian and Portuguese LMOOCs for academic discourse design after briefly addressing general issues associated with the instructional design of LMOOCs, particularly those for academic purposes. §4 presents the needs analysis of for the Italian and Portuguese LMOOCs in two stages. In §4.1, we briefly address distinctive aspects of Slavic languages, including Polish, Macedonian, and Czech, specifying critical areas for students of Portuguese and Italian. In §4.2, we present the applied questionnaires and their respective results. In §5, we illustrate how the needs analysis informed the production and implementation of the LMOOCs. Finally, in §6, we provide some concluding remarks.

2. LMOOC4Slav Project

Hundreds of L1 Slavic students opt to spend part of their studies in Romance-language countries like Italy or Portugal through the Erasmus program. Within the European linguistic landscape, Slavic and Romance languages are prominent language groups. Learning a Romance language poses several linguistic challenges for Slavic speakers. They are the main target group of the Erasmus+ funded LMOOC4Slav project - Romance languages for Slavic-Speaking University Students.

The primary objectives of the 30-month project (1/12/2021 – 31/05/2024) are to provide Slavic-speaking students with a freely accessible online learning path tailored to their needs for studying abroad in Romance-speaking countries, such as Italy or Portugal, through LMOOCs and OERs. Additionally, the project aims to increase autonomy in language learning, achieve good academic results in a shorter time frame, and support Italian L2 and Portuguese L2 teachers by creating a repository of OERs beneficial for Italian and Portuguese language learning. Moreover, the project entails the creation of MOOCs, OERs, and a portal for their free use, with a substantial impact expected due to the involvement of five universities with extensive contacts and exchange agreements with various countries.

The project involves several key steps, including planning, developing, and creating two MOOCs, one for Italian and one for Portuguese, as well as Italian and Portuguese academic discourse OERs, featuring audio and video materials and written texts on academic topics across various disciplinary fields. A pedagogical guide is designed to carefully explain how to integrate MOOCs and OERs into a cohesive learning path. Furthermore, a portal for teaching languages with MOOCs and OERs has been planned, created, and developed. This portal is an integrated and customisable learning environment, allowing recipients to organise and manage language-learning scenarios based on the provided resources. Additionally, the project foresees several impact and dissemination actions, including organising two international scientific conferences and publishing an e-book containing selected conference papers, which will explore the efficacy of LMOOCs as self-learning tools and in tutored pedagogical scenarios, along with comparisons to alternative approaches. Also, various tools such as brochures, videos, newsletters, web articles, and social media are used to disseminate project outcomes.

The outcomes of the project include the development of an innovative approach to language learning tailored for academic contexts, alongside the creation of high-quality and open educational resources for language teaching in academic mobility scenarios. An integrated and customizable learning environment will be established to facilitate the organization and management of language-learning activities using the project's OERs. Specialized communication skills aimed at students in mobility programs will be supported through the creation of tools.

The effectiveness of this approach will be validated in national and international academic settings, ensuring free access to quality resources for the training of thousands of students. Additionally, the project aims to establish a network for sharing and learning among participants.

Furthermore, there will be improvements in the skills, knowledge, and experience necessary for creating OERs for language learning, as well as en-

hancements in the language skills of participants in the two courses. The project will also raise awareness of the benefits of open education in Europe and explore the potential of MOOCs in overcoming technological barriers and providing access to learning for individuals with special needs or at risk of exclusion. Teachers of target languages will have the opportunity to manage language-learning scenarios based on the OERs provided on the project portal, which will serve as an integrated and customizable learning environment. Moreover, project outputs will be made available in an open-source repository beyond the project's duration, contributing to the advancement of research in language didactics.

3. LMOOCs Design

The creation of the two LMOOCs falls within the context of implementing practices, resources, and tools that contribute to advancing open and massive education, thus constituting a collaborative process with several phases, as described in the literature. In this context, it is assumed that the specialization of these courses according to the domain they target will present specific challenges and differentiated operational modes. In this section, we focus specifically on the design of MOOCs aimed at learning a foreign or second language for communication in academic settings, namely in the context of university system mobility. We begin by briefly outlining how the creation of other similar MOOCs allows us to serve as background and present the design of our two MOOCs.

3.1 LMOOCs for academic purposes

Inclusion in academia is a strategic topic for the higher education sector. As part of the steps taken by European educational authorities to build the European Higher Education Area (Sorbonne Declaration, 1998; Bologna Declaration, 1999), the ability to attract international students is among the most relevant goals. International students who want to attend courses at a foreign university and want to become part of a foreign academic community need specific linguistic-communicative skills, as well as cognitive and social skills related to the relevant academic context and disciplines (Hyland & Hamp-Lyons, 2002: 2). In fact, they should be familiar with conventions and practices of the scientific communities related to different disciplines, and they need a range of skills useful in university life (for example, to be able to actively participate in seminars and peer group work or to interact orally or

in writing with administrative staff). LMOOCs for academic purposes can be a viable option to prepare international students for this challenging enterprise. Since LMOOCs are, by definition, open and accessible, they are in line with EU's inclusion principle.

There are several academic language courses offered on MOOC platforms, such as academic English on FutureLearn¹ or academic French and Spanish on OpenLearn². These courses generally offer an insight to key features and conventions of academic culture in the target country, and they allow to develop academic language skills, that is reading, writing, listening and speaking in academic context. More specifically, they might provide guidance on how to listen to class lectures and take notes effectively, how to improve speaking skills for common tasks such as class discussions and presentations, how to express ideas clearly in an academic format, how to organize an essay using academic writing style and they might also develop some proficiency in a few key areas of 'academic' grammar.

Let us see in some more details the MOOC of English for Academic Purposes realized in the context of the MOVE-ME project. The course, based on the Cognitive Academic Language Learning Approach (Chamot & O'Malley, 1987), aims to develop study skills along with the ability to learn foreign languages in general. The target group are university students who are going to or are already attending university courses in English with at least a B1 level of proficiency. The course is organized in six modules corresponding to the six weeks. Week 1 and Week 6 are the introductory and concluding modules, while Weeks 2-5 focus on the development of the four fundamental language skills (listening, speaking, reading, writing). The course offers a great variety of linguistic input (video, audio, written text) to suit students with different learning styles, but videorecorded materials are the dominant didactic choice. Each module includes tools to promote interaction and reflection, such as forum sections and the Reflective Journal. While the forum aims to create a community of learners who, thanks to similarities of interests and purposes, can share knowledge and experiences using the target language, the Reflective Journal is an individual task that requires participants to write entries related to specific and guided input and to interact in the forum. Individual student work is thus supplemented with collaborative activities that induce active participation and mutual support in learning.

The following section is dedicated to the course design of two new academic language courses offering two Romance languages, Italian and Portuguese, to Slavic speaking university students in mobility.

