Building Bridges Towards Self-regulation: The Goal-Setting Behaviour of Adult Language Learners in MOOCs

Thesis

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Building Bridges Towards Self-regulation: The Goal-Setting Behaviour of Adult Language Learners in MOOCs

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BA Modern Languages
MA English Language Teaching and Applied Linguistics

Thesis Submitted to The Open University for the Degree of Doctor of Philosophy

Faculty of Wellbeing, Education and Language Studies
The Open University
January 2022
A Note to the Reader:

This thesis consists of words and images that represent the digital experience of adult language learners using Massive Open Online Courses for different language learning purposes.

Read it calmly, carefully, and joyously.
Abstract

Massive Open Online Courses (MOOCs) offer educational opportunities to a wide range of learners. Language learners can use these courses to develop knowledge and practise language skills needed daily or in different areas of specialisation. However, learners may not benefit from this learning opportunity if they do not know how to self-regulate their learning. Self-regulated learners employ various processes to master their learning and accomplish their goals. The literature shows that goal setting is a helpful self-regulatory process that contributes to a successful MOOC learning experience. Goal setting is the driving force behind any educational intention and can provide the basis for a strategic plan formulated by learners at the start of a learning task.

Moreover, this self-regulatory process holds the key to activating, monitoring, and assessing an effective learning process. Nonetheless, goal-setting support in these online courses is scarce. Research on goal setting in MOOCs has not previously investigated the personal learning goals that learners bring to these non-formal learning environments. This represents a twofold omission in the field of Computer-Assisted Language Learning (CALL), in which MOOCs are themselves an under-researched area. Although CALL practitioners have gradually integrated MOOCs into the L2 classroom, little research has examined adult learners' goals during their MOOC-based learning.

To address this gap in the literature, this research uncovers the goal-setting behaviour of 19 adult learners who studied MOOCs for four weeks as part of their classroom-based language courses. To achieve this aim, the researcher gathered and analysed 38 semi-structured interviews, 71 weekly monitoring surveys, 19 open-ended questionnaires and 19 MOOC screenshots. The findings of this study advance the field of CALL by providing a comprehensive picture of the different aspects of language, traditional and non-traditional goals, and MOOC elements involved when L2 adult learners self-regulate their learning online.
This thesis is dedicated to the loving memory of my grandparents.

Nono - You were always proud of my academic accomplishments.

Nona – You brought me back to life.

This one is for both of you.
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I would like to express my immense gratitude to my supervisors, Dr Timothy Lewis, Dr Tita Beaven, and Prof Rebecca Ferguson, and their unconditional support since 2017. I could not have asked for a better team to guide me through this transfiguration process: I started as a curious and naïve researcher, and soon, I will become a doctor who will never stop learning.

Tim, you taught me a variety of words and expressions that helped me improve my writing in English. Tita, you showed me ways to make my writing less odd and clumsy. Rebecca, you always reminded me to write consistently and connect each idea, paragraph, and chapter of this thesis to my research questions. We also forged a friendship full of helpful academic advice, kind words and check-in emails/calls that comforted me while experiencing a pandemic and receiving upsetting news. All of you enlightened me on the complexities of preparing, conducting, and completing a PhD. Thank you for trusting in this research and trusting me while I was learning to trust myself.

I would also like to thank The Leverhulme Trust and The Open University (OU) for funding this research. Thank you to my participants who decided to be on board this adventure for more than a month! Thanks to the gatekeeper and teachers of each language group in the Community Learning of Milton Keynes who opened their classroom doors to this online learning experience. A special thanks to Ana Beaven, who inspired me to take her MOOC-classroom integration idea to another level and for helping me during my stay in Ferrara. It was a field trip full of cultural richness and endless delicious food.

Thanks to The OU for allowing me to be part of an international PhD community that included The Leverhulme cohort and other PhD students from IET and WELS. Shout out to my friends and colleagues from The Chocolate Room (Gosia, Irina, Quan, Vasudha, Vicky, Shi Min, Maina, Saman, Dimitrios, Pin, and Khadija) and The Codebreakers Room in IET (Jake, Jess, Jo, Lesley, and Natalie). A special thanks to Tina, Paco, Raysa, Isa, Hilal, Josmario, Wendy and Bart. You showed me that determination, hard work, and well-being are essentials in a PhD. Allow me to add one more: collaboration. Indeed, doing a PhD is not a piece of cake, but if you work with others and learn from them, your PhD journey will not be as lonely as they say.

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The end of this chapter in my life would not be complete without the support of my parents, my partner in crime and my dearest friend Laura. Mamá & Papá, your daily text messages and weekly calls brought me life and joy. I will be eternally grateful to both of you for your love, wise words, and valuable life lessons that comforted me during the hard times of this PhD. Gracias por todo, los amo mucho. To Cosmin, you have been there since day one of this roller-coaster I called PhD life. Thank you for constantly reminding me that *totul va fi bine*. Laura, merci for your kindness and sincere friendship. I cannot wait to see all of you again!
Declaration of Authorship

I declare that the work presented within this thesis is my own. Some sections of this thesis have been edited and published or are being prepared for publication. Except where otherwise acknowledged, the work presented is entirely my own. Published works during my PhD are listed below.

References to Relevant Work


Conde Gafaro, B. (2019). Repurposing MOOCs for self-regulated language learning in an English for academic purposes course. In A. Comas-Quinn, A. Beaven, & B. Sawhill (Eds.), New Case Studies of Openness in and Beyond the Language Classroom (pp. 115–128). Research-publishing.net. https://doi.org/10.14705/rpnet.2019.37.970
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<td>CALL</td>
<td>Computer-Assisted Language Learning</td>
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<tr>
<td>CEFR</td>
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<td>Ed tech</td>
<td>Educational Technology</td>
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<td>ESP</td>
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<td>Reflexive Photography Caption</td>
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<td>SRL</td>
<td>Self-regulated Learning</td>
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<td>Universidad Nacional de Educación a Distancia [National University of Distance Education]</td>
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1 Introduction

Mastering a second or foreign language (L2) is a lifelong activity that requires commitment, motivation, and the adoption of social and learning skills. As an L2 learner of English and French, the author of the present study is familiar with the learning processes and motivational factors involved in this lifelong activity. Language learning "can be enhanced by giving learners a more active role in managing their own learning as well as providing the means for learners to connect the in-class and out-of-class learning" (Richards & Rodgers, 2014, p. 332). As a language teacher, the researcher is also interested in exploring innovative ways to engage learners to practise and develop their language competencies using online resources and digital technologies inside and outside the classroom.

Learning in Massive Open Online Courses (MOOCs) for language learning purposes has captured the researcher’s attention since she completed her master’s degree. She has studied French in a MOOC and has co-designed and facilitated a Spanish MOOC for academic purposes. These experiences have enabled her to witness the complexities of the MOOC universe through the lenses of learners, course designers, and mentors. She has learned the importance of assuming an active role in MOOCs, meaning that one should plan, monitor, and review one’s learning to learn more effectively. In other words, regulating one’s learning is essential when studying in these online courses.

Self-regulation of the language learning process occurs when learners deploy metacognitive, cognitive, and social skills to enhance their language learning (Oxford, 2017; Read, Bárcena & Rodrigo, 2010). However, L2 learners might need appropriate scaffolding if they do not know how to self-regulate, especially when learning beyond the classroom. The researcher decided to take a leap into the unknown and explore how L2 learners assume responsibility for their learning—mainly when they study in non-classroom environments such as MOOCs.

---

1 The researcher acknowledges that multiple characteristics are associated with MOOCs, such as massiveness and openness. Yet, the researcher referred to them as online courses in some sections of this thesis, especially to distinguish between classroom-based courses and MOOCs.
1.1 Background
From an educational perspective, the COVID-19 pandemic reminded educators, learners, and researchers of the existence of MOOCs and the set of strategies and study skills learners should develop to deal with unprecedented circumstances in the future. The pandemic disrupted traditional classroom-based education. One of the outcomes of disruption entails a radical systemic change that overtakes a sector (Weller, 2020), which became a reality in 2020. The massive spread of the virus forced the closure of schools and universities, which led teachers and learners to shift from classroom learning to distance learning. Online teaching and learning temporarily replaced face-to-face education during this significant social shift.

MOOCs generated significant attention in the media and within the educational technology (ed tech) community in 2012 (Pappano, 2012; Weller, 2020). The pandemic brought back that hype around these online courses and unveiled their unknown status for most people who aimed to continue learning regardless of the unforeseen circumstances (Impey & Formanek, 2021). Over 30 million people enrolled in MOOCs offered by leading platform providers, including Coursera, edX and FutureLearn, during the COVID-19 outbreak (Shah, 2020). It is fair to say that the impact of the pandemic on education led to an increased interest in online learning.

Using these online courses to support learning at a distance and expand the curricula of university courses also regained popularity amidst the pandemic. Reda and Kerr (2020) reported that online learning content from MOOCs, offered on the Federica.eu platform, was shared across Italian universities and accessed by many learners to support their transition to virtual education. They also pointed out that around 100 academics at University Naples Federico II were "integrating Moocs from Federica and using Microsoft Teams to hold lessons" in response to the coronavirus emergency (Reda & Kerr, 2020, para. 10). Integrating these online courses into formal education has been a common practice since 2013 (Weller, 2020). Nevertheless, using MOOCs, alongside other technologies, helped bridge the gap between classroom-based learning and distance learning during those difficult times for humanity.

