



Quality in Language Learning

Implementation of Digital Language Learning Opportunities in Higher Education

Guidelines for Good Practice





Quality in Language Learning

Implementation of Digital Language Learning Opportunities in Higher Education

Guidelines for Good Practice



Title

Implementation of Digital Language Learning Opportunities in Higher Education. Guidelines for Good Practice

Scientific coordination: Elisabete Mendes Silva

Technical coordination: Lorenzo Martellini

Organisers: Elisabete Mendes Silva (Instituto Politécnico de Bragança, Portugal), Sandro Moraldo (Alma Mater Studiorum Università di Bologna, Italy), Anna Zingaro (Alma Mater Studiorum Università di Bologna, Italy), María-Elena Gómez-Parra (Universidad de Córdoba, Spain), Ildikó Szabó (Karoli Gaspar Reformatus Egyetem, Hungary), Loreta Chodzkiéné (Vilnius Universitetas, Lithuania), Teodora Ghivirigă (Universitatea Alexandru Ioan Cuza Din Iasi, Romania)

Authors

Chapter one

Elisabete Mendes Silva, Isabel Chumbo, Vitor Gonçalves, Cláudia Martins, Alexia Dotras Bravo, Ana M. Alves

Chapter two

Julija Korostenskienė, Loreta Chodzkiéné, Hannah Shipman, Olga Medvedeva

Chapter three

Ildikó Szabó, Judit Hardi, Krisztina Streitman-Neumayer, Tamás Csontos, Attila Móczsa, Andrea Zseni-Petrik

Chapter four

Ludmila Braniste, Gabriela Gavril, Teodora Ghivirigă, Marina Vraciu

Chapter five

María-Elena Gómez-Parra, Leonor María Martínez-Serrano, Cristina María Gámez-Fernández

Chapter six

Anna Zingaro, Sandro M. Moraldo, Luisa Bavieri, Paola Polselli, Teresa Quarta, Jürgen Ferner, Sanna Maria Martin, Marina Artese, Sandra Nauert

Cover: Soraia Maduro (Instituto Politécnico de Bragança)

Date: January, 2023

Document developed as Intellectual Output three of the QuILL Project

<https://quill.pixel-online.org>

The QuILL project (2020-1-PT01-KA226-HE-094809) is co-financed by the Erasmus + programme of the European Union. The content of this publication is only responsibility of its authorship and neither the European Commission nor the Portuguese National Agency are responsible for the use that may be made of the information disseminated in this publication.

The methodological design and the information collection instruments have been designed by Pixel and Instituto Politécnico de Bragança, as the coordinator of the QuILL project, and validated by all partners.

This project is being developed with the participation of the partners: Instituto Politécnico de Bragança (project coordinator, Portugal); Pixel (Italy); Alma Mater Studiorum Università di Bologna (Italy); Universidad de Córdoba (Spain); Karoli Gaspar Reformatus Egyetem (Hungary); Vilnius Universitetas (Lithuania); and Universitatea Alexandru Ioan Cuza Din Iasi (Romania).

Publication Reference: Silva, E. M., Moraldo, S., Zingaro, A., Gómez-Parra, M. E., Szabó, I., Chodzkièn, L., & Ghivirigă, T. (Orgs.) (2023). *Implementation of Digital Language Learning Opportunities in Higher Education. Guidelines for Good Practice*. Instituto Politécnico de Bragança. <https://doi.org/10.34620/dadosipb/BBMSQE>



QuILL, 2023

Project Number: 2020-1-ES01-KA203-082364

Author Community: QuILL

ISBN: 978-989-33-4231-2

DOI: <https://doi.org/10.34620/dadosipb/BBMSQE>

TABLE OF CONTENTS

LIST OF ABBREVIATIONS	8
-----------------------------	---

<u>INTRODUCTION.....</u>	<u>9</u>
--------------------------	----------

CHAPTER ONE

<u>QUALITY IN STATE-OF-THE ART DIGITAL LANGUAGE EDUCATION.....</u>	<u>14</u>
--	-----------

1. INTRODUCTION	14
2. DIGITAL COMPETENCE IN THE EUROPEAN HIGHER EDUCATION CONTEXT	15
3. QUALITY DIGITAL LANGUAGE LEARNING: STATE-OF-THE ART TRENDS AND PROSPECTS	17
3.1 GAMIFICATION: A TEACHER'S ODYSSEY	18
3.2 LINKING TECHNOLOGY WITH LSP.....	20
3.3 ERASMUS+ LANGUAGE LEARNING WITH TECHNOLOGY PROJECTS: A POOL OF KNOWLEDGE	20
4. CONCLUDING REMARKS.....	21

CHAPTER TWO

<u>QUILL QUALITY CRITERIA AND QUALITY INDICATORS IN OER-INTEGRATED LANGUAGE LEARNING 25</u>	
---	--

1. INTRODUCTION	25
2. QUALITY IN EDUCATION THROUGH A HISTORICAL LENS	25
3. OPENNESS IN EDUCATION, AND WHAT IT ENTAILS	26
4. QUALITY CRITERIA APPLIED IN THE QUILL DATABASE OF OERS	27
5. QUALITY INDICATORS IN AN OER-INTEGRATED LANGUAGE COURSE	28
6. STUDY ONE: LANGUAGE TEACHERS' SATISFACTION WITH OPEN EDUCATIONAL RESOURCES.....	29
7. THE USE OF OERS THROUGH THE 5RS FRAMEWORK (AFTER WILEY (2009)).....	32
8. STUDY TWO (A PILOT STUDY): LANGUAGE LEARNERS'/STUDENTS' ATTITUDES TOWARDS OER.....	33

CHAPTER THREE

<u>INNOVATION IN LANGUAGE TEACHING.....</u>	<u>39</u>
---	-----------

1. INTRODUCTION	39
2. THEORIES AND CONCEPTS UNDERLYING INNOVATIVE APPROACHES TO LANGUAGE TEACHING.....	39
2.1 THE LEARNERS' ROLE AND LEARNER AUTONOMY IN ONLINE ELT LEARNING	40
2.2 THE CHANGING ROLE OF THE TEACHER IN ONLINE TEACHING SETTINGS IN THE 21ST CENTURY	40
2.3 METHODS OF ELECTRONIC LEARNING TECHNOLOGIES.....	41
2.4 TEACHING LANGUAGE SKILLS WITH DIGITAL TECHNOLOGIES	42
2.5 BLENDED LEARNING AS AN IDEAL EDUCATIONAL SETTING IN LANGUAGE EDUCATION IN HIGHER EDUCATION	42

3. INNOVATIVE SOLUTIONS IN TRAINING PRE-SERVICE EFL TEACHERS IN HIGHER EDUCATION	43
3.1 TEACHING PRACTICE DURING DISTANT LEARNING.....	43
3.2 HYBRID TEACHING PRACTICE	44
3.3. REVERSE MENTORING	44
3.4 PEER MENTORING	44
3.5 ONLINE TEACHING PRACTICE	45
3.6 ‘BEST’ PRACTICES IN FOREIGN LANGUAGE TEACHER’S ONLINE EDUCATION.....	45
4. RECOMMENDATIONS, DO’S AND DON’TS.....	46

CHAPTER FOUR

HIGHER EDUCATION STUDENTS’ MOTIVATION TO LEARN LANGUAGES USING DIGITAL TECHNOLOGIES AND RESOURCES..... 50

1. BASIC THEORIES ON MOTIVATION.....	50
1.1. MOTIVATION: DEFINITION(S) AND TYPOLOGY.....	50
1.2 TYPOLOGY OF MOTIVATION IN PSYCHOLOGY	51
1.3 THEORIES OF MOTIVATION IN PSYCHOLOGY	51
1.4 APPROACHES TO MOTIVATION IN LANGUAGE LEARNING	51
2. MOTIVATION IN DIFFERENT LEARNING SCENARIOS.....	53
2.1 THEORIES AND MODELS IN DIFFERENT LEARNING SCENARIOS	53
2.2 LSP SCENARIOS	54
3. ASSESSING MOTIVATION, ADDRESSING NEEDS AND TAILORING LANGUAGE COURSES TO THE SPECIFIC NEEDS OF HIGHER EDUCATION STUDENTS STUDYING LSP	55
3.1 ASSESSING MOTIVATION	55
3.2 COMPONENTS AND DESCRIPTIONS.....	56
3.3 ADDRESSING NEEDS AND TAILORING LANGUAGE COURSES TO THE SPECIFIC NEEDS OF HIGHER EDUCATION STUDENTS STUDYING LSP	57
4. ADDRESSING EFFECTIVELY THE NEEDS OF STUDENTS TO LEARN LANGUAGES AS A TOOL TO SUCCESSFULLY ENTER THE JOB MARKET AND DEVELOP FUTURE BUSINESS	58
4.1 BEST PRACTICES.....	58
4.2 NEEDS ANALYSIS TOOLS.....	59
5. CONCLUDING REMARKS.....	60

CHAPTER FIVE

IMPLEMENTING DIGITAL TECHNOLOGIES IN LANGUAGE LEARNING AND TEACHING AT A SYSTEMIC LEVEL IN THE HE SECTOR

1. THEORETICAL BACKDROP	65
2. LOOKING INTO QUILL’S OER CASE STUDIES	67
3. PRACTICAL GUIDELINES FOR THE IMPLEMENTATION OF OER FOR LANGUAGE LEARNING AND TEACHING IN HIGHER EDUCATION.....	69

CHAPTER SIX

DIGITAL EDUCATION AND LSP CONTENTS IN LANGUAGE LEARNING AND TEACHING 73

1. INTRODUCTION	73
2. THEORETICAL AND METHODOLOGICAL FRAMEWORK	73
2.1 DEFINING DIGITAL COMPETENCE: THE CONTRIBUTION OF THE COUNCIL RECOMMENDATIONS	73
2.2 THE PEDAGOGICAL DEBATE ON OERS	74
2.3 THE AGES OF THE MEDIA IN EDUCATION	75
2.4 NOTES ON ICT-BASED LANGUAGE TEACHING AFTER THE DIGITAL TURN	76
2.4.1 DIGITAL TURN AND DIGITAL GAP	76
2.4.2 STRENGTHENING DIGITAL LITERACY	76
2.4.3 INCREASING TEACHER CONFIDENCE AND AUTONOMY	77
3. HOW TO USE DIGITAL RESOURCES AS AN INTEGRATION OR AN ALTERNATIVE TO CLASSROOM ACTIVITIES: TOOLS AND CASE STUDIES	77
3.1 SUPPORTING FINNISH SPOKEN LANGUAGE LEARNING USING THE PUHUTSÄ SUOMEE? WEB COURSE	78
3.2 USING THE APP <i>FORLIVIAMO</i> TO SUPPORT ITALIAN L2 INCIDENTAL LEARNING	79
3.2.1 STRUCTURE AND FEATURES	80
3.2.2 TESTING	80
3.3 USE OF PODCASTS IN LSP TEACHING AND LEARNING	81
3.3.1 WHY PODCASTS?.....	81
3.3.2 EXPLOITATION OF A PODCAST FOR LSP.....	81
3.4. <i>DEUTSCH IM JOB – PROFIS GESUCHT</i> : ENHANCING SECTOR-SPECIFIC DISCOURSE	81
3.4.1 FEATURES OF THE WEB COURSE	82
3.4.2 TESTING: STUDENTS’ RESPONSES	82
3.4.3 GOING A STEP FURTHER: INTEGRATING THE OER.....	82
4. CONCLUSION	83

LIST OF ABBREVIATIONS

CALL – Computer-assisted language learning

CALI – Computer-aided language instruction

CEFR – The Common European Framework of Reference for Languages: Learning, Teaching, Assessment

CEFR-CV – The Common European Framework of Reference for Languages. Companion Volume

CFRiDiL – The Common Framework of Reference for Intercultural Digital Literacies

CLIL - Content and language integrated learning

DIGCOMPE – European Digital Competence Framework for Educators

DigEduPol – Digital Education Policies in Europe and Beyond: Key Design Principles for More Effective Policies

DOTS – Developing online teaching skills

EAQUALS – Evaluation and accreditation of quality in language services

EFL – English as a foreign language

ESP – English for specific purposes

HE – Higher education

HOTS – Higher order thinking skills

ICT – Information and communication Technology

LL – Language learning

LOTE – Learning other languages than English

LOTS – Lower order thinking skills

LSP – Language for specific purposes

LT – Language teaching

OA – Open access

OEP – Open educational practices

OER – Open educational resource(s)

OSS – Open-source software

MALL – Mobile-assisted language learning

MOOC – Massive open online courses

TALL – Technology-assisted language learning

TEL – Technology-enhanced learning

TELL – Technology-enhanced language learning

UDL – Universal design for learning

INTRODUCTION

ELISABETE MENDES SILVA

INSTITUTO POLITÉCNICO DE BRAGANÇA
UNIVERSITY OF LISBON CENTRE FOR ENGLISH STUDIES
BRAGANÇA, PORTUGAL
ESILVA@IPB.PT

It is of common sense to acknowledge the important role that languages play in all areas of life, from business and finance to education or cultural frameworks. It is of common sense that learning languages opens many doors, facilitating a myriad of educational and work prospects. In fact, speaking two or more languages proficiently or even in a rather holistic way is a vehicle for an endless world of possibilities not only in education but also in the most diverse political, social and cultural settings. Nonetheless, language learning has not always been a door open to the world and it was only accessible to merchants, travellers, businessmen, intellectuals or to the ones who could afford an education, either at home or at educational institutions. The concept of formal education was non-existent until the eighteenth century when the Enlightenment movement raised important questions about education and the need to improve peoples' mind through its power and via the creation of schools and universities (Feldges, 2022). However, the concept of popular education would only come to the fore of the political debate in the late nineteenth century. More schools were then built, schools for teachers also became forcefully needed as education was made available to an ever-growing proportion of the population. Teaching was thenceforth based on rote-learning and on rational and empirical approaches to life which reflected on the way learning was instilled into the students' minds. Reading, writing, arithmetic, plus religious instruction, were part of the school curriculum, and teachers were merely instructors (Morgan, 2011). At university, classical languages such as Greek or Latin had a strong tradition, whereas modern foreign languages would only be adopted as a university discipline in the early twentieth century. However, only in the last three or four decades of the twentieth century would modern languages digress from their almost exclusive literary input and grammar focus and sociolinguistics started to realise the importance of the spoken and social aspects of language (Coleman, 2004), coinciding with the emergence of the communicative language learning approach in the 1970s. In secondary schools, modern foreign languages would only be widely integrated in the curriculum in the 1970s, because of a national curricular change in England, also in line with European developments in that field (Dobson, 2018). The educational system has come a long way since a more behavioural approach was followed. Recognisably, education accompanied and reflected social, political, economic, and technological changes. Nowadays, in Europe and in the western world, education goes much in line with the ideas of progress, not only of a country, but also of a person's individual improvement. The democratisation of education aims at a global education where the humanist values of freedom, equality and justice are meant to prevail as part of a European identity.

Witold and Brock (2000) speak of a "European education" which:

must show Europeans that they can work more efficiently and live more comfortably together because of mediating educational and professional procedures and the training patterns agreed in the union as part of the economic goals. Extra-curricular activities as much as traditional school curriculum subjects are involved. Pursuits dealing with freedom and liberty, justice and equality, peace and environmental protection will be the new priorities of a European and global education in which the importance of traditional subject matter handed down in national school curricula will decline, giving way to an international interest which is becoming available already. (p. 15)

This emancipation from parochialism towards a more united and international Europe resulted in the creation of an educational framework that put together similar educational structures and practices in the European union member states. Consequently, the European Credit Transfer scheme (ECTS) was created and now applied in all European universities.

Apart from the dissemination of “items of European knowledge”, “European Education” also brings to light the importance of foreign language skills. It is therefore crucial to learn languages as a way of facilitating communication and thus enabling people “to live and work anywhere in the European Union” (Witold & Brock, 2000, p. 17).

The communicative competence has, in fact, been one of the crux issues in language learning and teaching since Del Hymes introduced this view in 1972. Earlier language teaching and learning models were based on a purely linguistic approach, ignoring “the social contexts where language was used” (Baker, 2017, p. 13). The Communicative language teaching (CLT), apart from other holistic models of language competence stemming from this umbrella system, e.g., Task-based Learning and Teaching (TBLT), Total Physical Response (TPR), Project-based learning (PBL), was an important influence for the Common European Framework of Reference for Languages (CEFR), published in 2001. In the attempt to promote plurilingualism, among other objectives, this framework “provides a common basis for the elaboration of language syllabuses, curriculum guidelines, examinations, textbooks, etc, across Europe.” (CEFR-CV, Council of Europe, 2020).

Twenty years have passed since CEFR first came to light, and today, in the age of digital technology, of globalisation, and of continuous migration waves, learning languages resonates even broader and more meaningfully. Learning languages is deemed mandatory in an increasingly technological and more competitive world. Currently, learning languages for specific purposes is a paramount need as, according to Coleman (2005):

In curricular terms, the acquisition of foreign language proficiency is, today allied to a multitude of ‘content’ domains, from the literary, cultural, linguistic, sociological, historical and political study of the country where the target language is spoken, through cognate areas such as other foreign languages and cultures, to widely different specialisms from Economics to Mechanical Engineering. (pp. 4-5)

The Council of Europe has also promoted the interconnection between languages and digital technology through several projects and programmes. The Digital Competence Framework for Citizens (Vuorikari, R. et al., 2016, 2022) and the Common Framework of Reference for Intercultural Digital Literacies (CFRIDiL) are two of its most renowned programmes. They are widely referred to in chapters one and six of this publication.

In the wake of Covid-19, a pandemic that has affected the world substantially, all the educational systems were forced to reinvent or/and adapt to the new physical and social conditions. Teachers had to review their core principles that guide them in their teaching practice. The digital world became then the great panacea in education and new learning environments were widely spread. Upholding Muñoz-Luna and Taillefer’s (2018) statement, “... beyond the role of technology uses, language teachers and researchers must now explore the field of digital activities and resources.” (p. 1), we are able to understand why the QuLL project and this publication, more specifically, are so timely.

The Erasmus+ project ‘QuLL – Quality in Language Learning’ was approved within the call *Strategic Partnerships for Digital Education Readiness* as it proposes a new insight into the way digital open educational resources (OER) are made available to language lecturers teaching languages for specific purposes or as foreign languages and how they can maximise their use in a qualitative way. One of QuLL’s main goal is to provide higher education language lecturers with a substantial number of Open Educational Resources (OER) to assist them in the teaching and learning process. In the QuLL portal, both language lecturers and learners will find many OER for 18 European languages, already tested and validated by students in real teaching scenarios. Apart from that, lecturers will also have available a training package which guides them into the way they identify, use and create online resources.

This publication, containing important theoretical and practical guidelines, is aimed at Higher Education policy makers, as well as Languages for Specific Purpose (LSP) lecturers, to improve the implementation of digital based language learning opportunities in higher education systems. It also intends to present, examine and reflect on the opportunities related to the use of digital technology in the language learning and teaching process.

This publication brings together contributions from the six partners that integrate the QuILL project consortium. Therefore, it consists of six chapters:

Chapter one - Quality in Digital Language Education State of the Art

Chapter two - Quality Criteria and Quality Indicators in OER-Integrated Language Learning

Chapter three - Innovation in Language Teaching

Chapter four - Higher education Student's Motivation to Learn Languages using Digital Technologies and Resources

Chapter five - Implementing Digital Technologies in Language Teaching at a Systemic Level in the HE Sector

Chapter six - Digital Education and LSP Contents in Language Learning and Teaching

Most resources found on the Internet are targeted at learners of English. This is one of the issues that QuILL addresses. Chapters four and five highlight this shortcoming, calling attention to differences between English as a Foreign Language (EFL) / English for Specific Purposes (ESP) and L2 teaching or LSP, hence the need to adopt alternative teaching strategies and to rethink motivation models adequate to LSP or Learning other Languages than English (LOTE).

All chapters address the process of language learning via digital resources and keywords such as "quality" "innovation", and "digital education" are common to all of them. Nonetheless, a division of subtopics was made so that each area could have a more in-depth analysis.

Chapter one provides a wide-ranging literature approach to the state of the art in digital language education in the context of European Higher Education. It addresses recent literature on the topic, in addition to bringing to the fore of discussion projects and programmes carried out by the Council of Europe as a way of attesting the relevance that digital technology has gained over the recent years. According to the literature, the integration of digital tools and resources into language teaching and learning in different European teaching scenarios has proven to be a quality asset to the new teaching and learning paradigm.

Chapter two puts forward important reflections on the complexity of quality in the teaching and learning process, as well as on the concept of good quality Open Educational Resources (OERs) and what it involves from the user perspective. Moreover, the authors identify quality indicators, such as student satisfaction, to measure the progress of digital based language teaching courses in Higher Education. To illustrate these quality indicators, two studies were conducted to examine both lecturers' and learners' feedback on an OER-integrated language course at university. The results obtained suggest that indicators of quality are valued by both learners and lecturers, plus OERs are seen as interesting and motivating supplementary class material.

In **Chapter three**, innovation sets the content of the whole chapter. Therefore, practices, approaches, methods, and strategies based on the use of digital technologies are outlined. Based on innovation in educating pre-service teachers in online settings, topics such as blended learning, student self-regulation and student's autonomy in EFL and SLP are addressed.

Chapter four focuses mainly on the issue of motivation and how influential it can be in L2 learning, in different learning scenarios and targeted at different learners. Therefore, addressing needs and tailoring language courses to the specific needs of tertiary students studying LSP is one of the best practices that the authors suggest in this chapter. Moreover, teachers must also involve learners in the process of selecting and designing learning resources, giving them more responsibility and autonomy in the learning process. In addition, the use of digital resources can also account for the increase in

motivation that will result in more effective learning. That way, students will be given the tools to successfully enter the job market and develop future business.

Chapter five examines how digital technologies for language learning and teaching are applied in the higher education sector, mainly through the QuILL database, explaining how resources were identified and selected in 18 European languages. The authors delve into this implementation process, describing its several stages. Best practices on how to make maximum use of digital resources are also addressed as a means to provide decision-makers, lecturers and learners with a set of seven recommendations that will prove useful in their learning and teaching practices either in face-to-face, hybrid or online scenarios.

Chapter six centres on LSP and provides useful guidelines for the identification and use of digital resources in the teaching context. Through the showcase of several tools and case studies focusing on Finnish, Italian and German for specific purposes, the authors exemplify how digital resources can be integrated in the teaching process or used as an alternative to classroom activities. Furthermore, the pedagogical discussion on Open Educational Resources sheds some light on the re-examination of teaching paradigms within the context of the digital turn.

The guidelines brought into play in these six chapters concur with the core principles that guide our teaching practice as higher education lecturers: we want our learners to become motivated and engaged, unfettering them from narrowmindedness, fostering autonomy and critical thinking. In the specific context of LSP, digital technologies equip teachers and students with more tools that will empower them during the learning and teaching process, so they continue to open as many doors as possible.

REFERENCES

- Baker, C. (2017). *Foundations of Bilingual Education and Bilingualism*. Multilingual Matters.
- Coleman, J. A. (2005). Modern Languages as a University Discipline. In J. A. Coleman & J. Klapper (Eds.), *Effective Learning and Teaching in Modern Languages* (pp. 3-9). Routledge.
- Council of Europe. (2020). *The Common European Framework of References for Languages. Companion Volume*. <https://www.coe.int/en/web/common-european-framework-reference-languages/uses-and-objectives>
- Dobson, A. (2018). Towards “MFL for all” in England: a historical perspective. *The Language Learning Journal*, 46(1), 75-85.
- Feldges, T. (2022) (ed.). *Education in Europe: Contemporary Approaches across the Continent*. The Routledge Education Studies Series. Routledge.
- Morgan, K. (2011). *The Birth of Industrial Britain*. Pearson Education Limited.
- Muñoz-Luna, R. & Taillefer, L. (Eds.). (2018). *Integrating Information and Communication Technologies in English for Specific Purposes*. English Language Education Collection, Vol. 10. Springer.
- Vuorikari, R., Punie, Y., Carretero Gómez S., & Van den Brande, G. (2016). *DigComp 2.0: The Digital Competence Framework for Citizens. Update Phase 1: The Conceptual Reference Model*. Publication Offices of the European Union.
- Vuorikari, R., Kluzer, S., & Punie, Y. (2022). *DigComp 2.2: The Digital Competence Framework for Citizens: with new examples of knowledge, skills and attitudes*. Publication Offices of the European Union. <https://data.europa.eu/doi/10.2760/115376>

Witold, T. & Brock, C. (2000). Introduction. The place of education in united Europe. In C. Brock & T. Witold, T. (Eds.), *Education in a Single Europe* (pp. 1-48). Routledge.

CHAPTER ONE

QUALITY IN STATE-OF-THE ART DIGITAL LANGUAGE EDUCATION

ELISABETE MENDES SILVA¹, ISABEL CHUMBO², VITOR GONÇALVES³, CLÁUDIA MARTINS⁴, ALEXIA DOTRAS BRAVO⁵, ANA M. ALVES⁶

INSTITUTO POLITÉCNICO DE BRAGANÇA ^{1,2,3,4,5,6}
UNIVERSITY OF LISBON CENTRE FOR ENGLISH STUDIES^{1,4}
RESEARCH CENTRE IN BASIC EDUCATION³
UNIVERSITY OF AVEIRO CENTRE FOR LANGUAGE, LITERATURE AND CULTURE^{4,6}
UNIVERSITY OF COIMBRA CENTRE FOR PORTUGUESE LITERATURE⁵
BRAGANÇA, PORTUGAL
ESILVA@IPB.PT, ISCHUMBO@IPB.PT, VG@IPB.PT, CLAUDIAM@IPB.PT, ALEXIA@IPB.PT, AMALVES@IPB.PT

ABSTRACT

For the last two decades much has changed in the context of education. Technology advancements in an all connected globalised world enacted new approaches in language teaching, particularly in the context of higher education. This chapter will therefore address state-of-the-art digital language education, supported by relevant literature in the field (e.g.); Arnó-Macià (2012); Atherton (2018); Blannin (2022); Li (2017); Peterson, Yamazaki et al. (2021); Vuorikari et al. (2022) among other related studies, programmes and projects – in order to provide a complete overview of the current situation as far as quality in digital language learning and teaching in Higher Education in Europe is concerned. The chapter also encapsulates and covers a variety of digital tools and resources which have contributed towards the quality of teaching and learning in the depicted context of languages for specific purposes.

1. INTRODUCTION

At the turn of the 21st century, in the context of education, Marc Prensky (2001) coined a new expression – “digital natives” – to define students at a time that had been witnessing a paradigmatic change against the backdrop of constant digital breakthroughs since the last decades of the 20th century. These “digital natives” were part of a “discontinuity” or “singularity” process that transformed “things so fundamentally that there is no going back” (p. 1). As the author argues: “This so-called ‘singularity’ is the arrival and rapid dissemination of digital technology in the last decades of the 20th century” (Prensky, 2001, p. 1). Prensky named the teachers and educators as “digital immigrants” as they became familiar with the new technologies, adopting (and adapting) them as an effective strategy in their teaching. Moreover, Prensky warned teachers about the need to change if they wanted to get the students’ attention (p. 6). One might easily deduce that this approach to technology has mainly allured younger teachers who were more prone to using technology in both their personal life and teaching than the more mature ones who looked at it with more suspicion and trusted the traditional approaches to teaching.

However, even though this might be true in some circumstances, it does not provide a sound argument to justify a more or less permeable attitude towards the use of technology in the teaching context. There is a myriad of factors that either aid or hinder the engagement of teachers with digital literacy in both their personal and professional lives, and more research is needed to provide us with a more insightful understanding of this issue, as Tour claims (2015, p. 127). In this regard, this author (2015), by attempting to identify “a close relationship between language teachers’ everyday digital literacy practices and the use of technologies in their classroom” (p. 137), carried out a study that examined “teachers’ use of technology use in personal life and teaching” (p. 136). These insights about new

literacies into teaching proved that this new approach to language teaching remains a challenge. As the author concludes:

Inclusion of new literacies in school settings requires many changes because curriculum and pedagogy are already constrained by external factors. Importantly, it requires individual teachers' efforts because, as this study illustrates, teaching new literacies can be further limited by teachers' digital mindsets. (p. 136)

Since 2001, digital technology has changed more significantly and swiftly, and teachers have accompanied this change as well. According to Johnston et al. (2019): "At a breakneck speed, new technological gadgets are introduced to the marketplace, as the great societal panacea of our generation. Technology is touted in even redemptive terms, akin to religious fervor." (p. v).

Digital technology has unleashed forces in the field of education never seen before and literature has abounded to examine and highlight the potentialities of new technologies in any teaching and learning context (Stanley, 2013; Smith, 2016; Li, 2017; Atherton, 2018; Blake & Guillén, 2020, Blannin, 2022). Additionally, Muñoz-Luna and Taillefer (2018) claim that "the integration of technology into education has been an important agenda for educational reform all over the world" (p. 6). The unceasing discoveries in this field in the first decades of the 21st century challenged and changed approaches to digital education. The teaching of languages also gained a renewed insight into the way languages were taught and learnt as new media and information technology became important ancillary tools to language teachers. Digital resources have thus enhanced teaching and learning possibilities, aligning both teachers and students' digital competences to 21st century challenges based on a digital competence framework. This agenda is highly valued in the new higher education (HE) arena that promotes digital literacy and interactive media for teachers and students (Blannin, 2022; Aguilera, 2022; Tomczyk & Fedeli, 2022), through, for example, the creation of the European Framework for the Digital Competence of Educators (DigCompEdu) set forth by the European Union in 2016 (Vuorikari et al., 2016) and with a new edition in 2017 (Carretero Gómez et al., 2017). We shall explore the progress of this and other frameworks further ahead.

This chapter deals with the integration of digital tools and resources into language teaching education and how it accounts for improving the quality and effectiveness of teaching. In addition, it will briefly examine the context of language for specific purposes and its interconnectedness with the digital world, as this topic will be dealt with in more detail in chapter 6. Through literature review, it will incorporate recent and meaningful studies, projects and programmes that prove the relevance of these viewpoints and attest the state-of-the-art trends within the specific domain of (quality in) digital language education in the European higher education context.

2. DIGITAL COMPETENCE IN THE EUROPEAN HIGHER EDUCATION CONTEXT

Digital technologies – a wide-ranging concept covering the Internet, digital mobile devices (smart phones, tablets, and the like), Web 2.0 tools virtual reality devices, artificial intelligence and other new and updated digital technologies (Tsvysk & Tsvysk, 2019, p. 562) – form the core of the modern age of technological developments. In fact, the swift rhythm of technological and digital changes catered for new enhanced and more interactive language learning models, such as Computer-Aided Language Instruction (CALI), Computer Assisted Language Learning (CALL) (in use since the 1960s, but with more impact in the 1990s, as literature interest corroborates (Levy, 1997; Beatty, 2003), Technology-enhanced language learning (TELL), and Mobile Assisted Language Learning (MALL). These models created a new learning and teaching framework that facilitated teachers' work.