¹ <https://www.futurelearn.com/courses/english-for-academic-purposes> (last access 19/03/24)

² <https://www.open.edu/openlearncreate/course/view.php?id=8072>;
<https://www.open.edu/openlearncreate/course/view.php?id=3906> (last access 19/03/24)

3.2 Italian and Portuguese LMOOCs for academic discourse design

The Italian and Portuguese LMOOCs are aimed at academic settings and therefore are part of the teaching of foreign languages for specific purposes (Basturkmen, 2012; Hyland, 2012, a.o.). They focus on linguistic-communicative competencies and learning skills within the educational domain. Their objectives include developing awareness of the language learning process and effective learning strategies, recognizing various language registers across different communication contexts, and enhancing comprehension strategies for academic oral discourse such as lectures. Additionally, they involve developing strategies for comprehending written expository texts in academic disciplines, learning to utilize electronic media and tools to enhance oral text production in academic contexts, acquiring proficiency in using online translators and conducting online research to improve written text production in academic fields. Learners are also expected to understand the risks associated with plagiarism and the limitations of automatic translation tools and recognize the potential and limitations of the diverse array of tools and communities available on the Internet.

So, a comprehensive understanding of L2 grammar, spanning morphosyntax, phonology, semantics, lexicon, text and discourse, and pragmatics, is fundamental. Additionally, navigating academic discourse involves engaging in communication characterized by inherent asymmetry between participants and encountering a wide variety of discourse and intercultural situations.

To create a useful and productive LMOOC for academic purposes, conducting an analysis of contextual needs before designing the course and its materials is crucial. This is what the pathway followed by the Italian and Portuguese LMOOCs for academic discourse from design to implementation shows (Fig. 1), since the need analysis is the first step of the journey. According to this framework, the proposed pathway consists of a series of stages, facilitated by diverse learning components, united through pedagogical tasks meant for individual or group participation.

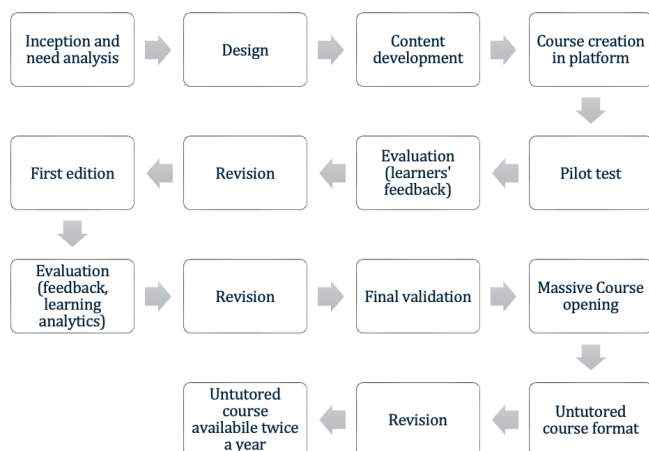


Fig. 1 LM00Cs pathway: from design to implementation

The findings of the needs analysis, which will be outlined in section 4, played a pivotal role in shaping the curriculum of the LM00Cs. They delved into the linguistic challenges and academic skills necessary for the social and academic assimilation of Slavic-speaking students in Italy and Portugal (Silva et al., 2022).

Regarding the overall learning design, a hybrid approach has been employed, combining elements of both objective-oriented and task-based models (Troncarelli, 2011). In accordance with this framework, the structured learning path consists of a series of units, delivered through various learning materials, and accompanied by pedagogical tasks designed for individual or group work. In fact, at the core of these two LM00Cs structure lies the organization in modules or weeks. The program will span six weeks, comprising six distinct modules, each aimed at fostering different cross-disciplinary skills applicable across various fields:

Module 1. Studying in Portugal/Italy.

Module 2. Communicating in the university

Module 3. Understanding lectures and taking notes.

Module 4. Writing university assignments.

Module 5. Prepare an oral presentation based on a written authentic document.

Module 6. Expression one's opinion, adopting a point of view/take an oral exam.

Every module encompasses video lessons, multimedia resources, textual documents, comprehension exercises, quizzes, and a brief written or oral

assignment. Additionally, each module features segments dedicated to various course components, including teaching materials, forums. Moreover, an evaluation system, including self-evaluation and peer evaluation, encourages reflection on students' learning process and foster the necessary autonomy for online language learning.

The MOILLE framework (Massive Open Online Interactive Language Learning Environment), developed by Perifanou (2016), consisting of a framework created to guide instructional designers which proposes six different interconnected dimensions, served as a crucial reference for selecting activities and materials.

We adopt an educational methodology centered on metacognition, emphasizing learning through practical experience and self-reflection. This approach is facilitated by a multimedia framework tailored for language learning in computer-assisted academic environments, encouraging autonomous learning and peer collaboration. The design of the LMOOCs draws inspiration from Task-Based Learning principles (a.o. Nunan, 1998), focusing on real-world language tasks to foster student engagement and autonomy. By actively engaging in these tasks, students will enhance their ability to learn independently and develop crucial metacognitive skills.

As we have already emphasized, the design and production of the MOOC took into account the profile of the learners, to fulfil their needs both in immersion and non-immersion academic setting. These needs vary and involve linguistic issues, academic culture, and learning styles. Knowing and integrating these dimensions is crucial for learning success.

4. Needs analysis for the Italian and Portuguese LMOOC

The needs analysis encompassed two primary sources. Initially, a literature review aimed to provide a succinct overview of the Slavic languages pertinent to the project, including Czech, Polish, and Macedonian, to delineate their disparities from the target learning languages, Italian and Portuguese, particularly within an academic framework. Subsequently, two surveys were conducted for each language to gain insight into the sociolinguistic profiles of students, both within immersion and non-immersion contexts, and to assess their learning strategies and communication needs. In §4.1, we provide some considerations on these three Slavic languages, highlighting the critical areas for Polish and Czech learners studying Portuguese and for Macedonian students learning Italian, respectively. This knowledge contributed significantly to determining the linguistic issues selected for the surveys administered to

students with Slavic languages as their L1. The questionnaires' design and main results are presented in §4.2.

4.1 Slavic languages: some considerations

The Slavs, according to archaeological and linguistic evidence, can be traced back to around 4000 B.C. At that time, the Great Eurasian Plain was inhabited by the peoples known now as “Indo-Europeans” (Sussex & Cubberley, 2006: 19).

The Slavic languages belong to the “satem” group of the Indo-European languages, and they constitute one of the 13 groups that make up this great language family. Each of these groups is derived from an intermediary language, which in the case of the Slavic languages was Proto-Slavic (Sussex & Cubberley, 2006: 20). The emergence of this group was the result of the break-up of the larger Balto-Slavic group derived from Indo-European central dialects. From the most homogeneous eastern group, four languages emerged between the 13th and 17th centuries: Russian, Rusyn, Ukrainian and Belarusian. The southern group in the Balkans split into two smaller groups very early on. In the east, Bulgarian and Macedonian dialects were used, from which a liturgical, and later, in the 9th century, thanks to the activity of St. Cyril and Methodius, a literary Old Slavonic language emerged, followed by the literary languages: Bulgarian (19th century) and Macedonian (1946–1960) (cf. Jakobson, 1949). The second south-western group included Serbo-Croatian and Slovenian. The West Slavic group at the end of the first millennium divided into two subgroups, Czech-Slovak and Lechitic, between which the Sorbian dialects occupied an intermediate position. The first of these subgroups eventually split into two separate languages: Czech and Slovak, while from the Sorbian dialects emerged Upper Sorbian, closer to Czech, and Lower Sorbian, closer to Polish. Three languages have emerged from the Lechitic group: Polabian, which became extinct in the 18th century, Pomeranian, whose last descendants are the Kashubian dialects, and Polish (Milewski, 2004: 140–141; Grzegorzczkowska, 2008: 174–178). As a result of these processes, the contemporary classification of Slavic languages is as follows: Eastern Slavic languages (Russian, Ukrainian, Belorussian, Rusyn), Southern Slavic languages (Slovenian and Serbo-Croatian with four standard varieties: Serbian, Croatian, Montenegrin and Bosnian) and Western Slavic languages (Lower Sorbian, Upper Sorbian, Czech, Slovak, Polish and Kashubian) (Milewski, 2004: 104).