People also rekindled their interest in L2 learning and enrolled in MOOCs to learn or practise a target language. The annual review of trends in online education published on The Report by Class Central, a search engine and reviews site for free online courses, placed foreign languages among the top ten most studied subjects in MOOCs amidst the pandemic (Shah, 2020). Language educators also combined these online courses with video teleconferencing software programs as part of their curricula to support L2 learners’ writing skills and enhance academic writing courses affected by the coronavirus pandemic (Zhang & Chen, 2021). However, learning a language in a MOOC is not a new phenomenon; educators and designers have developed MOOCs
for language learning purposes since 2014 (Bárcena & Martín-Monje, 2014). These online courses have also been considered to scaffold language learning at a distance (Gimeno-Sanz, 2021). MOOCs have continued to offer educational opportunities to L2 learners interested in acquiring knowledge in their target language or practising language skills to communicate with others in daily or specific situations.

Nonetheless, MOOC-based learning does not appeal to everyone (Weller, 2020). Many people disengage from this online learning activity, "particularly in the first few weeks" (Littlejohn, Hood, Milligan, & Mustain, 2016, p. 47). The literature shows that dropout rates surpass completion rates in these online courses (Reparaz, Aznárez-Sanado & Mendoza, 2020). Another misgiving is that, while learners can enrol for free, they are usually asked to pay "for certification, to sit a proctored exam, to receive course credit or to work towards a degree" (Littlejohn & Hood, 2018, p. 10). This paywall restricts access to some of the online learning material and further learning opportunities for learners who do not have the means to pay for a premium version of the course.

Similarly, the core principle of promoting learning at scale is questioned since MOOCs also leave behind individuals who do not have the habit of learning independently (Littlejohn & Hood, 2018). It is claimed that "many students do not sufficiently self-regulate their learning" (Moos, 2018, p. 251). Self-regulated learners benefit from MOOC-based learning since they deploy a range of skills to connect, find information and critically evaluate their learning progress on their own. According to Zimmerman (2015),

Self-regulated learning refers to how students become masters of their own learning processes. Neither a mental ability nor a performance skill, self-regulation is instead the self-directive process through which learners transform their mental abilities into task-related skills in diverse areas of functioning, such as academia, sports, music, and health (p.541).

Indeed, learners who do not know how to self-regulate their learning are at a disadvantage compared to those who effectively master their MOOC-based learning. Experts in computer-assisted language learning (CALL) also argue that L2 learners need to develop strategies to self-regulate their studies in MOOCs suited to self-access or non-formal learning (Gimeno-Sanz, 2021). Although this may become a limitation for learners willing to embark on online learning, it does not mean that these courses should be disregarded at all. A participant in the present study also supports this point: "I would have some concern if there were no online courses, if people couldn't access online courses because you're taking something away that might be the start of something for people" (INV2, Sofia). Taken together, learners benefit from MOOCs if they know
how to self-regulate their online learning activity, and appropriate scaffolding should be provided in these courses to ensure no learner is left behind.

After being around for over a decade, MOOCs have demonstrated that they have the capacity "to be more than a passing fad" (Godwin-Jones, 2014, p. 12). These online courses have become a potential means of enriching subject-specific knowledge and skill-based subjects, such as foreign languages. These online courses have provided learning opportunities at scale. While MOOCs enable learners to study at their own pace, these courses have also challenged the learning behaviour of learners who might know how to sufficiently self-regulate their learning. Altogether, MOOC-based learning has become a fantastic opportunity to build bridges towards self-regulation.

1.2 Rationale

Research has shown that "self-regulation is an essential educational skill that influences motivation, learning, and achievement" (Schunk & Greene, 2018, p. 13). MOOC researchers have explored the role of MOOCs as a means of self-regulation (Milligan, Littlejohn, & Hood, 2016). They draw on models of self-regulated learning (SRL), particularly those proposed by Zimmerman (Cerón et al., 2020; Alonso-Mencía et al., 2020). MOOC researchers have also investigated processes suggested in those SRL models, such as goal setting, strategic planning, and help-seeking (Kizilcec, Pérez-Sanagustín and Maldonado, 2017). Kizilcec et al. (2017) found that goal setting is one of the critical factors underlying attrition and achievement in these online courses.

Goal setting holds the key to self-regulation. It entails "identifying intended actions or outcomes" (Kitsantas et al., 2017). This self-regulatory process guides learners in their decision-making process regarding what to study and how much time they allocate to their studies. Goal setting also directs other learning processes to engage in a task and evaluate one's performance after dealing with the learning task (Zimmerman & Moylan, 2009). Although there is ample evidence in the literature that shows how this self-regulatory process helps learners succeed when studying in MOOCs, little do we know about the goals learners set when learning in those non-formal learning environments. Likewise, research to date has mostly investigated the self-regulating behaviour of younger learners, excluding an older age group of learners, who are rarely considered in the research into and design of these online courses (Mac Lochlainn, Nic Giolla Mhichil, & Beirne, 2021). The personal learning goals of adult learners in MOOCs are yet to be explored.
This lack of insights into personal learning goals is associated with the methodologies adopted when investigating goal setting in MOOCs. Previous studies have mainly relied on quantitative methods to study the online learning activity of learners in these courses (Zhu, Sari & Lee, 2018; Veletsianos & Shepherdson, 2016). This conventional trend in terms of methodologies emphasises the need to design instruments that can register the personal learning goals of learners in MOOCs. Adopting qualitative methodologies to explore the goal-setting behaviour of MOOC learners becomes an urgent call, especially when previous studies have shed light on a disparity between the goals of online course providers and the goals of learners (Henderikx, Kreijns, & Kalz, 2017; Henderikx & Kalz, 2019).

Another area that has been a focus for several authors is how the self-regulating behaviour of learners can be scaffolded in these online courses (Wong et al., 2017). Ongoing research has investigated different approaches to supporting MOOC learners when exploring a "structured open, online learning opportunity" (Clow, 2013, p. 185). A small body of research has attempted to design and embed prompts to scaffold goal setting in MOOCs. However, the goals included in those prompts evoke traditional goals focused on completion or gaining a certificate; these goals do not align with most learners' educational intentions (Loizzo, Ertmer, Watson, & Watson, 2017). No study has yet examined MOOC elements that influence adult learners' efforts towards goal attainment, as no study has yet explored what kinds of goal adult learners formulate by themselves in a MOOC.

These gaps in the literature of MOOCs echo the gaps identified in the context of CALL. While CALL researchers and practitioners have integrated MOOCs into the L2 classroom, they have focused on issues unrelated to the areas of interest in this study. To date, no study has delved into the self-regulating behaviour of L2 learners in language MOOCs (Sallam, Martín-Monje & Li, 2020; Alonso-Mencía et al., 2020). MOOC-based learning "require[s] individual learners to self-regulate their own learning, determining when, how and with what content and activities they engage" (Hood, Littlejohn, & Milligan, 2015, p. 83). Previous CALL research has not addressed the linguistic content L2 learners focus on the most when learning in a MOOC. It has neither explored language-related goals set by adult learners during a MOOC-class integration practice. Thus, several gaps must be addressed in the context of MOOCs and CALL regarding SRL, mainly relating to language focus, goal-setting process, and the support available in these courses for adult L2 learners to achieve their personal goals. Understanding these three aspects involved in MOOC-based learning is essential for building future studies.
1.3 Research Aims

The Open University promotes educational opportunity that aims to be open to ideas, methods, places, and people of different ages (The Open University, 2021). While conducting this study, the researcher was driven by this inclusive approach to learning, which entails that nobody should be told that they are too old to enrol in a language course either face-to-face or, better yet, in a MOOC. One of the aims of this thesis was to embrace an age-inclusive approach to study the online learning behaviour of adult L2 learners, who are usually left behind in this research context. Similarly, the researcher wanted to understand adult learners' interests and driving forces to engage in lifelong language learning. Hence, she aimed to respect learners' identity by acknowledging their personal goals during this study.

Moreover, this research aimed to build upon the concept of SRL to investigate goal-directed behaviour in MOOCs. This research also sought to inform the theory of goal setting, which can be applied under different learning contexts and with a wide range of individuals; after all, "goal setting is an open theory" (Locke and Latham, 2012a, p. 4). Lastly, the researcher aimed to advance the field of CALL by providing new insights into the aspects of language, personal learning goals and goal-setting support involved in MOOC-based learning from the perspective of adult L2 learners.

As outlined in Section 1.2, the researcher identified several gaps in the literature on MOOCs and LMOOCs, which called for more research on personal learning goals and goal-setting support. It was appropriate and reasonable to apply the construct of SRL, with its theoretical origins in social cognitive theory, to the context of online language education, particularly when researching the adaptive behaviour of LMOOC learners. The primary focus of this investigation was on the conscious ways in which second language learners regulated their own learning activity, rather than on the (perhaps less conscious) processes involved in the acquisition of a second language. Therefore, a cyclical phase model of self-regulation that incorporated metacognitive processes with self-motivation beliefs (Zimmerman & Moylan 2009) was chosen to inform the researcher's understanding of the self-regulatory process of goal setting and its development over a short period of online study.

Additionally, the researcher opted for goal setting theory and associated ideas developed by educational psychologists around this metacognitive process. This helped her to frame her understanding of the personal learning goals set by the adult language learners depicted in this thesis, thereby expanding the application of an open theory which has rarely been considered in qualitative language learning research. A lack of insight into the self-regulating behaviour of adult L2 learners and goal-setting behaviour in MOOCs and LMOOCs called for extensive use of
educational (rather than applied linguistic) theories to address these main gaps in knowledge. Using the cyclical model of self-regulation alongside goal setting theory in this thesis provides the basis for future studies aiming to integrate both (generic) educational theories and second language acquisition theory into a compound construct. This basis will give future researchers an instrument with which to expand our knowledge of self-regulated language learning in MOOCs. Nonetheless, second language acquisition theory was brought to bear when analysing the linguistic focus of participants.