The transition from Web 1.0, static and passive, to Web 2.0, dynamic and interactive, prompted information massification in real time (Smith, 2016, p. 3). Computer mediated communication became more encompassing with the spread of smartphones as they became a normalised commodity that

paved the way for a new learning area – Mobile Assisted Language Learning (MALL). According to Chinnery (2006), these technologies substantially enhance social inclusion in language learning, having to be used in line with the most adequate pedagogy (p. 9). More recently, Stockwell (2022) also points out the different attitudes to the use of digital technologies:

Although technology has features more prominently in education (...) since the spread of the Covid-19 virus at the beginning of 2020, there still remain strongly divided opinions as to its long-term use as a viable option to quality education rather than a stopgap until the world recovers from the disaster. (p. 1).

On the one hand, there are those who feel that technology may lag the pedagogical effectiveness in education, and, on the other, there are some who are utterly enthusiastic and optimistic about its effects. However, due to the widespread use of mobile devices, Stockwell (2022) argues that learning through technology, either CALL or MALL, “really does seem bound in expectations that it will make teaching and learning easier” (pp. 5-6). Despite the controversy around the effects of the use of digital technology in education, we must acknowledge the potential of technology to support teaching and learning environments. Nonetheless, the same author (2022) claims that the use of technology in the classroom must be carefully planned and implemented, otherwise it will no longer be effective as the main learning objectives will be missed (p. 2).

In the European context, the European Union continues to promote and update the Digital Competence framework (DigComp 2.2) (Vuorikari et al., 2022). This framework is aimed at developing citizens’ digital competences, so they are better equipped to face 21st century technological and social challenges. It provides new examples of knowledge, skills and attitudes and tools for self-reflection, monitoring and certification of digital competences. Additionally, it represents an excellent guide on how the citizens interact, share, engage and collaborate through digital technologies. These modes of action bear resemblance to the four Cs of 21st century skills in the education context: critical thinking, creativity, collaboration and communication. Among the 21st century skills, the digital competence has gained much importance over the last two decades.

The *Common European Framework of Reference for Languages* (CEFR-CV) (European Council, 2020), mentioned in DigComp 2.2, is also a paramount framework that guides European educational systems. Published for the first time in 2001, the CEFR has been constantly updated to meet the continuous challenges of a more pluricultural and plurilingual society. Apart from being a common basis for the uniformization of language syllabi, assessment, curriculum guidelines, among others, across Europe (Council of Europe, 2001), it also aims to foster learner-centredness, life-long learning, sign language, plurilingualism and the pluricultural competence, sustained on a communicative approach. The last version of CEFR-CV (Council of Europe, 2020) added new descriptors, bearing witness to current societal and technological changes:

The fact that this extension takes the CEFR descriptors beyond the area of modern language learning to encompass aspects relevant to language education across the curriculum was overwhelmingly welcomed in the extensive consultation process undertaken in 2016–17. This reflects the increasing awareness of the need for an integrated approach to language education across the curriculum. Language teaching practitioners particularly welcomed descriptors concerned with online interaction, collaborative learning and mediating text. The consultation also confirmed the importance that policy makers attach to the provision of descriptors for plurilingualism/pluriculturalism. (Council of Europe, 2020, p. 22)

Online interaction is, in fact, a reality that we cannot conceal. The internet has become a powerful medium in our lives and, as such, this new context needs to be added to the wide range of teaching contexts that education has available.

In the scope of the European Erasmus+ research Project EU-MADE4ALL – Integrating Multimodal Digital Literacy and English for International Communication – the Common Framework of Reference for Intercultural Digital Literacies (CFRIDiL) was designed, implemented and tested. This framework stemming from, but going beyond CEFR and DigComp 2.0, embraces a more hybrid classification of skills. Multimodality, digital literacy, and computer mediated communication for global communication represent the great panacea of this framework so that “communication in international and intercultural contexts” proves “successful” and “including more comprehensive multimodal, socio-semiotic and critical skills that take into consideration the expectations of socio-culturally diverse audiences and contexts” (Adami et. al., 2019, p. 11). Above all, CFRIDiL:

is a definite step towards standardisation of digital skills by promoting transparency and recognition for the evaluation of what a European citizen should know to be a successful communicator in today’s digitally-connected world and with the final goal of facilitating learning, employability and mobility. (Adami et al., 2019, p. 14).

In line with European Union guidelines, European HE systems also try to accompany the pace of change and make efforts to foster the digital competence among teachers, educators and learners. The Digital Competence Framework for Educators (DigCompEdu) serves as a springboard to endorse digital competences. As we can read in the document:

It aims to provide a general reference frame for developers of digital competence models, i.e. Member States, regional governments, relevant national and regional agencies, educational organisations themselves, and public or private professional training providers. It is directed towards educators at all levels of education, from early childhood to higher and adult education, including general and vocational training, special needs education, and non-formal learning contexts. It invites and encourages adaptation and modification to the specific context and purpose. (Punie & Redecker, 2017, p. 9)

Moreover, it places innovation at the heart of all educational institutions, including the HE context, by seizing the potential of digital technologies. Therefore, this framework addresses educators’ professional and pedagogic competences along with the learners’ competences, focusing on the areas of professional engagement, digital resources, assessment, empowering learners and, finally, facilitating learners’ digital competence (Punie & Redecker, 2017, p. 8).

With the aim of showing evidence to policy makers and educators of the effectiveness of policies that foster digital-age learning, the study *Digital Education Policies in Europe and Beyond: Key Design Principles for More Effective Policies* (DigEduPol) was published in 2017 (Redecker et al., 2017). Furthermore, SELFIE – the European tool for schools’ digital capacity – is also worthy of mention. Massive open online courses (MOOCs) (MOOCknowledge, MOOCs4inclusion) have also been added to the research agenda.

3. QUALITY DIGITAL LANGUAGE LEARNING: STATE-OF-THE ART TRENDS AND PROSPECTS

One of the main tenets behind the frameworks designed and implemented by the European Commission, led by its Joint Research Centre, is precisely the fostering of digital competences of all citizens to provide them with adequate tools to become more professionally successful and fulfilled both at professional and personal levels. In DigComp 2.2, five competence areas describe what the digital competence consists of namely: (i) Information and data literacy; (ii) Communication and collaboration; (iii) Digital content creation; (iv) Safety; and (v) Problem solving. In the context of language learning and teaching in HE, TELL, technology-assisted language learning (TALL), CALL and MALL meet the needs of the learners and go hand in hand with the demands of an increasingly digital

world. The Internet has provided both the teachers and the learners with a wide array of educational resources.

MOOCs, resulting from the Open Educational Resources movement in 2008, have also been an appealing educational digital resource and strategy. Regardless of MOOCs' democratic outlook, the use of MOOCs continues to pose new challenges in this regard. Deng, Benckendorff and Gannaway (2019) carried out a systematic study that examined the progress and new directions for learning and teaching in MOOCs. The findings led them to conclude that, despite the growing research studies on MOOCs, there has not been enough "systematic research on the learning and teaching dynamics in MOOCs" (p. 58), and reached five main assumptions:

- a) evidence-based research is insufficient, especially when regarding the audiences, who are subject to a certain Western cultural hegemony;
- b) relevant factors such as motivation seem to be oversimplified in studies on MOOCs;
- c) no research has been carried out regarding diverse approaches to learning engagement;
- d) measuring learning outcomes is highly simplified and depend largely on grades;
- e) so far it is unclear how different key learning and teaching factors relate, despite existing evidence about "more active behavioural and online social engagement" being linked to higher retention rates and academic performance.

Therefore, the authors claim that it is extremely important to consider the learning and teaching factors in the way they interact with one another, and not in an isolated way, so that MOOCs can be better implemented and assessed (p. 58).

MOOCs and all these digital resources and systems have been used as powerful and effective motivation and quality enhancers. As supporting tools to language classes, they add new elements to the methodological approaches to teaching and learning. Bolen (2021) presents a few reasons for incorporating technology-based resources into the language classroom: it is effective as students learn faster; it makes lessons more engaging; learners feel more motivated; learners become more autonomous; the teachers can have access to a myriad of "excellent" resources, such as quizzes, online board games, plagiarism checks, among others; and students, parents, administrators expect the use of the computer in the classroom (pp. 7-8). However, as already emphasised, if technology is used with no careful planning, then pedagogical aims might lose their efficacy. Therefore, it is imperative to know how and when to use technology in the classroom. If using it only for the sake of computer usage, then the learning goals become pointless, but if integrated under very defined aims and strategies, then the results will become much more encouraging.

3.1 GAMIFICATION: A TEACHER'S ODYSSEY

Gamification has also been on the agenda of teachers and educators. A wide variety of game-based learning platforms, language learning websites, online assessment, only to name a few, have mushroomed very recently. These online tools or apps, such as *Flippity*, *Quizizz*, *Quizlet*, *Kahoot*, *Nearpod*, or *Sutori*, create excellent opportunities for the teachers to plan more interactive and motivating lessons. *Duolingo*, *Edmodo*, *Class Dojo*, *Zondle*, *Languagenut*, *FluentU*, *Socrative*, *Brainscape*, *The Language Game* and *MindSnacks* are some gamification apps that are normally used in language learning (Prathyusha, 2020). These tools can also be embedded in e-learning courses, such as MOOCs, or others.

It is then important to clarify and classify gamification, from a broader perspective. Games have always exerted a natural attraction on individuals, allowing them not only to enjoy leisure and entertainment activities, but also for learning or even performing many of their activities. They also emerge as an important social and cultural component and are promoters of engagement with motivation (Bozkurt & Durak, 2018).

In the educational context, the use of games as aids or promoters of learning is not a new phenomenon. UNESCO recognises that digital games play an important role in young people's daily lives and considers them pedagogical tools to transfer, enhance and/or develop skills and competences for intercultural dialogue and social and emotional learning to prevent violent extremism (UNESCO, 2021).

However, the widespread use of digital games as a form of entertainment has raised the question of how to harness their potential for educational purposes. It is undeniable that the user of digital games is deeply attracted by and involved in these activities. The widespread use of mobile communication devices has made digital games ubiquitous in students' lives. This media availability and the attraction that games exert on students suggest stimulating options to educators so as to support the teaching learning process. Nonetheless, we can identify different modalities of using these digital games, with as many similarities as differences, namely: Edutainment (Al Fatta et al., 2018), Digital Game Based Learning (Nadolny et al., 2020), Serious Games (Sudarmilah et al., 2018) and Gamification. For the purposes of this chapter, we shall only delve into the latter.

Gamification is “the use of game design elements in non-game contexts” (Deterding et al., 2011, p.10). Chou (2016) defines gamification as “the art of generating fun by involving elements commonly found in games and carefully applying them to productive or real-world activities” (p. 8). For Schlemmer (2014), it is something that “proposes to create a game layer in an application or product, in place of being, in origin, a game” (p. 77). On the other hand, Gartner (2022) puts forth gamification as “the use of game mechanics and design to digitally engage and motivate people to achieve their goals” (para. 1).

Hamari et al. (2014) present gamification as a process of enhancing services by enriching them with gaming experiences. They also extend the definition beyond game mechanics, maintaining that the concept should be understood more broadly as a process in which the user is involved in psychological experiences, just as games generally do. These authors, in developing their conceptualisation of gamification, associate three essential potentialities that justify its use: productive behavioural results (for example, a positive correlation between increased learning effort and increased motivation); positive psychological results (such as, increased motivation resulting from user interaction with game design elements); and motivational resources (i.e. game design elements such as points, leaderboards, badges, levels, feedback, progress indication, among others).

Based on an analysis of dozens of studies on gamification, the same authors, state that all those carried out in education/learning contexts show mostly positive effects, especially in terms of increased motivation and involvement in learning tasks. They warn, however, that the same studies also point to some negative results to be considered, namely: the increase in competitive behaviour and difficulties in the assessment process.

For Vianna et al. (2013), game features such as instant feedback, badges, tangible goals, competitiveness, collaboration and “learning by doing” are essential elements to achieve specific purposes through gamification.

John et al. (2017) argue that learning activities using gamification (motivational resources) lead to a recognition of the importance of learning activities (psychological outcome) which, in turn, conducts to an increase in learning effort (behavioural outcome) that translates into progress in academic performance. In fact, gamification is pointed out as an active methodology that can contribute to motivating and engaging students in activities, fostering learning and shaping behaviour (Kim, 2015).

An improvement in learning performance, interaction with peers and an increase in motivation and engagement are three factors that Zainuddin et al. (2020) highlight from the effects on the use of gamification in education. Referring to interactive learning experiences, Fardo (2013) acknowledges the ability for gamification to help overcome a lack of student engagement, promoting a positive change in behaviour with increased meaningful participation. Therefore, in a game-based environment, learners' level of commitment and engagement increases (Glover, 2013, Kiryakova et al., 2014, Zainuddin et al., 2020, Vankúš, 2021).

There are also other language learning apps like *EducaPlay*, *Busuu*, *Babbel*, *Speakly*, *QLango*, or similar, that can be useful for both the learners and the teachers as, in there, the former will find all the guidance needed for learning the language of their selection, or the latter can also get ideas from designed and clearly instructed lesson plans or activities to be used in their lessons.

3.2 LINKING TECHNOLOGY WITH LSP

In the field of language for specific purposes (LSP), Arnó-Maciá (2012) examines how technology has transformed LSP teaching and learning. The author argues that technology has provided the LSP teachers with new and hybrid genres, computer tools for gathering and analysing specialized discourse, and the development of online materials and courses (p. 89). In fact, CALL applications have created opportunities for a more collaborative, creative, innovating and motivating learning environment. Muñoz-Luna and Taillefer (2018) regard the integration of technology in the LSP learning classes from two complementary approaches: first, “teachers and other language professionals as digital users of online activities and technological applications”, and, on the other side, “Teachers and professionals as innovative creators of those applications contributing from their practical experience (...)” (p. 2). These authors also provide English for Specific Purposes (ESP) teachers with different online teaching tools, like telematics dictionaries, corpora, video clips, among others (p. 2).

Nowadays, more than ever, it is essential to use tools that help the processes of GILT, that is Globalization (G11N), Internationalization (I18N), Localization (L10N), Translation (T9N). To achieve this, linguistic service providers use Computer-Assisted Translation (CAT), along with their own Translation Memories, Translation Editors, Terminology databases, among other tools to ensure productivity and interoperability. In no way are Thesauri, Glossaries, Dictionaries, Grammars, and digital Encyclopaedias to be underestimated. A last word is to be dedicated to machine translation tools within languages services, as well as language teaching.

3.3 ERASMUS+ LANGUAGE LEARNING WITH TECHNOLOGY PROJECTS: A POOL OF KNOWLEDGE

Because current times pose new challenges to language education, subsequently teaching and learning languages effectively and in accordance with the learners’ needs has become a priority. That is why integrating and implementing technology in the language learning classroom and online environment have been highly considered in the quality plan for language learning. At a European level, the European Commission, through the promotion of Erasmus+ projects, aims to develop research on language learning and teaching, and implement this technological paradigm in education and, more specifically, in the language field. Additionally, it also caters for different target-audiences: policy makers, learners, teachers and educators, in order to have a more overarching range of influence and change.

In this regard, The Erasmus+ Learning Foreign Languages Online is based on a democratic approach. It is aimed at self-directed language learners with economic difficulties and intends to facilitate language learning online by means of a database of free online resources and therefore promote learners’ autonomy. Teachers also have available open educational resources (OERs) as a supplement to “formal instruction settings”. This project is led by several European Language Schools (private and non-private) that restricted their study to 7 languages: English, French, German, Italian, Spanish, Croatian and Polish. This is an example of the use of online platforms to support language learning. Another one is DigiTise targeted at teachers over 50 and aimed to improve their digital skills much in line with DigComp2.2. The main intellectual outputs were a handbook and ten MOOC courses.

The Erasmus+ project ITILT 2 – Interactive Teaching in Languages with Technology – channels its scope of research and action to the use of technology for task-based language teaching (TBLT), with the focus on “new and emerging technologies, such as such as tablet PCs, mobile phones, and videoconferencing software” (n.d, para. 1). The educational contexts covered by this project include all levels of education.

Insofar it seems that projects under the Erasmus+ umbrella have gathered approaches and aspects on the field that are not only contemporary in terms of needs in education but also ground-breaking, since research has not been quick enough to establish foundational ideas in the field of technology, languages and higher education.

Therefore, the QuLL project meets the demands of education in the context of technological advances with its scope more channelled than the previous ones. It is aimed at the higher education context and focuses very specifically on LSP. The main objective of the project is to promote innovative practices to enhance the digital capacity of language lecturers at HE level. This is done, first, through the identification and review of high quality and user-friendly digital sources for the teaching of 18 different European languages. This is already online at the project's portal and has received contributions from lecturers all over Europe. Apart from the fact that the project promotes an online-based training of language lecturers on how to select, use and create digital sources for language teaching, it also fosters their capacity to effectively contribute to the development of digital education environments both in remote and on-site teaching. This online training is of paramount importance to support lecturers when changing the paradigm towards a technology enhanced language classroom.

4. CONCLUDING REMARKS

The increasing number of research, whether resulting from literature, Erasmus+ projects or other European Union programmes, on the integration of digital technology into the language learning contexts proves the relevance of technology-based resources as an important quality asset to be contemplated in methodological approaches to education as a whole.

Considering the HE context's idiosyncrasies, it must be mentioned that it was still able to embed all the approaches which have been encapsulated along the years, regarding both technology and language learning. The QuLL project seems an outcome of this path.

The learning and teaching of languages in the (near) future is indubitably linked with the digital paradigm that now permeates all aspects of our lives, and quality will always be a major concern in education and in language learning. Subsequently, language learning enhanced by technology is, with no doubt, an innovative asset that all players in education must endorse and use in a comprehensive, yet prudent, way so that students, who are the ultimate target-audience of all this new technological approach to teaching and learning, continue learning languages in a supported, engaging and effective manner.

LINKS TO EXTERNAL RESOURCES

DigiTise: <https://digitiseproject.eu>

Project EU-MADE4ALL – Integrating Multimodal Digital Literacy and English for International Communication: <https://www.eumade4ll.eu>

SELFIE – the European tool for schools' digital capacity: <https://www.pankampylis.eu/project/selfie-the-european-tool-for-schools-digital-capacity/>

The *Digital Competence Framework for Educators* (DigCompEdu): https://joint-research-centre.ec.europa.eu/digcompedu_en

The Erasmus+ Learning Foreign Languages Online: <https://www.learninglanguages.eu>

The Erasmus+ project ITILT 2 – Interactive Teaching in Languages with Technology: <https://www.uantwerpen.be/en/centres/linguapolis/research-projects/national-international-projects/international-projects/itilt2/>

REFERENCES

- Adami, E., Karatza, S., Marenzi, I., Moschini, I., Petroni, S., Rocca, M., & Sindoni, M. G. (2019). *The Common Framework of Reference for Intercultural Digital Literacies (CFRIDiL)*. eumade4all. European Commission. Erasmus+ Programmes. https://www.eumade4all.eu/wp-content/uploads/2019/09/cfridil-framework-MG3_IM_4-compresso.pdf
- Aguilera, E. (2022). *Digital Literacies and Interaction Media: a framework for multimodal analysis*. Routledge.
- Al Fatta, H., Maksom, Z., & Zakaria, M. H. (2018). Game-based learning and gamification: Searching for definitions. *International Journal of Simulation: Systems, Science and Technology*, 19(6), 41.1-41.5. <https://doi.org/10.5013/IJSSST.a.19.06.41>
- Arnó-Macià, E. (2012). The Role of Technology in Teaching Languages for Specific Purposes courses. *The Modern Language Journal*, 96, 89-104.
- Atherton, P. (2018). *50 Ways to Use Technology Enhanced Learning in the Classroom: Practical strategies for teaching*. SAGE.
- Beatty, K. (2003). *Teaching and Researching Computer-Assisted Language Learning*. Pearson Education.
- Blannin, J. (2022). *Beginning teaching with Digital Technologies*. SAGE.
- Blake, R. J. & Guillén, G. (2020). *Brave New Digital Classroom: Technology and Foreign Language Learning*. Georgetown University Press.
- Bolen, J. (2021). *ESL Technology games, activities and resources. 59 ways to implement tech in a language learning classroom*. Independently published.
- Bozkurt, A. & Durak, G. (2018). A systematic review of gamification research: In pursuit of homo ludens. *International Journal of Game-Based Learning*, 8(3), 15–33. <https://doi.org/10.4018/IJGBL.2018070102>
- Carretero Gómez, S., Vuorikari, R., & Punie, Y. (2017). *Digcomp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use*. Publications Office of the European Union.
- Chinnery, G. M. (2006). Emerging Technologies. Going to the Mall: Mobile Assisted Language Learning. *Language Learning & Technology*, 10(1), 9-16. <https://www.lltjournal.org/item/381/>
- Chou, Y. K. (2016). *Actionable Gamification Beyond Points, Badges, and Leaderboards*. You-kai Chou.
- Council of Europe. (2001). *Common European Framework of Reference for Languages: Learning, teaching, assessment*. Cambridge University Press.
- Council of Europe. (2020). *Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Companion volume with new descriptors*. <https://rm.coe.int/common-european-framework-of-reference-for-languages-learning-teaching/16809ea0d4>
- Deng, R. Benckendorff, P., & Gannaway, D. (2019). Progress and new directions for teaching and learning in MOOCs. *Computers & Education*, 149, 49-60. <https://www.sciencedirect.com/science/article/pii/S0360131518302902>
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011a). From game design elements to gamefulness: Defining «gamification». *Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments, MindTrek 2011, September, 9–15*. <https://doi.org/10.1145/2181037.2181040>

- Fardo, M. L. (2013). Kapp, Karl M. The gamification of learning and instruction: game-based methods and strategies for training and education. *Conjetura: filosofia e educação*, 18(1).
- Gartner. (2022). *Gartner Glossary*. Gartner Glossary. <https://www.gartner.com/en/marketing/glossary/gamification>
- Glover, I. (2013). Play as you learn: gamification as a technique for motivating learners. In: Herrington, J., Couros, A., & Irvine, V. (eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2013* (pp. 1999-2008). Chesapeake, VA, AACE.
- Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does gamification work? - A literature review of empirical studies on gamification. *Proceedings of the Annual Hawaii International Conference on System Sciences*, 3025–3034. <https://doi.org/10.1109/HICSS.2014.377>
- John, T., Feldotto, M., Hensen, P., Klingsieck, K., Kundisch, D., & Langendorf, M. (2017). Towards a lean approach to gamifying education. *Proceedings of the 25th European Conference on Information Systems, ECIS 2017*, 2970–2979.
- Johnston, B., MacNeill, S., & Smyth, K. (2019). *Conceptualising the Digital University. The intersection of Policy, Pedagogy and Practice*. Palgrave MacMillan.
- Kim, B. (2015). Understanding Gamification. *Library technology reports: expert guides to library systems and services*, 51(2), 000–000. <https://doi.org/10.1108/el-02-2016-0049>
- Kiryakova, G., Angelova, N., & Yordanova, L. (2014). *Gamification in Education*. https://www.academia.edu/34056409/Gamification_in_education?from=cover_page
- Levy, M. (1997). *Computer-Assisted Language Learning. Context and Conceptualization*. Oxford University Press.
- Li, L. (2017). *New Technologies and Language Learning*. Red Globe Press.
- Muñoz-Luna, R. & Taillefer, L. (Eds.). (2018). *Integrating Information and Communication Technologies in English for Specific Purposes*. English Language Education Collection, Vol. 10. Springer.
- Nadolny, L., Valai, A., Cherrez, N. J., Elrick, D., Lovett, A., & Nowatzke, M. (2020). Examining the characteristics of game-based learning: A content analysis and design framework. *Computers & Education*, 156, 103936. <https://doi.org/10.1016/J.COMPEDU.2020.103936>
- Prathyusha, N. (2020). Role of gamification in language learning. *International Journal of Research and Analytical Reviews*, 7(2), 577-583. <https://www.ijrar.org/papers/IJRAR2004090.pdf>
- Prensky, M. (2001). Digital Natives, digital immigrants. *On the Horizon*, 9(5). MBC University. <https://www.marcprensky.com/writing/Prensky%20%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf>
- Punie, Y. (Ed.) & Redecker, C. (2017). *European Framework for the Digital Competence of Educators (DigCompEdu)*. Publication Offices of the European Union.
- Redecker, C., Kamylyis, P., Bacigalupo, M. & Punie, Y. (Eds.). (2017). *Digital Education Policies in Europe and Beyond: Key Design Principles for More Effective Policies*. Publications Office of the European Union.
- Smith, B. (2016). *Technology in Language Learning: An Overview*. Routledge.
- Stanley, G. (2013). *Language Learning with Technology: Ideas for Integrating Technology in the Classroom*. Cambridge University Press.

- Stockwell, G. (2022). *Mobile Assisted Language Learning. Concepts, Contexts and Challenges*. Cambridge University Press.
- Sudarmilah, E., Fadlilah, U., Supriyono, H., Irsyadi, F. Y. Al, Nugroho, Y. S., & Fatmawati, A. (2018). A review: Is there any benefit in serious games? *AIP Conference Proceedings* 1977, 020059, 020059. <https://doi.org/10.1063/1.5042915>
- Tsvyk, V. A. & Tsvyk, I.V. (2019). Digital Technologies in Modern Education: Ethical Aspect. *Advances in Social Science, Education and Humanities Research*, volume 341. 5th International Conference on Arts, Design and Contemporary Education (ICADCE 2019) (pp. 559-564). Atlantis Press.
- Tomczyk, L. & Fedeli, L. (2022). *Digital Literacy for Teachers*. Springer.
- Tour, E. (2015). Digital Mindsets: teachers' technology use in personal life and teaching. *Language Learning & Technology*, 19(3), 124-139.
- UNESCO. (2021, May 2017). *Digital Games for Peace: Creativity, Innovation & Resilience*. <https://mgiep.unesco.org/article/digital-games-for-peace-creativity-innovation-and-resilience>
- Vuorikari, R., Punie, Y., Carretero Gómez S., & Van den Brande, G. (2016). *DigComp 2.0: The Digital Competence Framework for Citizens. Update Phase 1: The Conceptual Reference Model*. Publication Offices of the European Union.
- Vuorikari, R., Kluzer, S., & Punie, Y. (2022). *DigComp 2.2: The Digital Competence Framework for Citizens: with new examples of knowledge, skills and attitudes*. Publication Offices of the European Union. <https://data.europa.eu/doi/10.2760/115376>
- Vankúš, P. (2021). Influence of game-based learning in mathematics education on students' affective domain: A systematic review. *Mathematics*, 9(9). <https://doi.org/10.3390/math9090986>
- Vianna, Y., Vianna, M., Medina, B., & Tanaka, S. (2013). Gamification, inc. Como reinventar empresas a partir de jogos. Em *Journal of Chemical Information and Modeling*, 53(9).
- Zainuddin, Z., Chu, S. K. W., Shujahat, M., & Perera, C. J. (2020). The impact of gamification on learning and instruction: A systematic review of empirical evidence. *Educational Research Review*, 30, 100326. <https://doi.org/10.1016/j.edurev.2020.100326>

CHAPTER TWO

QUILL QUALITY CRITERIA AND QUALITY INDICATORS IN OER-INTEGRATED LANGUAGE LEARNING

JULIJA KOROSTENSKIENĖ, LORETA CHODZKIENĖ, HANNAH SHIPMAN, OLGA MEDVEDEVA

VILNIUS UNIVERSITY

VILNIUS, LITHUANIA

JULIJA.KOROSTENSKIENE@FLF.VU.LT, LORETA.CHODZKIENE@FLF.VU.LT, HANNAH.SHIPMAN@FLF.VU.LT,

OLGA.MEDVEDEVA@FLF.VU.LT

ABSTRACT

The wide application of Open Educational Resources entails the necessity to partly reconsider and fine-tune the conventional views on quality criteria and quality indicators in language teaching/learning in tertiary education. Reflecting on the complexity of quality issues in “open” education and in OERs–integrated language courses, we focus on the main products of Quill – the OER database and Teacher Training e-package, which presumably comply with quality requirements. To verify our assumption, two surveys were conducted. Language lecturers and students from higher educational institutions of the Republic of Lithuania were introduced to the QuILL outputs, tested them in practice and shared their experience while completing two questionnaires. The analysis of the collected responses provides valuable data on teachers’ and learners’ satisfaction, which is indispensable in striving for quality.

1. INTRODUCTION

Although the issue of quality of teaching and learning has been examined extensively from various perspectives, every innovation in teaching/learning environments and/or tools brings about the need to review and to fine-tune the well-established approaches and practices. Open Educational Resources (OERs) and their integration in university language courses pose new questions and raise concerns with all the stakeholders; quite a few of which are directly related to the level of quality assurance. This section is concerned with quality and its assessment within the Quality in Language Learning (QuILL) framework QuILL framework and its products, viz., a database of OERs and a teacher training package. We begin by a brief overview of how education came to be perceived through multi-dimensional quality criteria, and reflect upon the complexity of quality in teaching/learning. Moving to OERs, we seek to focus on “openness” and the changes that it entails. Then we relate the common quality criteria to the ones proposed in the description of the QuILL database.

Adopting the view that quality of a resource is intrinsically related to the learners’ progress, we have conducted two studies. In our first study, we consider the teachers’ perception of the usability of the OERs collected by QuILL. Our second study is a pilot study, in which we examine the feedback on the database provided by the learners. The main aim of both studies is to investigate teachers’ and students’ reaction to OER-integrated language courses at a university. We hope that the collected responses may be useful in developing a framework of indicators measuring the effectiveness of such courses.

2. QUALITY IN EDUCATION THROUGH A HISTORICAL LENS

In order to formulate what quality criteria and quality indicators may be reasonably posed for OER-integrated language learning, the concept of quality in education will be briefly presented through a historical lens. In what follows, we largely draw on the perspectives developed by Heyworth (2013). In his extensive overview, Heyworth views quality in education as both inextricably related to and

significantly different from its original conception, viz., quality as a phenomenon developed in and conceived for – specifically – the industrial world.

In the industrial world, the notion of quality was first raised as a control mechanism, necessary to enable step-by-step assurance of the compliance with the manufacturing process. To operationalise the concept of management of quality, it was brought to comprise four stages: planning, implementation, checking, and follow-up actions, the latter either of remedial nature, or designed to implement the entire cycle of quality control at a broader scale.