4.1.1 Polish Language

Polish is native language of most of the 41 million inhabitants of Poland and it belongs to the Lechitic branch of the West Slavic group. The Polish linguistic territory has traditionally been divided into five major dialect areas, corresponding to the historical-geographic regions of Małopolska (Lesser Poland), Wielkopolska (Greater Poland), Mazowsze (Mazovia), Śląsk (Silesia) and Kaszuby (Kashubia) (Bray, 1970: 601; Rothstein, 1993: 754).

The origins of historical Polish date back to the 11th century (Grzegorzczkova, 2008: 178; Sussex & Cubberley, 2008: 90–93). When it comes to its phonological features, Polish has seven vowels' phonemes and thirty-three consonantal phonemes, being an explicitly consonantal language. The system of vowels includes two nasal phonemes (an archaic Slav feature) and it lacks the distinction between open and closed vowels. The stress in Polish falls mainly on the penultimate syllable, with a few exceptions such as words of foreign origin (Bray, 1970: 589, 594; Rothstein, 1993: 687–696; Wróbel, 2001: 29–39).

Polish nominal, adjectival, numeral and pronominal morphology has preserved the system of seven cases, including the vocative. The nominal, adjectival and, in some cases, pronominal (e.g. third-person personal or demonstrative) and numeral (e.g. ordinal) gender systems distinguish three primary categories in singular: masculine, feminine and neuter, and two in plural: masculine-personal and non-masculine-personal. Polish verbal morphology disposes only of three tenses: present, past and future (Wróbel, 2001: 139). The additional fourth tense, Past Perfect, is used in modern language primarily for stylistic purposes. Polish is clearly an aspectual language since it makes use of perfective and imperfective verbal forms (Wróbel, 2001: 137–138). As far as the category of mood is concerned, it is common to distinguish the indicative, imperative and conditional (Rothstein, 1993: 696–712; Wróbel, 2001: 142–144; Dalewska-Greń, 2002: 281–283). Polish lacks the morphological representation of article, but its functions may be performed by other word classes, such as demonstratives (*ten, ta, to*) or numerals (*jeden, jedna*).

The unmarked order of the main constituents in Polish is Subject-Verb-Object (Rothstein, 1993: 723).

Based on the Portuguese-Polish contrastive analysis and the analysis of errors at different levels committed by Polish students, the critical areas for Polish learners studying Portuguese are: Phonetic and Phonological competence: 1. Place of accent; 2. Vocal quality; 3. Nasal vocals and diphthongs; 4. Palatal realization of /lh/, /nh/. Grammatical competence: 1. Use of verbal tenses and moods (indicative vs. subjunctive, Pretérito Perfeito Simples vs. Pretérito Imperfeito); 2. Nominal and adjectival inflection; 3. Use of article; 4.

Position of pronouns; 5. Use of prepositions. Lexical competence: selection of the adequate vocabulary according to stylistic, pragmatic, and textual factors.

4.1.2 Macedonian Language

The modern Macedonian language has the status of an official language only in North Macedonia and is recognized as a minority language in some parts of Albania. It is spoken by minorities in neighboring countries and the Macedonian diaspora, particularly in Canada, Australia, the United States etc. The Macedonian language is part of the Balkan linguistic league, together with Bulgarian, Neo-Greek, Albanian, Romanian, Aromanian, Turkish and some spoken languages of southern Serbia. With these languages it shares some main typological characteristics. The Macedonian language is spoken in the center of the Balkans and is surrounded by other Balkan languages (Slavic and non-Slavic). The reflection of some changes related to the balkanization of the grammatical structure of the Macedonian language in ancient texts is very limited. However, the end result of all the above processes, which began as early as the twelfth century, is the change in the typological structure of the Macedonian language (Lunt, 1952: 10–12). It passes from a synthetic language to an analytic language with remarkable Balkan characteristics among which the most important are the absence of inflection, the presence of a postponed definite article, the absence of the infinitive, the definite article distinct for the three persons (unique case in Slavic); the constitution of an opposition between determined verbs and indeterminate verbs (unique case in the Indo-European group) (Koneski, 1952: 354–409). Most of the lexicon of the Macedonian language is of Slavic origin and has various traits in common with other Balkan languages, especially in the lexicon. They are the result of socio-economic conditions, cultural relations, linguistic symbiosis through the centuries that have led to the appearance of bilingualism and plurilingualism among the Macedonian population (Macedonian-Greek, Macedonian-Turkish, Macedonian-Wallachian, Macedonian-Albanian, etc.). Another characteristic of the Macedonian language that it shares with other Slavic languages is the use of perfective and imperfective verbal forms (Friedman, 2001: 33–58). The unmarked order of the main constituents in Macedonian is Subject-Verb-Object.

Based on the Italian-Macedonian contrastive studies and the analysis of errors at different levels committed by Macedonian students, we have developed a list of critical areas for Macedonian learners studying Italian. The list starts from the areas considered most difficult for Macedonian students: Grammatical competence: 1. Concordance of tense and mood; 2. Hypothetical

construction; 3. Subjunctive; 4. Perfect vs imperfect; 5. Implicit verb forms; 6. Passive form; 7. Prepositions; 8. Pronouns (direct, indirect, combined, relative, *ci*, *ne*, etc.) 9. Idioms and collocations 10. Position of adjectives and adverbs; 11. Grammatical gender of words. Lexical competence: sectoral languages, especially bureaucratic language. Intercultural competence: problems related to different behaviors, non-verbal language, different habits and customs in Italy.

4.1.3 Czech Language

According to the dates of Simons and Fennig (2017), approximately, 10.7 million people speak Czech as their mother tongue - practically everyone in the Czech Republic and the total number of Czech speakers is estimated at 13.2 million, which includes 2.5 million users of Czech as a second language. As a result of several waves of emigration in the second half of the 19th and in the 20th century, Czech is also spoken by tens of thousands of emigrants and their descendants, especially in Slovakia, the USA, Canada, Germany, Austria, Australia, Ukraine, in Serbia, Croatia, Romania, Poland and a number of other countries.

Czech language – like the Polish language – belongs to the West Slavic language of the Indo-European languages. It developed from western dialects of Proto-Slavic at the end of the 10th century. It is partially influenced by Latin and German. Literature written in Czech has been appearing since the 14th century. However, the first written monuments date back to the 12th century.

Czech is close and mutually intelligible with Slovak. In the Czech Republic and Slovakia, passive Czech-Slovak bilingualism prevails (especially thanks to the former existence of a common state, Czechoslovakia). The mutual intelligibility of the two languages is estimated at 95%. (cf. Breton, 2017: 9) In interwar Czechoslovakia (1918–1938), in the spirit of the politics of the time, Czech and Slovak were considered two literary variants of one language.