SRL is regarded as "a deep and complex construct that encompasses a constellation of components and occurs in myriad different contexts" (Patrick & Middleton, 2002, p.37). The complex nature of SRL called for a methodological approach that could capture the complexities of participants' self-regulating behaviour. The approach considered to this qualitative inquiry was case study research, which is employed to investigate "a specific, real-life phenomenon from multiple perspectives to catch its complexity and uniqueness" (Simons, 2009, p. 21).

Case study research can examine one or multiple cases over time through detailed and in-depth data generated from multiple sources (Creswell & Poth, 2018; Denscombe, 2017; Yin, 2014). Having a varied set of evidence from multiple sources of information can also provide a rigorous understanding of SRL as a dynamic context-dependent process composed of different sub-processes (Butler, 2011). Case Study research was ideal for investigating how the self-regulatory process of goal setting unfolded over time, particularly within four weeks of MOOC-based learning.

Hence, the researcher studied multiple cases to shed light on the online language learning experience and personal goals of adult L2 learners from two different learning contexts. It was necessary to analyse and monitor participants' language focus and goal-setting behaviour from different angles to achieve the research aims. This approach enabled the researcher to use multiple methods to generate relevant information. She drew on more evidence than the participants' accounts alone through a method known as reflexive photography (Wallace, 2015). This technique enabled the researcher to gain an insight into participants' experiences with the MOOC of their choice, particularly with what they deemed to be useful for their learning. The combination of textual and visual data was used to address the research questions alongside the gaps in the literature.

The specific research questions addressed were:

**RQ1**: What aspects of language do adult language learners focus on the most when engaging with a MOOC as part of their classroom-based language course? (Chapter 4)
RQ2: What kinds of goals do adult language learners set for themselves in MOOCs that they select as part of their classroom-based language course? (Chapter 5)

RQ3: Which elements of MOOCs support learners' goal-setting behaviour? (Chapter 6)

1.4 Contributions
The researcher has contributed to her area of specialisation by gaining a nuanced and robust understanding of the self-regulating behaviour of adult L2 learners in MOOCs. In doing so, she has drawn from fundamental concepts in educational psychology, online learning, goal setting and language education. The researcher has also included conventional and creative instruments to generate quality data from participants studying different languages on various online platforms. The researcher has explored, analysed, explained, and provided a holistic view of aspects of language, personal learning goals and goal-setting support in MOOCs from the multiple perspectives of adult L2 learners who studied a chosen MOOC as part of their face-to-face language course.

In that sense, this research relates closely to the agenda set by Martín-Monje and Borthwick (2021), who have called for further research to inform and develop the landscape of Language MOOCs (LMOOCs). This thesis also informs and advances one of the less studied areas in CALL: MOOCs (Gillespie, 2020). More broadly, this thesis contributes to the field of CALL by making connections among various theories. The researcher brings an interdisciplinary understanding from the socio-cognitive theory in educational psychology, goal setting theory and second language acquisition theories, demonstrating the richness and complexity of researching how adult L2 learners self-regulate and set goals by themselves in LMOOCs and MOOCs.

Although the study presented in this thesis was carried out before the COVID-19 pandemic, the contributions of this research are even more valuable at a time of unforeseen events. This study also becomes an important starting point for future researchers on SRL and MOOCs, who aim to expand on the self-regulating behaviour of L2 learners in CALL-related practices. As an advocate for using MOOCs as part of classroom-based learning, the researcher states that this practice can shed light on the personal learning goals of learners and provide a unique experience to adventurous L2 learners who never stop learning.
1.5 Thesis Structure

Chapter 1: Introduction
This initial chapter has set the scene of this research. It has provided a rationale for studying the goal-directed behaviour of adult L2 learners in MOOCs after briefly summarising some gaps in the literature on MOOCs and CALL. It has also outlined the research aims of this study and its contributions to knowledge.

Chapter 2: Literature Review
The second chapter of this thesis presents a more detailed review of the theoretical and empirical work related to SRL, MOOCs and MOOCs in the L2 classroom. The literature review chapter discusses the concept of SRL from a socio-cognitive perspective and defines goal setting through the lens of goal-setting theory. It then reviews L2 studies on this area before describing the features of MOOCs, previous studies on SRL in MOOCs, and the integration of these online courses in classroom-based language courses. Finally, gaps in the literature of MOOCs and CALL are highlighted and presented as research questions.

Chapter 3: Methodology
Chapter 3 explains the philosophical underpinnings of the research. It presents case study research as the chosen approach to this qualitative investigation. It then describes the cases, methods and instruments employed to answer the three research questions. It also provides an account of the selected approach to data analysis and the ethical procedure underlying this research.

Chapter 4: Aspects of Language Identified in MOOCs
Chapter 4 is the first of the analytical chapters of this thesis and focuses on Research Question 1 (RQ1). It presents the results of two case studies based on a thematic analysis of 19 semi-structured interviews, 71 weekly monitoring surveys, 19 open-ended questionnaires and 19 MOOC screenshots. First, the qualitative results of Case Study 1 are presented and analysed, followed by the results of Case Study 2. The chapter ends with a discussion of the main aspects of language participants in both case studies focused on the most in MOOCs and the external elements that shaped their language focus during MOOC-based learning.

Chapter 5: A Taxonomy of Personal Learning Goals in MOOCs
Chapter 5 focuses on RQ2. It classifies the goals participants in Case Study 1 and Case Study 2 reported when engaging with their chosen MOOCs. The analysis was based on the same data used to answer RQ1 plus interview data from the 19 initial semi-structured interviews. The chapter ends with a discussion of how the taxonomy of goals relates to concepts identified in the literature. The discussion addresses adult language learners' complex and diverse goal-setting
behaviour when studying LMOOCs and MOOCs as part of their classroom-based language course. It unravels fascinating insights into the online learning behaviour of participants and challenges potential assumptions about adult learners in these online courses.

**Chapter 6: Goal-setting Support in MOOCs**

Chapter 6 is the final chapter to present an analysis in response to RQ3. It reviews the elements that facilitated the goal-setting behaviour of participants in their chosen online course. The analysis was based on the same data used to answer RQ1. A discussion around the beneficial elements identified in the findings appears at the end of the chapter. This section is followed by a critical appraisal of the conceptualisation of goals in these online courses.

**Chapter 7: Conclusions**

The final chapter of the thesis summarises the answers to each research question. It highlights the theoretical, methodological, and practical contributions to knowledge of this research. Besides, it provides recommendations for practitioners, L2 learners and teachers based on the results of Chapters 4-6. The chapter ends by discussing limitations of the thesis and directions for future research.

2 **Literature Review**

This chapter reviews the theoretical and empirical work that is relevant to this research across three sections. Section 2.1 deals with works on self-regulated learning that study the complex area of goal setting. Section 2.2 discusses goal setting in MOOCs. Lastly, Section 2.3 synthesises the research dealing with the integration of MOOCs into language classrooms at different educational levels. The chapter concludes by highlighting gaps in the literature about goal setting and online language education with MOOCs, forming the basis of the research questions of this doctoral thesis.

2.1 **Self-regulated Learning: The Metacognitive Process of Goal Setting and its Place in Language Learning Research**

Section 2.1.1 starts by presenting an overview of the concept of self-regulated learning (SRL) through the lens of Zimmerman and Moylan’s (2009) cyclical phase model of self-regulation.

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2 Sections of this chapter appeared in modified form in the publications listed in the 'Declaration of Authorship' section.

3 In psychology, self-regulation is a broader concept than SRL, but please note that both terms are used interchangeably in this thesis as they are used in the literature (e.g., Footnote in Figure 1).
Then, Section 2.1.2 discusses the role of goal setting in supporting self-regulation. Section 2.1.3 presents different types of goal identified in the literature. Lastly, Section 2.1.4 reviews the empirical work on the self-regulatory process of goal setting, with particular reference to the landscape of foreign language education.

2.1.1 Understanding self-regulated learning

SRL refers to a dynamic cycle of processes whereby students\(^4\) plan, monitor, evaluate and adjust their performance toward goal attainment. Regulating one's learning is depicted as a micro-level within the broader concept of self-directed learning (SDL) (Loyens, Magda, & Rikers, 2008; Neelen & Kirschner, 2018). Loyens et al. (2008) state that SDL is both a learner characteristic and a design feature of the learning environment that stresses students' freedom to define a learning task, select and critically evaluate learning resources. The authors also consider SRL a learner characteristic, but "SRL seems more concerned with the subsequent steps in the learning process such as learning goals and strategies" (Loyens et al., 2008, p. 418). The scope of this literature review focuses on SRL and the self-regulatory process of goal setting, as discussed below.

The concept of SRL first emerged in North America in the field of educational psychology. In a review of the development of SRL research, Schunk and Greene (2018) traced its origins back to the 1970s when cognitive-behavioural research aimed to improve students' self-control and academic learning. Research on students' learning behaviours prompted the need to develop integrated perspectives on self-regulation to systematically explore self-regulatory processes in educational contexts. By the 1980s, integrated models had been developed, and research on self-regulation increased. Zimmerman (1989) was one of the first self-regulation theorists to explain SRL as the degree to which students "are metacognitively, motivationally, and behaviorally active participants in their own learning processes" (p. 329). He included the notion of metacognition in his triadic model of SRL, strongly influenced by Bandura's (1986) socio-cognitive theory, which states that peoples' actions result from the interplay of personal, environmental, and behavioural factors.