The transfer of quality management to education was not simple, namely because the kind of services provided within the education industry is very different from those of the industrial world: there is no physically palpable commodity produced. Second, the notion of the client as service recipient is far less clearly defined, comprising, but not necessarily limited to:

- a) the one who actually commissions and pays for the services (i.e., education) – and thus ranges from the authorities to parents to learners;
- b) the one who receives the services (e.g., the learner); and
- c) the one who gets (in)directly affected by the service provided, without necessarily being aware of this fact.

Considerations of many other factors, such as a) interconnectedness within the provision of educational services inside an organisation, whereby its members become both service recipients and service providers, b) accountability of the ultimate service recipient to the service provider in exchange for their expectations for satisfaction, c) questioning the very notion of the applicability of quality management within public educational institutions, given that the latter are not commercial bodies trading in education (even though the latter criterion seems to have become rather limited due to e.g., paid admissions), have also been voiced. The latter factor of quality management in the education sphere in particular has to do with the broader issue of how productive and efficient an educational institution should be.

If quality of education is to be perceived through the lens of client satisfaction, the scale of clients listed above also implies the intricacy of quality measurements. In a very simplified form, the immediate client (learner) may have specific short-term goals, which may or may not coincide with the longer-term goals of stakeholders involved in the educational process, in which some may not even envisage themselves as participants of the learning process.

With respect to language education, Heyworth argues that quality considerations are to be formulated at the micro- and macro- levels. At the micro-level, these concern formulating, enacting, and evaluating proper teaching practices. At the macro-level, teaching practice is to be viewed in light of its contribution to broader dimensions of “individual educational development” on the one hand, and “the social and developmental aims of [the] educational environment” (Heyworth, 2013, p. 286), on the other.

3. OPENNESS IN EDUCATION, AND WHAT IT ENTAILS

With all the complexity of a conventional educational framework, quality management and quality assurance become still more intricate when using open educational resources.

Open educational resources have irreversibly opened up education and precipitated radical changes in practice and mindsets of all the stakeholders. The importance of “openness” in education is confirmed in the Recommendation on OER, adopted by UNESCO’s General Conference at its 40th session on 25 November 2019 (<https://www.unesco.org>).

Further steps in the opening of education have brought about MOOCs with new concerns about quality assurance and new approaches to quality indicators, with specific focus on the given learning situation as well as the core stakeholders involved (Hayes, 2015; Macleod et al., 2015) and on investigating learners’ intentions and goals (Henderikx, Kreijns, & Kalz, 2017; Stracke et al., 2018; Stracke & Tan, 2018)).

The Quality Reference Framework for the Quality of MOOCs (European Alliance for the Quality of Massive Open Online Courses (MOOCs), <http://mooc-quality.eu/qrf>) presents valuable insights into quality criteria and quality indicators of lower-scale OER-integrated courses, such as LSP language courses offered to university students.

The concept of an open educational resource *per se* could have many interpretations since “open” in an OER refers to a continuous, not binary construct (Wiley, 2009) and we, the teachers, measure the openness of content in terms of the rights we, as the users of the content, are granted. Wiley (2009) proposes the 5Rs Framework which stands for the most important rights of a user, such as:

Retain - the right to make, own, and control copies of the content (e.g., download, duplicate, store, and manage).

Reuse - the right to use the content in a wide range of ways (e.g., in a class, in a study group, on a website, in a video).

Revise - the right to adapt, adjust, modify, or alter the content itself (e.g., translate the content into another language).

Remix - the right to combine the original or revised content with other material to create something new (e.g., incorporate the content into a mashup)

Redistribute - the right to share copies of the original content, your revisions, or your remixes with others (e.g., give a copy of the content to a friend).

While reviewing the list of the aforementioned rights, Connell and Connell (2020, p. 4) admit that “The more the rights attached to a resource or a repository meet the 5Rs, the more it can be judged to be “open”. In this way, the researchers consider the 5Rs to serve as the background, against which quality in relationship to a given OER is to be explored.

4. QUALITY CRITERIA APPLIED IN THE QUILL DATABASE OF OERS

According to Wiley (2015), the quality of an educational resource depends upon how much it supports the learning process. While it is hardly possible to give a clear characterisation of the mindset of the original creator of an OER resource or that of its end user, an area where some more clearcut quality expectations may be set is the middle ground, a mediator, which in the context of the present discussion is represented by Quality in Language Learning (hereinafter QuILL) initiative. As a *mediator*, QuILL has aimed to create a database of OERs, bringing them together from various parts of the World Wide Web (WWW) in a single repository, while verifying their selection through an internal set of criteria, as well as by testing it with fellow teachers and students. This multi-layered mediation of OERs within QuILL and the associated quality considerations form the methodological premise for the discussion below.

In the case of QuILL, the mediator is collective: it is constituted by the compilers of the QuILL database of OERs, including the administrative and managerial body, who have envisioned the conceptual architecture of the present database, and the dedicated teams, who have been implementing this endeavour. Developing a database of OERs, QuILL teams, as mediators, critically assess each resource, thereby providing a round of quality assurance mechanism, at the stage following the creation of an OER by its original authors. The significance of the mediator as a quality assurance mechanism resonates with a perspective by Connell and Connell (2020, p. 8): “in looking at quality with respect to OER, we should think of 'quality-before-the-fact' as well as 'quality-after-the-fact': that is, both while an OER is being considered for use by the teacher and during the assessment of the learners' progress.

As one of the primary objectives of QuILL is to create a database of OERs for language learning and teaching, let us thus consider the basic qualities and characteristics of the selected OERs.

The quality criteria for the resources presented in the QuILL database here may be viewed as ensuring their state of being “fit for purpose”, to use another notion Heyworth (2013, p. 284) adopts in his discussion as a criterion for quality management in education. To be fit for purpose in education means

for an educational institution to satisfy client expectations. Fitness for purposes may be further broken down into the following components (Heyworth, 2013, p. 287):

Purpose – Why are we undertaking this activity? Is the purpose a ‘fit’ purpose?

Description – What is the nature of the thing we are talking about? What kind of thing is it?

Comparison – What are ‘good’ instances of the subject? What is ‘good practice’ in a particular activity? What criteria do we use for this?

Evaluation – How good an example of its kind is it? How does it compare with set standards?

Management – What can we do to ensure that quality is maintained? How can we make it better? What standards do we apply to this?

Guarantees – How do we know we can rely on the quality of a particular thing or activity? How can it be reliably accredited? By whom?

The components listed above are presented as general guidance; yet these premises have been at the core of the development of quality guidelines throughout QuILL project. We elaborate on that below. In the context of OERs, we view fitness for purpose as meeting a number of criteria by a given OER to be considered appropriate so as to be stored in the database of OER resources within QuILL project.

The criteria posited for an OER originate at least at two levels, which are as follows:

- **The initial, “internal” criteria**, which served as guidelines for the original authors in the very development of the resources;
- **The “external” criteria**, developed by the participants of the QuILL project on the basis of the goals of the project. Although following a rigorous verification procedure, which has been jointly developed and approved by all QuILL teams, the practical application of these external criteria varies somewhat with respect to the specific team and primarily due to target languages, bearing in mind the unequal availability of the OERs and consequently, underrepresented languages with limited OERs available.

Incorporating both the internal and the external compilers of a given selection of OERs, the proposed criteria comprise the following:

Visible planning of the resource – as perceived by the original authors and by the relevant QuILL team;

Clarity of aims of the resource – as perceived by the original authors and by the relevant QuILL team;

Clarity of stages – as perceived by the original authors and by the relevant QuILL team;

Variety of tasks – as perceived by the original authors and by the relevant QuILL team;

Appropriateness of the material to the level of the prospective learner – as perceived by the original authors and by the relevant QuILL team;

Range of skills practiced – as perceived by the original authors and by the relevant QuILL team;

Clear explanations – as perceived by the original authors and by the relevant QuILL team;

Attention to individual learner needs – as perceived by the original authors and by the relevant QuILL team.

5. QUALITY INDICATORS IN AN OER-INTEGRATED LANGUAGE COURSE

Quality indicators concern the most immediate end users, i.e., learners themselves, but also the instructors, potentially incorporating a given resource into their work. Within the framework of QuILL, quality indicators are viewed as a means to measure the progress of digital based language teaching courses in the Higher Education framework; as such, they may incorporate traditional accountability tools, results in examinations and standardised tests.

Importantly, due to the apparent properties of OERs, the users’ perspectives gain additional weight in assessing the progress in a language course. QuILL strategy was to ensure that all stakeholders involved in the project respond to the OERs from the user perspective, whether it be the teacher or the student (recall a perspective on the interconnectedness of the participants within an educational organisation).

Consequently, the proposed and most immediately observable quality indicators for OERs integrated language courses comprise the following:

Teacher satisfaction in questionnaires (as assessed by the respondents in the framework of the QuILL project);

Student satisfaction in questionnaires (as assessed by the respondents in the framework of the QuILL project).

6. STUDY ONE: LANGUAGE TEACHERS' SATISFACTION WITH OPEN EDUCATIONAL RESOURCES

To discover the Lithuanian teachers' satisfaction level with the application of OERs in their language classes an online survey was conducted in the period of 15-25 November 2022. Prior to the survey, the participants were introduced to the QuILL project outputs: the Database of Teaching Resources and e-Training Package available on the project website. The latter outcome was also exploited as a training tool, and was of great use, especially to those who have never applied an OER in their language classes. The participants of the training session were taught how to select, integrate or create OERs of their own into the subject syllabus.

After the training session, the participants were encouraged to explore the QuILL database, apply the most suitable OERs to their language classes (according to the reviewed set of criteria), express their opinion on the outcomes as well as to share their expertise while answering the questions of the questionnaire published both in English (available at: <https://forms.office.com/r/1AhQiFpEh4>) and Lithuanian (available at: <https://forms.office.com/r/M1ALPb61Gk>). The questionnaire comprised mainly multiple choice and some open-ended questions.

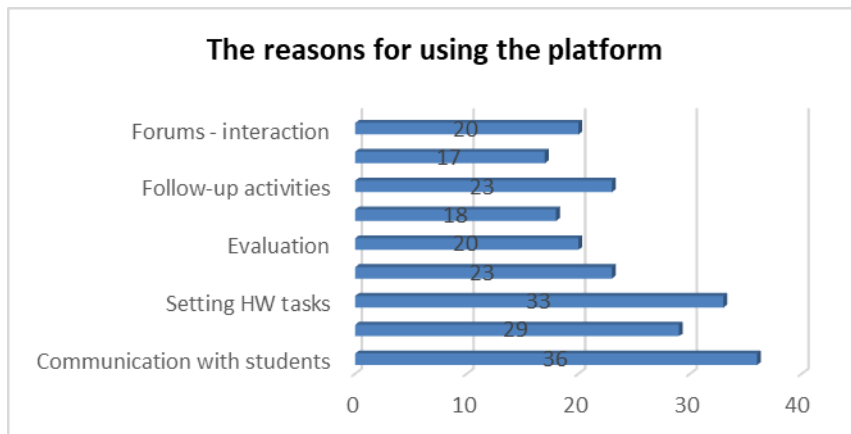
The sample size of the respondents encompassed 43 participants representing 23 language lecturers teaching Lithuanian, English, French, Spanish, German, Polish, Latvian, Estonian at different universities and other institutions of higher education in the Republic of Lithuania, 17 language teachers working at public or private secondary schools and gymnasias of the state, and three language policy makers having part-time jobs in the area of education.

General characteristics of the survey participants revealed that the biggest part of the respondents (23) had been teaching languages for more than 15/16 years, the teaching experience of the second biggest group of the respondents varied from one to five years. 26 respondents claimed that the last time they had attended professional development courses on digital teaching was within the last six months, and it was within the last year when the rest of the participants had updated their digital competence. Furthermore, the respondents have been active members of many professional associations and special interest groups or research fields, ready to spread their knowledge and expertise with their colleagues.

While reviewing the teaching contexts of the surveyed participants it has to be stressed that just seven participants claimed not having used any teaching platform in their institutions, the rest admitted that both Microsoft Teams (mentioned by 32 respondents) and Moodle (mentioned by 28 respondents) happened to be their everyday companions for a language class. Further to it, seven respondents mentioned the application of Google Classroom and one of Canvas LMS to language teaching.

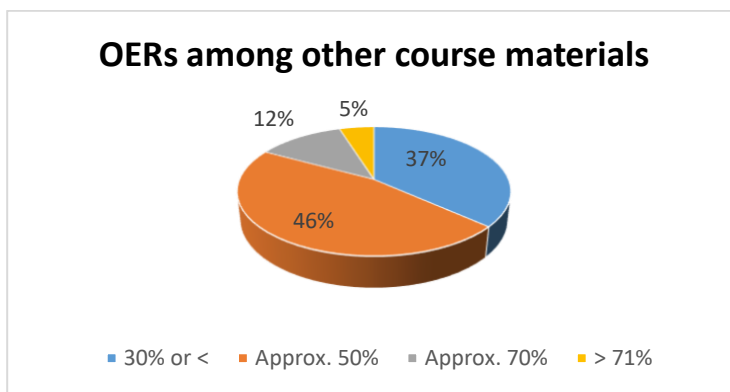
When asked to identify the reasons what the learning platforms were used for, first of all, the majority of the language teachers stressed a multifaceted value of the learning platform. Nevertheless, the display of the answers in Figure 1 demonstrates that the priority was given to such aspects of the teaching process as 'facilitating communication with students' (36 respondents), 'setting homework tasks' (33 respondents) and 'sharing OERs' (29 respondents). In general, the latter number suggests that application of OERs in language teaching/learning process does not fall outside. On the contrary, it supports the evidence of their frequent use by the language teachers.

Figure 1
The reasons for using the learning platform



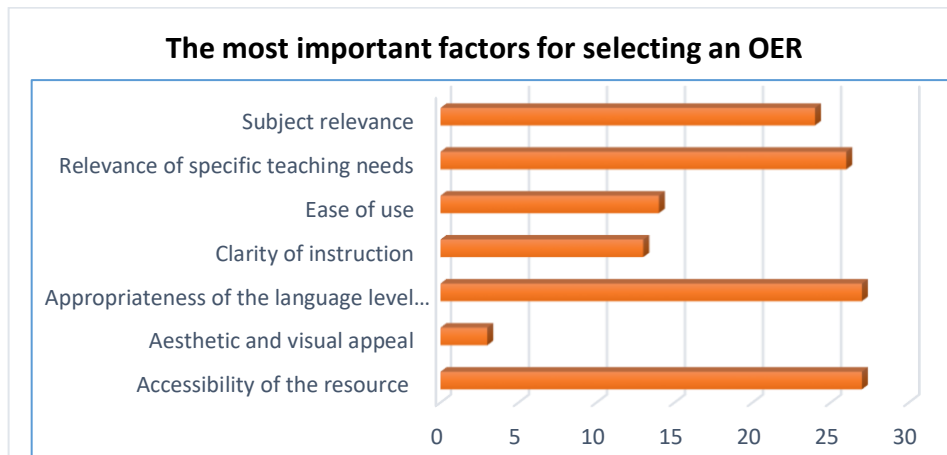
When asked to indicate the approximate percentage that OERs may take place among other course materials, as recommended by the study programme (see Fig. 2), nearly half of the respondents (46%) claimed that they could cover approximately 50% of the course materials. 12% of the language teachers were for giving OERs even wider space in the course, of approximately 70%, and it was 5% of the respondents who intended to expand the usage of OERs even more than 71%. On the other hand, 37% of the language teachers were more moderate than their colleagues and admitted that 30% of OERs was enough among all the course materials.

Figure 2
OERs among other course materials



The data provided in Figure 2 encouraged further investigation into the pathways of selecting and taking responsibility for an OER. The respondents maintained that mainly the teachers themselves had a right to decide what to use (30 teachers) in their language classes. Just in two cases, either administration or Committee members of the study programme were responsible for the selection of teaching materials. Further to it, in nine institutions, OERs have to be formally approved either always or in most cases. In contrast, 35 respondents claimed that they were allowed to take decisions themselves, and successful integration of OERs in Language for Specific Purposes curricula highly depended on both the methodological decisions of the teaching staff (30 respondents) and availability of teaching resources (21 respondents). Figure 3 presents a list of the most important factors that make language teachers reach decisions while selecting OERs:

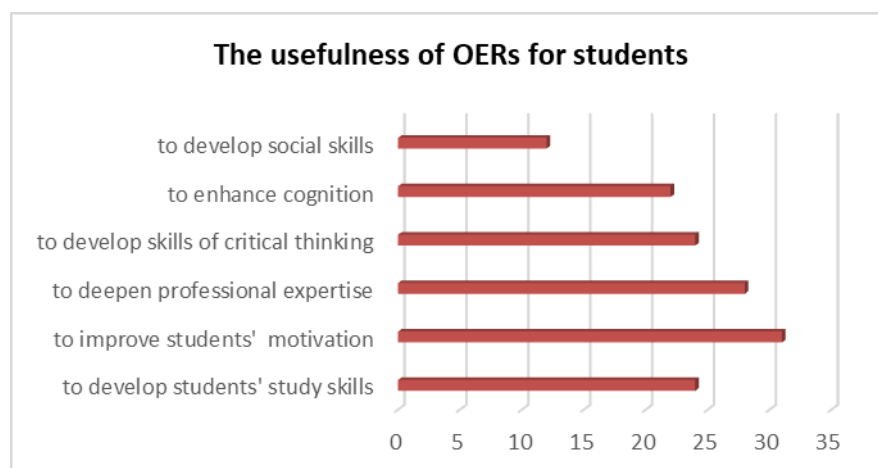
Figure 3
The most important factors for selecting an OER



As seen in Figure 3, the teachers took into consideration accessibility of the resource as well as its appropriateness to learners' language level difficulty (27 respondents, respectively). They also paid attention to the resource's relevance to specific teaching needs, i.e., skills they intended to target or develop (26 respondents). And the fourth key factor chosen by the respondents appeared to be the resource's suitability to the subject (24 respondents). Although such factors as the resource's 'ease of use' or 'clarity of instruction' were pointed out just by the third of the respondents, they remained to be significant and often mattered while selecting an OER.

Further to the factors describing technical characteristics and content relevance of an OER, it is the target learner whom the resource is meant to. Therefore, we also aimed at eliciting teachers' attitudes toward a list of factors related to the usefulness of OERs for students.

Figure 4
The usefulness of OERs for students (according to language teachers)



As it was expected, the respondents' priority had been given to OER's magic characteristic to generate students' motivation (31 answers). According to the language teachers, they (OERs) also inspired students to deepen their expertise (28 answers), encouraged them to develop both their study skills and critical thinking skills (24 answers, respectively). Fewer respondents (22) thought that OERs could enhance students' cognition and develop their social skills (12 answers). It is important to note that nearly all the respondents (38) admitted the presence of the power in an OER, which could be explored

to meet each individual student's needs. This consequently proved that the current status of available OERs had been seen in a very positive light.

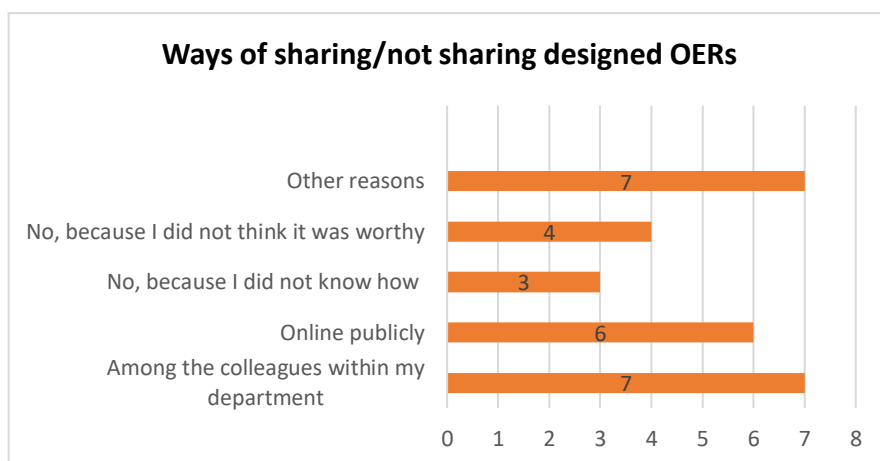
7. THE USE OF OERs THROUGH THE 5RS FRAMEWORK (AFTER WILEY (2009))

To explore the *status quo* of OERs through the perspective of the 5Rs Framework proposed by Wiley (as cited in Connell & Connell, 2020) in language teaching at the institutions of higher and secondary education of Lithuania, a number of the survey questions addressed that issue.

First, 30 respondents out of 43 admitted that they had been adapting or remixing freely available resources to their particular teaching needs; however, when asked whether they checked the existing copyright regulations, the provided answers grouped the respondents into those who either always or often checked the regulations (60%) and those (40%) who rarely or never took such an important matter into consideration. The reason to justify such a high percentage of teachers, who neglect copyrights, could be an assumption that they have been just in the initial steps of attaching the rights to the chosen resources.

Second, the survey disclosed 20 respondents who had already designed OERs of their own. Further exploration into the ways they shared the created OERs or the reasons why they did not want to share their outputs can be seen in Figure 5:

Figure 5
The ways of sharing/not sharing the designed OERs



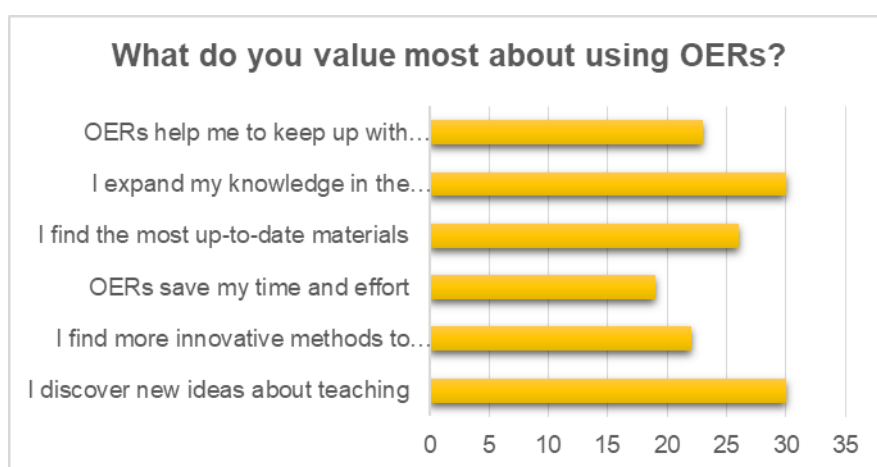
13 respondents admitted having shared the OERs designed by themselves either online publicly (6) or among the colleagues working in the same department (7). The rest acknowledged having some experience in creating outputs though their OERs had never reached a wider public due to their modesty (4), digital illiteracy (3) or some other reasons.

Delving into the list of problems the teachers were facing while designing their own OERs, one can find “the shortage of time” as the major problem for the respondents. Due to it there appeared many subsequent reasons: “You get stuck in the simplest things, then you get nervous, reject your idea for a while, which means for good”. Poor digital skills were the second major reason preventing teachers from creative tasks: “In order to design you should be familiar with the rules of design. I’m not saying that I have not tried, I did many times. However, whenever I started, I always confronted with some technical obstacles”. Thirdly, that always nagging feeling of inferiority: “I cannot compete with the beautifully designed materials” could be a discouraging factor that blocked teachers’ willingness to create. However, not all the answers were negative. Some positive attitudes towards designing an OER like “It took me quite a long time to design a handout. In the beginning, it looked simple and unattractive. But it worked: it was very useful for my students. I forgot about its visual drawbacks

instantly: the longer I used it the more attractive it seemed to me” proves the fact that the road to success comes through hard work and dedication, and it is the teachers who manage the quality of language teaching themselves.

The review of the respondents’ answers regarding the problems related to OERs design allowed us to infer that although there was teachers’ potential and willingness, the absence of common policy at national and local levels made the current status of the application of 5Rs framework quite unbalanced. The respondents’ answers to the question “What they value most about using OERs”, makes us believe that such a situation is just temporal and its improvement is just a matter of time.

Figure 6
What do you value most about using OERs?



In Figure 6, one can see that the language teachers are certain about the value of OERs as a methodological tool: OERs expand their knowledge in the subject (30 answers) and provide new ideas about teaching (30 answers). OERs for them are the sources of the most up-to-date materials (26 answers), help them keep up with modern trends in education (23 answers), and save time and effort (19 answers). And finally, it is the OERs that bring innovative methods for them to deliver material, and in such a way, they update their didactic competences.

Having explored the survey respondents’ answers it can be stated that although the current use of OERs in language teaching has reached the 3Rs stage in the country, the teachers are willing not only to select and integrate the available OERs into their lessons but also are full of ideas to dive into the stage of designing their own OERs.

8. STUDY TWO (A PILOT STUDY): LANGUAGE LEARNERS’/STUDENTS’ ATTITUDES TOWARDS OER

In order to build up a more complete picture of the perception of good quality OERs, it is necessary to involve the learners for whom the resources have been designed. In order to ascertain a sample of students’ perspectives, undergraduates (aged 21-23) on the ‘English and Another Foreign Language’ (French, Russian, or Spanish) Bachelor’s programme at Vilnius University were also invited to take part in a pilot project.

The project comprised two stages:

- In the first stage, the project participants were encouraged to explore the QuILL database as part of their autonomous studies and find three interesting OERs. They then conducted a quick analysis on what makes a good OER, and what issues they faced when accessing what they identified as a less useful OER (e.g., dead links, incomplete instructions, etc.).

- In the second stage, the students had to create their own digital revision tools and provide their input through a questionnaire (available at shorturl.at/bEKMZ) designed to examine their attitudes towards using OERs and digital tools.

18 respondents completed the questionnaire, 14 of whom were able to identify what OERs are from a list of four options. It should be acknowledged that the students had been encouraged to visit the QuILL database of teaching and learning resources as part of their autonomous learning. They were also involved in a project to create their own digital revision tools. Sixteen respondents had already used OERs and the following digital tools and apps were familiar to students in response to an open question: “ReWord, Duolingo, Busuu, Drops, Quizlet, YouTube, podcasts”. Only one student said they had not been on a language course in which OERs had been used. Those courses that integrated OERs into the course content were rated positively; however, the students noted a number of drawbacks or potentially demotivating problems. In response to an open question about problems that may arise when using OERs, the responses included: “Some people might not like specific types of OERs which can make them less motivated”. Other comments related to the content of OERs included: “wrong CEFR level”, “low quality content”, “out-of-date information”, and “too much information and then you can’t structure the most important materials”. One student criticised the lexis for being inappropriate to the context, or the resource lacking “...creativity or spoken language lexis”. One comment on content concerned inappropriate resources or mislabeled levels (too high or low on the CEFR scale according to the students), although one might question their ability to adequately evaluate this.

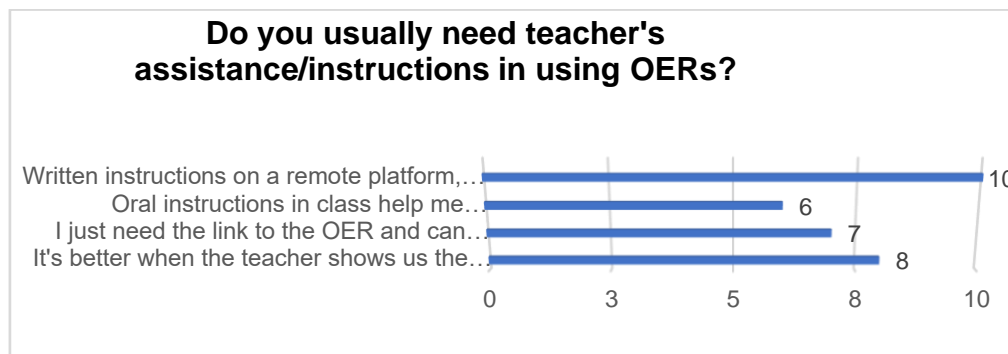
Three students identified lack of access as being an issue. Sometimes lecturers had recommended sites with a limited-time free trial, after which students would have had to pay for the resource. Although such resources are by their very nature not OERs, they were nevertheless identified as such by the surveyed students. Another student did not feel comfortable creating an account and providing personal details, stating “If I'd need to create an account or pay anything for using that OER I'd simply ignore this task/homework”. Two students mentioned dead links or information no longer being accessible. Some commented related to design and layout – “Complicated design (to the point, where you don’t know what button does what)” and technical issues were frequently mentioned, including internet connection problems, running out of mobile data. Of course, these diverse comments reflect the diverse nature of OERs.

Six respondents said they could envisage a good language course without OERs, while twice this number said OERs were necessary on a quality course. When asked in an open question what skills they thought OERs had helped them develop, the responses were similar. Three students highlighted improved interactivity compared to traditional learning using a course book. One student wrote “Interactivity; the ability to switch from boring textbooks to interesting videos, podcasts, games and exercises”. Listening comprehension was identified eight times, while five students reflected that they had improved their reading comprehension skills through OERs. Eight students mentioned OERs being helpful in assisting their vocabulary acquisition (“I think lexis is easiest to learn with OERs as there are different ways to present it”); other skills identified were creativity, IT skills, memory skills, speaking ability, concentration, grammar, and the ability to visually learn new concepts (through videos). Other benefits for students included “phonetics, hearing and learning to pronounce words. Speaking and communicating in the language that you are learning” and “maintaining interest in the subject” and “writing skills” (only mentioned by one student).

In terms of the types of support that students prefer receiving from lecturers, there was unsurprisingly no consensus as each student has individual preferences and ways of working. Some students chose all four options, indicating that the type and level of support depends on the familiarity with the task.

Figure 7

Do students need teachers' instructions in using OERs?



A key component of any learning resource is that it is motivating for the student. 44% of students reported that OERs contribute slightly to their motivation, while 33% were more positive, indicating that they improve their motivation substantially. 11% said that OERs have a minor impact on their levels of motivation for language learning.

When asked to identify what makes a resource attractive and 'good', the students identified the following features (in an open question): the source is deemed to be appealing and interesting if it has visual input (photos, videos) and is "easy to use, clear, short instructions, no long paragraphs, more visuals than text". If there is a transcript, a video or podcast is easier to follow and students can read and listen/watch at the same time, which can help with pronunciation. Pictures help to provide clarity and help with learning vocabulary because it is easier to memorise the lexis. As online tasks can be interactive, multiple choice tasks with feedback were mentioned as a positive, as well as elements of gamification, such as winning points and getting feedback. "It's also the rewarding part, when you answer a question you get a message saying good job, or if you fail it says something encouraging". The wide variety of available resources was identified as a positive feature, as was maintaining the students' interest due to resources being "pleasant to scroll through and it does not get boring that easily, compared to workbooks". The variety of task types also appeared to be important to students ("there are different creative variations that encourage you to learn"), as was the immediate feedback or elements of progression "when it checks what do you have learned".