As for the linguistic characterization, in the written language the Latin alphabet and special diacritics in case of some graphemes are used (e.g., *č*, *ř*, *ě*, *ž*, *š*). The pronunciation is characterized by a fixed accent on the first syllable of the spoken word, the opposition of vowel length and one specific consonant written with one character “*ř*” (voiceless gingival vibrating consonant). As in the Polish language, Czech is an inflectional language characterized by a complicated system of inflection in nominal and verbal system due to which has a very free word order and a specific verbal transitivity.

As in the Polish language, the nominal, adjectival, numeral, and pronominal morphology has preserved the system of seven cases, including the voca-

tive. The nominal, adjectival and, in some cases, pronominal (e.g., third-person personal or demonstrative) and numeral (e.g., ordinal) gender systems distinguish three primary categories in singular: masculine, feminine and neuter, and two in plural: masculine-personal and non-masculine-personal. Czech verbal morphology disposes only of three absolute tenses: present, past, and future, being the relative tenses expressed lexically. The verb aspect is based on the opposition telicity versus atelicity (expressed mostly by lexical affixes) not considering the criteria of the actionsart. As far as the category of mood is concerned, it is common to distinguish the indicative, imperative and conditional. Czech lacks the morphological representation of article, but its functions may be, although only in determined contexts, performed by other word classes, such as demonstratives (*ten, ta, to*) or numeral “one” (*jeden, jedna*).

Based on the Portuguese-Czech contrastive studies (Svobodová, 2016, 2021) and the analysis of errors at different levels committed by Czech students, the critical areas for Czech learners studying Portuguese are: Phonetic competence: 1. Accent; 2. Vocal quality; 3. Nasal vocals; 4. Fast diction; 5. Synalepha; 6. Palatal realization of s, z. Grammatical competence: 1. Relative tenses and verbal moods (indicative versus subjunctive, actionsart, perfect versus imperfect; 2. Grammatical gender; 3. Plural; 4. Article; 4. Pronouns (position); 5. Prepositions; 6. Honorific formulas and treatment by 2nd or 3rd person. Lexical competence: selection of the adequate vocabulary according to geographic, stylistic, pragmatic, and textual factors.

4.2 Questionnaire analysis

As already pointed out, to better understand the needs of our target group, four questionnaires were designed (two questionnaires for Slavic learners of Italian in FL and L2 contexts and two questionnaires for Slavic learners of FL and L2 Portuguese) following the same basic structure. The first group of questions is related to personal data and information about the informants, such as age, gender, country of origin, mother tongue, other languages known, length of study of the target language, estimated level of competence, home institution and year of enrollment. The second group of questions is referred to various aspects of academic Italian/Portuguese and aims to elicit (expected or experienced) difficulties regarding linguistic and cultural features, textual genres, specific skills, and strategies applied by the students to face such difficulties.

4.2.1 Italian questionnaire results

Our questionnaires obtained 188 answers from FL learners of Italian (88% female, 12% male students), aged mainly 17-24 (84%) and 25-30 (10%) and 21 answers from L2 learners of Italian (90% female, 10% male students), aged mainly 18-24 (52%) and 25-30 (33%).

FL informants are primarily Macedonian and Polish, to which are added some Croatian, and Serbian participants. All FL learners know other languages, mainly English, followed by German, Spanish and French. The average length of study of Italian is 4 years. 69% of the FL informants learnt Italian in the country of origin, 3% in Italy and 17% both at home and in Italy. The dominant level of competence is A2 (38%), followed by B1 and B2 (both 20%), C1 (14,5%), C2 (5,5%) and A1 (2%). Most of the informants are university students of philology or social and human sciences, less represented are faculties of technology, medicine, economy, music, tourism and hospitality; there is also a significant number of last year high school students and the sample also includes some learners following language courses in other institutions (for ex. at Dante Alighieri society).

L2 informants are 43% Polish, the other 57% is equally divided between students coming from Slovakia, Russia, Byelorussia, Croatia, and North Macedonia. All L2 learners know English, some of them declaring a third foreign language as well (typically Spanish, French, German). The length of study of Italian is higher in L2 students compared to FL informants, reaching on average 6 years, including generally 2 years of sojourn in Italy (min. 4 months, max. 12 years). The informants are all university students, attending mainly faculties of human and social sciences. The majority decided to study in Italy to learn the target language and culture. Our L2 informants had a relatively high level of competence, C1 being the prevailing level (47,6%), followed by B2 (23,8%), B1 (14%), C2 (9,5%) and A2 (4,7%).

In the second part of the questionnaire informants provided interesting insights about expected (FL) or experienced (L2) difficulties in different fields of academic communication. Regarding the cultural aspects, our informants considered mainly problematic the communication with offices, followed by different ways of carrying out lessons and exams (Fig. 2).

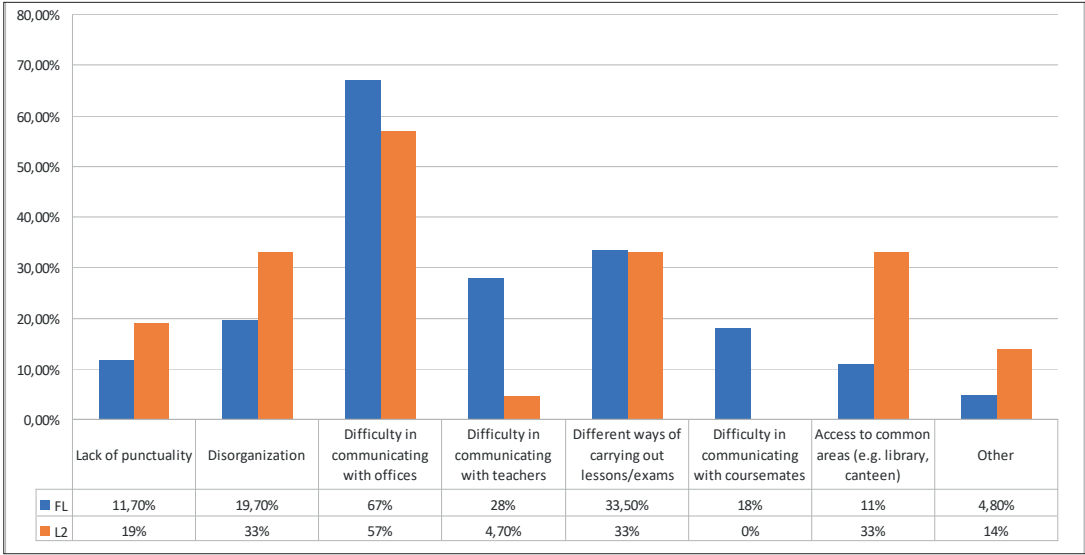


Fig. 2 Cultural differences in academic communication in Italy

As far as the most frequent task required to university students are considered, our informants indicated as more problematic the oral presentations and the oral exams (FL students in particular), followed by written assignments (Fig. 3).