Metacognitive operations are seen as central to Zimmerman's (1989) triadic model of SRL. Metacognition refers to two groups of activities, namely one's self-awareness of how, when, and where to employ cognitive strategies and the regulation of those different strategies to direct the learning process (Flavell, 1979). Winne and Hadwin's (1998) model of SRL also has a robust

\(^{4}\) 'Students' are defined in this thesis as learners who are enrolled in a face-to-face study programme.
metacognitive background. Nonetheless, one critical difference between Zimmerman's (1989) model and Winne and Hadwin's (1998) model is that the latter includes metacognition as a final "optional" stage where students review their tactics and adjust their processes for future tasks (Winne, 2001, p. 168). The issue is that Winne and Hadwin's (1998) model is based on a loop of four phases that inform each other. Hence, presenting the fourth stage as optional can result in a three-phase loop where students do not have the opportunity to adapt and improve their performance to approach a task effectively.

Another issue with Winne and Hadwin's (1998) SRL model is that it does not consider how metacognitive processes interact with other motivational, emotional, and social elements of self-regulation (Greene & Azevedo, 2007a). Unlike Winne and Hadwin, Zimmerman (1989, 2000) deems metacognition to be a component intertwined with other cognitive and motivational processes and beliefs that underlie students' learning efforts; thus, he finds it necessary to develop an integrative theoretical model of self-regulation. Twenty years later, Zimmerman revises his initial model known as "a triadic analysis of self-regulated functioning" (Zimmerman, 1989, p. 330) and, together with Moylan, proposes "a cyclical phase model of self-regulation" (Zimmerman & Moylan, 2009, p. 300) that represents this crucial interplay among metacognitive processes and sources of motivation (Figure 1).
Zimmerman and Moylan (2009) consider SRL as a cyclical process that includes the notion of metacognition and motivation throughout a forethought, a performance, and a self-reflection phase, described below:

1. **The forethought phase** refers to self-regulatory learning processes and motivational beliefs that precede learning efforts and shape students' willingness and preparation to self-regulate their learning.

2. **The performance phase** entails self-regulatory processes that take place during learning and accompany students' self-control and self-observation of their performance.

3. **The self-reflection phase** involves self-regulatory processes whereby self-judgment and self-reaction of students' previous learning efforts come together to
influence the next forethought and performance phases—thus, completing the self-regulating cycle (Figure 1).

The authors suggest that "the length of a student's self-regulatory cycles will vary based on the frequency and timing of feedback, which in turn depends on outside sources, such as receiving a quiz grade, as well as personal sources, such as keeping a diary" (Zimmerman & Moylan, 2009, p. 301). Hence, subsequent adjustments to learning do not solely rely on personal initiatives; social and environmental feedback (Zimmerman & Moylan, 2009) also influence this cyclical process.

Some studies have provided empirical support for this cyclical model of self-regulation. Research conducted by DiBenedetto and Zimmerman (2010) focused on science courses studied by high school students. They found that students' high levels of achievement were linked to the frequent use of sub-processes outlined in each self-regulatory phase of this model (Figure 1). In a subsequent study, Zimmerman, Moylan, Hudesman, White and Flugman (2011) explored the effect of offering self-reflection training on college students taking math lessons. They found that students who corrected their errors, solved new problems, and revised a quiz as part of their self-reflection training performed better in regular class examinations than untrained students.

The early developments of this model (Zimmerman, 2000) were also applied to research on physical activities (Cleary, Zimmerman, & Keating, 2006). The ed tech community has also chosen this framework to analyse the self-regulatory processes of learners studying MOOCs (Littlejohn et al., 2016; Cerón et al., 2020). Most studies to date have used both the first and the latest version of this cyclical model to gather empirical evidence of self-regulation in subjects such as math, science, and sports in classroom and online environments. However, little research has used this model, particularly the one illustrated in Figure 1, for investigating the self-regulatory processes that learners employ to regulate their language learning process.

From a socio-cognitive perspective, self-regulation is defined as "a variable process rather than as a personal attribute that is either present or absent" (Zimmerman, 2015, p. 541). Following this line of thought, SRL can be categorised into 'biologically secondary abilities and learning' on evolutionary educational psychology grounds (Geary, 2012). Biologically secondary competencies are not inherent attributes; they do not occur automatically or effortlessly for most students hence the need for organised and teacher-directed explicit instruction (Geary, 2012). Similarly, in the case of language education, which is a focus of this thesis, research has shown

5 'Learners' are used here to indicate individuals actively engaged in learning, but not necessarily enrolled in a face-to-face study programme.
that self-regulation occurs "initially through a process of other-regulation, typically mediated through language" (Mitchell & Myles, 2004, p. 195). This view of SRL means that individuals learn to self-regulate under the guidance of others, such as teachers, and language becomes a vehicle that helps individuals achieve this process.

Even though Zimmerman (2015) initially argues that SRL involves "processes that are personally initiated to acquire knowledge and skill, such as goal setting (...)" (p. 541), he then states that "self-regulated learning theory and research can include social forms of learning such as modeling, guidance, and feedback from peers, coaches, and teachers" (Zimmerman, 2015, p. 541). In the same year, Zimmerman and his colleagues concluded that "students who receive self-regulated learning instruction can become agents of their own academic destinies" (Zimmerman, Schunk, & Dibenedetto, 2015, p. 109). Research has provided empirical support demonstrating the benefits of offering explicit instruction to improve the self-regulating behaviour of students, as described below.

Lienemann, Graham, Leader-Janssen and Reid (2006) designed a study to enhance students' SRL, particularly their goal-setting processes. The findings of this study showed a positive impact of goal-setting support on participants who were struggling to perform well in writing activities (Lienemann et al., 2006). In the first stage of the study, participants were offered explicit guidance on defining goals, setting a plan, and using strategies to work towards their writing goals. Both teachers and students monitored their progress toward goal achievement. At the end of the study, the role of the teacher diminished and encouraged students to revise their writing goals and assess their progress independently. The main stages in this study were closely aligned with the three phases of the cyclical model of SRL (Figure 1). Lienemann et al. (2006) study demonstrated the advantages of offering explicit instruction on goal setting within the SRL framework among students at risk for academic failure.

Previous studies in Computer Assisted Language Learning (CALL) have also provided empirical support in relation to the value of offering instruction to scaffold self-regulatory processes. Chang (2005) incorporated formal instruction and application of self-regulated learning strategies, such as "journal keeping and study time self-recording" (p. 226), into a web-based language course of 28 university students to help them develop and practise self-regulatory processes, including time management, self-recording and self-evaluation. The author found that teaching university students self-regulatory strategies within web-based lessons improved their motivation, goal orientation, task value, and self-control beliefs (Chang, 2005).

Chacón-Beltrán (2018) also taught 14 vocabulary learning strategies to 736 adult learners studying English at beginner level in a language MOOC, such as "Inventing sentences that would
contain the new word" (p. 585). He found that after teaching vocabulary learning strategies to participants, they "reported both using new strategies during the MOOC and a strong intention to continue doing so afterward" (Chacón-Beltrán, 2018, p. 590). Likewise, Kitsantas and Dabbagh (2010) published a handbook for teaching six self-regulatory processes through computer learning technologies; goal setting was taught through modelling and emulation before being adapted to students' learning context. Hence, it can be inferred that the actions of others can facilitate the self-regulatory processes of students who are thought to employ those processes for themselves to master their learning.

Altogether, Section 2.1.1 has introduced the construct of SRL through the lens of Zimmerman and Moylan's (2009) cyclical phase model. It has identified the three phases that this cyclical model entails, followed by a review of the studies that have provided an empirical basis to the ideas and processes proposed in this framework. This section has also highlighted the lack of studies using Zimmerman and Moylan's (2009) cyclical phase model in foreign language education.

The importance of scaffolding SRL has been discussed in this section, given that this type of process does not occur spontaneously for most students. The literature has also shown the benefits of teaching self-regulatory strategies in classroom and online settings, including goal setting. Engaging in goal-directed actions is necessary to succeed (Locke & Latham, 2012a). In the case of SRL, goal setting is indispensable when learning to learn more effectively since the dynamic cycle of self-regulatory processes stems from this metacognitive process (Figure 1).

Section 2.1.2 provides a detailed account of the scope of goal setting.

2.1.2 Defining the scope of goal setting
The self-regulatory process of goal setting is a critical component of SRL. One common feature among many theoretical perspectives on self-regulation is that goal setting triggers SRL by maintaining students' focus on goal-directed behaviour and the use of relevant task strategies toward goal attainment (Sitzmann & Ely, 2011). Goal setting underpins the cyclical phase model of self-regulation and precede learning efforts, meaning that the numerous self-regulatory processes and motivational beliefs illustrated in Figure 1 are generated once a goal has been established. When goal attainment occurs, new goals are set, thereby leading to a new self-regulating cycle (Schunk & Greene, 2018; Zimmerman & Moylan, 2009). In a review of numerous theoretical and empirical perspectives on self-regulation, Schunk and Greene (2018) highlighted that goal setting acts as a key that unlocks an active form of learning; it enables students to activate and sustain their self-regulatory learning efforts more effectively.
According to Locke and Latham (2012), around 400 empirical studies have also provided evidence on this vital role of goal setting to increase performance in different fields, leading to "the development of goal setting theory in 1990" (p. 5). Zimmerman and Moylan (2009) define this self-regulatory process from the perspective of these two influential goal-setting theorists: "Goal setting refers to specifying the outcomes that one expects to attain, such as solving a page of decimal problems during a one-hour study session (Locke & Latham, 2002)" (Zimmerman & Moylan, 2009, p. 301). Moreover, Zimmerman (2002, 2015) argues that novice learners typically set general distal (long-term) goals, while expert learners set specific proximal (short-term) goals for themselves.