The sampled students concluded that a high-quality OER should be easy to use, accessible, with clear audio and good quality video; it should be well-written and contain reliable and up-to-date information. There should be some clear instructions and have some follow-up exercises in the form of interesting tasks. Some kind of incentive system of rewards or levels was identified as a bonus. It should be freely accessible, including on smaller screens or mobiles and all the links should work and be active. The design should be attractive and it should be adaptable.

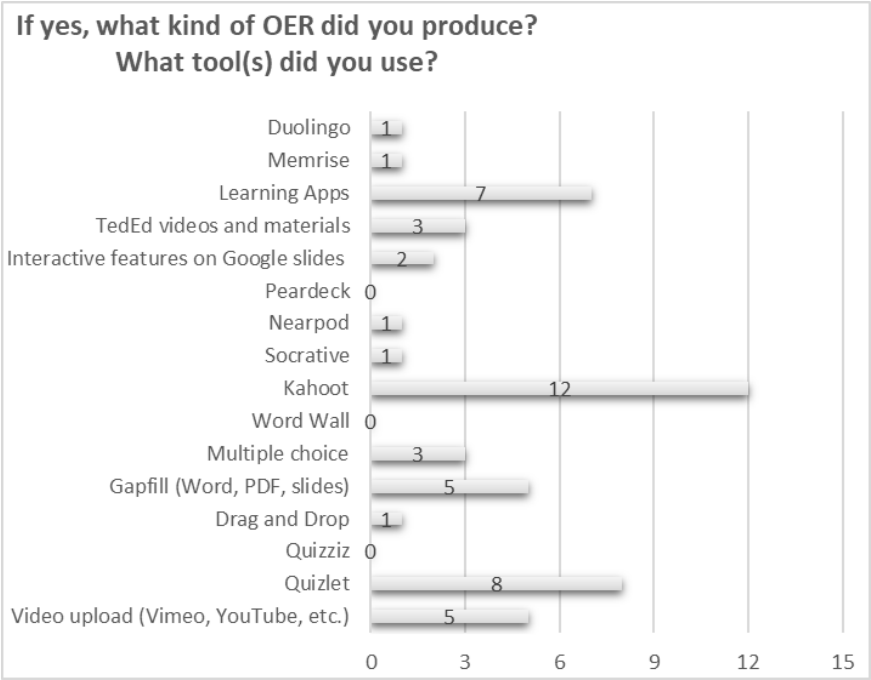
One of the more specific questions for students concerned whether OERs could replace educational professionals. The students were then invited to justify their responses, which only three students declined to do.

Many students mentioned motivation: "I think certain topics and aspects of a language need the help of a teacher. Moreover, I simply couldn't learn a new language just by using OERs, since I wouldn't have that much motivation", whereas another student believes it depends on the person, so "if a person is motivated enough he does not necessarily need a teacher". Other students identified that "it is possible for people to learn something on their own, using the high-quality resources" and "information these days is so easily available and there are millions of good sources"; there were some other comments on the lack of reliability of OERs and how they would trust the information provided by a lecturer more readily than an online resource ("I cannot blindly trust an OER"). Teachers were also

identified as being a source of help or “a guide” and to provide reliable explanations; interactivity within the classroom and access to a trainer were named as the benefits of learning with a teacher. A few comments related to the efficiency and speed of learning a language: “you still need a live communication to improve your skills even more” [sic] and “we learn faster in discussions and dialogues”. One respondent emphatically wrote, “Nobody or anything can substitute the teacher”. So, despite having experienced online teaching and understanding the benefits of accessing a plethora of resources online, the majority of the surveyed students still see the need for a teacher.

Other questions in the survey related to the students creating their own OERs, which is the epitome of autonomous learners. As part of their project work on their English Lexis course, the students were encouraged to create their own OERs. They also did this to highlight lexical chunks after making oral presentations on a variety of topics. The students overwhelmingly valued the process of creating their resources, and there seemed to be an underlying sense of motivation at having created something that helped their peers to revise the course materials. Most students specially mentioned that the process of creating the mini language games had helped them to memorise the lexis and use it in context. It is important to recognise that this particular cohort of students may have been primed in their responses as the demonstrated understanding of the tasks they had been given. Their responses should not be taken as representative of the wider community of students at Vilnius University.

Figure 8
Kinds of OER produced by students



In response to the final open question, seven students took the opportunity to add comments on their and their lecturers’ usage of OERs. There were some critical comments and some interesting insights and suggestions, such as limiting the number of tools used “so as not to get confused”. The positive comments reiterated that OERs can be motivating, particular for added learning on new topics or as a means of recapping what has been covered in class, so as a supplementary resource (“they help to keep students motivated and not bored by simply filling student book tasks”). Some students commented on the use of class time: “Just few lecturers have ever used OER or mainly it is a video source which is not very gripping, as the videos can usually be watched at home and discussed afterwards. Lecturers keep using old methodologies.”

Overall, it was encouraging that despite our flaws as lecturers, some students believe “when it comes to studies, for me there is not any substitute for a teacher”, so in order to keep our students motivated, the academic community should strive to supplement our courses with OERs by searching for and creating high-quality resources, as well as encouraging students to try their hand at creating their own as part of their own learning journey.

In summary, the student questionnaire revealed that learners themselves appear to value the same indicators of quality as educators. They also experienced technical issues accessing some materials. Their motivation varied according to the particular OER and level, but in general, students with intrinsic motivation found OERs to be useful. Many students identified that they were a welcome change from traditional course books, especially as supplementary materials that were interactive and provided feedback. The learners surveyed still saw a role for lecturers as guides; digital tools cannot simply replace them. The learners in the pilot study seemed to find creating their own resources worthwhile (in terms of learning English vocabulary) and fulfilling (developing their digital literacy).

LINKS TO EXTERNAL RESOURCES

European Alliance for the Quality of Massive Open Online Courses (MOOCs): <http://mooc-quality.eu/grf>

REFERENCES

- Connell, M. & Connell, J. (2020). *Critical Evaluation of Quality Criteria and Quality Instruments in OER Repositories for the Encouragement of Effective Teacher Engagement*. European Schoolnet. Defining the "Open" in Open Content and Open Educational Resources was written by David Wiley and published freely under a Creative Commons Attribution 4.0 license at <http://opencontent.org/definition/>.
- Hayes, S. (2015). *MOOCs and quality: A review of the recent literature*. QAA MOOCs Network.
- Henderikx, M. A., Kreijns, K., & Kalz, M. (2017). Refining success and dropout in massive open online courses based on the intention-behavior gap. *Distance Education*, 38(3), 353-368. <https://doi.org/10.1080/01587919.2017.1369006>
- Heyworth, F. (2013). Applications of quality management in language education. *Language Teaching* 46(3), 281-315. <https://doi.org/10.1017/S0261444813000025>
- European Alliance for the Quality of Massive Open Online Courses (MOOCs). n.d. The Quality Reference Framework (QRF). <http://mooc-quality.eu/wp-content/uploads/2019/11/Quality Reference Framework for MOOCs v11.pdf>
- Macleod, H., Haywood, J., Woodgate, A., & Alkhatnai, M. (2015). Emerging patterns in MOOCs: Learners, course designs and directions. *TechTrends*, 59 (1), 56-63.
- Stracke, C. M., & Tan, E. (2018). The Quality of Open Online Learning and Education: Towards a Quality Reference Framework for MOOCs. In J. Kay & R. Luckin (Eds.), *Rethinking learning in the Digital age. Making the Learning Sciences Count: The International Conference of the Learning Sciences (ICLS) 2018* (pp. 1029-1032). International Society of the Learning Sciences.
- Stracke, C. M., Tan, E., Teixeira, A., Pinto, M., Vassiliadis, B., Kameas, A., Sgouropoulou, C., & Vidal, G. (2018). *Quality Reference Framework (QRF) for the Quality of Massive Open Online Courses (MOOCs)*. www.mooc-quality.eu/QRF

UNESCO. (25 November 2019). *Recommendation on Open Educational Resources (OER)*. UNESCO. Retrieved from: <https://www.unesco.org/en/legal-affairs/recommendation-open-educational-resources-oer>

Wiley, D. (16 November 2009). Defining "Open". *Improving learning*. <https://opencontent.org/blog/archives/1123>

Wiley, D. (27 March 2015). Stop saying "Good Quality". *Improving learning*. <https://opencontent.org/blog/archives/3821>

CHAPTER THREE

INNOVATION IN LANGUAGE TEACHING

ILDIKÓ SZABÓ, JUDIT HARDI, KRISZTINA STREITMAN-NEUMAYER, TAMÁS CSONTOS, ATTILA MÓCZA, ANDREA ZSENI-PETRIK

KÁROLI GÁSPÁR UNIVERSITY OF THE REFORMED CHURCH IN HUNGARY
BUDAPEST, HUNGARY

SZABO.ILDIKO@PSKI.HU, HARDIT.JUDIT@KRE.HU, STREITMAN.KRISZTINA@KRE.HU, CSONTOS.TAMAS@KRE.HU,
MOCZA.ATTILA@KRE.HU, PETRIKNE.ZSENI.ANDREA@KRE.HU

ABSTRACT

The chapter will outline the practices and approaches that should be implemented to innovate the teaching of languages at Higher education level through the effective and quality-based use of digital technologies. The chapter will address issues such as: blended learning, digital skills, methods and planning; how digital technologies have affected teaching language skills; autonomous learning multiple intelligences, learning strategies, student self-regulation, self-directed life-long learning, active learning and the role of learner autonomy in ELT and online learning in the 21st century, especially focusing on innovation in educating pre-service teachers in online settings. Based on literature review and a case study, recommendations will be provided.

1. INTRODUCTION

The digital generation of young people make the 20% of the world's population (Zheng et. al. 2020) and most of the language learners are presumed to belong to this group. This number establishes the potential for using various digital resources for communication. Moreover, the digital generation behaves differently in learning situations since the use of digital sources help students with stimulating their minds and allow them to learn through discovery.

In this learning environment the importance of learner autonomy and the different methods, strategies and tools that can facilitate it are increasing in teaching generally, and especially in online learning and higher education.

It is our task as lecturers to teach our students the necessary skills and knowledge so they can become 21st century learners and cope with the changing world. Providing students with a better starting point on the Internet and new technological improvements cannot be discarded since they inspire language learners of the digital age.

2. THEORIES AND CONCEPTS UNDERLYING INNOVATIVE APPROACHES TO LANGUAGE TEACHING

In the 21st century new educational aspects of language teaching, or teaching and education in general, have developed. The roles of both lecturers and students have changed. Teachers can facilitate autonomous learning by changing their approach from that of an instructor to a facilitator. This deters students from relying on the teacher as the main source of knowledge. To achieve learner autonomy, students' capacity to learn for themselves, awareness of their own learning intelligences and learning styles are encouraged. Developing their own learning strategies, self-regulation, regular goal setting, feedback and self-assessment are also key parts of learner autonomy. Teachers can enhance learner autonomy in their work in several different ways: through careful analysis of their learners' needs, introducing and modelling strategies for independent, self-directed learning or giving learners techniques they can use to monitor their own learning. They can provide regular feedback and consultation to help learners plan for their own learning, or with the use of self-access tasks, tests, and other self-directed learning tools.

Changing roles of both teachers and students have influenced teaching methods and tools. The evolution of Technology Enhanced Learning (TEL) has also affected teaching and learning practices, and the advanced use of learning technologies in higher education. Having the required skills for digital education is an expectation both for lecturers and students.

New roles, forms and settings in education have an impact on methodology. As a result, matching teaching methods with appropriate TEL tools in higher education is a key to enhance the teaching quality.

The aforementioned aspects and issues are discussed in detail in the following subchapters.

2.1 THE LEARNERS' ROLE AND LEARNER AUTONOMY IN ONLINE ELT LEARNING

Autonomous learners take an increasing amount of responsibility for what they learn and how they learn it. Autonomous learning is a more personal and focused method of learning. It can achieve better learning outcomes because learning is based on learners' needs and preferences. It differs from the traditional teacher-led approach in which most decisions are made by the teacher by giving control to the learner. There are five principles for achieving autonomous learning: active involvement in student learning, providing options and resources, offering choices and decision-making opportunities, supporting learners, and encouraging reflection.

It has also become important to pay attention to the emotional aspects of learning. One of the key elements of self-directed lifelong learning is goal-oriented motivation: students set goals at the beginning of their learning process and stay committed throughout it in the hope of achieving these goals. Goal-oriented motivation is considered to be a significantly better and more effective base for learning than external motivational factors. Students' self-esteem and their courage to take risks should also be actively encouraged and promoted as these traits lead to better management of uncertain situations, more confident goal-setting and higher perseverance. Only sufficient motivation can ensure high quality student achievement (Ushioda, 2003, p. 98).

The importance of learner self-regulation has been highlighted by scholars integrating the learners' proactive involvement in controlling the various facets of their learning in a broad and unified framework. Self-regulation has been conceptualised to also include motivational self-regulation besides the cognitive and metacognitive components.

When it comes to self-directed learning, the self-direction and self-regulation skills of the student play an important role in their ability to master this approach. As mentioned before, goal setting is key to effective learning. Learning goals should be in accordance with one's life goals, originating from the students' own determination, not from external sources. The learning process should begin with mobilising and critically evaluating the learner's own knowledge, followed by creating a clear strategy about how to realise the aforementioned goals. It is worth noting that learning itself is most effective if it comes from engaging in a wide variety of learning activities (Alammary et. al. 2014), which may also include pedagogy based on multiple intelligences, interacting with others, and direct experience. Critical reflection on the results should be executed both at the end of the learning process and throughout.

Autonomous learners can be characterised by the implementation of self-directed lifelong learning, which is undoubtedly a 21st-century concept. Its key elements can be described as the learners' 'ownership' of their own learning and their ability to move towards their own goals. This approach is often mentioned in close connection with the idea of lifelong learning, which means that the learning process extends beyond formal education, therefore requires the learner's ability to have autonomy over his or her learning.

2.2 THE CHANGING ROLE OF THE TEACHER IN ONLINE TEACHING SETTINGS IN THE 21ST CENTURY

Active learning can definitely enhance learners to become autonomous learners. The concept of active learning 'understands that, in order to create knowledge, students must be active agents in the process of learning. It is based on the premises of the constructivist theory of learning, which suggests that

humans construct knowledge and meaning from their experiences.’ (Feltus & Oliveira, 2019) The fundamentals of this approach can be found in other already existing teaching methods. The literature may also refer to this concept under the name of student-centred learning, engaged learning, collaborative learning or problem-based learning (Feltus & Oliveira, 2019).

Active learning means a shift from traditional teacher-centred lessons to student-centred education, where students are actively engaged and involved in the learning process and become more responsible for their own learning achievements. Students can benefit from this approach in various ways: they may become less anxious, feel more confident and empowered, and can learn significantly more by participating actively than they would in a passive environment.

To create an environment based on the aforementioned principles, the role of the teacher needs to be reconsidered: within the context of active learning, students receive more autonomy over their learning, the teacher ceases to be the sole source of knowledge and rather becomes a facilitator in order to help students achieve their own goals. Instead of a one-way transmission of knowledge, one of the core elements of active learning is open dialogue and debate between the teacher and students, which requires an interactive teaching strategy. Students should be encouraged to regularly reflect on their experiences and achievements, and may also give feedback to the teacher who can propose new tasks and activities based on students’ preferences. It is important to note that not only can active learning be applied in any field of education, but it is also not an exclusive concept. Teachers may integrate this new approach into other previously used methods, with the goal of boosting effectiveness in class.

2.3 METHODS OF ELECTRONIC LEARNING TECHNOLOGIES

Although the use of digital technologies has influenced various fields of language teaching, such as autonomous language learning, self-paced and collaborative learning, as well as language management, the focus of language teaching is still communication. Ihnatova et al. (2021, p.3) divide the ways of implementing the methods of electronic learning technologies into two broad groups:

- synchronous learning tools: chat rooms, interactive whiteboards, videoconferences;
- asynchronous learning methods: email, blogs, forums, Twitter, video and audio podcasts, online testing.

Synchronous learning tools offer real time communication, while asynchronous learning methods allow network communication regardless of time and place.

The application of modern educational technologies in teaching foreign languages includes: the use of distance learning with the help of computer technology (Internet) in teaching foreign languages;

- the organisation of group and completed work of students and computer control (performance of test assignments by computer);
- the use of technical resources (audio and video files);
- the use of visual materials (thematic drawings, diagrams).

Attention should be paid to the use of different language learning applications and language learning platforms, such as Edupuzzle, Storyjumper, Miro, only to name a few, which facilitate communication by allowing teachers to prepare online teaching material relying basically on online sources. These materials are interactive, thus create an active and productive digital learning environment providing a wide variety of tasks, exercises, or assessment.

The Cambridge English Digital Framework has been developed in consultation with practising language teachers and trainers. It describes key competencies for teaching effectively with technology. Six categories of this digital framework can be explored: Digital World, Digital Classroom, Digital Teacher, Designing Learning, Delivering Learning, and Evaluating Learning. All the categories deliver

comprehensive insight into the most important areas and thus a great help for teachers of the digital age.

2.4 TEACHING LANGUAGE SKILLS WITH DIGITAL TECHNOLOGIES

Digital technologies could be used for different purposes, nevertheless, their use for teaching primary language learning skills has not been discussed. As for language skills, Alakras and Razak (2021) found that digital technology has improved students' listening skills. Also, digital technologies have a positive impact on students' speaking skills. The outcomes of their study revealed that digital technologies have also improved EFL students writing skills and helped students acquiring new vocabulary.

All these findings demonstrate the significance of the use of digital technologies for language teaching and language learning purposes. The authors concluded that the use of digital technologies by EFL teachers and students is on a high level. Additionally, teachers and students have a high level of basic and didactic digital literacy. Their study also showed that there are no significant differences between students and teachers' use of digital technologies. The high level of using digital technologies among EFL teachers and students enhance language learning and teaching.

2.5 BLENDED LEARNING AS AN IDEAL EDUCATIONAL SETTING IN LANGUAGE EDUCATION IN HIGHER EDUCATION

Blended learning combines face-to-face classroom learning with online materials and activities. This approach is often referred to as hybrid learning as well, however, there is a difference between these terms. Siegelman (2019), for instance, makes a distinction between them by saying that the online components in blended lessons are intended to supplement and build upon the in-class materials, whereas online elements of hybrid courses are meant to replace some of the in-person class time. In hybrid lessons, the students can interact online in real time (synchronous interactions) or at different times (asynchronous interactions).

Dziuban et al. (2004) define blended learning as an instructional method which combines the efficiency and socialisation opportunities of in-class teaching and the digitally enhanced learning possibilities of online teaching. It is a student-centred approach where students are active and interactive participants. They add that blended learning provides more opportunities for interaction between student-instructor, student-student, student-content and student-outside resources. This method is also characterised by integrated formative and summative assessment mechanisms both for students and faculty.

Blended learning has many advantages, especially in the context of higher education. One of the most important benefits is that it saves time spent in-class and, as Singh et al. (2021) note, students can learn in a flexible learning environment, i.e., they have some control over the pace, time and place of their work. In addition, this approach allows flexible scheduling and self-pacing, i.e., students can progress at their own pace, as they can learn autonomously and work independently on home assignments and projects. Bartolomei-Torres (2021) highlights that modules and materials can be tailored to the students' individual needs, i.e., blended learning can be personalised, which boosts efficiency. He adds that the incorporation of information and digital technologies serve as a facilitating element.

Other advantages include the fact that blended learning allows students to continuously monitor their own progress, which can also increase learner autonomy. Paradoxically, students have the opportunity to communicate more with other learners and instructors, because they have access to different discussion boards, chat rooms, and forums, which allows even more reserved students to interact with their mates or teachers (Singh et al., 2021). Jeffrey et al. (2014) report in their study that many blended teachers believe that continuous access and availability of the content resources, (online) course materials and examples are beneficial to student learning, while teachers appreciate the unlimited access to different online tools and resources.

3. INNOVATIVE SOLUTIONS IN TRAINING PRE-SERVICE EFL TEACHERS IN HIGHER EDUCATION

ICT has been relatively long used in foreign language teaching. However, one of the central issues in teaching foreign languages, regardless of the medium, is the use of authentic material, often with the help of some kind of tools. ICT experts have already highlighted (Nádori & Prievara 2012) the benefits of using virtual classrooms. Among other things, they point out that virtual classrooms allow for socialisation in addition to collaborative work, create the possibility of immediate feedback and differentiated feedback can easily be implemented. Using virtual classroom settings requires conscious pedagogical planning and methodological preparation in order to ensure that language learning is differentiated in line with the requirements of modern language teaching, taking into account the learners' individual needs, using authentic materials and appropriate tools (Miskei-Szabó, 2021).

During Covid-19 pandemic, the Hungarian teaching profession has demonstrated its flexibility, innovation and commitment. Teaching practice in pre-service teacher education at universities in the traditional framework requires trainees to do co-teaching as well as individual teaching sessions, both of which are analysed in a group discussion. Training teachers of foreign languages is executed in a way that is communicative, cooperative, collaborative, and creative in its approach. Instructors teach in a way that also serves as a model for students in their future work as teachers. When teaching at universities went online during the pandemic situation, preserving this approach was a priority. Universities implemented such practices that allowed the student trainees to be able to go through their training process in a way that was as close to the original, classroom version as possible.

Future primary school teachers can choose to major in English-language training in Hungarian tertiary education. Students who graduate in primary education will be qualified to teach English as well as all general primary subjects and will possess the theoretically-based knowledge, skills and competences in pedagogy and psychology needed to complete teaching and education service in Mathematics, Hungarian Language and Literature, Science, Visual Education, Music Education, Physical Education and Crafts for the first four form, which means they learn and teach English for specific purposes.

The Department of Foreign Language and Literature, Eötvös Loránd University's Faculty of Primary and Preschool Education (ELTE TÓK), Budapest, developed and implemented new frameworks offering possible solutions to one of the most difficult challenges: the design, organisation and implementation of joint teaching practices between teacher training institutions and primary schools in emergency situations, in the presence, absence and hybrid curricula.

The experience of the participant research demonstrates that the techniques used support the broad development of students' pedagogical competences and positively influence the motivation, reflective approach and awareness of students and teachers involved in the pedagogical experiment, even in those unpredictable times. The following subchapters introduce the innovative solutions used by and with student teachers of EFL in online environments (Trentinné Benkő & Kovács, 2021).

3.1 TEACHING PRACTICE DURING DISTANT LEARNING

Following the switchover to distance learning in higher education on 12 March 2020 and the switch to an online curriculum in public education on 16 March, all teaching practice and preparation for the switchover was halted until both institutions had established the technical framework for further work. Student teachers' task was to develop, in small groups, a complex digital curriculum that was adapted to the pupils' new work schedules, took into account individual differences and offered opportunities for support and differentiation. Microsoft Teams, which has now been adopted by the institution, provided an ideal online platform to coordinate and support the work of both students and teachers. It also allowed student teachers to gain experience in distance learning and thus successfully complete the teaching practice course.

3.2 HYBRID TEACHING PRACTICE

Due to the coronavirus outbreak, the autumn 2020 semester started in a hybrid teaching practice. To preserve as much as possible the traditional structure and atmosphere of the exercise, student teachers and assistant teachers gave their lessons to the students in person, but the other classmates and the teacher could not be present in the classroom. For this reason, the lessons were recorded, and the recording was viewed by the students together with their methodological tutor in a secure setting in the ELTE TÓK building.

The discussion and preparation were initially conducted in a traditional way, with personal presence, as assisted recalling results in much more accurate observations and much more conscious self-reflection from the student teacher. However, as the epidemic situation worsened, the possibility of joint projection, discussion and preparation was also eliminated. The lesson was recorded by the tutor, who edited the recording to focus on the most important events and broadcast it on the Teams platform. The subsequent discussion and preparation also took place online. Instead of watching the whole lesson together, the observation of selected parts of the lesson provided an opportunity to analyse certain pedagogical situations in more depth and length. According to the students' feedback, this hybrid solution was the closest to the expected independent learning experience and was confirmed by the results of the end-of-semester evaluation questionnaire.

3.3. REVERSE MENTORING

On 9 November 2020, in view of the epidemiological situation, ELTE switched back to distance learning, thus eliminating the possibility of teaching in person. In contrast, the students continued to study at school, which at first sight seemed an insoluble conflict and an insoluble challenge for the organisation of the teaching practice. The idea of reverse mentoring was raised up: by replacing student teaching with tutor teaching, all student tasks could be done online. In reverse mentoring, the students prepare the teacher-coach colleague to deliver the lesson they have planned, with a special focus on its methodological and technical implementation. The lesson was planned and prepared by the students in the usual way but delivered by the teacher-coach to the students in person, which was video-recorded. The recording was viewed online by the students and analysed together as usual.

In the context of the reverse mentoring, the methodological tutor asked students to write a free-form letter, to give feedback, to reflect on what had happened, to raise awareness and to support experiential learning. The students' opinions were shared with the mentor teacher only after the course was completed. The evaluation of the unstructured essays was preceded by a word frequency test.

The focus of the textual feedback was clearly on the topic of preparation and planning, and this was the topic that received the most professionally exciting and relevant comments. The participants showed dedication, responsibility, reflection, autonomy, and camaraderie. In this case, they took responsibility and demonstrated their professionalism and commitment not only towards the profession, the lesson they were planning and the students, but also towards the mentor teacher who was teaching the lesson for them. In terms of planning, it turned out that planning a lesson for others was a much more complex task requiring greater awareness. Precision, thoughtfulness, attention to detail, thoroughness, and flexibility, as well as a sense of realism, were also found to be required.

3.4 PEER MENTORING

In the second half of the autumn 2020 term not only the students but also the pupils were working in an online learning system. This made implementing online teaching through the Teams platform possible. In the English Literacy group, there were several students who taught part-time while studying. Some of them were involved in teaching children online; thus had more experience of online teaching than their peers. To take advantage of this opportunity, this lesson was prepared with the support of the tutors through co-mentoring. The students taking the online lesson were assisted by

their peers in preparing for the lesson. Student feedback on peer mentoring was entirely positive. They all highlighted the stress-reducing, safety-enhancing effect of being able to turn to a more experienced peer for help at any time. One of them specifically mentioned that this was a natural part of practical training.

3.5 ONLINE TEACHING PRACTICE

The ELTE also introduced distance learning for the spring semester 2021, but the public education continued to be taught in an attendance-based curriculum. The lessons were taught by the students in person, while their classmates were able to follow the events live via online streaming. The discussion and preparation were also done on the Teams platform. Evaluation of student work in the online environment also followed the principles of gamification. As of 6 March 2021, public education switched to distance learning, which this time was much smoother than a year earlier; soon students were able to teach online lessons to students. Discussion and preparation also took place online. To ensure a smooth and successful implementation, all participants were given proprietary access to the ELTE Training School's own Teams interface, so that all online pedagogical situations could be monitored and easily managed.

The teacher students felt that they had benefited from the online teaching experience and that their previous online learning experiences had helped them to prepare for teaching. However, in their opinion, it was much more difficult to make the necessary contact with the students, more preparation, more practice for online teaching. Feedback showed that response times were longer and visual aids required a lot of planning. In addition to connecting with the students, the main challenge for them was getting the whole group to move. They missed the usual interactions and found that it is terribly difficult to engage students in the online space, especially for someone not very experienced in teaching. In face-to-face teaching everything was much easier, lessons were 'more lively' and 'it was much easier to listen to the students individually'. The trainee teachers' awareness and reflection were improved.

3.6 'BEST' PRACTICES IN FOREIGN LANGUAGE TEACHER'S ONLINE EDUCATION

When faced with online education, the biggest challenge for trainers of teacher students was to maintain their teaching policy and principles. The English language team have come up with some practical ideas and approaches that could be called 'best practices'. When creating these tasks, their main goals were to present and practise new knowledge while keeping students interactive, creative, communicative, and reflective, i.e., motivated (Fenyődi et al. 2021).

The best practice examples are available online: <https://ojs.elte.hu/gyermekneveles/article/view/2570>. They are categorised into groups according to the course where they were realised by teacher students of EFL.

- a) Language Preparation Course for English-Hungarian Bilingual Education:
 - 'My Lockdown News': An online warmer exercise on Padlet;
 - Online school-visit projects and reports
- b) Early Childhood Language Development and English for Specific Purposes
 - Feeding babies: Be a YouTube influencer
- c) Young Learner EFL Methodology
 - A drawing on the Zoom whiteboard used for demonstrating verb tenses when presenting how to teach grammar
 - Online wordsearch using the Zoom whiteboard
- d) Juvenile Literature
 - A Wordwall Hobbit: Chapter 14, 'Questions and Answers' pairing game
 - A trailer of Coraline
 - A trailer based on the Narnia series
- e) Bilingual Pre-School Music Education

- A LearningApps music vocabulary Pelmanism game
- A Wordwall Musical notation 'Find the Match' game
- f) Bilingual Pre-School Visual Arts
 - A Wordwall Art vocabulary practice, 'Labyrinth' game
 - Visual arts projects from the online Easter lesson, 2020
- g) Science Education in English in Pre-school Settings
 - A mind map created online in connection with the song, 'Over in the Meadow'
 - A topic web of Eric Carle's The Very Hungry Caterpillar
- h) The Theory and Practice of Bilingual Education
 - Blank certificates congratulating students on completion of the practice quiz
 - Online games created by students
 - Tutorial videos created by students
- i) Games in English for Children
 - Designing structured learning based on video games
 - Instagram as an education platform for teacher candidates – @examoinsta

As a conclusion, the authors state the best practices in online foreign language teaching practices can trigger further improvements when teacher students start their actual teaching career. "The abundance of online applications aided them in generating very useful exercises and tasks that may be later incorporated into F2F or blended learning, too. Despite the stress and the pressure on educators, the EL team has gained in self-confidence and self-efficacy while feeling positive about managing the difficulties and answering the challenges. As a part of this process, student teachers were offered a different kind of self-experience: exploring and learning about digital and online teaching. When given additional opportunities, they made creative individual or collaborative products that displayed their special knowledge and skills. Teaching practices have therefore been extended and enriched during the pandemic as previous 'best' practices have been tested and adapted." (Fenyődi et al. 2021).

4. RECOMMENDATIONS, DO'S AND DON'TS

Because of the insufficient commitment and enthusiasm of many language learners, as well as the high rate of language learning failure, L2 teachers have been continuously on the lookout for techniques they can apply to enhance student motivation (Dörnyei, 2005). An excellent framework for the possible motivational strategies is based on the Dörnyei and Ottó (1998) process model which consists of four main dimensions:

1. creating the basic motivational conditions,
2. generating initial student motivation,
3. maintaining and protecting motivation,
4. encouraging positive retrospective self-evaluation.