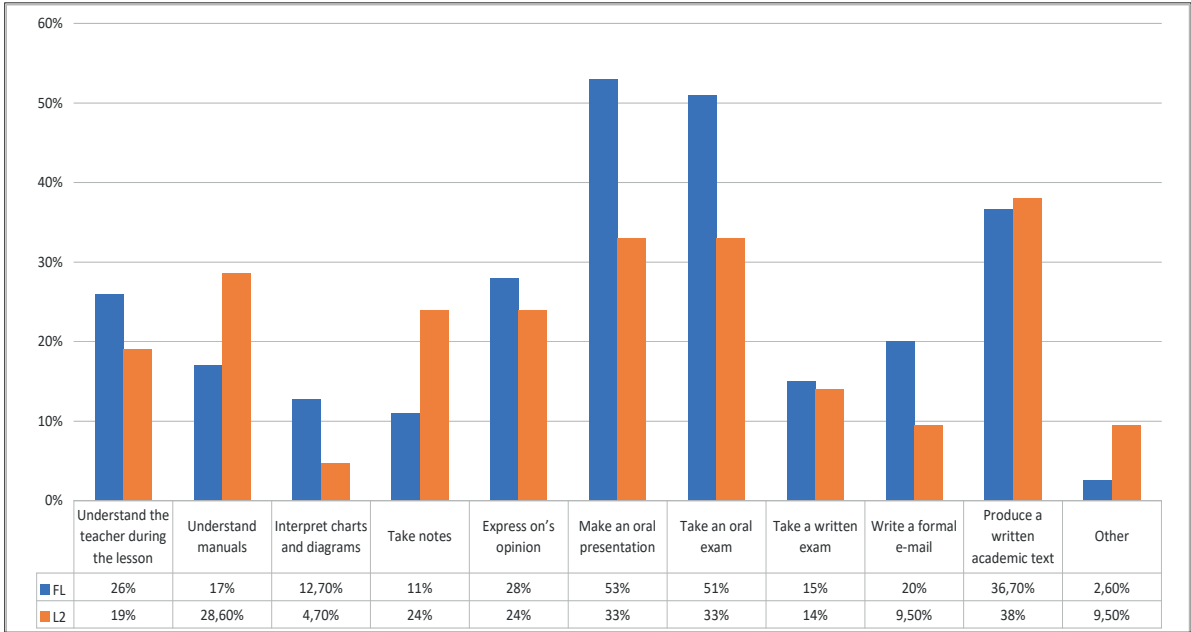


Fig. 3 Main difficulties while studying in Italy

L2 students indicate as courses more difficult to follow those where the use

of language for specific purposes is dominating (for ex. legal Italian, economics, linguistics, psychology). Textual genres considered hard to understand both for FL and L2 learners are medical reports, essays, regulations, calls for application, conference presentations, university lectures. L2 learners also suggest university handbooks as a source on major problems. Instead, if we consider textual genres to produce, both FL and L2 students indicate essays, debates, theses, and oral presentations. FS learners indicate forms to fill in (for ex. application for registration) as one of the priorities, while L2 learners suggest video CVs and reviews.

Regarding linguistic aspects, learners feel the need to work on their vocabulary and textuality. L2 learners seems to be also aware of syntactic problems (Fig. 4).

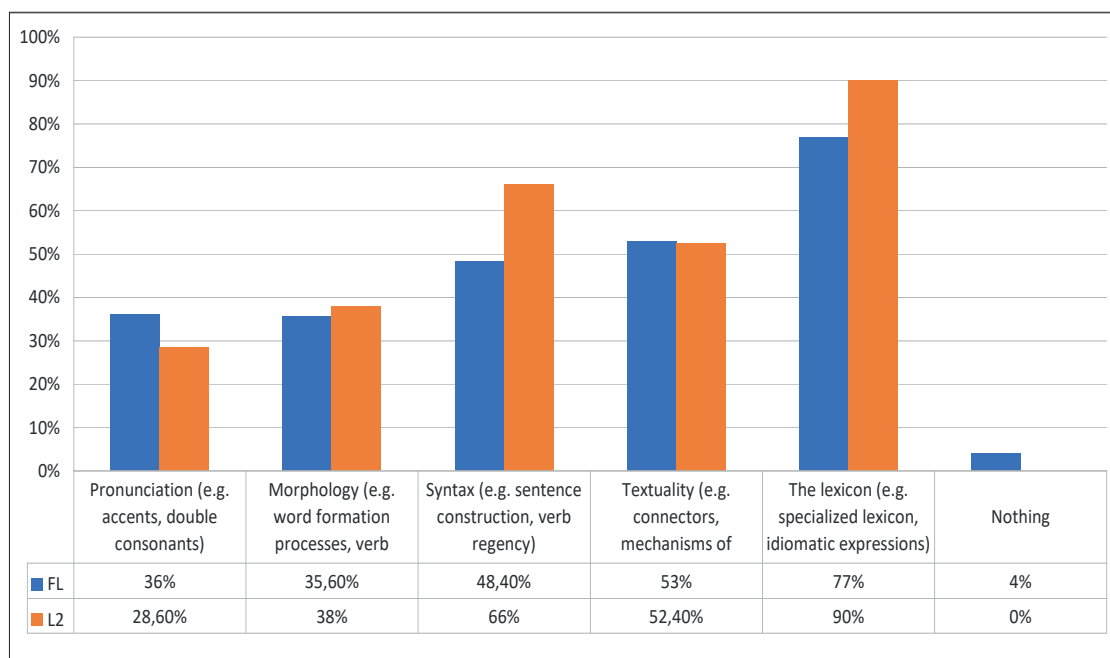


Fig. 4 Language aspects to improve

In the pronunciation students signal difficulties producing Italian tonic accent and double consonants, as well as open/closed vowels ([ɛ] vs [e], [ɔ] vs [o]). As far as lexicon is concerned, students indicate specialized lexicon as particularly hard to learn. In the Italian morphosyntax prepositions seem to be the hardest to learn, followed by complex sentence structure and clitic pronouns (Fig. 5).