From the perspective of teaching and researching language learning strategies, Oxford (2017) also agrees that "Language learners without strategic self-regulation row unsound boats aimlessly and confusingly and sometimes capsize, but strategically self-regulated learners row sound boats effectively toward learning goals" (p. ii). It is fair to say that the influence of goal-setting theory is discernible in the work on self-regulation, even in the context of language education and research.

Despite defining and using goal setting in the literature of SRL and goal setting theory, there is very little agreement on what people mean by the notion of goals in the first place (Lemos, 1996; Rowntree, 1982). In the goal-setting tradition, "a goal is the object or aim of an action to attain a specific standard of proficiency, usually within a specified time limit" (Locke & Latham, 2002, 705). Goal-setting theorists also focus on the relationship between goals and performance outcomes to explain the complexity associated with the goal construct. Locke and Bryan (1969) state that goals entail specific standards related to a task for evaluating performance outcomes and the quality of those performance outcomes is judged by their effectiveness and efficiency. The following example attempts to illustrate both accounts more clearly:

Two students set the goal of submitting a 2000-word essay in Spanish next Thursday to ensure they send it before the deadline, i.e., next Friday. If both students have managed to submit the essay on Thursday, they have attained the standard of proficiency they set for themselves within the specified time limit. Therefore, they can judge their own performance outcome as good. The standard of proficiency may not necessarily match the standard set by their teacher, who will read their essays and might evaluate students’ performance differently against a defined assessment criterion.

Moreover, Schunk (1990) states that "a goal is what an individual is consciously trying to accomplish" (p. 72). That element of consciousness underlies a critical discrepancy observed in the literature between representatives of SRL and language education, as far as the meaning of
goals is concerned. Take, for example, the view of goals proposed by Zimmerman et al. (2015), which differs from the conceptualisation of goals presented by Colpaert (2010, 2014) in the field of language learning and teaching. The former state that a "goal is the behavior or outcome that one is consciously attempting to perform or attain" (Zimmerman et al., 2015, p. 84). Conversely, the latter focuses mainly on personal goals, which "seem to be non-conscious or unconscious volitions related to a specific learning situation" (Colpaert, 2010, p. 269). Four years later, he describes the concept of personal goals "as subconscious volitions which are difficult to elicit" (Colpaert, 2014, p. 167). Nonetheless, Colpaert (2010) considers personal goals as psychological factors that play an essential part in stimulating or hindering the language learning process in the learner's mind.

A risk remains when assuming that individuals are fully conscious of their goals at the start of a task. Schunk (1990) identifies that "students enter learning activities with such goals as acquiring knowledge, solving problems, and finishing workbook pages" (p. 72). However, that might not always be the case. Personal goals, also referred to as 'student-specific outcomes', are to an extent unpredictable (the educator cannot fully control them), and they are dependent upon the extent to which learners engage in the learning experience and take responsibility for their learning (Eisner, 1979). Even when scholars agree on goal setting as the basis of self-regulation, different perspectives emerge when defining the intricate construct of goals across disciplines. Indeed, a lack of consensus on a standard definition of goals is evident, especially when discussing the level of consciousness that goal setting entails. However, Locke and Latham argue that "human beings have the ability to voluntarily, and thoughtfully, engage in behavior that is goal directed" (2015, p. 121). Drawing from the theoretical perspective of goal setting, individuals can set goals, consciously or unconsciously, as part of their goal-directed behaviour.

Schunk (1990) also argues that "The effects of goals on behavior depend on their properties: specificity, proximity, and difficulty levels" (p. 74). Locke and Latham’s (2002, 2012) understanding of goals is also framed in those triadic terms: specificity, proximity in time, and difficulty level. Ample research has demonstrated that vague, distal, or easy goals are less effective than specific, proximal, and challenging goals (Bandura & Schunk, 1981; Locke & Latham, 1990, 2002, 2012). More precisely, specific, and challenging goals produce higher performance levels than vague or abstract "do your best" goals (Locke & Latham, 2012, p.5). Similarly, research on self-regulation has shown that "setting specific, proximal, challenging but attainable goals greatly influenced the effectiveness of learners' efforts to learn" (Zimmerman, 2015, p. 542). Bandura and Schunk (1981) state that students can benefit from setting goals with those three properties (specificity, proximity, and difficulty) since these can help them to:
1. Enhance learning
2. Activate self-standards more effectively
3. Make self-evaluation more accurate
4. Reveal progress
5. Boost self-efficacy (i.e., "beliefs about one's capabilities to learn or perform at designated levels" (Zimmerman & Moylan, 2009, p. 301)).

Zimmerman et al. (2015) add three more properties of goals that can also make a difference in guiding and motivating learning and performance: origin, congruence, and focus. When discussing the origin of goals, i.e., self-set goals or goals set by others, evidence has shown that "self-set goals increase acquisition and motivation more than assigned goals" (Zimmerman et al., 2015, p. 96). However, Locke and colleagues (1981) conclude that when students accept assigned goals because of their compatibility with their own goals, those have the same effect as self-set goals. This point leads to the fifth property, congruence: "goals that are mentally or socially compatible increase learning and motivation more than conflicting goals" (Zimmerman et al., 2015, p. 96).

Lastly, a sixth property of goals is their focus. Socio-cognitive theorists distinguish between two distinct purposes, to increase learning or enhance performance, which Zimmerman and colleagues (2015) classify into two goals with a different focus. A learning goal focuses on processes, task strategies or the means to improve learning (Zimmerman et al., 2015). In contrast, a performance goal focuses on "producing task outcomes (or the ends) of learning" (Zimmerman et al., 2015, p. 99). In total, six properties of goals have been identified in the literature on goal setting; each of them has a bearing on how individuals manage their subsequent efforts to learn or perform on their own.

Additionally, Locke and Latham (2012) point out that goals have two attributes: goal content and goal intensity. The first attribute "refers to the object or result being sought (e.g., increase profit by 20%)" (Locke & Latham, 2012, p. 5). The second attribute entails the effort required to set a goal, the importance of the goal compared to others (assuming multiple goals), and the commitment to goal achievement. Zimmerman et al. (2015) explain that "Goal content can vary qualitatively; for example, students may set academic, social, and athletic goals" (p. 95). Goal content "also can vary quantitatively; students may set many or few goals, short- and long-term goals, and goals that vary in difficulty and specificity" (Zimmerman et al., 2015, p. 95). In this explanation, Zimmerman and colleagues (2015) briefly outline a qualitative perspective to classify goals within the boundaries of a specific field. This perspective differs from a quantitative perspective that classifies goals regarding their specificity, proximity, and difficulty, which refer to

Most studies underpinned by goal-setting theory have adopted interventionist approaches to mainly investigate the goal properties of specificity and difficulty (Locke & Latham, 2012). Goal setting theorists tend to run statistical tests to verify that "specific, challenging goals are a better way than vague goals to increase performance on laboratory tasks" (Locke & Latham, 2015, p. 105). This strong inclination towards researching goals from a quantitative perspective overshadows potential studies aiming to understand goals qualitatively. Given that goal-setting theory "is an open theory" (Locke & Latham, 2015, p. 121), more studies adopting naturalistic approaches are needed to examine different goals beyond their traditional properties, thereby expanding goal-setting theory from a qualitative perspective. What is more, adopting a qualitative perspective can serve to develop a domain-specific classification of goals, particularly in language education, which is an essential pillar of this thesis.

Before expanding on the different types of goals identified in the literature, Section 2.1.2 ends by presenting the view of goals that underlies this thesis. This understanding is drawn from the previous discussion around goal setting as a significant determinant of self-regulation and goal setting as a well-established theory. A goal is understood in this thesis, as follows:

A goal is meaningful and contextual; it represents what individuals want to acquire within a particular situation, either a specific piece of knowledge or skill. It stimulates learning by stating a focus on specific activities and strategies relevant to goal attainment. A goal can be revised at a particular point in the learning process, and it carries an implicit or explicit element of time for attainment. Last but not least, setting goals may or may not be a self-initiated process for people. Yet, this process can be developed over time, even under the supervision of others.

2.1.3 Identifying types of goals

Theorising about goal setting is more complex than developing a standard definition of goals. Different theorists classify goals through the lens of self-determination theory, socio-cognitive theory, and achievement goals theory. According to Kasser and Ryan (1996), goals can be classified based on their content into two types: intrinsic and extrinsic. Individuals who pursue intrinsic goals strive to satisfy their inherent needs for personal growth and competence (Deci & Ryan, 1985). Conversely, individuals who pursue extrinsic goals are more likely to ignore their needs, and instead, they strive to become successful and famous (Kasser & Ryan, 1996). Students driven by extrinsic goals aim to obtain "rewards and the positive evaluation of others" (Schmuck, Kasser, & Ryan, 2000, p. 226).
A study conducted by Vansteenkiste et al. (2004) demonstrated the benefits of pursuing intrinsic goals in an autonomy-supportive learning context. They found that high school and college students who opted for intrinsic goals during a regular class activity (reading task or physical activity) in an autonomous context reported a more profound engagement, better test performance, and more remarkable persistence in the task than those who pursued extrinsic goals. Besides, they observed that "Presenting tasks in terms that are consistent with satisfaction of basic psychological needs (whether via the content or the context of the task) led to positive learning-related outcomes" (Vansteenkiste et al., 2004, p. 259). Hence, framing tasks from an intrinsic perspective influences students' engagement and subsequent learning outcomes.