Learning strategies constitute a useful toolkit for active and conscious learning, these strategies pave the way toward greater proficiency, learner autonomy, and self-regulation. According to Dörnyei, the definition of learning strategies is the following: 'the construct refers to specific actions, behaviours, steps, or techniques which include any thoughts, behaviours, beliefs, or emotions that students use to improve their own progress in developing skills in a second or foreign language. These strategies can facilitate the internalisation, storage, retrieval, or use of the new language.' (Dörnyei, 2005)

Self-regulated learners are those who "seek to accomplish academic goals strategically and manage to overcome obstacles using a battery of resources." (Dörnyei, 2005). Scholars increasingly recognise that the most important thing about proactive strategic learners is not necessarily the exact strategies they apply, but rather the fact that they do apply them (Macaro, 2001, p.264).

It is important to note that learning can be understood as a social process, while knowledge may be viewed as a social construction. The learner may unconsciously internalise certain thoughts from their environment, while also learning more explicitly by conversations and discussions with others, followed by critical reflection. Doing so requires critical thinking: students may have to do constant reflection on their prior experiences, concepts, and habits as well as on the new knowledge they encounter.

The aforementioned process-oriented teaching approach promotes self-directed lifelong learning of students. Some of its following main principles may be helpful for lecturers:

- when facilitating students on their journey to develop self-directed learning, it is important to move gradually, as student's self-management skills and tolerance of uncertainty may differ,
- active participation of students and the opportunity to practise are crucial for effective learning,
- teachers may encourage students to consciously mobilise and reflect on their prior knowledge,
- the emotional aspects of learning should be taken into consideration: teachers can play an important role in helping students realise and deal with their own emotions, hence improving their emotional intelligence. They may support students in acquiring perseverance and self-regulation for their learning and also in getting more self-confidence by giving them regular positive feedback,
- cooperative learning may be encouraged more within the context of school education.

The increasing acceptance of digital technology promotes the use of various online sources, especially in the fields where there is a lack of authentic and appropriate material. Planning an online learning occasion, however, requires different approaches than planning a classroom lesson. First of all, a platform or more platforms should be chosen, which are either available technically or fit to the objective of the course.

Digital literacy skills should be improved and a broadening perspective on the accessible sources is necessary. Teachers should be able to choose the most suitable tools according to students' needs and learning styles. Having chosen the suitable digital tool, its structures should be acquired. Different teaching purposes may require different tools. Teachers need practice and experience in the use of every tool in order to teach specific subject matters easily (Alakras & Razak, 2021).

Besides planning the timeframe, the material and sequence, online tools have to be critically chosen. Since online learning can be more challenging and more difficult for some of the language learners, attention must be paid on selecting stimulating materials, such as interesting e-textbooks, articles, websites, movies or podcasts (audio materials). Group projects – under the constant supervision of a teacher – are an excellent method to integrate students. Learners' commitment can be enhanced by interactive crosswords, quizzes, multimedia games.

There are some recommendations that need to be considered before launching and planning a blended course. Harris et al. (2008) propose that instructors should take the following into account: the learning process, learning outcomes and the learning environment, e.g., what approaches to learning can be used or whether the learning outcome can be accomplished without in-person contact. They add that learning outcomes, students' learning style, their motivation, the goals, the learning content, the effectiveness of the lessons, and the accessibility of the resources should be thoroughly measured and analysed by a group of instructors and evaluated by learners as well.

Alammary et al. (2014) similarly argue that blended teachers should focus on the objectives of the course, not on the technologies. Only after the objectives of the course (learning outcomes, content and skills to be mastered by the students) have been specified, can the teacher start to design various activities, both with and without technology as well as online and offline. According to Hofmann (2006), it is inevitable to weave online content and in-class content together so that they form a comprehensive whole.

Bartolomei-Torres (2021) suggests that it is crucial to activate students' prior knowledge and promote self-assessment. Also, it is important to tutor students who need some clarification in connection with the materials, tasks or activities. Stewart (2002) points out that both staff and learners need proper skills training, so that they can produce and use the components of the blended course. Childs et al. (2005) emphasise that professional support should be available, e.g., IT experts, support staff, trainers and administrators who can assist instructors. In addition, user support systems, sufficient time and skills to create online material are also recommended.

Furthermore, learners' needs, motivation and expectations should be taken into consideration as well when designing a blended course, because only motivated students whose expectations are met participate actively in blended learning. It is also necessary to find the right balance between online and in-class learning, as for example relying entirely on online lessons may have a negative effect on the students' performance (Harris et al., 2008).

LINKS TO EXTERNAL RESOURCES

<https://ojs.elte.hu/gyermekneveles/article/view/2570>

REFERENCES

Alakrash, H. M., & Abdul Razak, N. (2021). Technology-Based Language Learning: Investigations of Digital Technology and Digital Literacy. *Sustainability*, 13, 12304.

<https://www.mdpi.com/2071-1050/13/21/12304/htm>

Alammary, A., Sheard, J., & Carbone, A. (2014). Blended learning in higher education: Three different design approaches. *Australasian Journal of Educational Technology*, 30(4), 440–454.

<https://ajet.org.au/index.php/AJET/article/view/693/1061>

Bartolomei-Torres, P. (2021). *Blended learning: benefits and recommendations for teachers*.

<https://www.learningbp.com/blended-learning-benefits-recommendations-teachers/>

Bolhuis, S. (2003). Towards Process-Oriented Teaching for Selfdirected Lifelong Learning: A Multidimensional Perspective. *Learning and Instruction*, 13, 327–347.

https://sisu.ut.ee/sites/default/files/opikasitus/files/bolhuis_2003_towards_process-oriented_teaching_for_selfdirected_lifelong_learning_0.pdf

Childs, S., Blenkinsopp, E., Hall, A. & Walton, G. (2005). Effective e-learning for health professionals and students – barriers and their solutions. *Health Information and Libraries Journal*, 22, 20–32.

Dörnyei, Z. (2005). *The psychology of the Language Learner*. Routledge.

Dörnyei, Z. & Otto, I. (1998). Motivation in action: A process model of L2 motivation. *Working Papers in Applied Linguistics*, 4.

Dziuban, C., Hartman, J., & Moskal, P. (2004). Blended learning. *ECAR Research Bulletin*, 7.

<https://www.educause.edu/~media/files/library/2004/3/erb0407-pdf.pdf?la=en>

Feltes, H. P. M., & Oliveira, L. A. (2019). *The Role of The Active Learning Approach*. *Teaching English as a Foreign Language*. *The ESPecialist* 40(2).

<https://pdfs.semanticscholar.org/554e/c4d37675d4976aab9eddbf1add039e5594b9.pdf?qa=2.34421538.2030148517.1667139642-384546625.1667139642?la=en>

- Fenyődi, A., Poros, A., Lo Bello, M. J., Kruppa, É., Árva, V., & Trentinné Benkő, É. (2021). Online education and 'best' practices in foreign language teacher's education during the 2020/2021 lockdown period. *Gyermeknevelés Tudományos Folyóirat*, 9(2), 286–313. <https://ojs.elte.hu/gyermekneveles/article/view/2570>
- Harris, P., Connolly, J., & Feeney, L. (2008). Blended learning: overview and recommendations for successful implementation. https://www.researchgate.net/publication/235278645_Blended_learning_Overview_and_recommendations_for_successful_implementation/link/578eb5f708ae81b4466eccfe/download
- Ihnatova, O., Poseletska, K., Matiuk, D., Hapchuk, Y., & Borovska, O. (2021). The application of digital technologies in teaching a foreign language in a blended learning environment. *Linguistics and Culture Review*, 5(S4), 114–127. <https://lingcure.org/index.php/journal/article/view/1571>
- Jeffrey, L. M., Milne, J., Suddaby, G., & Higgins, A. (2014). Blended learning: How teachers balance the blend of online and classroom components. *Journal of Information Technology Education: Research*, 13, 121–140. <https://www.jite.org/documents/Vol13/JITEv13ResearchP121-140Jeffrey0460.pdf>
- Hofmann, J. (2006). Why blended learning has not (yet) fulfilled its promises: Answers to those questions that keep you up at night. In C. J. Bonk, & C. R. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs* (pp. 27–40). Pfeiffer.
- Macaro, E. (2011). *Learning strategies in foreign and second language classrooms*. Continuum.
- Miskei-Szabó, R. (2021). Az online oktatás tapasztalatai gyakorló pedagógusok és egyetemi hallgatók szemszögéből: A virtuális osztályterem szerepe a tanításban. *Gyermeknevelés Tudományos Folyóirat*, 9(2), 314–331. <https://ojs.elte.hu/gyermekneveles/article/view/2571>
- Nádori, G. & Prievara, T. (2012.) *IKT módszertan Kézikönyv az info-kommunikációs eszközök tanórai használatához*. B&T Oktatási és Fordítási Bt.
- Siegelman A. (2019). *Blended, hybrid, and flipped courses: What's the difference?* <https://teaching.temple.edu/EDVICE-EXCHANGE/2019/11/BLENDED-HYBRID-AND-FLIPPED-COURSES-WHAT%E2%80%99S-DIFFERENCE>
- Singh, J., Steele, K., & Singh, L. (2021). Combining the Best of Online and Face-to-Face Learning: Hybrid and Blended Learning Approach for COVID-19, Post Vaccine, & Post-Pandemic World. *Journal of Educational Technology Systems*, 50(2), 140–171. <https://journals.sagepub.com/doi/10.1177/00472395211047865>
- Stewart, J.M. (2002). A blended e-learning approach to intercultural training. *Industrial and Commercial Training*, 34(7), 269–71.
- Trentinné Benkő, É., & Kovács, M. (2021). A tanítási gyakorlat alternatív megközelítései: jelenléti, távolléti és hibrid megoldások a koronavírus-járvány idején. *Gyermeknevelés Tudományos Folyóirat*, 9(2), 256–285. <https://ojs.elte.hu/gyermekneveles/article/view/2568>
- Ushioda, E. (2003). Motivation as a socially mediated process. In D. Little, J. Ridley, & E. Ushioda (Eds.), *Learner autonomy in the foreign language classroom: Teacher, learner, curriculum, assessment*. Authentik.
- Zheng, B., Ward, A., & Stanulis, R. (2020). *Medical education online*, 25(1), 1686949.

CHAPTER FOUR

HIGHER EDUCATION STUDENTS' MOTIVATION TO LEARN LANGUAGES USING DIGITAL TECHNOLOGIES AND RESOURCES

LUDMILA BRANIȘTE¹, GABRIELA GAVRIL², TEODORA GHIVIRIGĂ³, MARINA VRACIU⁴

"ALEXANDRU IOAN CUZA" UNIVERSITY OF IAȘI^{1, 2, 3, 4}

IAȘI, ROMANIA

BRANISTELUDMILA@YAHOO.COM, TRANSLATORGABRIELA1@GMAIL.COM, TEODORA.GHIVIRIGA@UAIC.RO,

MARINA.VRACIU@UAIC.RO

ABSTRACT

Chapter four focuses mainly on the issue of motivation and how influential it can be in L2 learning, in different learning scenarios, and when targeted at different learners. Therefore, addressing needs and tailoring language courses to the specific needs of higher education learners studying LSP is one of the best practices that the authors suggest in this chapter. Moreover, teachers must also involve learners in the process of selecting and designing learning resources, thus giving them more responsibility and autonomy in the learning process. In addition, the use of digital resources can also account for the increase in motivation that will result in more effective learning. That way, students will be given the tools to successfully enter the job market and develop future business.

1. BASIC THEORIES ON MOTIVATION

1.1. MOTIVATION: DEFINITION(S) AND TYPOLOGY

Motivation is a complex psychological phenomenon, with multiple meanings. Generally speaking, motivation can be seen as 1. the reason why somebody does something or behaves in a particular way: motivation (behind something) *What is the motivation behind this sudden change?* And motivation for (doing) something; 2. the feeling of wanting to do something, especially something that involves hard work and effort. An idea of classical European philosophy, motivation was developed as a concept in 20th-century psychology and other social sciences. In the 21st century, the concept of motivation has become instrumental in language learning theory. Specialists agree that a high level of motivation is a key factor in L2 learning, as the choice of tasks and the length it takes to accomplish them, the degree of effort in carrying out a set task depend exclusively on the student/learner (Dörnyei & Ushioda, 2021, pp. 4-6). In their compendium, Dörnyei and Ushioda (2021) see motivation as: an enticement for action; as the human ability to satisfy one's needs through certain activities; a dynamic psycho-physiological process which controls human behaviour and defines its organisation, direction, stability and active status. As stated in Ushioda (2013), motivation ranges from a collection of processes which inform wish, desire or impulse, to act and activity, or a collection of motives. However, as shown by Dörnyei and Ushioda (2021), "the big story in motivation research was the gradual shift away from Robert Gardner's social psychological approach – associated with the classic concept of integrative motivation – towards a more complex, more dynamic and more situated approach with a more pronounced educational relevance." (p. xi) Also, as Sivaci (2020) emphasized, there is a need for deeper focus on the study of emotions in LL and LT.

1.2 TYPOLOGY OF MOTIVATION IN PSYCHOLOGY

According to Reiss (2012, pp. 152-156), motivation can be classified as: extrinsic/intrinsic; positive/negative; constant/non-constant:

- *extrinsic* motivation is not connected to the content of any kind of activity; it is conditioned by external factors (e.g., participation in competitions for a prize), while *intrinsic* motivation is internal, connected to the content of an activity and not to the outer world (e.g. practising sports because it brings positive emotions).
- *positive* motivation, based on positive stimuli (e.g., if children behave themselves, parents will give them more screen time) vs *negative* motivation, based on negative stimuli (e.g. if children do not go to sleep late, parents may give them extra screen time the next day, etc.).
- *constant* motivation, based on basic human needs (e.g., hunger, thirst, etc.) vs *non-constant* motivation, which requires permanent support (e.g. quit smoking, lose weight, etc.).

1.3 THEORIES OF MOTIVATION IN PSYCHOLOGY

Theories of motivation (TM) study and analyse the human needs, their contents, structure and the way they are connected to people's motivation. The study of these needs triggered the emergence of three main directions in TM: (1) content-oriented; (2) processual; (3) worker-focused.

Theories under (1) analyse the factors which influence motivation and are mostly concentrated on the human-needs analysis. They describe the structure of needs and their content as well as how these needs are connected to motivation; the focus is on understanding the inner drive. This group of theories includes Maslow's needs hierarchy ('Maslow's pyramid', 1954), its interpretation and addition as presented in the ERG (Existence-Relatedness-Growth) theory proposed by Clayton Alderfer (1969), the acquired-needs theory suggested by David McClelland (1987), and Frederick Herzberg's two-factor theory (1987).

Direction (2) includes theories which analyse the way human beings distribute their efforts and what type of behaviour they choose in order to attain new goals. Human behaviour is seen as informed not only by needs, but also as a function of a person's perceptions and expectations related to a particular situation and to possible consequences of the specific way of behaving. Among this large group of theories, the most authoritative are: Victor Harold Vrooms' expectancy theory (1964), according to which individuals are motivated to act provided that their performance is rewarded, and its development in: John Stacy Adams's equity theory (1963), in which correct reward is understood as a motivating force; Layman Porter and Edward Lawler's theory (1968), with its detailed explanation of the conditions and processes by which reward for work occurs; Edwin A. Locke and Latham's goal-setting theory (1990), which sees specific goal setting and feedback as linked to improved task performance; the theory of participatory management and its main idea that employees might be better motivated if they choose the tasks they prefer to focus on and coordinate their work with each other (Bainbridge, 1996).

Direction (3) includes the X and Y theory of motivation proposed by Douglas McGregor (1960), linked to the previous theory in its understanding of the typology of the employees as the X (reward-motivated) and the Y (internally motivated) types; and Ouchi (1980), who emphasises the strong connection between employee and manager under the idea of a 'job for life'.

1.4 APPROACHES TO MOTIVATION IN LANGUAGE LEARNING

Theories of motivation appeared in social psychology and migrated or were extended to theories of motivation in L2 learning (Noels et al., 2019; Dörnyei & Ushioda, 2021). Motivation may depend on social motives formulated on the basis of a community's needs. These motives shape and define extrinsic motivation, which falls under two types: *wider social* motivation and *personal* motivation. The human motivational sphere may be influenced by the nature of man's activity; this is an instance of intrinsic motivation, which includes success motivation. Another type of motivation is *distant/long-distance* vs *near/actual* motivation. Relatively recent research by influential western authors in the

field of motivation in learning L2 (Ushioda, Gardner, Dörnyei) owes to the contributions of several scientist, psychologists and educators.

Discussing motivation in Second Language Acquisition, Ema Ushioda (2013, pp. 1-17) gives a useful outline of the evolution of language learning (LL) theory: founded in Canada in 1959 and directed at second language learning motivation, it shaped the understanding of the language learner's orientation toward the foreign language speaker communities. In the 1990's, in line with cognitive theories, language learning theory focused on learning in the classroom. In the 21st century, with English as a world language, the focus of language learning theory sees motivation in terms of self-and-identity goals, because speakers of English may wish to see themselves as members of the global community. Along with globalisation and migration, the focus of LL theory has also shifted to learning other languages than English (LOTE) (Ushioda, 2013).

Robert Gardner: instrumental and integrative motivation. In his conceptualisation of motivation, Robert Gardner (2010) showed that all types of motivation are influenced by social and cultural factors. Gardner (1985, 2001) distinguished between *instrumental* and *integrative* motivation. *Integrative motivation* represents the reflection of intrinsic needs and is triggered, for instance, by the students' desire to identify themselves with the culture of the country where a particular language is spoken. Therefore, in integrative motivation, the goal of language learning is the student's inner need, i.e. the student's values involved in meeting and communicating with other people, while language becomes the instrument. In *integrative motivation* L2 learning is seen as a goal in one's career development. Research has shown that integrative motivation seems to correlate with the most successful results in L2. However, this may not prove always true in the case of LSP, where instrumental motivation may be prevalent. L2 teaching should integrate both. In later research, Gardner (2007, p. 19) drew the following conclusion to his studies: "it is the intensity of the motivation in its broadest sense, incorporating the behavioural, cognitive, and affective components, that is important." An important addition to Gardner's theory is the concept of linguistic self-confidence introduced by Clément Clément et al. (1994).

Zoltán Dörnyei and the classifications of the Self. Dörnyei challenged the previous three authorities, Gardner, Noels (2000) and Ushioda. He extended the range of motivation studies by proposing a more complex structure of motivation in learning L2. According to Dörnyei, there are three levels of motivation: the *language* level (culture, society, intellectual and pragmatic level), the *learner's* level (individual characteristics, linguistic self-confidence) and, lastly, the *learning-environment/situation level* (curricula, aids, manuals, tasks/homework, components related to the teacher's personality, their behaviour, style of teaching/conducting class work (1994, p. 280). Dörnyei and Otto also point to another important component of motivation: non-stability and change in time (1998, pp. 45-46). In the 1960-1990s most research on motivation was focused on the perception of L2 and L2 native speakers through the eyes of the learners. In the 1990s, the research paradigm changed and social motives started to be seen as insufficient for the description of motivation.

The view of motivation has been widened with the inclusion of new notions from cognitive science and psychology. For instance, John Schumann (1975, 1997, 2001) suggested a neurobiological explanation to motivation; motivation is seen as a cognitive assessment of a situation according to a number of parameters (*novelty, pleasure, connection to the human goals and need, potential to overcome the situation, commitment to social norms and personal values*). Schumann concludes that, firstly, emotional reactions influence attention and effort applied to the learning process and, secondly, that these models of assessment can lie at the basis of motivation. For instance, different tasks will be met in a positive way provided that they take into account the student's peculiarities and talents (1997). Apparently, all core issues related to motivation can be summarized and referred to as 'the three R's of motivation science': *motivational relativity, motivational regulation, and motivational reactivity* (Bernaus & Gardner, 2008, p. xi).

Moving away from early motivational hierarchies (Maslow, 1956) that emphasized the "objective" or normative priority and organisation of needs, many current motivational approaches assume a subjective relativism in both the priority and mental organisation of needs and motives. What needs

are most central, then, and how they relate to each other, are thought to be products not only of the inherent qualities of the needs themselves, but also of the individuals' distinct history of pursuing them, as well as the constraints and affordances they encounter at the moment and along their lifetime (Bernaus & Gardner, 2008, p. xii). Understanding motivation is relevant in all stages of L2 learning, in relation to situations, cultures in contact, the students' age and self-view, approach to personal development, goals in life. Irrespective of the nature of motives, a motivated student of L2 experiences a feeling of fulfilment and inner growth which is instrumental in all fields and walks of life.

2. MOTIVATION IN DIFFERENT LEARNING SCENARIOS

2.1 THEORIES AND MODELS IN DIFFERENT LEARNING SCENARIOS

As a guideline for lecturers teaching foreign languages in higher education we mention only some of the numerous studies and collective volumes that revive the models put forward by Robert Gardner and Lambert (1972), Zoltan Dörnyei (2005, 2007, 2011), Ema Ushioda (2013), to mention only the most important names in the field. The point of focus here is not to address the evolution of theories and conceptual variations in educational psychology, but rather to suggest a few elements that define the teaching and learning of specialised languages (LSP) in specific contexts using new technologies, available online resources, text corpora, digital libraries, media, among other digital resources.

As even one of the best-known theorists of motivation in L2 acquisition (Dörnyei & Otto, 1998) remarks, theories inevitably propose reductionist paradigms, at odds with the dynamic, mobile nature of motivation, and cannot cover the variations determined by the specific contexts of learning. Motivation is a process dependent on multiple variables, which relate to the psychology of the individual, the relations between different social groups, the ways in which individual or group identities are constituted, power relations in the social context, among others. The theoretical constructs reflect, to a large extent, the ideologies of the time and the transformations in the field of psychology, social sciences, or pedagogy, and, to a lesser extent, the concrete actual situations in the teaching processes and the challenges of teaching and learning LSP.

Most studies and analyses devoted to motivation in language teaching and learning have focused predominantly on EFL and ESL. Motivation in LOTE has remained almost unexplored territory. R. Gardner (1985) constructs the psycho-social model of motivation in language learning based on research in bilingual (French, English) settings in Canada. Dörnyei (1990 and on) bases his theories on the analysis of data on the motivation of young Hungarians to learn English, collected by means of questionnaires. As Ushioda and Dörnyei pointed out (2017), the rise of English as a global language requires rethinking theories of motivation in L2 learning and rethinking models constructed for EFL/ESL. The authors argue that there is a need for differentiated approaches to EFL and LOTE, theories that consider their different functions in the contemporary world. Dörnyei proposes a grounding of the theories in the individual-psychological dimension, in which he sees a differentiating, stable element. Ushioda believes that, in order to counteract the negative influence of English as the dominant language on LOTE learning, the approach needs to be less instrumental. It appears then that both authors privilege intrinsic-affective motivation in LOTE learning.

Apart from the necessary distinction between EFL and LOTE, it is necessary to point out the differences between L2 teaching and learning in general and the same in specialised languages (LSP). In the case of LSP, integrative motivation, intrinsic-affective, may occur, but it is not a central element in the learning process. The study of a foreign language is subordinated, sometimes even imposed, by the choice of a field of study or profession (law, medicine, economics, engineering, etc.). It is not the learner's main activity (outside the fields of philology, journalism, or translation/interpreting specialisation), but one designed to provide professional training and to help build the desired career. For example, a law student, in general, projects his or her excellence in the field of law and not in the field of language proficiency.

2.2 LSP SCENARIOS

LSP study often occurs in parallel with or as a complement to ESP and is driven by career choices (study abroad, internships, training programmes, business relationships, volunteering), economic migration and refuge from conflict zones. LSP remains a component of learners' professional identity, often overshadowed by ESL. In the case of migration (refuge) to the target country, it becomes a *sine qua non* condition for the integration of learners into the new environment. Learning LSP is not always a choice of the learner but can be determined by various circumstances (e.g. acting as a volunteer in the Peace Corps in a certain country, choosing universities in Europe where fees are lower than in the home country, getting a job in a company, etc.) and does not automatically imply a desire to integrate into the target community and adopt its cultural values (an essential element of motivation, in Gardner's model).

LSP teaching strategies and teaching scenarios are influenced by cultural differences that mark teacher-student relationships, relationships within student groups, between students and representatives of the target community. Cross-cultural teaching/learning situations, as Geert Hofstede (1986) pointed out at the end of the 20th century, are problematic for all parties involved and can create many perplexities and undermine engagement and interest in language learning. The teacher has the difficult task of mapping the learning contexts, of detecting cultural differences and of proposing content that will foster intercultural communication and familiarise learners with the different cultural codes of the country in which they are, making it easier for them to function in the environment.

Depending on the learning situation, groups can be linguistically homogeneous or heterogeneous, comprising students from different geographical areas with different cultural backgrounds. They can be linguistically homogeneous, but include learners from different fields (law, economics, engineering, environmental sciences, cinema, etc.). An increasingly common phenomenon is the enrolment of young people born in the diaspora in study programmes in their parents' countries of origin. The identification of learners' needs, the choice of specific materials, the content, and the ways of integrating technology into teaching are all based on:

1. specific contexts for learning LSP: courses in the students' home country, as part of lectureships; language and cultural training courses in the country of study; courses in another country, through European mobility programmes, long or short-term training.
2. the homogeneity/non-homogeneity of the learners in terms of language, specialisation, and age.
3. the legal framework and specific education policies.

Students on language courses organised in their home country or participating in mobility programmes in third countries do not have the opportunity for direct contact with the target language. The online resources used in the courses have, in addition to their function as teaching materials adapted to the level of study and specific requirements, the role of providing learners with information about the presence of the second language in cyberspace, about digital libraries and lexicographic works, electronic works, podcasts, etc., stimulating their interest in creating an immersive virtual environment.

Outside their country of origin, students can pursue their studies (bachelor, master, PhD, post doctoral studies) in a widely spoken language, either in English or in the language of the country concerned (less widely spoken). In the former case, the language of the country in which they are studying was not initially the target language and can remain a tool for integration, which ensures functioning in that society. In some fields, particularly medicine, knowledge of the local language is necessary for professional training (e.g. in the relation between the medical profession and patients). In the second situation, the language of the country becomes (often in conjunction with ESP) the target language, the subject of study in the curriculum, and it is certified by examinations and certificates. Although in both situations learners are exposed to the language of the country in which they are studying, the

ways in which they relate to it are markedly different and will require differentiated approaches to the teaching process. The different interests of the students in learning the language of the country (functioning in the social system or specialisation) influence the selection of electronic resources, as well as the identification of the skills to be acquired by the learners (e.g. speaking, writing, correspondence, writing, translation).

As new technologies have been integrated into the EFL or ESP teaching/learning process for more than two decades, there are platforms, apps and numerous scientifically and didactically validated online educational resources. Many western universities offer online courses in applied languages and specific languages. This is not the case in countries that do not have a long tradition of research and teaching of the national language as a foreign language, where the process of creating lexicographic resources and digital libraries started later.

The use of electronic resources available on the Internet in the organisation of LSP courses requires the development of digital competences and teachers' intercultural communication skills, relational mediation and transmission of information and content, as well as the careful mapping of teaching/learning contexts and the understanding of intrinsic (affective-psychological) and, above all, extrinsic (conjunctural, socio-economic, political) factors that influence learners' motivation and interest in acquiring specialised languages (Hampel & Stickler, 2015, p. 63).

Online teaching is still in its infancy in some countries where, until recently, education laws did not recognise other forms of education than traditional, face-to-face classroom teaching. The expectations of some learners are often shaped by the traditional, *in-situ* system, with the online environment increasing their anxiety and their dissatisfaction, thus decreasing motivation. All these aspects need to be considered when designing teaching scenarios to stimulate learners' interest and make optimal use of new technologies in the acquisition of LSP.

3. ASSESSING MOTIVATION, ADDRESSING NEEDS AND TAILORING LANGUAGE COURSES TO THE SPECIFIC NEEDS OF HIGHER EDUCATION STUDENTS STUDYING LSP

3.1 ASSESSING MOTIVATION

The process of learning in general and of language learning, which is the point of interest in this chapter, has been seen, intuitively and through research, as closely related to motivation. In turn, motivation has been viewed in physiological terms as a form of electrical and chemical brain stimulation, in behavioural terms as “the anticipation of reward” (Brown, 2000), or in cognitive terms as related to the student's decision and choices in terms of the goals they set for themselves or intend to avoid (Dörnyei, 2001). More recently, it has been viewed as one of the elements of a more complex framework: Luckin (2018, cited in Bearman et al., 2020, p. 55) considers it one of the seven interrelated elements, out of which five are forms of meta-intelligence, listed by Sternberg (2021, p. 493) – understanding, control, and coordination of higher cognitive processes, such as the processes of intelligence, creativity, and wisdom, or problem solving, reasoning, decision making, and concept formation. Among them there is the *meta-subjective intelligence*, which has to do with the ability to know and regulate one's motivations and emotions.

Generally, motivation – or lack of it – is seen as one of the key factors in the students' success or failure in L2 learning. In self-determination theory (SDT) (Deci & Ryan, 2000; Ryan & Deci, 2017) motivation is viewed as a continuum composed of various forms of behavioural regulation depending on the level of individual autonomy. Beside intrinsic and extrinsic motivation, the authors defined three types of motivation, one of them being *amotivation* (i.e., the absence of motivation or lack of the intention to behave) (Ryan & Deci, 2020). Also, researchers investigated several variables associated with intrinsic motivation in teaching foreign languages and found that students' engagement can be an important predictor of self-determined motivation for language learning (Oga-Baldwin et al., 2017). Moreover, engagement can predict achievement and absenteeism in English courses (Dincer et al., 2019).

Success and failure are also viewed in terms progress: while this can be easily quantifiable and easy to establish in some areas/types of activities/skills, it may also be more ambiguous in others. “Language learning, in particular, is a slow process, with many ruptures, progressions and regressions, and indicators of progress may not be as easy to perceive.” (Busse, 2014, p. 159) On the other hand, a good understanding and handling of motivation can be conducive to better results, a higher degree of students’ satisfaction, and shorter time spent in the learning process, which also implies reduced costs. Therefore, it has been emphasised how important it is for both course designers and lecturers to be aware of these levels of motivation at the beginning of the learning unit (semester, course etc.) and throughout the process. To be able to assess its levels in student activity, it seemed crucial to describe it for a sound basis of what is to be measured.