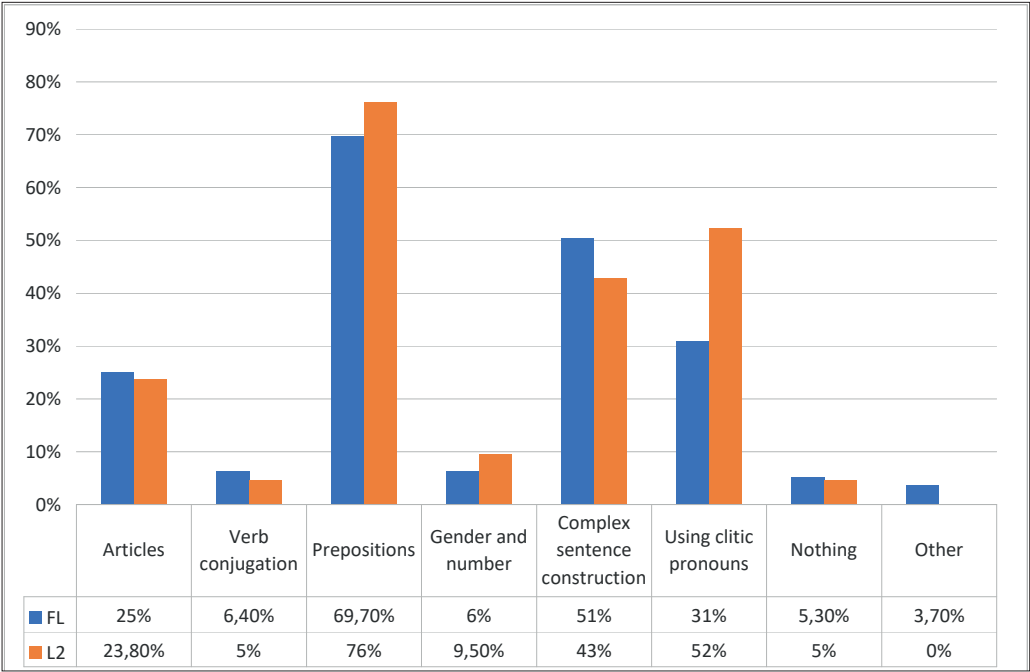


Fig. 5 Challenging morphosyntax aspects

The last part the questionnaire was concerned with strategies. Students indicate as most helpful learning strategies taking notes and repeating before the exam, consulting dictionaries, asking for clarification to the professor and reading carefully the course’s program and objectives.

4.2.2 Portuguese questionnaire results

Our questionnaires obtained 131 answers from FL learners of Portuguese (84,7% female, 13,7% male and 16% other gender students), aged mainly 18-24 (77,1%) and 25-30 (11,5%) and 4 answers from L2 learners of Portuguese (75% female, 25% male students), aged mainly 25-30 (50%), 18-24 (25%) and >36 (25%). Although the sample of L2 informants is scarce, they were considered in the needs analysis of the Portuguese LMOOC.

FL informants are primarily Czech (29,8%), Polish (21,4%) and Slovaks (19,8%), to which are added some Bulgarian, Croatian, Ukrainian, and Slovenian participants. All FL learners know other languages, mainly English, followed by Spanish, German, Italian and French.

Most of the informants studied Portuguese between one and three years (42%), closely followed by the students who learnt it between four and six years (33,8%). 95,4% of the FL informants learnt Portuguese in the country

of origin, 2,3% in Portugal and 2,3% both at home and in Portugal. The dominant level of competence is B2 (29,8%), followed by B1 (22,9%), C1 (19,1%), A2 (13,7%), A1 (11,5%) e C2 (3%). Most informants are at university studying Portuguese Philology and Modern Languages, Cultures and Literature, but also from Translation Studies and Public Administration. There are also several high school students.

Regarding L2 informants, they are from Bulgaria, East-Timor, Poland, and Ukraine. Besides their mother tongue, all speak English as a common foreign language. The length of study of Portuguese oscillates between 3 months and 6 years. 2 of the informants learnt Portuguese only in Portugal, while 1 learnt it in their country of origin and the other one both at home and in Portugal. 2 are university students from the Master of Portuguese Language and Teaching, the others study Portuguese in Language courses. The reasons stated for learning Portuguese were mainly improve their language level but also for professional purposes. The L2 informants have a wide range of proficiency levels: 2 are from A1, 1 from B1 and 1 from C2.

In the latter section of the questionnaire, respondents offered interesting perspectives on anticipated challenges in academic communication for foreign language learners (FL) or encountered obstacles for second language learners (L2) across various domains.

From a cultural perspective, L2 informants cited lack of punctuality and communication difficulties with administrative offices as the main issues at the host institution. Regarding the linguistic difficulties they encountered at the host institution, they indicated giving an oral presentation, expressing opinions, and understanding textbook language as the main obstacles they had to face. Regarding the textual genres that pose the most difficulty, the perception among informants is one of widespread challenge both in their reception and production. Among the listed academic genres, particular emphasis was placed on the difficulty of medical reports and regulations. As for the linguistic aspects they wish to improve, vocabulary and pronunciation stand out, with idioms and vowel reduction being, respectively, the most problematic issues. For morphosyntax's, the main problems are related with complex sentences with subjunctive and clitic pronouns. The last part the questionnaire focused on strategies. Students indicate as most helpful learning strategies consulting dictionaries, repeating before the exam, peer group study, asking for feedback/correction from the native colleagues.

In analysing data concerning FL informants, we considered frequent textual genres in academic discourse, linguistic issues, and learning strategies.

Considering the production of academic textual genres, the informants indicated that the most problematic are essays/ scientific articles (31,3%), fol-

lowed by thesis/dissertations (23,6%), whereas the least difficult are oral presentations, CVs and administrative forms (18,3% each).

When asked about the linguist domains in which they felt the greatest need for improvement (Fig. 6), the respondents selected primarily the lexicon (78%), particularly idiomatic expressions and specialized vocabulary, and textuality (74%), mostly the cohesion mechanisms to build the text. Pronunciation was indicated by more than half of the informants (56,5%), followed by syntax and morphology (48,1% each).

Regarding pronunciation, the three aspects that were marked as the most difficult were the production of nasal vowels (46.6%), vowel reduction (41.2%), and word stress (35.9%).

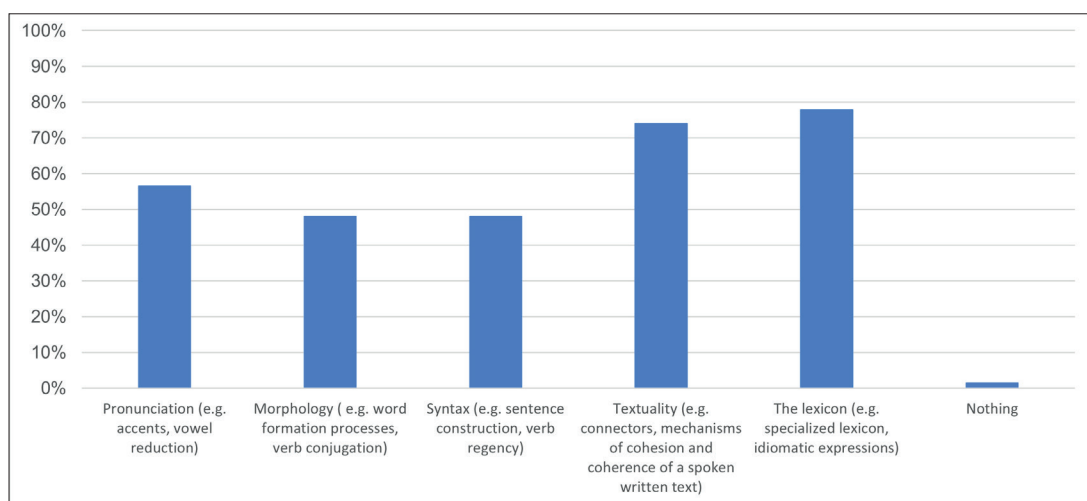


Fig. 6 Language aspects to improve

In turn, the challenges posed by morphosyntactic aspects are presented in Fig. 7. Of the aspects highlighted, students attributed less weight to difficulties with forms of address and gender and number issues, with the greatest challenge posed by the construction of complex sentences with the subjunctive (58.8%), followed by verb conjugation, the use of articles and prepositions, and also the use of clitic pronouns.