The researchers also emphasised a close link between goals and learning contexts. Vansteenkiste et al. (2004) found that the benefits of deeper engagement and better test performance associated with pursuing intrinsic goals were more prominent in contexts where students were encouraged to make decisions for themselves instead of working in learning contexts where no choice was given at all. This research mainly targeted college and secondary students. Considering that adults tend to be motivated by internal rather than external interests (Knowles, 1970), further research examining the goals of older learners in similar independent-supportive learning contexts is needed.

From a socio-cognitive perspective, goals are categorised into learning goals and performance goals, as presented in Section 2.1.2 by Zimmerman et al. (2015). This binary classification resembles the two types of goals that stem from achievement goal theory, named mastery and performance goals (Elliot & McGregor, 2001). Mastery goals, also known as learning goals, focus on acquiring skills or knowledge (Kaplan et al., 2002). Conversely, performance goals refer to the aim of performing better than others and demonstrating superior competence (Elliot & Murayama, 2008). The work underpinned by self-determination theory, socio-cognitive theory, and achievement goals theory has expanded the understanding of content goals by offering an alternative perspective to the standard quantitative classification based on goals' specificity, proximity, and difficulty.

Nonetheless, other authors have raised the need to explore further and move away from performance goals. Locke and Latham (2012) suggest that "Research is needed on what are called performance goals, because such goals can be of many types (e.g., winning at competition, trying to impress others, gaining rewards), which may not be equally effective" (Locke & Latham, 2012, p. 625). Similarly, Brophy (2005) proposes that goal theorists and motivational researchers "should move on from performance goals (...) or use other terms that emphasize achievement but not competition" (p. 167). After conducting multiple searches of the ERIC and PsycINFO
Grant and Dweck (2003) and Brophy (2005) have presented additional classifications of achievement goals, which seek to unravel subtypes of performance goals and provide alternative terms that do not carry the peer comparison connotation underpinned by the term performance-approach goals, respectively. This theoretical distinction among performance goals has received empirical support through the work of Lee and Bong (2016), which involved a series of three studies with approximately 1000 Korean adolescent students who reported their achievement goals at three public middle schools. Of the different types of performance goals, Lee and Bong (2016) found that outcome goals were mentioned the most by participants in study 2, whereas ability goals were mentioned far more frequently by students in study 3 than those in Studies 1 and 2.

Likewise, the authors noted that mastery goals were the most prominent at a school where students "were free of both extreme pressure and competition associated with high school
admission and the fear of negative evaluation associated with ability grouping" (Lee & Bong, 2016, p. 290). Conversely, ability goals were the most prominent concern for students "who attended a school with between-class ability grouping" (Lee & Bong, 2016, p. 290). Indeed, they concluded that "the type of achievement goal students pursue depends heavily on the dominant culture in the achievement setting" (Lee & Bong, 2016, p. 290). Akin to Vansteenkiste et al. (2004) experiments, this set of studies thus demonstrated a context-dependent relationship between the type of goal pursued and the characteristics of the learning environment.

From a social cognitive self-regulatory perspective, previous studies have also used other terms to refer to performance goals that emphasized achievement but not competition. In two studies that involved high school girls practising their dart-throwing skills, Zimmerman and Kitsantas (1996, 1997) used 'product goals' to refer to performance goals that did not include a comparison element. The authors also called them 'outcome goals' to indicate a focus purely on the end results or product of a task (Zimmerman & Kitsantas, 1996, 1997). In the same studies, Zimmerman and Kitsantas (1996, 1997) presented another type of content goal called 'process goals', which originated in sports psychology (Kitsantas et al., 2017; Williams, 2012), but has also been applied in educational settings (Schunk & Swartz, 1993; Zimmerman & Kitsantas, 1999).

**Process goals** focus on practising or rehearsing strategies to master a particular task; these strategic steps promote attention to detail and generate better performance than outcome goals (Zimmerman & Kitsantas, 1996). However, shifting from process to outcome goals after attaining automaticity (i.e., mastering a task) generates better performance (Zimmerman & Kitsantas, 1996, 1997). Interestingly, process goals and outcome goals were later renamed "learning-process goals" and "performance outcome goals" by Zimmerman et al. (2015, p. 100) when reviewing the first two studies of Zimmerman and Kitsantas focused on achievement goals.

Although the literature has presented alternatives to performance goals, some authors have debated the inclination towards achievement goals. Boekaerts, de Koning and Vedder (2006) state that "achievement goals are not the only goals that students bring to the classroom" (p. 48). They cite the work of Lemos (1996) as illustrating the few attempts found in the literature to fill the "considerable gaps in knowledge about the nature of content goals students bring to the classroom" (Boekaerts et al., 2006, p. 33). The authors (2006) highlight two non-academic goals from Lemos' work: 'interpersonal goals' and 'enjoyment goals', as described next.

Lemos (1996) videotaped in-class behaviour and interviewed 17 sixth graders at a Portuguese school. She also studied teachers' goals in the same context, which are not enumerated here since they remain outside the scope of this literature review. The group of girls and boys studied six school subjects, including English as a foreign language (L2) and Portuguese.
as a mother tongue (L1). Students were explicitly asked about the goals they usually pursued in the classroom in two instances. These goals were initially divided into general and specific goals. The former refers to "goal orientations" students develop for classroom activities, whereas the latter refers to "the specific goals students' adopt for particular activities in the real classroom setting" (Lemos, 1996, p. 154). This classification differs from the traditional one posed by goal-setting theorists, who distinguish between general versus specific goals based on the property of specificity (Locke & Latham, 1990, 2002; Schunk, 1990).

Locating her work outside the goal-setting tradition, Lemos (1996) categorised students' purposes in pursuing in-class activities as general goals and students' aims for specific in-class activities as specific goals. Despite the confusion around the terms 'general' and 'specific', her empirical work stands out from the previous studies reviewed here by distinguishing between orientations (general motivational states) and goals (specific standards to be pursued in a particular context) when investigating students' personal goals. This distinction between goal setting and goal orientation is also made in the forethought phase of Zimmerman and Moylan's (2009) cyclical model of SRL (Figure 1).

Lemos' (1996) subsequent classification was based on the goals students predominantly reported during the study. The frequency of goals was analysed based on percentages that derived from the content analysis of 34 interviews. Seven types of goals were identified accordingly:

1. **Working goals** (29%) focus on "engaging in activities “to finish it and to go on to the next one”, “to get it done”” (Lemos, 1996, p. 158). Participants reported more specific working goals than general goals.

2. **Evaluation goals** (21%) focus on "the desire to be positively evaluated and/or activities directed to avoid negative evaluations concerning academic classifications" (Lemos, 1996, p. 158)

3. **Learning goals** (19%) focus on "a desire to learn (“to know more about”, “to find out how”)” (Lemos, 1996, p. 158).

4. **Complying goals** (17%) focus on "a need to adapt to the learning management demands (such as adapting to the pace of the class group, doing what the teacher says, answering only when requested, listening to the teacher), and/or activities directed to avoid negative consequences of incompliance" (Lemos, 1996, p. 158). Participants reported more general compliance goals than specific goals.

5. **Interpersonal relationship goals** (6%) focus on "the desire to develop meaningful positive relationships with teachers and/or students" (Lemos, 1996, p. 158).
6. **Enjoyment goals** (5%) focus on engaging in activities for "pleasure, enjoyment, and fun" (Lemos, 1996, p. 158).

7. **Discipline goals** (3%) focus on "the need to comply with discipline rules (ethical and moral) and/or activities directed to avoid the negative consequences of indiscipline" (Lemos, 1996, p. 158).

In this study, "the only significant difference between students' general and specific goals concerns complying goals and working goals" (Lemos, 1996, p. 162). Moreover, students frequently reported working and evaluation goals. The former has "not been previously described in the literature" (Lemos, 1996, p. 164). In contrast, the latter aligns with the focus of extrinsic goals (Kasser & Ryan, 1996) and outcome goals (Brophy, 2005; Zimmerman & Kitsantas, 1996, 1997). The interpersonal relationship goals also relate to the 'social goals' mentioned by Zimmerman et al. (2015) when referring to qualitative content goals. Despite the low frequency of interpersonal relationship goals and enjoyment goals reported in this study, Lemos (1996) acknowledged the existence of these two non-academic goals in a classroom context, which is indeed enlightening.

Her findings, which "underscore the role of the classroom setting in shaping students' goal pattern" (Lemos, 1996, p. 167), are akin to those of Vansteenkiste et al. (2004) and Lee and Bong (2016) concerning the relationship between goal types and specific learning contexts. The study also indicated a mismatch between students' and teachers' goals in the classroom. However, Lemos highlighted the potential influence of teachers and their instructional strategies on students' goals since "a mismatch does not necessarily mean that teachers' goals do not influence students' goals". (Lemos, 1996, p. 154). Hence, she called for further research "regarding other important goal-related characteristics, such as the classroom structures and the instructional strategies" (Lemos, 1996, p. 168). The empirical studies of Lemos, Vansteenkiste and colleagues, and Lee and Bong have demonstrated that students' goals are formed in context.