3.2 COMPONENTS AND DESCRIPTIONS

Motivation is a complex concept and, while its level can be approximated by observing learners’ mimics, gesture, conversational cues (Lepper et al., 1993, as cited in De Vicente & Pain, 1998), time spent engaged in a particular task, the accuracy of the results relies to a great extent on subjective factors such as the teacher’s experience or the length of time spent with the students. That is why attempts have been made to find assessment instruments that can provide accurate data that would help identify the best solutions in the selection of teaching and learning strategies, content, format, for example. Thus, a number of methods and instruments have been set in place in various countries by research groups dedicated to this purpose. In terms of assessment instruments, specialised literature mentions several standardised instruments, for instance the general AMS (short for Academic Motivation Scale Ams-C 2) college (cegep) version), by R. J. Vallerand et. al., created in Canada in 1992-1993 (http://www.lrcs.ugam.ca/wp-content/uploads/2017/08/emcegep_en.pdf), based on a questionnaire and a 7-point scale (which is not devised for language learning in particular, but can be adapted for this purpose), or EME (short for l’Échelle de Motivation en Éducation), also developed in Canada, assessing intrinsic and extrinsic motivation on one hand and amotivation on the other (Vallerand et al., 1993) which, however, does not target the language learning scenario either. As has already been said, the most extensive work in this field is that of R. C. Gardner, centred specifically on language learning. In his attempt to create a scale of motivational intensity, he relied on questionnaires and analysed the data; the main result was the *Attitude Motivation Index* meant to measure motivation in language learning. The three main factors in his scale were *effort, desire to achieve a goal, and attitudes*. His research was focused on learning French in Canada and interestingly among the 11 variables in the test, beside *interest in foreign language*, he included cultural factors such as attitudes towards the people speaking the language learned, which can be relevant for our project, since often the groups of students enrolled in the LSP classes consist of persons coming from diverse cultural and ethnical backgrounds, and their personal perception of the people and culture whose idiom they are acquiring may play a significant role in their level of motivation. The most important contribution of Gardner’s team, however, was the use of the concept of *orientation to language learning*, which he divided into two types. On the one hand, he described *integrative motivation*, seen as the type of motivation that concerns the learners’ desire to integrate in the community whose language they are acquiring, to share in the culture and experience it as a member of another culture; on the other, *instrumental motivation*, which is, on the contrary, related to the way the learners see themselves and their status in their own culture in terms of access to better jobs, professional and social status, perceived level of education through the knowledge of the language(s) learned (Johnson & Johnson, 1999). This implies that the language lecturer needs to be aware of these differences, establish their weight from the beginning, and adjust strategies, activities, materials with this aspect in sight. Also, since it has an important role, the integrative element must be included even if in LSP in higher education instrumental motivation is supposed to be the main focus.

In more recent years, following the technological advance and the emerging e-learning systems and digital resources, new approaches have been proposed that would be directed towards the

improvement of learning systems based on motivation diagnosis. (De Vicente & Pain, 1998). Teimouri, Plonsky and Tabandeh (2022) developed and validated a language-specific grit scale to measure L2 learners grit – a mix between passion and perseverance for L2 learning. The QuILL project itself tested and validated the use of a number of online resources in real-case LSP teaching with groups of lecturers and students in order to see how and to what extent such resources can be used/adapted, and also to suggest guidelines to their implementation (Silva et al., 2022). Among other aspects, such as level of energy, motivation is generally associated with the intensity of engagement; a low level of engagement is corroborated with low levels of motivation: the sooner it is detected, the more efficient the intervention can be. This can be tracked in some e-learning systems, which would allow adequate personalised intervention to reengage the students (Cocea & Weibelzahl, 2011). As a rule, a solid assessment of motivation, an identification of the motivating vs demotivating factors could contribute to better choices by lecturers and better performance by students.

3.3 ADDRESSING NEEDS AND TAILORING LANGUAGE COURSES TO THE SPECIFIC NEEDS OF HIGHER EDUCATION

STUDENTS STUDYING LSP

Since our project focuses on resources for LSP, it is interesting to note that from the beginning, needs analysis was related to the ESP (English for Special Purposes) movement in an attempt to increase the financial efficiency of short-term Language for Occupational Purposes and Language for Vocational Purposes courses by designing and adjusting them to the particular interests and professional necessities of the learners. In pre-higher education decisions are usually made by other parties such as parents or governmental entities on behalf of the under-age learners (Richards, 2001, p. 54). However, the fact that LSP courses are delivered to adults can imply that the participants can – and often are willing to – play a role in the decision-making process of selecting the topical areas in vocabulary, genres, specific competences, etc. (Basturkmen, 2013, p. 1), which, in turn, has been shown to have a positive impact on motivation. However, their input needs to be considered carefully, since they lack pedagogical expertise. Unlike courses in Language for General Purposes, these necessities and requirements are often related to a particular restricted area; this in turn implies that, while General Language courses are usually long-term endeavours, LSP courses have limited duration (one or a few semesters), which also means the necessity to have a clear focus on the designed area and to make effective use of the allotted time.

Another aspect that is specific of LSP courses is the heterogeneous nature of the group, where differences can imply ethnic, cultural differences, different pre-existing levels of linguistic proficiency, different learning styles and even differences in terms of the participants' age. Also, in the case of the foundation year for university students who decide to study abroad, elements of Language for Academic Purposes may have to be integrated to ensure optimal preparation for their performance within the higher education institution. These are reasons why needs analysis is a pre-requisite in syllabus and course design and revision in LSP, as well as in the process of producing specific resources. Needs analysis has been defined as:

the use of systematic means to define the specific sets of skills, texts, linguistic forms, and communicative practices that a particular group of learners must acquire [...and which are] informing its curricula and materials and underlining its pragmatic engagement with occupational, academic, and professional realities (Hyland, 2007, p. 392).

Needs analysis may be used for a variety of purposes (for a comprehensive list see Richards, 2001, pp. 52-53), some of which are adaptable to the higher education LSP scenario (e.g. to identify the demographic profile of the group, to determine which students from a group are most in need of training in particular language skills, to identify a gap between what students are able to do and what they need to be able to do in their respective domain/profession). The information thus obtained can be used as a basis for planning a training programme (ibid.) Needs analysis can take place at the outset

of a learning module/course, during or after a language programme (Richards, 2001, p. 54), it can be conducted in various ways (formally or informally), and may target different types of needs: *subjective* ones referring to what learners would like to learn vs *objective* ones referring to tasks, activities and skills students should be able to perform in current or later study or professional situations (Basturkmen, 2013, p. 1), needs as seen by *insiders* or *outsiders*, *perceived* and *present* needs vs *potential* and *unrecognised* needs (Richards, 2001, p. 53). All this information can be gathered through various methods: staff and student questionnaires, interviews, error analysis, in order to perform or contribute to course and/or syllabus design. Some very sophisticated instruments can be used, but others are simple and can be created *ad hoc*, consisting of a few questions – e.g. in order to find out the relevance of the language with a view to the students' future career, a simple four-item questionnaire can be created asking whether: the language will be required; the language will be important; the language will be helpful in getting a well paid job after graduation; it is not important and neither will it be in the future.

The information can be then used to create or adjust courses in general, or to create or adapt resources to fit the pre- and post-graduation needs of the students. This is actually one of the LSP teaching competences (4.1.) as described by the Common Competence Framework (CCF) – a model of knowledge and skills necessary in an LSP teacher (http://catapult-project.eu/wp-content/uploads/2019/11/CATAPULT_LSP_Teacher_CCF_v12.pdf)

4. ADDRESSING EFFECTIVELY THE NEEDS OF STUDENTS TO LEARN LANGUAGES AS A TOOL TO SUCCESSFULLY ENTER THE JOB MARKET AND DEVELOP FUTURE BUSINESS

This section deals with a crucial component of addressing effectively the needs of students to learn languages as a tool to successfully enter the job market and develop future business in the framework of LSP courses, especially in the form of the student-centred approach and the adaptation of the course to the students' academic and professional needs.

As a rule, as far as LSP is concerned, the intentionality of students' participation in the course is clearly defined: they learn the language in order to apply it to a certain future situation, usually a professional one; therefore, the aims and purposes of the learning process can easily be identified from the outset. As compared to the situation in which students attend a General Language course in the framework of a mandatory curriculum, Language for Specific Purposes, students choose to develop their language skills with a view to increasing their employability. As a result, it does not require significant additional effort on the part of the teacher to convince students of the usefulness and relevance of the course.

4.1 BEST PRACTICES

In order to better orient the course towards the students' studies and profession, it is highly recommendable that the teacher should assess the real needs of the future employees and of the labour market at large, in its various forms ranging from self-employment to being a member or leader of a team in a multinational company. In this way, students completing the LSP course will be prepared to rise up to the demands of their academic requirements until graduation and later to meet the demands of a fluid constantly changing job market. According to Scrivener (2011, p. 90), this type of Needs Analysis should tackle the aspects such as: why learners might need language in the future; the learner's present language level and current problems; their learning preferences in terms of content and types of learning activities.

In terms of identifying the required competencies on the job market, the teacher can start with a hypothetical general job title and description, and go further and discover specific tasks that the students are (or will be) supposed to accomplish in their line of activity, along with any possible details that can be linked to them, the situations learners might face, specific examples of language they might need to use, etc. Such an approach is especially beneficial when the teachers have no ready-made course at hand and they have to prepare all materials themselves.

An unproductive attitude that might arise is students' unwillingness to aid the teacher in his/her task of defining the best teaching strategies and resources according to the students' needs: they might assume a comfortable position of rejecting any responsibility for the learning process, handing it over fully to the teacher. The reasons can be manifold: either the students think they are not experienced enough in the field to actively participate in building up the contents of the course, or they think it should be solely the teacher's concern. Moreover, even though the student-centred teaching paradigm is currently preferred and widely accepted by teachers, there is a chance students are used to a teacher-centred classroom, where their opinions and needs are constantly ignored. However, the general aim is that of moulding autonomous learners who would be able to assume lifelong learning and improve their knowledge and skills independently, therefore students have to be encouraged to realise the importance of teacher-student cooperation even in terms of the methodological aspects applied to the framework of the course.

4.2 NEEDS ANALYSIS TOOLS

A tool that would help teachers adapt the course to the students' own academic and/or professional goals and future position on the labour market is providing constant feedback. Special attention should be paid to ensuring a two-way feedback (from learners to teachers and vice versa). Feedback is regarded as one of the key points of an LSP course for the following reason: given that, as a rule, students have clearly set goals and purposes in language learning, the teacher has to make sure the course meets the learners' needs and demands as much as possible; otherwise, the efficiency and the practical value of the course would suffer considerably. Thus, we recommend introducing various elements that provide students with feedback (both oral and written, at different times of the lesson, during or after it) on a regular basis. Present technologies ensure effective feedback, possibly even real-time communication: many digital resources can be set to offer immediate feedback in terms of the acceptability and accuracy of the answers, while the various existing platforms are also designed as places of dialogue between lecturers and students.

Apart from explicit student-centredness – a *sine qua non* condition of any LSP course, the teacher's task is made more complex by the specificity of the domain targeted by the course. Having little or no prior knowledge on the subject/domain they have to focus on, the teachers' task might sometimes be difficult – the reason why many teachers are discouraged and reluctant to take on LSP courses. However, LSP presents a spectacular opportunity for communication: students know the topic, teacher knows the language; in order to breach this gap, both sides are forced to learn to communicate and to pass on information.

The above-stated challenge is accompanied by the issue of providing appropriate and up-to-date learning materials – an important aspect that contributes to boosting students' motivation and plays a key role in preparing them for real-life activity. As has been mentioned in the specialised literature in the field, students' awareness of the importance and efficiency of the activities suggested by the teacher is the basis for the success of the learning process (Chirilă, 2020, p. 203). Thus, it would be highly advisable to have students actively participate in the choice of materials (topics discussed during the lesson, texts suggested for reading, videos assigned for watching, etc.). By allowing students to select at least some of the learning resources, the teacher would be able to provide them with the most adequate content which would fully correspond to students' needs and would drive high levels of motivation, both cognitive and attitudinal. Needless to say, only authentic materials (with possible slight adaptations, according to students' level) should be used, providing examples of modern language use. Should the teachers opt for a ready-made set of materials or a coursebook, they should carefully assess it using a set of well-established criteria (see, for example, Nunan, 1991, p. 223).

All the above-mentioned strategies employed in the framework of an LSP course contribute to one of the essential goals of any learning process, namely developing an autonomous learner. Students' capability of self-study is crucial in this case: no language course can ever teach them everything they need to know in real-life situations, and they will anyway be forced to explore and discover various

profession-related language aspects and skills on their own. It is important that the teachers should promote learner autonomy, making their students aware of the main strategies applied in language learning and encouraging the students to reflect on the learning process. Students can learn by using specific tasks that would help them take responsibility for acquiring new language knowledge and skills in the future. Such activities might include writing 'can do' statements after finishing a lesson or a unit, compiling their own glossaries with real-life terms or contexts from the target field, preparing presentations on their particular area of research or professional activity, organising self-study groups, etc.

An important autonomy-related factor in moulding the students' motivation in LSP courses is creating a self-access centre – an open learning centre which can be freely used by students after classes. The use of such centres is highly recommendable for LSP since they boost students' autonomy by providing them with a wide range of materials. In modern conditions, when we are used to working in the virtual environment, such centres can take form of repositories of resources provided by the teacher. Any LSP class should be accompanied by a carefully compiled list of resources which would include – but not be limited to – the following: reliable online dictionaries and reference materials, thematic web sites, academic journals on the target field, open access videos, TV shows, documentaries in the area of interest, to name just a few. The teacher might also ask each student to complete the list with several resources of their own, thus boosting their learning agency. Needless to say, all materials included on the list should be carefully verified in terms of their appropriateness and reliability.

5. CONCLUDING REMARKS

Motivation is a crucial element in language learning, therefore a good understanding of the concept itself, of the main theories posited, as well as knowledge of the factors that influence it can only contribute to better results and higher satisfaction, especially in LSP, with its particular profile regarding age, purpose, focus on professional and academic communication. Correctly assessing it, along with establishing the learners' needs through needs analysis is conducive to a better adjustment of courses and teaching materials. Digital resources in particular are apt to affect motivation, as they contribute to and favour adjustment/creation of adequate courses, syllabi and teaching resources, to provide immediate feedback and personalised learning pace, and involve the learners (at least partly) in decision making with regards to the content and strategies used. Besides the immediate increase in the students' involvement in the activities and better performance in the respective language, it also enhances employability and chances to secure better jobs in the long run.

LINKS TO EXTERNAL RESOURCES

CATAPULT project. Computer Assisted Training and platforms to Upskill LSP Teachers <http://catapult-project.eu/>
CATAPULT project. Common Competence Framework available at http://catapult-project.eu/wp-content/uploads/2019/07/CATAPULT_O2_report_final.pdf

http://catapult-project.eu/wp-content/uploads/2019/11/CATAPULT_LSP_Teacher_CCF_v12.pdf

ACADEMIC MOTIVATION SCALE (AMS-C 28) COLLEGE (CEGEP) VERSION, Robert J. Vallerand, Luc G. Pelletier, Marc R. Blais, Nathalie M. Brière, Caroline B. Sénécal, Évelyne F. Vallières, 1992-1993, Educational and Psychological Measurement, vols. 52 and 53, available at http://www.lrcs.uqam.ca/wp-content/uploads/2017/08/emecegep_en.pdf

REFERENCES

- Adams, J. S. (1963). Toward an Understanding of Inequity. In *Journal of Abnormal and Social Psychology*. 67(5), 422–436. <https://doi.org/10.1037/h0040968>
- Alderfer, C. (1969). 'An empirical test of a new theory of human needs'. *Organizational Behavior and Human Performance*, 4(2). 142-175, [https://doi.org/10.1016/0030-5073\(69\)90004-X](https://doi.org/10.1016/0030-5073(69)90004-X). (<https://www.sciencedirect.com/science/article/pii/003050736990004X>)
- Basturkmen, H. (2013). Needs Analysis and Syllabus Design for Language for Specific Purposes. Chapelle, C.A. (ed.). *The Encyclopedia of Applied Linguistics*. Blackwell Publishing Ltd.
- Bearman, M. et al. (Eds.) (2020). *Re-imagining University Assessment in a Digital World*. Springer.
- Bernaus, M., & Gardner, R. C. (2008). Teacher Motivation Strategies, Student Perceptions, Student Motivation, and English Achievement. *Modern Language Journal*, 92(3), 387–401. <https://doi.org/10.1111/j.1540-4781.2008.00753>
- Brown, H. (2000). *Principles of language learning and teaching*. Prentice Hall.
- Busse, V. (2014). Visible learning and visible motivation. Exploring challenging goals and feedback in language education. *Motivation and Foreign Language Learning: From theory to practice*
- Chirilă, A. (2021). Motivarea studenților străini în anul pregătitor de limba română: strategii și tehnici. *Intertext*, 1/2 (201-207). Editura Universității Libere Internaționale din Moldova.
- Clément, R. et al. (1994). Motivation, Self-Confidence, and Group Cohesion, in. *The Foreign Language Classroom, Language Learning*, September, pp. 417-448.
- Cocea, M., & Weibelzahl, S. (2007). Eliciting Motivation Knowledge from Log Files Towards Motivation Diagnosis for Adaptive Systems. In C. Conati, K. McCoy, & G. Paliouras. (Eds.). *User Modeling 2007. UM 2007. Lecture Notes in Computer Science*, vol 4511. Springer.
- Deci, E. L. & Ryan, R. M. (2000). The " what" and " why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268.
- De Vicente, A. & Pain, H. (1998). Motivation Diagnosis in Intelligent Tutoring Systems. January 1998 Lecture Notes in Computer Science. *Proceedings of the Conference Intelligent Tutoring Systems*, 4th International Conference, ITS '98, San Antonio, Texas, USA, August 16-19, 1998.
- Dincer, A., Yeşilyurt, S., Noels, K. A., & Vargas Lascano, D. I. (2019). Self-determination and classroom engagement of EFL learners: A mixed-methods study of the self-system model of motivational development. *Sage Open*, 9(2), 2158244019853913.
- Dörnyei, Z. (1990). Conceptualising Motivation in Foreign Language Learning. *Language Learning*, 40, 45-78.
- Dörnyei, Z. (1994). Motivation and Motivating in the Foreign Language Classroom Author(s), in *The Modern Language Journal*, 78(3). 273-284. Blackwell Publishing. Available at: <http://www.jstor.org/stable/330107>
- Dörnyei, Z. (2001). *Motivational strategies in the language classroom*. Cambridge University Press.
- Dörnyei, Z. (2005). *The Psychology of the Language Learner: Individual Differences in Second Language Acquisition*. Lawrence Erlbaum Associates Publishers.

- Dörnyei, Z. (2007). *Research Methods in Applied Linguistics: Quantitative, Qualitative and Mixed Methodologies*. Oxford University Press.
- Dörnyei, Z. (2009). *The L2 Motivational Self System*. Z. Dörnyei & E. Ushioda (Eds.), *Motivation, Language Identity and the L2 Self* (pp. 9–42). Multilingual Matters.
- Dörnyei, Z., & Otto, I. (1998). Motivation in Action: A Process of L2 Motivation. *Working Papers in Applied Linguistics*, 4, 43-69.
- Dörnyei, Z., & Ushioda, E. (2021). *Teaching and researching motivation: new directions for language*. Routledge.
- Gardner, R. C. (1985). *Social Psychology and Second Language Learning: The Role of Attitudes and Motivation*. Edward Arnold.
- Gardner, R. C. (2001). Integrative Motivation and Second Language Acquisition. In Z. Dörnyei & R. Schmidt (Eds.), *Motivation and Second Language Acquisition* (pp. 1-19). University of Hawai'i Press.
- Gardner, R. C. (2010). *Motivation and Second Language Acquisition: The Socio-Educational Model*. Peter Lang.
- Gardner, R. C. & Lambert, W. E. (1972). *Attitudes and Motivation in Second Language Learning*. Newbury House.
- Gardner, R. C., & Macintyre, P. D. (1993). *A Student's Contribution to Second Language Learning. Part II: Affective Variables*. *Language Teaching*, 26, 1–11.
- Gardner, R. C., Tremblay, P. F., & Masgoret, A. M. (1997). Towards a Full Model of Second Language Learning: An Empirical Investigation. *The Modern Language Journal*, 81, 344-362.
- Hampel R., Stickler, U. (2015). *Developing Online Language Teaching*. Palgrave Macmillan.
- Harmer, J. (2007). *The Practice of English Language Teaching*. Fourth edition. Pearson Longman.
- Herzenberg, F.I. (1987). One more time: How do you motivate employees? *Harvard Business Review*, 40(1), 53-62.
- Hofstede, G. (1986). Cultural differences in teaching and learning. *International Journal of International Relations*, 10, 301-320. <https://doi.org/10.4324/9781351006743>.
- Hyland, K. (2007). English for Specific Purposes. Cummins, J., Davison, C. (eds.) *International Handbook of English Language Teaching. Springer International Handbooks of Education*, vol. 15. Springer.
- Johnson, K., Johnson, H. (1999). *Encyclopedic Dictionary of Applied Linguistics: A Handbook for Language Teaching*. Blackwell Publishing Ltd.
- Kormos, J. & Csizér, K. (2008). Age-Related Differences in the Motivation of Learning English as a Foreign Language: Attitudes, Selves, and Motivated Learning Behavior. <https://doi.org/10.1111/j.1467-9922.2008.00443.x>
- Lawler, E. E., Porter, L. W., & Tennenbaum, A. (1968). Managers' attitudes toward interaction episodes. *Journal of Applied Psychology*, 52(6, Pt.1), pp. 432–439. <https://doi.org/10.1037/h0026504>
- Locke, E. A. & Latham, G. P. (1990). *A theory of goal setting and task performance*. Prentice Hall. https://www.academia.edu/26293602/A_Theory_of_Goal_Setting_and_Task_Performance
- Luckin, R. (2018). *Machine Learning and Human Intelligence: The Future of Education for the 21st Century*. UCL Institute of Education Press.

- Maslow, A. H. (1954). *Motivation and Personality*. Harper and Brothers.
- Maslow, A. H. (1956). Defense and growth. *Merrill-Palmer Quarterly*, 3, 36–47.
- McClelland, D. (1987). *Human Motivation*. University of Cambridge Press.
- McGregor, D. (1960). *The Human Side of the Enterprise*. McGraw-Hill, Inc.
- Melnichuk, M. V. (2017). Market-Oriented LSP Training in Higher Education: Towards Higher Communicative Skills. *EURASIA Journal of Mathematics Science and Technology Education*, 13(8), 5073-5084.
- Noels, K. A. Why are you learning a second language? *Language Learning* 50(1), February 2000, 57–85.
- Noels, K.A., Adrian-Taylor, S., Saumure, K., & Katz, J. W. (2019). Motivation and the support of significant others across language learning contexts. *Journal for the Psychology of Language Learning*, 1(1), 106–141.
- Nunan, D. (1991). *Language Teaching Methodology. A textbook for teachers*. Prentice Hall.
- Oga-Baldwin, W. Q., Nakata, Y., Parker, P., & Ryan, R. M. (2017). Motivating young language learners: A longitudinal model of self-determined motivation in elementary school foreign language classes. *Contemporary Educational Psychology*, 49, 140-150.
- Ouchi, W. G. (1980). Markets, Bureaucracies, and Clans. *Administrative Science Quarterly*, 25(1), 129-141. <https://doi.org/10.2307/2392231>
- Reiss, S. (2012). Intrinsic and extrinsic motivation. *Teaching of Psychology*, 39 (2), 152–156. <https://doi.org/10.1177/0098628312437704>
- Richards, J. (2001). Curriculum Development in Language Teaching. *Cambridge Professional Learning*. Cambridge University Press.
- Ryan, R. M. & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. Guilford Publications.
- Ryan, R. M. & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary educational psychology*, 61, 101860.
- Schumann, J. H. (1975) Affective factors and the problem of age in second language acquisition. *Language Learning*, December 1975. <https://doi.org/10.1111/j.1467-1770.1975.tb00242.x>
- Schumann, J. H. (1997). *The Neurobiology of Affect in Language*. Blackwell Publishers.
- Schumann, J. H. (2001). Appraisal psychology, neurobiology, and language. *Annual Review of Applied Linguistics*, 21. 23 – 42. <https://doi.org/10.1017/S0267190501000022>
- Scrivener, J. (2011). *Learning Teaching. The Essential Guide to English Language Teaching*. Third edition. Macmillan.
- Silva, E. M., Chumbo, I., Gonçalves, V., Martins, C., Dotras Bravo, A., & Alves, A. M. (2022). The QuLL project: embracing digital technology in LSP teaching in Higher Education. In *XVII CercleS International Conference 2022*. 162-164. Instituto Politécnico do Porto.
- Sivaci, S. (2020). *The role of emotions in language learning: an investigation into the relationship between EFL learner's emotional experience and L2 motivational self-esteem*. Lambert Academic Publishing.

- Sternberg, R. J. (2021). Meta-Intelligence: Understanding, Control, and Coordination of Higher Cognitive Processes. In R. Holm-Hadulla et al. (Eds). *Intelligenz: Theoretische Grundlagen und praktische Anwendungen. Heidelberger Jahrbücher Online*. 6. 487-502. <https://doi.org/10.17885/heiup.hdjbo.2021.1.24399>
- Teimouri, Y., Plonsky, L., & Tabandeh, F. (2022). L2 grit: Passion and perseverance for second-language learning. *Language Teaching Research*, 26(5), 893-918. Sage Journals.
- Ushioda, E. (2013) *The Palgrave Macmillan International Perspectives on Motivation. Language Learning and Professional Challenges*. Palgrave Macmillan.
- Ushioda, E. & Dörnyei, Z. (2017). Beyond global English: motivation to learn languages in a multicultural world. Introduction to the Special Issue. *Modern Language Journal*, 101(3), 451-454. Available at <https://www.jstor.org/stable/44980998>
- Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1993). On the Assessment of Intrinsic, Extrinsic, and Amotivation in Education: Evidence on the Concurrent and Construct Validity of the Academic Motivation Scale. *Educational and Psychological Measurement*, 53(1), 159–172.
- Vroom, V. H. (1964). *Work and motivation*. Wiley.

CHAPTER FIVE

IMPLEMENTING DIGITAL TECHNOLOGIES IN LANGUAGE LEARNING AND TEACHING AT A SYSTEMIC LEVEL IN THE HE SECTOR

MARÍA-ELENA GÓMEZ-PARRA, LEONOR MARÍA MARTÍNEZ-SERRANO, CRISTINA MARÍA GÁMEZ-FERNÁNDEZ

UNIVERSIDAD DE CÓRDOBA
CÓRDOBA, SPAIN

ELENA.GOMEZ@UCO.ES, LEONOR.MARTINEZ.SERRANO@UCO.ES, CRISTINA.GAMEZ@UCO.ES

ABSTRACT

The main objective of this chapter is to analyse and discuss the implementation of digital technologies for language learning and teaching in the higher education (HE) sector. Based on literature review and case studies throughout Europe, QuILL case studies will be looked into. Therefore, discussion and conclusions will provide recommendations to decision-makers, lecturers and learners, based on the results and best practices found. In addition, comprehensive instructions on how to transfer and replicate such practices will be listed.

1. THEORETICAL BACKDROP

Digital technologies in the field of higher education language learning and teaching have witnessed unprecedented development, which has enormously increased due to the outbreak of the COVID-19 pandemic. UNESCO (2020) provided recommendations to help schools ensure that learning could be continued during pandemic, such as keeping readiness of essential equipment and facilities (e.g., platforms, computers and Internet connection) for online learning. Panda and Mishra (2020) argue that digital technologies facilitate educational and learning practices, whose design needs to address the foundational concerns of collaborative, participatory, connected and creative learning. Moreover, benefits from the use of quality Open Educational Resources (OER) in Higher Education (HE) include (Blomgren, 2018, p. 55) “cost-savings in acquiring resources for teaching and learning as well as user-generated content, instructor creativity, and contextualised and responsively timely learning opportunities.” UNESCO (2012, para. 1) defines OER as “learning, teaching and research materials in any format and medium that reside in the public domain or are under copyright that have been released under an open license, that permit no-cost access, re-use, re-purpose, adaptation and redistribution by others.” The idea of OER comes from other movements, mainly Open Access (OA) and Open Source Software (OSS) (Hylén, 2006, as cited in Berti, 2018, p. 6). Tuomi (2006) advocates the idea that openness is about the right to modify, repackage and add value to existing resources. In this frame, Creative Commons (CC), which is one of several public copyright licensing available, was developed to reverse how copyright permissions previously had been established (Lessig, 2008). OER have generally been criticised for their poor quality (International Commission of the Futures of Education, 2020). The European Union, on the other hand, visualises OER through a more specific perspective:

...OER are visualised as the conjunction of practices around open content with practices around open learning more broadly (Figure 1). In relation to open content, questions centre around what is special about educational content and how it is made openly available, licensed and distributed or shared. In relation to learning practices, investigation focuses on how practices around content contribute to or are supported by other practices across the sphere of learning activities. (Falconer et al., 2013, p. 8)

This view of OER includes a consideration on the ways in which OER can impact individuals (in their learning process), institutions and even organisations (see the UKOER Impact Model, Falconer et al., 2013, p. 9). OER have attracted the attention of many scholars and there seems to be consensus on the fact that more research is needed to increase its visibility and use (especially in foreign language teaching and learning).

Moreover, adult learning for the European Commission (n.d., para. 1) “refers to a range of formal and informal activities, both general and vocational, undertaken by adults after leaving initial education and training”. Adults pursue learning to enhance their employment prospects, to develop personally or professionally, or to obtain transferrable skills, such as critical thinking. Therefore, OER and digital technologies are playing a role, which COVID-19 pandemic has accelerated due to significant changes in how we humans live, learn and work. The need to update knowledge, skills and competences are nowadays more urgent and peremptory than ever, which is leading to key initiatives at the European level to provide support to national institutions to increase the participation of adults in learning and training activities (e.g., *European Skills Agenda* by the European Commission, 2022, among others).

Hylén and Schuller (2007) indicate that digital resources should be published in an editable format which makes it possible for users to copy and paste pieces of text, images, graphics or any other media, so that they can be easily adapted or modified and, therefore, used by teachers. Hence, non-editable formats, such as Adobe Portable Document Format (.pdf) or Flash (.swf), do not seem to be appropriate for a high level of openness. Open formats such as Hyper Text Markup Language (HTML), Portable Network Graphics (.png), and OpenDocument Format (.odf) are more open, and easier to be introduced in classroom contexts.