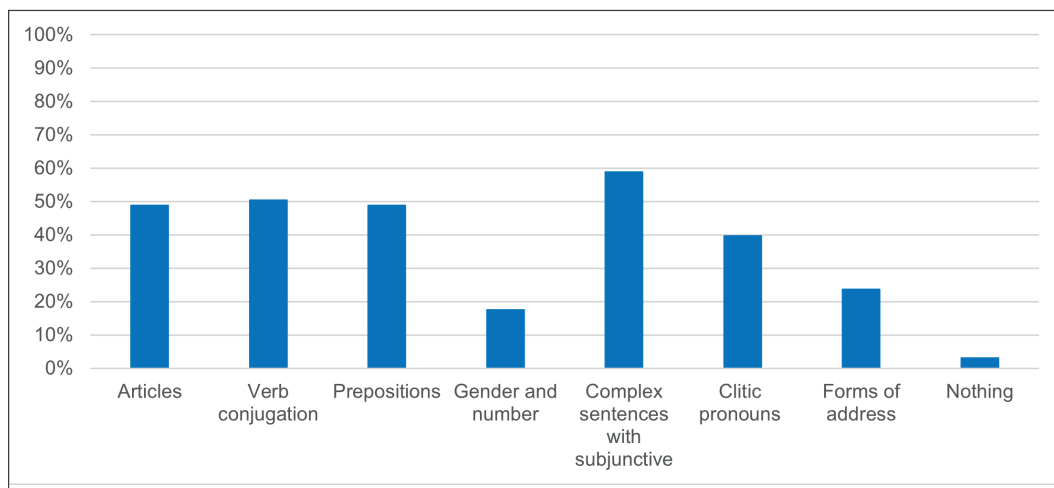


Fig. 7 Challenging morphosyntax aspects

Shifting the focus to the analysis of the surveys regarding the learning strategies that students consider most valuable in an academic context (Fig. 8), we find that students point to a variety of learning facilitation strategies, with the three most popular being taking notes in various forms (84%), repeating several times before the exam, aloud or silently (72.5%), and consulting dictionaries in print and online (69.5%).

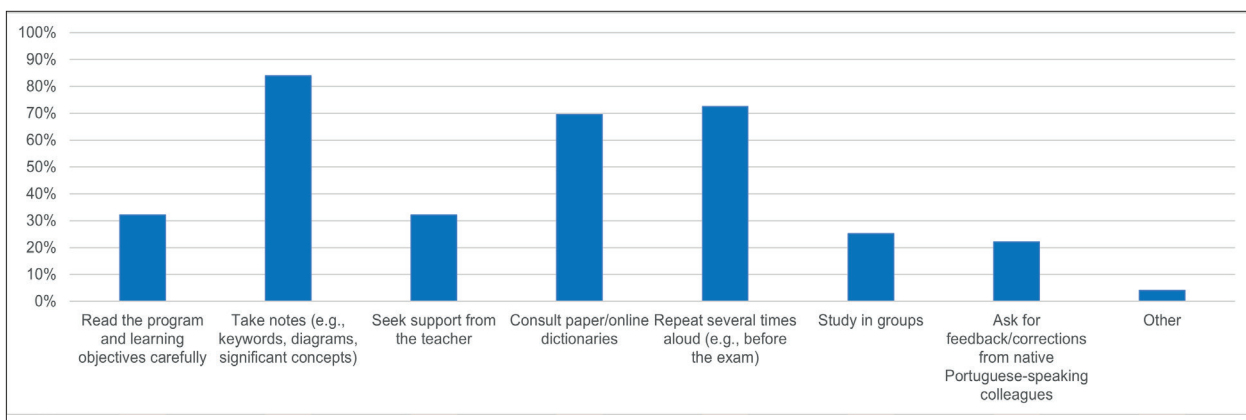


Fig. 8 Helpful learning strategies

4.2.3 Discussion of the results

The analysis of the questionnaires results in its main aspects, linguistic, sociocultural, and pedagogical, as well as the knowledge of the members of the partner teams about the benefits and challenges that Slavic students face

both in immersion contexts during their mobility and in non-immersion contexts when they participate in mobility in, informed the decisions made about the LMOOCs design and production, briefly outlined in §3.2. As a result, we developed a common general framework for both LMOOCs, adapting them to meet specific requirements depending on the specific linguistic features of each target language and particular academic settings.

Considering linguistic domains regarded as competencies to improve, we find that students of Italian and Portuguese, both as FL and L2, generally value the same elements, focusing on textuality and lexicon and emphasizing mastery of morphosyntax and pronunciation. Regarding the main linguistic difficulties experienced by students, the focus for all goes to the critical areas diagnosed in §4.1. because of the typological differences between Slavic and Romance languages. So, it was no surprise that articles, prepositions, complex sentences, clitic pronouns, and pronunciation were the main issues selected. Despite the similarities, both groups of languages present some specificities that must be addressed when deciding which linguistic contents the course should include. For example, Italian LMOOC will focus more on word stress and double consonants when considering pronunciation. In contrast, Portuguese LMOOC will promote tasks to improve the comprehension of vocalic reduction and the production of nasal vowels. Another example is that Portuguese will offer more opportunities to train complex sentences with subjunctives, a critical problem for students. At the same time, the clitic pronouns will be subject to thorough training in Italian due to their complexity for Slavic students. The need for improvement related to lexicon and textuality stressed by many students is intimately associated with the specific domain of discourse communication and the discourse and textual genres in academic settings. Specialised lexicon and idioms are challenging for all groups, as is the mastery of specific textual genres from oral and written modalities, with the most selected being the production of a written academic text, oral presentations, expression of one's opinion, understanding the teacher during lectures and communication with the office for all students. In this context, there are some differences depending on the specific academic setting. For instance, oral exams are more problematic for Slavic students who are doing their mobility in an Italian university because of their relevance in the assessment system than for those studying Portuguese. Finally, the analysis of learning strategies includes taking notes and understanding manuals and other scientific documents, such as scientific articles, reports, and dissertations.

The following section presents an example for each language to illustrate how these findings were crucial to both LMOOCs' instructional design and how they were at work to facilitate students learning.

5. From need analysis to LMOOC design: an example

5.1 Italian

As we have seen in §4.2.1, both FL and L2 learners indicated communication with offices as a major difficulty. In fact, the use of formal registers in a different cultural setting presents several problems for learners. E-mail is “the most preferred, pervasive and efficient means of communication between students and instructors” (Félix-Brasdefer, 2012: 223). However, many studies claim that this genre is characterized by writing rules not yet been standardized and by a mixture of traits including spoken and written, formal and informal elements (Pistoiesi, 2004; Andorno, 2014). Furthermore, in writing formal e-mails, students must pay attention to the pragmalinguistic norms of the genre and to the sociolinguistic norms peculiar to interaction in the academic environment. Based on these considerations, we decided to deal with e-mail writing in academic context in Module 2, dedicated to communication at university, to informal and formal interactions (other students, teachers and employees). The learning path includes videos presenting interactions with the Erasmus tutor, with the employee of the Erasmus office, WhatsApp and face to face exchanges with fellow students, video-lessons summarizing principles of how to use registers appropriately in relation to the interlocutors and a specific video-lesson about formal e-mail writing. The video is followed by comprehension exercises and an example of formal e-mail (Fig. 9) to analyze (for ex. vocabulary used).