Lastly, Lemos found "no major differences between students' goals in different subject-matters" (Lemos, 1996, p. 163). Nevertheless, her findings showed a preference for complying goals (29%) and working goals (23%) in an English class as an L2 and a preference for working goals (27%) and learning goals (24%) in a Portuguese class as an L1. Indeed, a slight difference remained regarding students' goals in the subject of languages. Apart from completing activities, participants focused on learning when studying their L1, but they did not much strive for learning when studying their L2. Instead, they focused on following the teacher's instructions and completing activities in their L2 class.
This is a remarkable finding that connects students' goal intensity (i.e., the second attribute of goals) and self-regulation. Lemos (1996) outlined that "internal regulation" was possible when learners concentrated their efforts on pursuing more "demanding goals (learning goals and evaluation goals)" instead of "easier-to achieve goals (such as working goals and complying goals)" (p. 166). Although she did not systematically compare the self-regulatory efforts of students attending an L1 class and an L2 class, her findings revealed a glimpse into self-regulation in the field of language education. This novel study raises the question of how transferable all these findings are to other language learning contexts and creates the need for L2 studies investigating students' personal goals.

Altogether, authors presented in Section 2.1.3 have attempted to draw fine distinctions among goals based on their content. Classifications have emerged from two main strands of research, namely a socio-cognitive strand and a motivational strand. Other authors in the field of educational psychology have suggested alternative goal categories. The multiple taxonomies of content goals proposed by different authors reviewed above are summarised in Table 1.
Table 1 Summary of types of goal found in the literature reviewed in Section 2.1.3

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The classification of goals summarised in Table 1 reflects a diversity of content goals from multiple theoretical perspectives discussed in this section. Undoubtedly, the studies conducted in educational psychology shows a broader range of goals compared to the ones drawing from a motivational strand. This diversity of goals shown in Table 1 indicates that students are likely to pursue multiple goals beyond the dichotomous tradition between mastery/learning and performance goals and other goals outside the achievement dimension. The work of Lemos (1996) acknowledges the subjective element associated with pursuing personal goals by explicitly asking students to formulate their own goals. Indeed, it is a laudable research practice that needs to be replicated in future work to gain a nuanced understanding of personal learning goals within the context of self-regulation of language learning.

The previous studies reported above, however enlightening, were conducted in contexts that typically involved younger students enrolled in classroom settings, mainly high school and college. Participants were also studying different subjects, including languages. Yet, the focus on students' goals in relation to second language learning was very shallow. This tendency calls for more subject-specific investigations that examine the personal goals of language students, particularly those set by older individuals in diverse learning contexts. Accordingly, Section 2.1.4 reviews studies into goal setting in language education.

### 2.1.4 Scoping goal setting in language learning research

Many L2 studies have implemented achievement goal orientation theory and self-determination theory as broad frameworks for investigating students' goals in the field (e.g., Tercanlioglu, 2004; He, 2005; Koul et al., 2009; Chang, 2005; Chan & Chi, 2010; Lou & Noels, 2016, 2017). The scope of these studies is limited to examining L2 students' goal orientation, a motivational construct that "involves their beliefs or feelings about the purpose of learning" (Zimmerman & Moylan, 2009, p. 302). It is reasonable to examine L2 students' goals from a motivational strand, considering the close interaction between goals and motivational orientation of students (Oxford & Shearin, 1994; Dörnyei, 1998, 2001; Zimmerman & Moylan, 2009). However, L2 researchers often focus on students' educational intention in terms of reasons rather than aims when studying a target language (Dörnyei, 2003). Similarly, those previous L2 studies are devoid of any link to a different understanding of goals apart from the conventional mastery-performance goal classification, illustrated in Table 1.
Another issue with this series of studies is that they are highly reliant on quantitative data collection measures, such as achievement goal scales and Likert-scale questionnaires, leaving no room for employing qualitative data collection instruments that might provide insights into students-produced goals. Brophy (2005) argues that measuring students' goal orientations with questionnaires is an area of concern since these tools "suggest goal orientations that the students might not have generated on their own and limit the range of responses that students can offer to those defined by the researcher" (p. 170). The work on L2 goals from the authors outlined above failed to examine the goal-setting behaviour of language students. The researchers exclusively opted for methods that assumed that all goals fell into the categories they defined instead of employing methods that would allow students to establish their personal language-related goals.

Remarkably, a growing body of literature has started to acknowledge students' voices when researching the self-regulatory process of goal setting in L2 learning. L2 researchers have decided to ask students about their goals instead of assuming that students' goals align with a set of goal orientations generated in fixed questionnaires. A few L2 studies have focused on one or two goal properties: specificity (Walker & Haddon, 2011), proximity (Kormos et al., 2011), specificity and difficulty (Moeller et al., 2012). These last authors conducted a longitudinal study in the Spanish language classrooms of 23 high schools in The US from 2005 to 2009. Moeller et al. (2012) aimed at facilitating the goal-setting process in the L2 classroom by integrating 'LinguaFolio', "a classroom-based, structured intervention designed to promote self-regulation among learners" (Moeller et al., 2012, p. 158).

The LinguaFolio goal-setting process asked 1,273 students to set their goals at the beginning of a learning unit and create an action plan for goal attainment. The portfolio-based tool included a self-assessment component that asked learners to review their goals and provide evidence of goal attainment. They argued that "asking students to revisit goals they set at the beginning of the chapter encourages them to make SMART (specific, measurable, attainable, realistic, time-bound) goals SMARTER" (Moeller et al., 2012, p. 157).

The researchers also aimed to develop an intrinsic interest in language learning by promoting a mastery goal orientation and challenging SMART goals to enhance language learning achievement (Moeller et al., 2012). Accordingly, at the end of each academic year, they used a rubric to assess if the students’ goals were "growth oriented, theme based, measurable, specific, realistic, challenging, personally relevant, and time bound ("by the end of this chapter . . . ")" (Moeller et al., 2012, p. 168). Data analysis revealed a consistent growth over time in goal, action plan, and reflection score of high school students of Spanish. A correlational analysis of the goal-setting process and language proficiency scores showed a statistically significant relationship.
between goal setting and language achievement. Students with higher goal-setting scores tended to have higher language achievement in reading, writing, or speaking (Moeller et al., 2012). This finding aligns with one of the two core findings that led to the development of goal-setting theory: "Specific, difficult goals lead to higher performance" (Locke & Latham, 2012, p. 5). Overall, these combined results emphasise the idea that "better goal writers equal better users of language" alongside "the need to focus on the goal-setting process for the potential benefit of all learners" (Moeller et al., 2012, p. 163).

Allen (2010) focused extensively on the evolution of goals reported by two L2 learners before, during and after a 6-week summer Study Abroad (SA) program in France. Her findings support the idea that goals are not static and can change depending on the L2 environment. Similar to Moeller et al. (2012), she emphasised the importance of helping L2 learners "identify learning goals and ways to pursue them" (Allen, 2010, p. 469). Allen (2010) also classified the content goals reported by participants in her study into 'linguistic goals' and 'other goals', yet she did not provide much information to distinguish between the two types of goals apart from the self-explanatory labels.

Similarly, O' Connor (2018) classified university students' content goals within a tandem scheme in France. The study implemented goal setting as part of a tandem language learning course to investigate the types of goals and attitudes of 41 students toward goal setting in a tandem learning context. "In tandem learning, two people who are learning each other’s language work together to help one another achieve their desired aims" (Lewis, 2005, p. 165). In this face-to-face tandem study, 19 English speakers from Australia, Ireland, the UK, and the US worked in pairs with 22 French speakers from France during 12 weeks outside the traditional classroom setting (O’ Connor, 2018). Participants completed a journal where they wrote their goals, summarised each tandem meeting, and reflected on their progress toward their goals.

The researcher grouped the goals reported by participants into nine categories: linguistic, cultural, skills, social, activity, teaching, course-related, affective, and academic categories. O’ Connor (2018) concluded that most students found goals useful because they helped them focus on what they wanted to do, but they reported difficulties establishing appropriate goals and working toward them. Hence, she highlighted the need for more scaffolding to help learners identify the characteristics of appropriate goals and subsequently set their own, following Doran’s (1981) criteria of SMART goals (O’ Connor, 2018), previously commented on in the Moeller et al. (2012) study.

Perhaps the most startling L2 study focusing on goal-setting support so far has been the one attempting to scaffold children's personal short-term goals through an educational avatar.
proposed by Tsiakas et al. (2021). Although the avatar design is at the initial stages, this research aims to help students set appropriate personal goals during the interaction with the avatar "rather than automatically select the "correct" study plan and goals for the student" (Tsiakas et al., 2021, p. 263). Moreover, the interaction with the avatar "aims to help the student understand that both their choices (goals) and actual actions (study) have consequences on their learning outcomes" (Tsiakas et al., 2021, p. 263). The researchers also want to enhance students’ motivation during the goal-setting process by examining how visualisations (e.g., avatar expressions, background colour) influence the student-avatar interaction. The work of Tsiakas et al. (2021) is situated "in the context of language learning for children" (p. 262). Nevertheless, this promising study should be replicated with other age groups to support their goal-setting process. This empirical work is the only study registered so far in the literature that has adopted goal-setting theory to focus on goal proximity alongside goal-setting support in the context of L2 learning.