OER and digital technologies are abundant in the field of foreign language learning and teaching, where resources, methodologies and approaches are updated at even a faster pace than in other areas. Vyatkina (2020) states that corpora should be used as OER within language teaching, to which various examples are provided in the teaching of German. Cinganotto and Cuccurullo (2016) advocated for the use of OER and digital tools in the classroom, as these can drastically change language education, especially within CLIL (Content and Language Integrated Learning) settings. Bellés Calvera and Bellés Fortuño (2018) recommended Voki as an OER tool for the teaching of English pronunciation. For Pulker and Kukulska-Hulme (2020) the field of Open Educational Practices (OEP) is relatively new (Weller et al., 2018). For these authors, developing research within this area can be categorised into two different strands:

research on OEP in the context of OER creation, use, and adoption; and research on OEP in relation to an open ecosystem that includes, for example, open learning, open teaching, open scholarship, open pedagogy, open assessment, open data, and open source. (Pulker & Kukulska-Hulme, 2020, p. 1)

Berti (2018) had already advocated for this idea (i.e., the way OER impact on OEP), which has given rise to the Open Education Movement (p. 4). Berti’s study examines advantages and challenges related to Open Education by discussing the production of OER in languages other than English in higher education, as most resources found on the Internet are targeted to learners of English. This is one of the issues that QuILL project (Quality in Language Learning) addresses to (i.e., to promote the learning of content through languages other than English) because, following Zancanaro and Amiel (2017), a substantial imbalance exists in the availability of open educational content in less-spoken languages. Thus, QuILL researchers have done their best to identify resources for the learning and teaching of content through 18 different European languages: Bulgarian, English, Estonian, Finnish, German, Hungarian, Italian, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Slovakian, Slovenian, Spanish and Swedish (see https://quill.pixel-online.org/gp_teachingSources.php).

Blessinger and Bliss (2016) state that technology tools and e-learning offer potential solutions to geographical barriers by giving a global audience unprecedented access to free, open and high-quality educational resources which, as QuILL searches to demonstrate, can be done even more effectively by

using such resources for the teaching of content in higher education contexts. The content areas identified by QuILL researchers range from arts and music, business and communication, medicine and nursing, teacher education, accounting, journalism and multimedia tourism, law, military service, bioscience or engineering, just to mention some of the most relevant ones (see https://quill.pixel-online.org/gp_teachingSources.php).

Moreover, some other authors have tried to examine the quality and accessibility of OER. Krajcso (2016) proposed a classification and quality criteria for OER within the field of foreign language learning. Gómez-Parra et al. (2019), in the frame of a research project entitled *LinguApp: Asegurando el acceso al aprendizaje universal e inclusivo de segundas lenguas* (PRY208/17) funded by *Fundación Pública Andaluza Centro de Estudios Andaluces* (an institution within the Andalusian Regional Government), planned the development and validation of two instruments devoted to the assessment of OER for language learning. The first instrument evaluated the technical characteristics of the websites, whereas the second one was specifically designed to assess which language skills are developed through the use of an OER, and how this process takes place by focusing on the contents and activities that the given website offers. The instruments designed by Gómez-Parra et al. (2019) are included in this paper and have been used by the QuILL research team to evaluate the quality of the OER included in this project, as will be discussed in section 3 of this chapter.

2. LOOKING INTO QUILL'S OER CASE STUDIES

This section will describe OER examined by QuILL researchers as case studies that epitomise the process by which these were analysed and selected to be catalogued into QuILL website. An in-depth account of the criteria employed in QuILL search, selection and evaluation process will be given in this section alongside an overview of OER selected, since OER displayed on QuILL website have followed the same validation pattern prior to being selected.

Such OER review process underwent six main stages. The first stage was devoted to the search and location of OER of Foreign Language Teaching and Learning in HE for Specific Purposes in 18 different languages, already mentioned in the preceding pages.

The second phase was devoted to the analysis of OER basic characteristics and is carried out mainly through selecting from thirteen sets of parameters collectively agreed by QuILL researchers before the first stage began. This was done following academic criteria supported by updated literary reviews. In this phase, basic information about the OER title, date of publication, and link had to be completed in the first place. In case some materials were not available online or risked future lack of online access, a file upload tool to the QuILL website grants access to them for the next five years. Second, information about target groups, namely lecturers and/or students, were provided. Most resources were classified as catered to both lecturers and students, and only some of them were selected only for lecturers when they provided specialised methodological guidelines that could potentially hinder students' independent usage of the materials. Third, OER topics were classified according to academic and/or professional domain areas. A reduced number of thirteen domains was preferred rather than a larger list of academic fields to avoid an excessive atomisation of scholastic areas. In any case, several domain areas could be selected concurrently given that some OER topics were general enough to allow for their inclusion within some of them. For example, an OER devoted to parasite control could very well fit into Medicine and Nursing, Bioscience as well as Sustainability. Fourth, depending on OER characteristics, they were more prone to be employed either in an autonomous learning scenario, in a classroom context, or in both. Thus, QuILL website users will find OER classified according to their most suitable teaching and learning situations. Next, OER target language and OER language of instruction were addressed separately since, mostly in correspondence with the lower Common European Framework of Reference (CEFR) levels (Council of Europe, 2001), quite often OER could be targeted to a given language learning but have a different language of instruction. Hence the importance of the next step, which consisted in selecting the CEFR language proficiency level (Council of Europe, 2001)

that any OER corresponded to. Namely, Basic User (A1 and A2), Independent User (B1 and B2) and Proficient User (C1 and C2). Given the enormous multimodal variety of OER found and looked into by QuILL researchers, it was necessary to classify them according to the type of medium they used. The options available for such end were the following: animation, activity/task, audio, game, guiding resources (online course/book), laboratory, picture/graphics, reference resources (online dictionaries, grammar guides, phrasebooks), simulation, test and video. OER frequently appeared in a multimodal form, actively integrating, for example, audio and/or video with activities that could be autonomously tested by users. Likewise, another essential feature analysed by QuILL researchers was the skill(s) addressed by such OER, which selected one or several options between listening, writing, speaking reading and mediation. This was the last step in the second phase of the guided exploration of OER characteristics.

The third phase carried out a tailor-made exploration of OER, concerned with providing individualised reports which included detailed descriptions of OER general characteristics, the technological elements required (if any), the student's needs addressed, the adaptability to groups of learners most in need of language preparation, and the methods for the validation. In sum, this phase intended to provide further explanations of the items selected in the previous phase as complementary material for users that did not rest exclusively on itemised features.

The fourth phase, entitled "Review," followed a Likert-scale methodology which ranked from 1 to 5, where 1 was the lowest and 5 the highest. Nine different quality indicators had to be addressed. These were the following:

1. Comprehensive approach: this item measured the OER capacity to match the needs of lecturers and students.
2. Added value: it measured whether the OER provided additional tangible improvements.
3. Motivation enhancement: this item assessed the OER capacity to motivate students to improve their language skills.
4. Innovation: this element evaluated effectiveness of the OER in introducing innovative, creative and previously unknown approaches to LSP learning.
5. Transferability: this measured OER transferable potential and OER possibility to be a source of further capitalisation/application for other language projects in different countries.
6. Skills assessment and validation: this item looked into the availability of appropriate tools for lecturers to monitor students' progress and for students to assess their own progress and to reflect on their learning experience.
7. Adaptability: this element measured flexibility of OER contents and possibilities for the LSP lecturers to adapt such contents to their and to students' need.
8. Usability: this item assessed the technical usability of the OER from the point of view of the lecturer and the student.
9. Accessibility: this last item evaluated the OER accessibility from the point of view of the lecturer and the student.

In addition to this quantitative review, a qualitative justification complemented and further expanded the scores provided to each of the quality items ranked and nuanced in deeper detail the salient quality features of OER catalogued.

The next phase was related to preparing a case study, which unpacked reflections for users in terms of target students (e.g., number, degree or course attended), method used, results obtained and risks (if any) to be taken into account when using each particular OER. Case studies usually responded to three different types of descriptions, depending on whether they had been implemented prior to their inclusion in QuILL website. The first description dealt with how the resource was successfully used directly by QuILL researchers; the second description explored how the resource was successfully tested by other lecturers who participated in QuILL; thirdly, the description included a proposal about how QuILL researchers would test it (in case none of the previous options had been possible). This was

particularly the situation in some instances given that the QuILL project was being implemented during important national restrictions in European countries due to the COVID-19 pandemic.

In the last and sixth phase, QuILL researchers produced an ad hoc checklist and/or guidelines devoted to how to use each specific OER analysed. The production of individualised checklists and/or guidelines has given QuILL researchers a comprehensive view of the general features shared by many of the OER reviewed and this has made possible the preparation of practical guidelines when implementing OER for Foreign Language and Teaching in HE. Thus, the next section will provide the most essential take-aways from all that work carried out throughout the project.

3. PRACTICAL GUIDELINES FOR THE IMPLEMENTATION OF OER FOR LANGUAGE LEARNING AND TEACHING IN HIGHER EDUCATION

The Internet offers a cornucopia of OER for foreign language teaching in Higher Education (HE), regardless of whether it is general language or language for specific purposes. When implementing high-quality OER in the foreign language classroom, it is of the essence to keep in mind a set of practical guidelines for effective teaching, that is, teaching that is conducive to lasting, deep understanding of discipline-specific content. What follows is a series of recommendations based on pedagogical know-how that might help practising teachers to teach language in effective ways, making the most of the potential offered by OER in face-to-face, hybrid and online learning scenarios.

1. *Carefully select and adapt OER to cater for students' diversity in terms of learning style and pace, interests and needs.* It remains a fact that HE classes all over the world are diverse in themselves. Diversity itself is an endless source of richness in learning scenarios. In this context, OER might offer invaluable input for addressing specific content on the foreign language syllabus, but it is a moral imperative for teachers to create inclusive learning environments and ensure that the OER used in class are versatile enough to attend to student diversity. In this connection, Universal Design for Learning (UDL) advises teachers to remove all potential barriers that might prevent students from accessing the curriculum by deploying a wide range of forms of engagement, representation, and expression. UDL makes thus learning universally accessible to every single student irrespective of their skills and capacities.
2. *Always exploit OER in ways that promote dialogic learning and rich interaction amongst students.* OER are not an end in themselves, but rather a means to achieving specific learning objectives and outcomes. As such, they are the starting point for teachers to create learning experiences in the classroom that engage students' attention and boost their creativity, decision-making and critical thinking skills. Of all learner-centred methodologies, cooperative learning reveals itself to be the most effective when it comes to fostering positive interdependence, emotional bonds and rich interaction amongst students. Put succinctly, cooperative learning is most likely to be conducive to *deep learning* (and not *surface learning*) when compared with other methodologies, since it cultivates student talk instead of teacher talk and puts students in a position where they have to interact with and respond to input as embodied by the OER from a critical standpoint. However, other active methodologies such Project-Based Learning, Design Thinking, Visual Thinking or Flipped Teaching may also be the perfect allies to using OER in the language classroom.
3. *Ensure selected OER give students ample opportunities to practice all language skills in a balanced and (if possible) integrated manner.* According to the *Common European Framework of Reference* (Council of Europe, 2001), competence in a foreign language comprises a set of skills concerning listening, speaking, reading, writing, and mediation. Specific OER may be focused either on one skill or on a constellation of skills at the same time. Whichever the case, language teachers should ensure OER are enriched and pedagogically exploited in the classroom, by designing appropriate follow-up tasks that take students in new directions and give them extra practice to consolidate their knowledge.

4. *Provide students with appropriate scaffolding at critical points of the learning progression when using OER in the language classroom.* Scaffolding is about giving students judicious support to ensure they can do the tasks proposed by OER and progress along the learning pathway. In fact, high-quality OER should be designed in such a way that students' progress from cognitively simple to more complex, cognitively demanding tasks. If tasks are cognitively demanding yet doable, students will experience a sense of achievement and feel more motivated to learn. On the contrary, if no scaffolds are provided, a sense of frustration will set in and prevent learning from happening. Scaffolding should therefore be integral to OER design. If missing, then teachers should put in place strategies that ensure appropriate scaffolding of the learning process, such as giving students clear instructions regarding tasks and groupings, and providing examples and models, among others.
5. *Open up learning spaces and moments where creativity may flourish.* OER that cultivate more LOTS (lower order thinking skills) than HOTS (higher order thinking skills) according to Harold Bloom's taxonomy (Anderson and Krathwohl, 2001) are not always appropriate in language classroom practice to take students to what Lem S. Vygotsky (1978) termed their *Zone of Proximal Development*. Teachers need to ensure that students' progress from LOTS to HOTS and create spaces where they are given opportunities to unleash their creativity. Certain OER may not explicitly boost learners' creativity and push them to think out of the box, but teachers can exploit them in novel ways that encourage experimentation, originality and a mindset of excellence.
6. *Give students effective feedback when using OER in the foreign language classroom.* Mistakes are a natural part of the language learning process, but they need to be tackled judiciously. Scientific evidence suggests that feedback offered at strategic points of the teaching-learning process can boost students' learning. Teachers should always praise students' achievement in public and carefully draw learners' attention to recurrent mistakes made by individual students or by the class as a whole without exposing learners to ridicule. In this regard, it is of the essence that teachers create emotionally safe learning environments where students are invited to take risks and experiment with OER, regardless of whether they make mistakes in the process.
7. *Provide visible learning for all students as well as assessment of and for learning when using OER in class.* Visible learning happens when teachers make explicit what their learning agenda is, that is, what the learning objectives and outcomes are in using specific OER. The teaching-learning circle is complete only when assessment comes in as part of the whole picture. Assessment is about measuring students' success and ascertaining whether the learning goals have been achieved or not. However, assessment is not just meant to be assessment *of* learning. Assessment *for* learning refers to moments in the learning progression when students are required to complete tasks that provide explicit evidence of their assimilation of curricular content. Effective OER should include such moments in order to emphasise the importance of learning as an ongoing process or work in progress and cultivate a mindset of academic excellence amongst students.

These seven main recommendations have thoughtfully intended to meaningfully integrate the implementation of OER within not only foreign language teaching situations, but also those contexts of Foreign Languages for Specific Purposes in HE. The pedagogical potential of OER continues to provide teachers, students and decision-makers with objective arguments to further research and ensure the creation of plenty of opportunities for their implementation. In this regard, this chapter has attempted to open up a space for the analysis and discussion of digital technologies in the context of HE language teaching and learning. For such end, a literature review opens the chapter by identifying the main concepts and ideas discussed nowadays by scholars and clearly establishing the theoretical scope of the chapter. Secondly, a thorough description of the systematic methodological procedures devised by QuILL researchers has been provided, sprinkled with examples that illustrate the innovative nature of the project. Finally, in the form of pearls of wisdom that readers can take away, a list of seven methodological key reflections shaped as recommendations close the chapter that allow for the

meaningful integration of OER in language teaching and learning contexts in HE both for language for general purposes as well as for specific purposes.

REFERENCES

- Anderson, L. W. & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Longman.
- Bellés Calvera, L. & Bellés Fortuño, B. (2018). Teaching English pronunciation with OERs: the case of Voki. *Sintagma: revista de lingüística*, 30, 57–80. <https://doi.org/10.21001/sintagma.2018.30.04>
- Berti, M. (2018). Open Educational Resources in Higher Education. *Issues and Trends in Educational Technology*, 6(1). https://doi.org/10.2458/azu_itet_v6i1_berti
- Blessinger, P. & Bliss, T. J. (Eds.). (2016). *Open education: International perspectives in higher education*. Open Book Publishers. <https://doi.org/10.11647/obp.0103>
- Blomgren, C. (2018). OER awareness and use: The affinity between higher education and K-12. *The International Review of Research in Open and Distributed Learning*, 19(2), 55–70. <https://doi.org/10.19173/irrodl.v19i2.3431>
- Cinganotto, L. & Cuccurullo, D. (2016). Open educational resources, ICT and virtual communities for content and language integrated learning. *Teaching English with Technology*, 16(4), 3–11.
- Council of Europe. (2001). *Common European Framework of Reference for Languages: Learning, Teaching, Assessment*. <https://rm.coe.int/16802fc1bf>
- European Commission. (n.d.). *Adult learning initiatives*. <https://education.ec.europa.eu/education-levels/adult-learning/adult-learning-initiatives>
- European Commission. (2022). *European Skills Agenda*. <https://ec.europa.eu/social/main.jsp?catId=1223&langId=en>
- Falconer, I., McGill, L., Littlejohn, A., & Boursinou, E. (2013). *Overview and analysis of practices with Open Educational Resources in adult education in Europe*. European Union. <http://oro.open.ac.uk/50933/1/JRC-Adult%20Learning%20Report%202013.pdf>
- Gómez-Parra, M. E., Huertas-Abril, C. A., & Espejo-Mohedano, R. (2019). Estudio para la validación de instrumentos para la evaluación de sitios web de aprendizaje de lenguas extranjeras. *Revista de Lenguas para Fines Específicos*, 25(1), 62–80. <http://dx.doi.org/10.20420/rlfe.2019.250>
- Hylén, J. & Schuller, T. (2007). *Giving knowledge for free. The emergence of open educational resources*. OECD. <http://www.bibalex.org/Search4Dev/files/303047/132488.pdf>
- International Commission on the Futures of Education. (2020). *Education in a post-COVID world: Nine ideas for public action*. UNESCO. <https://cutt.ly/PNVoy8O>
- Krajcso, Z. (2016). Classification and quality criteria for open educational resources in the field of foreign language learning. *Journal of Language and Cultural Education*, 4(1), 48–59. <https://doi.org/10.1515/jolace-2016-0004>
- Lessig, L. (2008). *Remix: Making art and commerce thrive in the hybrid economy*. Penguin. <https://doi.org/10.5040/9781849662505>

- Panda, S. & Mishra, S. (2020). Towards mainstreaming technology-enabled learning. In S. Mishra & S. Panda (Eds.), *Technology-enabled learning: Policy, pedagogy and practice* (pp. 225–244). The Commonwealth of Learning.
- Pulker, H. & Kukulska-Hulme, A. (2020). Openness reexamined: Teachers' practices with open educational resources in online language teaching. *Distance Education*, 41(2), 216–229. <https://doi.org/10.1080/01587919.2020.1757412>
- Tuomi, I. (2006). *Open Educational Resources: What they are and why do they matter*. http://www.meaningprocessing.com/personalPages/tuomi/articles/OpenEducationalResources_OECD_report.pdf
- UNESCO. (2012). *What are open educational resources (OERs)?* <https://www.unesco.org/en/communication-information/open-solutions/open-educational-resources>
- UNESCO. (2020). *Education: from school closure to recovery*. <https://en.unesco.org/covid19/educationresponse>
- Vyatkina, N. (2020). Corpora as open educational resources for language teaching. *Foreign Language Annals*, 53(2), 359–370. <https://doi.org/10.1111/flan.12464>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Weller, M., Jordan, K., DeVries, I., & Rolfe, V. (2018). Mapping the open education landscape: Citation network analysis of historical open and distance education research. *Open Praxis*, 10(2), 109–126. <https://doi.org/10.5944/openpraxis.10.2.822>
- Zancanaro, A. & Amiel, T. (2017). The academic production on open educational resources in Portuguese. *Revista Iberoamericana de Educación a Distancia*, 20(1), 81–104. <https://doi.org/10.5944/ried.20.1.16332>

CHAPTER SIX

DIGITAL EDUCATION AND LSP CONTENTS IN LANGUAGE LEARNING AND TEACHING

**ANNA ZINGARO, SANDRO M. MORALDO, LUISA BAVIERI, PAOLA POLSELLI, TERESA QUARTA, JÜRGEN
FERNER, SANNA MARIA MARTIN, MARINA ARTESE, SANDRA NAUERT**

UNIVERSITY OF BOLOGNA
DEPARTMENT OF INTERPRETING AND TRANSLATION (DIT)
DEPARTMENT OF MODERN LANGUAGES, LITERATURES, AND CULTURES (LILEC)
CENTRO LINGUISTICO D'ATENEO (CLA)
BOLOGNA/FORLÌ, ITALY

*ANNA.ZINGARO2@UNIBO.IT, SANDRO.MORALDO@UNIBO.IT, LUISA.BAVIERI@UNIBO.IT, PAOLA.POLSELLI@UNIBO.IT,
TERESA.QUARTA2@UNIBO.IT, JURGEN.FERNER@UNIBO.IT, SANNAMARIA.MARTIN@UNIBO.IT,
MARINA.ARTESE@UNIBO.IT, SANDRA.NAUERT@UNIBO.IT*

ABSTRACT

The chapter will focus on how to investigate digital educational resources for the study of LSP languages and on how to use them to innovate or make more engaging language learning and teaching processes from the twofold perspective of the lecturer and the learner.

1. INTRODUCTION

The rapid rise of new technologies has caused the global higher education landscape to change quickly. In recent years, this already constantly changing technological environment has received a strong push by the Covid Sars-2 pandemic, which has forced institutions to develop digital teaching resources or, if already available, to improve and expand them to adapt to the new requirements. This context brought out and emphasised the already existing challenges, the difficulties, and potentialities of using technology in teaching, leading to a wider application of digital resources in the classroom.

Therefore, this chapter aims to discuss the opportunities related to the use of digital resources as integration or as an alternative to classroom activities in Higher Education language courses. We will begin this contribution with an outline of the theoretical underpinnings that support the use of digital resources in education. We will then discuss the current challenges that lecturers face in bringing technology in the classroom. In this regard, we will provide practical examples and case studies of resources that have been tested in university language courses of Finnish as a Foreign Language, German as a Foreign Language and Italian as a Second Language to increase language teaching effectiveness and attractiveness.

2. THEORETICAL AND METHODOLOGICAL FRAMEWORK

This section will outline the theoretical and methodological concepts guiding our research on the use of technology as an alternative or supplement to the classroom. Particular attention will also be paid to the challenges facing the teacher today, in terms of being able to use digital resources and staying up-to-date with their use and the implications this has on his or her profession.

2.1 DEFINING DIGITAL COMPETENCE: THE CONTRIBUTION OF THE COUNCIL RECOMMENDATIONS

The digital turn in education has brought quick and unexpected changes and the education systems, often, have not been able to keep the pace with them.

In this regard, teachers are aware, in their daily experience, that they must come to terms with the 21st century education landscape: they recognise the importance of promoting a variety of learning

approaches and environments, including the use of digital technologies; moreover, they realise that using digital resources in classroom activities requires digital and technology-based competences.

These competences are among the eight key competences identified by The Council Recommendations of 22 May 2018 on key competences for lifelong learning, which citizens must possess in order to facilitate personal fulfilment and development, employability, social inclusion and active citizenship (European Council, 2018). These are: 1. Literacy, 2. Multilingualism, 3. Numerical, scientific and engineering skills, 4. Digital and technology-based competences, 5. Interpersonal skills, 6. Active citizenship, 7. Entrepreneurship, 8. Cultural awareness and expression.

As also mentioned in chapter 1, when defining competence 4, Digital competence, the Recommendation refers to the Digital Competence Framework (DigComp 2016; new version 2022). Indicating the inadequacy of the EU citizen's digital competence level, the DigComp is a tool that can be used to identify this competence and to improve and support it. Five components of digital competence are introduced: 1. Information and data literacy, 2. Communication and collaboration, 3. Digital content creation, 4. Safety, 5. Problem solving.

Moreover, to better grasp teachers' needs and to support the development of students' digital competences as well, the European Commission published the European Framework for the Digital Competence of Educators (DigCompEdu, 2017) with a focus on the digital competences that are specific to the teaching profession.

In the Council Recommendation, the digital competence definition has been broadened as 'the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society. It includes information and data literacy, communication and collaboration, media literacy, digital content creation (including programming), safety (including digital well-being and competences related to cybersecurity), intellectual property related questions, problem solving and critical thinking' (European Council, 2018, p. 9).

In these seminal documents, digital competence is seen not just as the confident use of software or digital devices, as it also includes a set of knowledge, skills, attitudes, abilities and strategies (e.g.: confident, critical, responsible use; problem solving and critical thinking) that teachers must possess in order to manage digital educational environments effectively.

The generation and dissemination of these documents and frameworks illustrate how they can contribute to innovation in education and professional development. They can help to identify teachers' level of digital competence, in order to fill possible shortcomings and to promote vocational education and training from the lifelong learning perspective. At the same time, they can support the necessary reflection on the appropriate pedagogical approaches to adapt in current educational and social environments.

2.2 THE PEDAGOGICAL DEBATE ON OERS

To summarise in a few lines some of the issues that characterise scholars' debate on Open Educational Resources (OERs) and their use in language teaching and learning, it is useful to observe that most research questions are based on four pillars: the relationship between OERs, pedagogical approaches and methodologies; learning goals and students' perception of OERs; teachers' digital competence and/or attitude regarding OER creation, use or re-use; the implication that the very definition of OERs for language learning might have on teaching practices.

The relentless pace of technological revolution has led to rethink teaching paradigms considered as acquired and consolidated. However, well before its disruptive expression in the 21st century, distance learning evolution defined various models of adult education. If we consider the pedagogy of different distance learning generations over time, we notice the interplay that is realised between learning theories and technological advancement (table 1). This productive interplay is outlined in Table 1, which is adapted from Anderson & Dron (2011) considering the version proposed by Rivoltella (2021).

Generation	Main technologies	Pedagogy	Target	Teacher's role
1 st generation	Published media	Behaviourist/Cognitive pedagogy (focus on instruction)	Individuals	Content producer, guide, language model
2 nd generation	Mass media			
3 rd generation	Networking media	Social-constructivist pedagogy (focus on construction and creation)	Groups	Discussion leader
		Connectivist pedagogy (focus on connections and sharing)	Networks	Critical mate

Table 1. Three generations of distance teaching/learning; adapted from Anderson & Dron (2011); Rivoltella (2021).

The sociocultural constructivism (Jonassen & Rohrer-Murphy, 1999) emphasises the importance of knowledge restructuring through processes of comparing, sharing and negotiating meaning in a context that promotes action in learning modes such as peer collaboration and peer tutoring (Fragai et al., 2017). In connectivism, the development of meta-skills is considered crucial (Siemens, 2006). According to Downes (2019), connectivism key principles, such as autonomy, diversity, openness and interactivity produce effective outcomes in students' language learning and in their increased capacity to learn how to learn, and to acquire new knowledge in an autonomous way.

By contrast, the conceptual definition of 'open education' may appear controversial. According to Almeida, the OER movement is often victim of a 'decontextualized rhetoric' (Almeida, 2017, p. 15) in its emphasis on 'social abstractions like inequality or oppression' (ibid., 2017, p. 14). The spread of labels such as 'open pedagogy' or 'open education practice' has thus raised criticism about the vagueness of modalities, tools and learning processes (Zawacki et al., 2020). Focusing on students' learning by doing, 'OER-enabled pedagogy' has been defined as 'the set of teaching and learning practices that are only possible or practical in the context of the 5R permissions [retain, reuse, revise, remix and redistribute] which are characteristic of OER' (Wiley & Hilton, 2018, p. 135). In contrast, Mishra (2017) calls for a less rigid definition of an OER, in a bottom-up perspective that would complement the top-down one. This would guarantee the criteria of 'authenticity' of resources (see the case of learning with academic podcasts and LSP's analytical tool in Module 2 of the e-learning package of the QuILL's website and in point 3.3. of this chapter) while a strict observation of the 5Rs would not.

2.3 THE AGES OF THE MEDIA IN EDUCATION

In "The third age of the media", Rivoltella (2018) argues that the current period represents the third stage of media evolution. Since the 1980s, the media have been the channel through which a message passes from one interlocutor to another, freeing itself from any restrictions of space and time. In this first phase, the possibility of using media as amplifiers of our sensory organs is still optional, which allows the user to maintain the illusion of being in control of the situation.

Since the end of the decade, we witness a drastic paradigm shift: media invade urban space and become the environment in which we weave many of our social relationships; our ecosystem appears to be increasingly constituted by media. At the same time, we are also observing the emergence of learning communities where one can share content, meet people or obtain services. From a pedagogical point of view, in this second phase, media as an environment become more pervasive but the user retains the power to enter and – eventually – leave it.

Finally, we come to the current third phase in which the media are transformed into a kind of second skin that allows us to build meaningful relationships and/or content together with other users. The

power of this mutation makes it increasingly unrealistic to reject such tools; consequently, educational systems and services are obliged to cope with such pervasiveness.

The proliferation of ICTs has implied the multiplication of new types of languages: verbal, written, iconic, musical, gestural, among others. The ability to adequately understand and use these new languages represents a great educational challenge as it poses problems relating to the semiotic dimension (succeeding in transmitting knowledge of the structure of the new languages), the expressive dimension (ensuring that they are used in a creative and meaningful way) and the ethical dimension (what can or cannot be expressed or communicated). Finally, these are flanked by the political dimension of providing effective tools for the development of critical thinking, which underpins the concept of citizenship. It is indispensable to rethink the role of teachers to make ICT-based resources full educational tools, succeeding in bringing inside the classroom what we already use outside in a pedagogically correct manner.

We consider it useful to exploit the pedagogical implications inherent in Rivoltella's theories, especially in reference to the second and third stages of media. From an educational point of view, websites, apps and social media can be used to improve the effectiveness and attractiveness of the language teaching and learning process with regard to LSP (for example analysing podcast's input and discourse in media seen as a communicative environment) while innovative ICT-based resources offer new opportunities of communication in virtual contexts (for instance contributing to blogs' discussions in media seen as a connective tissue).

2.4 NOTES ON ICT-BASED LANGUAGE TEACHING AFTER THE DIGITAL TURN

The forced move to online teaching during the pandemic has revealed deficits in digital and pedagogical lesson planning. In an attempt to fill this gap in knowledge, frameworks are being developed. Intra-institutional support and peer support from colleagues is important to keep pace with the dynamic development of the digital teaching environment.

2.4.1 DIGITAL TURN AND DIGITAL GAP

Although the use of digital technologies in foreign language teaching has been practised for a long time, there has been an exponential increase in digitally supported forms of teaching in recent years, due in particular to the SARS CoV-2 pandemic. The crisis posed major challenges to all stakeholders (learners, teachers, institutions, technicians, and parents). From the start, significant work was put into continuing the training programme in the form of online courses. Digitally supported teaching received an extraordinary boost, but in this improvised form it also showed that the necessary technological and pedagogical-didactic knowledge for this specific form of teaching was generally not available. It seems that the vision of digital skills promoted, especially for teachers, as a declared goal of European education policy, has not yet been sufficiently implemented. The high-profile skills required of teachers under the Framework for Digital Competence of Educators (DigCompEdu), the "high levels of digital and pedagogical skills" (Punie & Redecker, 2017, p. 6), had to be measured against reality, and it became apparent that challenging learning curves were yet to be mastered. In particular, teachers who received little or no institutional help in the digital organisation and implementation of their courses suddenly had to deal with a new digital teaching environment and the associated planning and techniques. In the current research discussion, this juxtaposition of digital turn and digital gap is found in the double labelling of "planned online language teaching versus crisis-driven online teaching" (Gacs et al., 2020).