Leggi il testo della e-mail che Giovanna invia al professore, poi rispondi alle domande scegliendo l'opzione corretta tra le tre proposte.

Gentile professor Rossi,

sono Giovanna Franchigiani, studentessa regolarmente iscritta al primo anno del corso di laurea in Ingegneria Meccanica (matricola 50039) e studentessa frequentante il Suo corso di “Matematica 1”.

La contatto per chiederLe se fosse possibile fissare un ricevimento, al fine di ottenere delucidazioni in merito al programma d’esame. Più precisamente, avrei alcune domande da porLe riguardo ai materiali distribuiti a lezione, i quali ho trovato particolarmente complessi.

Inoltre, Le sarei molto grata se potesse inviarmi in allegato le dispense di cui ci ha parlato la scorsa lezione e per le quali ci ha chiesto espressamente di scriverLe una e-mail.

In attesa di un Suo gentile riscontro, La ringrazio anticipatamente e Le auguro una buona giornata.

Cordiali Saluti,

Giovanna Franchigiani

Fig. 9 Example of formal letter sent by a mother tongue student

Subsequently, learners are asked to correct inappropriate sentences and to work on formal pronouns (Fig. 10).

Nelle seguenti frasi ,correggi l'errore evidenziato scegliendo l'opzione più appropriata tra le due proposte.

Ho preso in prestito un libro la scorsa settimana in biblioteca e avrei dovuto riconsegnarlo oggi. Tuttavia, **devo** prolungare il prestito ai fini della preparazione di un esame.

Select one:

☐ a. avrei urgentemente bisogno di...

☐ b. ho bisogno per favore di...

Scegli il pronome corretto.

Gentile professore,

sono uno studente del terzo anno di lettere. contatto per chiederle se fosse possibile incontrarci per un ricevimento nel giorno disponibile. Infatti, ho frequentato il corso di letteratura italiana da tenuto lo scorso semestre e avrei alcune domande tecniche da porger in relazione alla bibliografia da indicata nel programma d'esame.

auguro una buona serata e attendo una sua gentile risposta.

Cordialmente,

Marco Fagotti

Fig. 10 Example of exercises on pronouns in formal letters

Finally, students are requested to produce a formal e-mail on a forum, evaluate their own production using a grid and then give feedback to their peers. The module ends with a video-lesson summing up considerations about registers in language.

5.2 Portuguese

As we have seen in §4.2.2, the primary linguistic aspects students wish to improve are pronunciation and vocabulary, with idioms and vowel reduction being the most problematic issues. For morphosyntax, the main problems are the mandatory contexts of subjunctive and clitic pronouns. They also

mentioned forms of address, in what concerns formal conversation with Professors, or with employee of the Erasmus office, among others.

As for learning strategies, they mentioned, for instance, peer group study and asking for feedback/correction from native colleagues.

As an example of Module 2, the learning path for formal interactions vs informal interactions included, among other subjects, attention to Forms of address in European Portuguese (Duarte, 2011; Duarte & Marques, 2023). We offer two videos, one with an interaction in a formal context and another with an interaction in an informal context, face-to-face exchanges with fellow students (Fig. 11). Students also read formal emails and videos with an interaction in which a housemate explains how to survive at the University, the first problems at the University, phone calls, WhatsApp messages, pronunciation exercises, and quizzes about the documents.



Fig. 11 Example of video with informal conversation

Sometimes, texts with information appear in these videos, as in Fig. 12. The video or other documents are followed by comprehension exercises (Fig. 13). As Forms of address are a topic of great difficulty in European Portuguese, we also have an explanation about them in a PowerPoint document with voice. All these documents have multiple questions to test oral comprehension, and we suggest reading a newspaper article about forms of address with a questionnaire for reading comprehension.

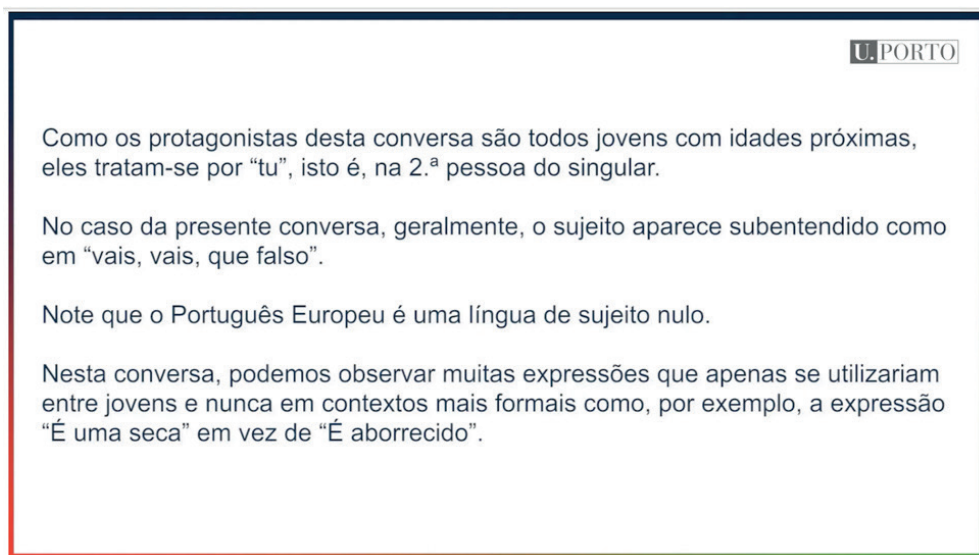


Fig. 12 Example of a text in a video with informal conversation

Comprehensive exercises and grammar or lexical ones appear after all kind of documents: video, PowerPoint with voice, written texts.

Selecione a opção correta para completar cada alínea:

a) A forma de tratamento usada pela Rute revela que a relação entre as interlocutoras é:

☐ próxima.

☐ distante.

☐ Indiferente.

b) Ao tratar a interlocutora por “Prezada Senhora”, a Rute revela, em relação a ela:

☐ respeito.

☐ familiariedade.

☐ desprezo.

c) No contexto de comunicação apresentado, a forma de tratamento “Prezada Senhora” não poderia ser substituída por:

☐ Cara Senhora.

☐ Querida Senhora.

☐ Estimada Senhora.

Fig. 13 Example of questions of a quiz after a formal email

Periodically, students are requested to create documents on a forum, assess their work using a grid and provide feedback to peers. At the end of each module, they receive an evaluation covering all the topics within that module.

6. Final remarks

This article delved into the creation of Language MOOCs under the LMOOC4Slav project, aiming to enhance Slavic-speaking university students' proficiency in Italian and/or Portuguese and their intercultural awareness in academic settings. It emphasized the importance of analyzing the target audience's linguistic profile, previous pedagogical experiences, and learning styles for instructional design. This analysis involved literature reviews and surveys from Slavic students to understand their sociolinguistic profile, learning strategies, and communication needs, informing the content, activities, and technological resources integrated into the MOOCs.

This process is based on the conviction that this phase of MOOC construction is foundational for the subsequent phases, especially those related to determining the conceptual framework of the course, defining its curriculum, and the following stages of production and pre-production. This implies that the target audience for these courses is, to some extent, an active participant in their creation before becoming the final recipient during their widespread

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