2.4.2 STRENGTHENING DIGITAL LITERACY

Since content-related, pedagogical and digital competencies interact in efficient teaching, but teachers are often left to deal with this complex task alone, attempts were made to provide a structured framework for teacher training. This is also an attempt to create a positive effect on the theory-practice gap, i.e., the unequal relationship between theoretical research knowledge and its practical

implementation in everyday teaching: “Despite a multitude of research-based publications and best practices relating to computer assisted language learning (...) there is a dearth of resources on how to prepare teachers for online language teaching and the skills needed for this new teaching environment.” (Compton, 2009). Already at the turn of the millennium, the European Commission supported the ICT4LT website to promote ICT training for language teachers. In 2006, the Technological Pedagogical Content Knowledge (TPACK) framework was presented, which understands the learning situation as an interplay of technological knowledge, pedagogical knowledge and content knowledge: “Thus teachers need to develop fluency and cognitive flexibility not just in each of the key domains (T, P, and C), but also in the manner in which these domains and contextual parameters interrelate, so that they can construct effective solutions.” (Koehler & Mishra, 2009). In addition to TPACK, which was not specifically designed for language teaching, other frameworks emerged that focused on digital language teaching. These include the European Commission-funded projects DOTS, Developing Online Teaching Skills, and EAQUALS, Evaluation and Accreditation of Quality in Language Services. DOTS offers a Moodle-based workspace and seeks to meet the dynamic, ever-evolving demands of teacher training by offering constantly updated workshops (Stickler et al., 2020). EAQUALS (2016, p. 4), on the other hand, attempts to classify competences and requirements by means of a detailed description inventory in order to promote teachers’ self-assessment. Further frameworks, also at national level, underpin the fact that there is a great need for action in this field (cf. Deregözü, 2022). Numerous initiatives are also aimed at reducing the skills deficit, e.g., the “Quality Initiative for Teacher Training”, which promotes teacher training in Germany with a focus on the digital classroom environment (BMBF, 2022).

2.4.3 INCREASING TEACHER CONFIDENCE AND AUTONOMY

In many places, the digital challenge must be faced by the teachers without support, which often has a negative effect on their emotional state and results in a lack of motivation. A defensive attitude towards digital tools is the result, especially when digitalisation is imposed as an institutional mandate. This in turn leads to a negative teaching atmosphere: “Such negative attitudes often filter down to the learners, who can sense their teachers’ lack of enthusiasm (...) about the technologies that they are required to use, and this can have a detrimental effect on the learning environment on the whole.” (Stockwell & Reinders, 2019, p. 45). It therefore remains a desideratum that teaching institutes anchor their in-service training of teachers to a structured and regular form. The ability to use digital tools in a constructive way and to feel safe in doing so leads to greater autonomy for the teacher. This in turn increases the instructional choices to appropriately place these digital tools or content in the lesson planning. It is highly advisable, especially when there is a lack of institutional support, to build a peer network between teachers to exchange best practices. Within the QuILL project, operative tool 3 “Using digital resources in language teaching” provides an overview of important points in digital course organisation (setup, content creation, assessment, autonomy and motivation), which could be of particular interest to novice or seasoned teachers. This tool can be found in Module 2 of the Training Package available on the website of the QuILL project.

3. HOW TO USE DIGITAL RESOURCES AS AN INTEGRATION OR AN ALTERNATIVE TO CLASSROOM ACTIVITIES: TOOLS AND CASE STUDIES

Based on the previous considerations, it emerges that the use of digital resources brings with it endless challenges to language teaching, with special regard to LSP. Therefore, in this section we will describe how to use digital resources as an integration and /or as an alternative to classroom activities in university language programmes. In particular, we will show how websites, apps and podcasts can be applied to increase language teaching effectiveness and attractiveness within the current technology-based learning approaches. In this regard, we will provide practical examples of resources that have

been tested in language courses of Finnish as a Foreign Language, Italian as a Second Language and German as a Foreign Language.

3.1 SUPPORTING FINNISH SPOKEN LANGUAGE LEARNING USING THE PUHUTSÄ SUOMEE? WEB COURSE

Digital teaching materials help teachers to resolve specific issues in language teaching. With regard to Finnish language teaching, we may say that one of the most challenging aspects of learning Finnish is the great difference between the two main registers of the language, that is, standard and spoken Finnish. Standard Finnish is predominantly a written form of the language and spoken standard Finnish is limited only to very formal situations. Colloquial spoken Finnish differs from standard Finnish in pronunciation, morphology and syntax. In addition, the regional variants greatly differ from written and spoken standard language and colloquial Finnish (Karlsson, 2018, p. 443).

In terms of understanding speech in everyday communication, it is essential to know the key features of colloquial spoken Finnish. For a language learner, learning both speech and writing is of primary importance: written language is needed, for example, in education and professional life and when dealing with authorities, while communication and integration into Finnish society are facilitated by mastering the spoken language (Kuparinen, 2001, p. 15). Competence in standard Finnish is also fundamental for successful academic and professional qualification.

The role of spoken Finnish in L2 classroom has been widely discussed by teachers and researchers for decades, especially in the 1990s. Currently, teaching is mostly focused on standard Finnish as it is considered the best approach for a learner to learn the basic language structures. Learning both registers in the language parallelly would increase the already high number of word forms to learn, making the cognitive load critically affect student's learning outcomes, especially at the beginner level. On the other hand, spoken Finnish competence has been considered important by teachers for students not only for managing everyday communication but also addressing the point of view of inclusion, as the lack of competence in spoken Finnish might label the learner different from other interlocutors. The key to learn both language registers is to practise each in their own context: reading and writing for standard Finnish, listening and speaking for spoken Finnish. Most of the recent learning materials bring the colloquial spoken language out to some extent, but the emphasis in teaching still lies on standard Finnish. In addition, the time constraint in language courses often forces teachers to focus on standard Finnish.

Digital learning materials and tools play an important role in integrating self-directed learning and blended learning, supported by teacher. In spoken Finnish teaching, *Puhutsä suomee?* (Do you speak Finnish?) web course is a complete learning material that can be used as an introduction to spoken Finnish with a wide range of language proficiency levels (A1-B1). While other courses with digital teaching materials of Finnish as a second or foreign language especially for advanced learners quite often include contents focusing on lexical and grammatical competence (Kotilainen et al., 2022), this course is designed to meet the specific needs of Finnish learners to expand their knowledge on spoken Finnish both theoretically and practically. The materials are created and collected as part of the DIGIJOJOU project (2017–2020) for Finnish teaching in higher educational institutions by Herta Erkkilä (Centria University of Applied Sciences), Emmi Pollari (University of Helsinki) and Laura Uusitalo (Haaga-Helia University of Applied Sciences). The course materials are CC-licensed for teachers to share and use them for non-commercial purposes. The objectives of the course are to offer students theoretical and practical skills on understanding and producing spoken Finnish and to give them tools for better comprehension of the differences between spoken and written language registers.

The course material consists of five modules that contain situational videos, instructional videos, online exercises and suggestions and ideas on various oral and written assignments. At the beginning of each module, the learning objectives are very clearly explained. A smart device with headphones and microphone and Internet connection are required for taking up the course. The exercises use different kinds of applications and interactive multimedia tools for task-based learning, such as Zoom, YouTube, Padlet and WhatsApp. Situational videos present spoken Finnish for day-to-day

communication and informal discussions. The videos present very natural, simple and authentic spoken Finnish. They cover different speech situations that are familiar to intermediate and advanced language learners, but a systematic examination of the differences interest even a fairly advanced student as they offer a new perspective on spoken Finnish. Specific vocabularies are available in support of the situational videos, with explanation on the spoken Finnish forms and standard Finnish. Instructional videos have a more theoretical approach, focusing on spoken language morphology and syntax. In these 5–10-minute videos, the main differences between spoken and standard Finnish are explained by teachers. This course also offers a self-learning module that contains grammar summary, a complete glossary and numerous exercises with automated feedback in order to help students practise spoken Finnish. The course is completed with a bibliography of theoretical readings. The course well adapts for different teaching methods such as flipped classroom, contact and distance learning and independent study, and it serves both as a complementary study material and as a complete course.

The course has been successfully used as a complementary material in the final phase of a basic-level Finnish language course for the first-year university students at the University of Bologna since 2020. Its objectives are to introduce students to the main characteristics of the colloquial language in a comparative-contrastive perspective with respect to standard Finnish, to familiarise students with different registers of Finnish and to highlight the importance of both registers and their respective contexts of use. The resource includes the includes guidelines for self-study use, or in the case of blended learning, when accompanied by the teacher. The clarity of presentations, immediacy of icons and variety of exercises and rapidity of feedback have been positively received by students and teachers. This course encourages students to start using colloquial spoken Finnish alongside the standard language, thereby allowing also the classroom communication to evolve from a standard Finnish adjusted Teacher Talk towards a more natural spoken form of the Finnish language.

3.2 USING THE APP *FORLIVIAMO* TO SUPPORT ITALIAN L2 INCIDENTAL LEARNING

'Forliviamo' is a free web application for the incidental learning of Italian as L2 developed at the Department of Interpreting and Translation (DIT) of the University of Bologna (Forlì Campus). It provides international students with language, culture and practical information related to the city of Forlì – one of the cities of the Multicampus of the University of Bologna– and its surrounding areas (cf. Cervini & Zingaro, 2021); (Zingaro, *forthcoming*). Forliviamo was designed within the CALL-ER project (Context-Aware Language Learning in Emilia Romagna), funded by the Region Emilia Romagna (High Competences for Research and Technology Transfer, Human Resources for Intelligent Specialization) through a one-year research grant awarded to the author of this section, and it was inspired by a previous project, named ILOCALAPP (<http://www.ilocalapp.eu/>).

Forliviamo was developed within the methodological framework of Context-Aware Language Learning, Mobile-Assisted Language Learning (MALL), experiential and incidental learning.

Context-awareness is defined in the field of MALL as “a mobile computing paradigm in which applications can discover and take advantage of contextual information such as user location, time of day, neighbouring users and devices, and user activity” (Musumba & Nyongesa, 2013, Introduction section, par. 1). For example, mobile devices can be used in education to perform tasks related to the surrounding environment (e.g., using geolocalisation to search for places of historical and cultural interest or for information related to daily life and city services etc.).

Another concept that fits this app is the so-called incidental learning, which has been defined in general terms as “a by-product of some other activity, such as task accomplishment, interpersonal interaction, sensing the organisational culture, trial-and-error experimentation, or even formal learning” (Marsick & Watkins (2016, p. 12). In this regard, it is hoped that users of Forliviamo will improve their Italian indirectly, by surfing the app and creating experiences within the context where they are. The following paragraphs will provide an overall description of the structure and the features of the application.

3.2.1 STRUCTURE AND FEATURES

The app content is organised in six main categories: 1) *University life* at Forlì Campus, 2) *Eating and drinking out* (local recipes and restaurants offering local cuisine), 3) *Itineraries* on local architecture of the Middle Ages and fascism, 4) *Practical life* (health, post office etc.), 5) *Places* and 6) *Events* of the city and its surroundings. Each text has been assigned a level, albeit indicative of linguistic competence easily recognisable to users through the following captions placed under the titles of the texts: “Basic level”, “Intermediate level” and “Difficult level”.

Although Forliviamo was not designed with the specific objective of LSP learning, each section also allows the user to deal with domain-specific languages, such as: architecture, the Italian higher education system, the national health system, patient information leaflets and local gastronomy, with the latter also including ethnographic *realia* (Vlahov & Florin, 1970, p. 432), i.e., words and expressions for culture-specific material elements, such as local kitchen tools and food lexicon in both Italian and the Romagnolo dialect. Users have the opportunity to start from any of the categories, without a predefined path. However, in order to stimulate curiosity and promote active participation in the learning process, some extra elements of content, i.e., additional texts or multimedia, can only be unlocked through activities based on the concept of gaming, such as taking a quiz. This choice was made in accordance with the studies of Castañeda and Cho (2016), Rachels and Rockinson-Szapkiw (2017) and Kétyi (2015) that have shown the positive impact of the integration of a game-like application in a classroom on language learning.

3.2.2 TESTING

Forliviamo has been used both as an integration of the classroom activity and for self-learning on the topic of gastronomy within a course of Italian as L2 held by the author of this section, which involved a sample of 21 intermediate level students.

The lecturer divided the students in groups. Each group was assigned three texts (one basic, one intermediate, and one advanced level) and was asked to carry out reading and listening comprehension activities, with the latter to be done with headphones. At the end of the activity, groups reported to the rest of the class what they had learned. Another option is to assign the same procedure for self-learning. In this case students were asked to choose individually three texts within the same section, as long as there was an example of one basic, one intermediate, and one advanced level content, and to carry out reading and listening comprehension activities at home.

In both cases, at the end of the activities, students were submitted a questionnaire aimed to collect opinions on their comprehension of the contents and their perception of pleasantness and usefulness for learning Italian of both the specific contents consulted and the app as a whole.

What emerges from observing the data collected is the perception that the app made a clear contribution to learning new information on gastronomy, familiarising themselves with Forlì and Italian culture and also to improving the knowledge of Italian. Just to provide a few examples: 38% of respondents said that they learnt “a great deal of information about the typical dishes and wines of Romagna”, 47.6% responded “a lot of information”, 4.8% “enough information”, and 9.5% “few”. Moreover, all participants said they learnt new words and listed numerous examples in their free answers. Moreover, 43% evaluated the app as “very useful for improving Italian” 47.4% as “useful”, 4.8% “so-so” and 4.8% “of little use”. Similarly, the app is “very useful for discovering the city” for 57%, “useful” for 28.5%, ‘so-so’ for 9.5% and “not at all’ for 5%.

The feedback received from users provided several suggestions for implementing the app, that are now being developed by the IT section of the Forliviamo team, such as: improving geo-localisation, adding audio files with the pronunciation of the words given in the pop-up windows and a lot more.

In conclusion, it emerges from the analysis of these data that the app was highly appreciated. Users rated it as a very useful tool from both a didactic and a tourist point of view for the discovery of gastronomy and its Italian and Romagnolo vocabulary, and for the improvement of Italian language skills.

3.3 USE OF PODCASTS IN LSP TEACHING AND LEARNING

A *podcast* is any *downloadable digital file*, in audio, video or audio-text/video-text format, usually released in a series of episodes that forms a collection. Podcasts are popular technological products, which help teachers to bring more variety to the tools they use in their teaching (Indahsari, 2020, p. 104).

3.3.1 WHY PODCASTS?

Given their popularity, podcasts have been adopted in language teaching, as an incorporated technological support for developing competences (cf. par. 2.1, European Commission, 2018, p. 2). Audio or video podcasts (being available everywhere and any time) may aid students and teachers link together out of the classroom situations as well as bringing real-world situations into the classroom, keep the contents of the teaching action up-to-date (motivation enhancement), help improve listening, introduce socio-cultural aspects of the target language (the latter being especially important for specific professional or disciplinary areas such as medicine, nursing, tourism, social sciences), and illustrate LSP terminology and grammar with real voices.

However, the search for quality podcasts of Italian for special purposes (ISP) is not easy, given the overwhelming amount of material in EnglishSP. Teachers must therefore carefully search for and select appropriate podcasts for their teaching activity. Collections can be found on web-radio, web-TV, specific podcast internet sites, or applications (Spotify, Audible).

What we propose here is a classroom activity where a podcast from a web-radio (<https://storielibere.fm>) is used (podcast content: interviews with breast cancer sufferers).

3.3.2 EXPLOITATION OF A PODCAST FOR LSP

The activity was used in a class of intermediate (B1) students of ISP at the University Language Centre (Bologna University): seven students of Medicine and Surgery and two students of Pharmacy, all in their twenties. These types of students are used to spending a great deal of time studying, memorising specific lexis, and transferring into practice the notions learnt. Furthermore, they were about to start their training experience in Italian hospitals, where they have to interact with Italian (native/non-native) speakers (patients and staff).

The teaching aims were therefore to improve listening and writing skills, because these features both in students' in-hospital training and in their university classes. The activities were global listening (to grasp the general meaning); discrete listening (filling the gaps in the first transcribed part, and dictation of the second part, slowing down the original podcast); paragraph division and title insertion in the transcription, for summarising skills; oral summary of the whole podcast.

In order to gather the students' opinions on the podcast activity, an anonymous questionnaire with closed and open questions was administered via a Google module. The reactions from the students were unanimously positive about the listening and writing activities (e.g., dictation). Students also found useful the final summarising activities.

The main difficulty encountered by the lecturer was to select a suitable podcast, to download it, and to manipulate it. Even though the preparation is extremely time-consuming, compared to ready-made audio, podcasts are more attractive and more informative for learners, reaching the goal of enhancing motivation and facilitating learning.

3.4. DEUTSCH IM JOB – PROFIS GESUCHT: ENHANCING SECTOR-SPECIFIC DISCOURSE

The OER *Deutsch im Job – Profis gesucht* is a web course provided by the international broadcaster Deutsche Welle (DW). It helps learners and language teachers to approach sector-specific discourse and vocabulary by means of authentic spoken language material as well as contextual learning tasks.

3.4.1 FEATURES OF THE WEB COURSE

The Audio and video material provide learners with real-life situations and convey information and terminology regarding five different professional sectors: tourism/gastronomy, retail industry, nursing, installation engineering and facility cleaning. It is worth underlining that the comprehension of spoken German is a crucial competence for L2 learners, especially in degree programmes such as those at the Department of Interpreting and Translation (DIT), University of Bologna, which focus on linguistic mediation.

In this section, we will examine the module on gastronomy. The online language teaching resource comprises multimedia learning content in the form of (subtitled) video and audio material, as well as exercises with a focus on listening comprehension and vocabulary. Thus, all essential language skills (listening, reading, writing, and speaking) are covered by the course, to some degree. The focus on the vocabulary which is conveyed via different channels (spoken, image, written) is in line with Koeppel's (2013) claim that the multimodal processing of new vocabulary is more efficient. Although the aim of the resource is rather to convey sector-specific vocabulary and typical phraseology, each of the seven units also deals with grammatical issues that are contextually embedded and particularly relevant for the gastronomy sector, e.g., informal imperative (unit: staff meeting), time and date formats (unit: booking), modal verbs (unit: ordering), subjunctive II as a polite form (unit: paying the bill).

3.4.2 TESTING: STUDENTS' RESPONSES

The resource has been tested by thirteen intermediate level students of the Department of Interpreting and Translation. The students were asked to complete the online learning path on the topic of gastronomy. In advance, they were given a questionnaire with both open and closed questions. The students were asked to comment on whether they found the learning materials to be intuitive, motivating and useful, and whether they thought they contributed to the development of their German language skills.

All students evaluated the learning unit positively and found it both user-friendly and motivating. One student tested the course on a smartphone and reported that the navigation was user-friendly, thus confirming the responsive nature of the design. They appreciated the diversity of input and exercises as well as the immediate feedback on completed exercises. Several students underlined their appreciation of a story-driven approach supported by video clips providing authentic spoken German in real-life contexts. The provided transcripts and subtitles were found to be of great help in aiding comprehension.

As for the development of students' German language skills, expansion of their vocabulary (through cloze tests and matching exercises) and listening skills (through comprehension exercises) were mentioned most frequently by students (85%), while communicative competence and grammatical knowledge were mentioned by only a few (15%). This might be explained by the fact that grammar issues are only explained and not trained by the exercises, and that the speaking exercises do not provide the student with feedback. While learners had the means to autonomously assess their performance for listening and vocabulary exercises, the missing feedback for speaking exercises and pronunciation tasks can be bridged by the native speaker teacher in the classroom, as will be shown in the following paragraph.

3.4.3 GOING A STEP FURTHER: INTEGRATING THE OER

Although the OER *Deutsch im Job – Profis gesucht: Gastronomie* can be used very effectively for self-learning, there are some skills that might be further developed through additional classroom activities. In fact, in an L2 German language class, within a bachelor's degree course in Intercultural and Linguistic Mediation at the DIT, we used some of the transcriptions to simulate dialogues and analyse the communicative structures. The aim was to strengthen students' communicative competence. In fact, both Imo (2013) and Bachmann-Stein (2013) claim that the analysis of spoken language based on transcripts enhances the communicative competence. Moreover, the text formats (interviews and

real-life conversations in a professional setting) of this OER are especially suitable for role play exercises.

This approach has proven to be efficient in enhancing the students' speaking abilities and applying the previously acquired knowledge from the module (sector-specific vocabulary and typical phraseology) in a communicative context in the classroom. Hence, the combination of digital resources and focused class-room activities increased both efficiency and attractiveness of the language teaching.

4. CONCLUSION

This chapter focused on the opportunities related to the use of digital resources as integration or as an alternative to classroom activities in Higher Education language courses. It addressed the challenges in the use of digital resources in teaching, with respect to current theoretical approaches and the ongoing need for lecturers and all actors in educational institutions to continuously expand their knowledge and be flexible to the permanent change to which digital resources are subject. It described the strategies adopted to use digital resources to increase language teaching effectiveness and attractiveness by providing practical examples of four case studies on the use of digital resources for learning Finnish, German and Italian in university language courses.

This contribution aimed to show the advantages, criticalities and challenges faced by lecturers today in using technology as a supplement and/or alternative to the classroom. In doing so, we hope that these reflections shared here may be useful to all those involved in educational institutions to encourage reflection and stimulate further investigation.

LINKS TO EXTERNAL RESOURCES

Digital Competence of Educators: https://joint-research-centre.ec.europa.eu/digcompedu_en

ICT for language Teachers: <http://ict4lt.org/>

EQUALS: <https://www.eaquals.org/>

QuILL, Module 2, case study 2: https://quill.pixel-online.org/TP_module02.php?st=7#guide

QuILL, OT 3: Using digital resources in language teaching: https://quill.pixel-online.org/TP_module02.php?st=8#guide

Puhutsä suomee? Web course. [cit. 2022-10-18]. Available on: <http://puhutsäsuomee.fi>

Forliviama [online]. [cit. 2022-01-20]. Available on: <http://www.forliviama.it/>

Tits up! Web-radio podcast. Available on: <https://storielibere.fm/tits-up-airc/>

Deutsch im Job – Profis gesucht. Web course. [cit. 2022-10-24]. Available on: <https://learnergerman.dw.com/de/deutsch-im-job-profis-gesucht/c-39902336>

REFERENCES

- Almeida, N. (2017). Open Education Resources and Rhetorical Paradox in the Neoliberal Univers(ity). *Journal of Critical Library and Information Studies*, 1(1).
- Anderson T. & Dron J. (2011). Three generations of distance education pedagogy. *International Review of Research in Open and Distance Learning*, 12(3), 80-97.
- Bachmann-Stein, A. (2013). Authentische gesprochene Sprache im DaF-Unterricht – Pro und Contra. In S. M. Moraldo & F. Missaglia (Eds.). *Gesprochene Sprache im DaF-Unterricht* (pp. 39-58). Winter.

- Bundesministerium für Bildung und Forschung (2022). Digitalisierung in der Lehrkräftebildung nach dem Digital Turn, BMBF.
- Carretero Gomez, S. & Vuorikari, R., & Punie, Y. (2017). *Digcomp 2.1: The Digital Competence Framework for Citizens with eight proficiency levels and examples of use*. Publications Office of the European Union.
- Castañeda, D. A. & Cho, M. H. (2016). Use of a game-like application on a mobile device to improve accuracy in conjugating Spanish verbs. *Computer Assisted Language Learning*, 29(7), 1195–1204. <https://doi.org/10.1080/09588221.2016.1197950>
- Cervini, C. & Zingaro, A. (2021). When learning Italian as a Second Language, tourism and technology go hand in hand. *7th International Conference on Higher Education Advances (HEAd'21)*, 341–349. <https://doi.org/10.4995/head21.2021.12961>
- Compton, L. K. L. (2009). Preparing language teachers to teach language online: a look at skills, roles, and responsibilities. *Computer Assisted Language Learning*, 22(1), 73-99.
- Council of the European Union. (2018). *Council Recommendation of 22 May 2018 on key competences for lifelong learning*, 2018/C 189/01. European Council.
- Deregözü, A. (2022). Foreign Language Teacher Competences: A Systematic Review of Competency Frameworks. *Ankara University Journal of Faculty of Educational Sciences*, 55, 219-237.
- Downes, S. (2019). Recent work in connectivism. *European Journal of Open, Distance and e-Learning*, 22(2), 113-132.
- EAQUALS. (2016). The Equals Framework for Language Teacher Training & Development. <https://www.equals.org/resources/the-equals-framework-for-language-for-academic-purposes-teacher-training-development/>
- Fragai, E. & Fratter, I., & Jafrancesco, E. (2017). *Italiano L2 all'Università*. Aracne editrice.
- Gacs, A. & Goertler, S. & Spasova, S. (2020). Planned online language education versus crisis-prompted online language teaching: lessons for the future. *Foreign Language Annals*, 53(1), <https://onlinelibrary.wiley.com/doi/epdf/10.1111/flan.12460>
- Imo, W. (2013). Rede und Schreibe: Warum es sinnvoll ist, im DaF-Unterricht beides zu vermitteln. In S. M. Moraldo, S. M. & F. Missaglia (Eds.). *Gesprochene Sprache im DaF-Unterricht* (pp. 1-24). Winter.
- Indahsari, D. (2020). Using podcast for EFL students in language learning. *J. Eng. Educ. Society*, 5(2). <https://doi.org/10.21070/jees.v5i2.767>
- Jonassen, D. H. & Rohrer-Murphy, L. (1999). Activity Theory as a Framework for Designing Constructivist Learning Environments. *Educational Technology Research and Development*, 47(1), 61-79. <https://link.springer.com/content/pdf/10.1007/BF02299477.pdf>
- Karlsson, F. (2018). *Finnish. A Comprehensive Grammar*. Routledge.
- Kétyi, A. (2015). Practical evaluation of a mobile language learning tool in higher education. *Critical CALL – Proceedings of the 2015 EUROCALL Conference* (pp. 306–311). Research-publishing.net. <https://doi.org/10.14705/rpnet.2015.000350>
- Koehler, M. J. & Mishra, P. (2009). What is technological pedagogical content knowledge? *Contemporary Issues in Technology and Teacher Education*, 9(1), 60-70.

https://www.researchgate.net/publication/241616400_What_Is_Technological_Pedagogical_Content_Knowledge

- Koepfel, R. (Ed.) (2013). *Deutsch als Fremdsprache: Sprachwerblich reflektierte Unterrichtspraxis*. Hohengehren: Schneider-Verlag.
- Kotilainen, L. & Sundvall, E. & Komppa, J., & Niinivaara, J., & Udd, T. (2022). Edistyneen suomenoppijan digitaaliset oppimateriaalit – nykytilanne ja uusia suuntia. *Kieli, koulutus ja yhteiskunta*, 13(3).
- Kuparinen, K. (2001). Suomen kielen kaksi koodia oppijan asenteissa ja kielenkäytössä. In P-R. Piiparinen-Rintaluoma (Ed.). *Suomi toisena kielenä ja variaatio*. 4. 7-86. Helsingin yliopiston suomen kielen laitos.
- Marsick, V. J. & Watkins, K. (2016). *Informal and Incidental Learning in the Workplace* (Routledge Revivals), Routledge.
- Mishra S. (2017). Open educational resources: removing barriers from within. *Distance Education*, 38(3), 369-380.
- Musumba, G. W. & Nyongesa, H. O. (2013). Context awareness in mobile computing: A review. *International Journal of Machine Learning and Applications*, 2(1). <https://doi.org/10.4102/ijmla.v2i1.5>
- Punie, Y. (Ed.) & Redecker, C. (2017). *European Framework for The Digital Competence of Educators: Digcompedu*. Publications Office of the European Union.
- Rachels, J. R. & Rockinson-Szapkiw, A. J. (2017). The effects of a mobile gamification app on elementary students' Spanish achievement and self-efficacy. *Computer Assisted Language Learning*, 31(1-2), 72-89. <https://doi.org/10.1080/09588221.2017.1382536>
- Rivoltella, P.C. (2018). The third age of the media. *Sciendo – Research on Education and Media* 10(1) <https://doi.org/10.1515/rem-2018-0001>
- Rivoltella, P.C. (Ed.) (2021). *Apprendere a distanza. Teorie e metodi*. Raffaello Cortina Editore.
- Siemens, G. (2006). *Knowing Knowledge*. https://www.knowingknowledge.com/2006/10/knowing_knowledge_pdf_files.php
- Stickler, U. & Hampel, R., & Emke, M. (2020). A Development Framework for Online Language Teaching Skills. *Australian Journal of Applied Linguistics*, 3(1), 123-151.
- Stockwell, G. & Reinders, H. (2019). Technology, Motivation and Autonomy, and Teacher Psychology in Language Learning: Exploring the Myths and Possibilities. In *Annual Review of Applied Linguistics*. 39. 40-51. <https://doi.org/10.1017/S0267190519000084>
- Vlahov, S. & Florin, S. (1970). Neperovodimoe v perevode. Realii. *Masterstvo Perevoda*. 6. 432-456. Sovetskij pisatel.
- Vuorikari, R., Kluzer, S., & Punie, Y. (2022). *Digcomp 2.2: The Digital Competence Framework for Citizens - with new examples of knowledge, skills and attitudes*. Publications Office of the European Union.
- Wiley, D., & Hilton III, J. L. (2018). Defining OER-Enabled Pedagogy. *International Review of Research in Open and Distributed Learning*, 19(4). <https://doi.org/10.19173/irrodl.v19i4.3601>
- Zawacki-Richter, O., Conrad, D., Bozkurt, A., Aydin, C. H., Bedenlier, S., Jung, I., Stöter, J., Veletsianos, G., Blaschke, L. M., Bond, M., Broens, A., Bruhn, E., Dolch, C., Kalz, M., Kerres, M., Kondakci, Y., Marin, V., Mayrberger, K., Müskens, W., Naidu, S., Qayyum, A., Roberts, J., Sangrà, A., Loglo, F. S., Slagter van Tryon, P. J., & Xiao, J. (2020). Elements of Open Education: An Invitation to Future Research.

International Review of Research in Open and Distributed Learning, 21(3), 319–334.
<https://doi.org/10.19173/irrodl.v21i3.4659>

Zingaro, A. (forthcoming). Forliviamo: How to incidentally learn Italian through a context-aware mobile application. In Ó. Ferreiro-Vázquez & A. T. Varajão Moutinho Pereira Correia (Eds.), *Technological innovation put to the service of language learning, translation and interpreting: Insights from academic and professional contexts*. Peter Lang.

ACKNOWLEDGMENTS

The paper is the result of the collaboration of the authors. In particular, Anna Zingaro wrote the introduction to section 2 and 3, subsection 3.2 and the conclusions to the chapter, whereas the general introduction to the chapter is a joint work with Sandro M. Moraldo; Luisa Bavieri wrote subsection 2.1; Paola Polselli wrote subsection 2.2; Teresa Quarta wrote subsection 2.3; Jürgen Ferner wrote subsection 2.4; Sanna Maria Martin wrote subsection 3.1; Marina Artese wrote subsection 3.3; Sandra Nauert worked at subsection 3.4. General supervision and proofreading were carried out by Sandro M. Moraldo, Sandra Nauert and Anna Zingaro.