Although the number of empirical studies on goal setting within the context of L2 learning is quite limited (Lee & Bong, 2019), a growing body of literature has started researching students' personal goals through the lens of goal-setting theory. The studies reviewed above showed a strong preference for investigating students' personal goals outside the classroom. They also relied on student-produced goals and not solely on questionnaires or achievement goal scales as the L2 studies on goals presented at the start of this section. However, these L2 studies mainly focus on goals set by younger learners, as summarised in Table 2.
<table>
<thead>
<tr>
<th>Study/Authors</th>
<th>Year</th>
<th>Focus</th>
<th>Context</th>
<th>Participants</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen</td>
<td>2010</td>
<td><strong>Goal setting:</strong> attribute of goal content (linguistic goal and other goal)</td>
<td>Outside the classroom setting in a Study Abroad (SA) Program in France</td>
<td>Two L2 learners of French, both women <strong>aged 20 years</strong> old from a university in the US.</td>
<td>Blog entries, three semi-structured interviews and two questionnaires</td>
</tr>
<tr>
<td>Moeller, Theiler, and Wu</td>
<td>2012</td>
<td><strong>Goal setting:</strong> property of goal specificity (specific and vague goals) and difficulty (easy or challenging goals)</td>
<td>23 high schools in the US</td>
<td>1,273 L2 <strong>younger</strong> students of Spanish</td>
<td>A portfolio, a goal-setting process rubric, and an online language proficiency test: The Standardized Measure of Proficiency (STAMP) assessment</td>
</tr>
<tr>
<td>O’Connor</td>
<td>2018</td>
<td><strong>Goal setting:</strong> attribute of goal content (nine categories of goals labelled as follows: linguistic, cultural, skills, social, activity, teaching, course-related, affective, and academic)</td>
<td>Outside the classroom setting in a face-to-face Tandem scheme Program offered by a public university in France</td>
<td>41 L2 students of French and English, <strong>average age 20 years</strong>.</td>
<td>A tandem journal and a Likert-scale questionnaire</td>
</tr>
<tr>
<td>Tsiakas, Cnossen, Muyrers, Stappers, Toebosch, and Barakova</td>
<td>2021</td>
<td><strong>Goal setting:</strong> goal-setting support and property of goal proximity (short-term and long-term goals)</td>
<td>The context of language learning for children.</td>
<td><strong>Children</strong></td>
<td>Educational avatars and recurrent neural networks (RNNs) to model sequential data and predict learning outcomes</td>
</tr>
</tbody>
</table>
Table 2 shows the lack of attention to L2 goals set by adult learners within L2 research. This issue represents a striking gap in the literature since "the majority of work conducted on goal theory has focused on educational (Schunk & Zimmerman, 1996) and work (Locke & Latham, 2002) settings, which rarely include older adults" (West, Ebner, & Hastings, 2012, p. 439). This gap in the literature results in many unresolved questions, for example, what process goals do adult L2 learners adopt to master a language task?

L2 researchers should address similar questions since we know little about the content goals people of varying ages set for themselves when learning a target language. Most of the studies reviewed above highlighted the need to help L2 students identify and pursue their own goals, which has been given minimal attention in language teaching and research. Oxford (2017) calls for more "Attention to learners' goals", arguing that "Sadly, some teachers do not know what their learners' goals are regarding the language or concerning future studies or work, but it is never too late to ask" (p. 311).

Likewise, the self-regulatory process of goal setting is underexplored in the literature of L2 learning (Oxford, 2017), and research studies pinpointing types of goals that entail other properties apart from specificity, proximity, and traditional achievement goals are lacking. Thus, more research is needed to provide insightful empirical data on the content goals individuals from older age groups set for themselves when studying a target language in other learning environments beyond the classroom setting.

2.1.5 Summary of Section 2.1

To summarise, this first section of the literature review has introduced the concept of self-regulated learning, followed by the crucial component of goal setting in such a dynamic and evolving cycle of self-regulatory processes. After reviewing the central tenets of goal-setting theory and discussing the notion of goals from various perspectives, the section has offered the view of goals that underpins this thesis, i.e., goals are meaningful, context-dependent, and can be revised at specific times in the learning process. Then, the section has presented goal classifications based on multiple lines of reasoning from the literature, as summarised in Table 1. Lastly, goal setting research has been situated within the field of L2 learning before pointing to the following gaps in the literature:

1. a lack of insight into the goal-setting behaviour of adult L2 learners and
2. a lack of studies attempting to devise a taxonomy of goals to shed light on the personal language-related goals set by adult L2 learners outside the classroom.
Section 2.2 explores the goal-setting behaviour of learners beyond classroom settings. It discusses the main characteristics of non-formal learning environments, research on goal setting in those learning contexts, and any potential support for learners to direct their independent learning in such environments.

2.2 Goal Setting in MOOCs

Section 2.2.1 discusses the phenomenon of Massive Open Online Courses (henceforth, MOOCs), their five main characteristics (massiveness, openness, online learning material, structured course design, flexible approach to learning) and their links to SRL. Then, Section 2.2.2 discusses the role of the self-regulatory process of goal setting in MOOC-based learning, drawing on significant findings stated in the literature. Section 2.2.3 ends this second part of the literature review by commenting on existing goal-setting support embedded in these online courses.

2.2.1 MOOCs

MOOCs became a widespread phenomenon at the start of the 2010s, with The New York Times labelling the rise of these online courses in 2012 as "the year of the MOOC" (Pappano, 2012). The connectivist approach, which emphasises that learning in a digital age relies on connections between people and sources of knowledge via internet technologies, had provided the basis for earlier MOOCs (Siemens, 2005). From a broader perspective, "the MOOC phenomenon can be viewed as the combination of several preceding technologies: some of the open approach of OER, the application of video, and the revolutionary hype of Web 2.0" (Weller, 2020, p. 129). Although "learning at scale, at a distance" should not be considered a new phenomenon when referring to the rise of MOOCs (McAndrew & Scanlon, 2013, p. 1450), these online courses represent the development of online learning at an unprecedentedly massive scale (Daniel, 2012). Hence, the characteristic of massiveness indicates that MOOCs are designed to be studied by an unlimited number of learners.

Another characteristic of MOOCs is related to what Ferguson and Buckingham Shum (2012) describe as the dimension of "Open Communities" (p. 311). These online courses welcome thousands of people worldwide who have access to an internet connection and a desire for learning any subject regardless of their academic background or qualifications. The openness in MOOCs is understood in terms of unlimited enrolment, but not of open licences since usually most of their content cannot be reused or distributed by third parties (Kukulska-Hulme, Goshtasbpour & Conde Gafaro, in press; Weller, 2020, Godwin-Jones, 2014). However, this thesis does not deal with openness, but with MOOCs as a possible means of online self-regulation and L2 education. The latter has already been explored through language MOOCs (Bárcena & Martín-
Monje, 2014; Gimeno-Sanz, 2021). More detailed coverage of the benefits and realities of language MOOCs within the field of Computer-Assisted Language Learning (CALL) is presented in Section 2.3.

Apart from massiveness and openness, the third characteristic of any MOOC relates to its online learning material. MOOC-based learning is categorised as non-formal learning, i.e., audio-visual resources and activities within MOOCs are designed for learning outside traditional settings. For example, one of the goals of language MOOCs includes providing "non-formal training for those outside formal education" (Bárcena & Martín-Monje, 2014, p. 10). MOOCs also tend to be associated with informal learning (Conole, 2013). Online informal learning also takes place outside formal learning environments; however, resources within this type of learning are not designed for learning purposes (Toffoli & Sockett, 2015). Non-formal learning, or non-formal training, "takes place outside formal learning environments but within some kind of organisational framework" (Council of Europe, 2021, para. 2).

The online learning material of MOOCs is organised into video lectures, subject-specific articles, text-based assignments, discussion forums and other social networking tools (Margaryan, Bianco, & Littlejohn, 2015; Sokolik, 2016). This learning content is usually presented through a modular structure in MOOCs (Godwin-Jones, 2014; Littlejohn, 2013). Some MOOCs usually set a fixed start date and end date (Margaryan et al., 2015). Other MOOCs do not follow a fixed schedule, but they are still structured as a course encompassing similar learning material, including discussion forums (edX Learner Help Center-Miguel, 2021a; Maldonado-Mahauad et al., 2018). Accordingly, the exemplars of online multimedia content outlined above alongside the structured course design are part of the main characteristics of these non-formal learning environments. Considering that learners should regulate their learning to effectively study in a MOOC (Milligan & Littlejohn, 2016; Wong et al., 2019), the literature has examined the potential relationship between learners' SRL and the fourth characteristic of MOOCs, as described next.

The learning design that underpins the organisation and structure of MOOC content might have a bearing on how students learn on their own in these online courses. MOOC environments can be designed in different ways to encourage SRL (Littlejohn & Milligan, 2015). For instance, a comparative study carried out by Milligan, Littlejohn, & Hood (2016) analysed findings relating to the self-regulatory processes of two groups of learners while following two separate MOOCs offered on edX (n= 126 participants) and Coursera (n=788 participants), respectively. Both MOOCs displayed different learning formats. The first MOOC followed a typical MOOC format of watching video lectures, reading textual materials, and answering self-assessment quizzes. In this course, participants used notetaking as the main task strategy. In
contrast, the second MOOC included extensive use of project work where participants completed exercises in data manipulation. These project-based tasks encouraged learners to focus on the essential elements for their learning and to use diverse self-regulatory processes to meet the course requirements, such as time management and self-evaluation.

The structure of both online courses tended to influence participants' goal-setting processes (Milligan et al., 2016). Setting goals enables learners to monitor their progress towards goal attainment and adjust their learning, if necessary (Zimmerman & Moylan, 2009). Highly self-regulating participants from the first MOOC were more likely to set goals related to the online course objectives than those from the second MOOC, who set goals related to gaining more knowledge and expertise. From a goal-setting perspective, one can apply Lemos' (1996) goal classification to these findings and infer that learners in the content-based MOOC pursued complying goals, while learners in the task-based MOOC pursued personal learning goals (Section 2.1.3). Milligan et al. (2016) hypothesise that the way participants set their goals in the first MOOC may have been related to the fact that the course possessed a more rigid structure that encouraged them to focus on the course content and objectives. Since the study provided evidence from only two MOOCs, it is worth investigating whether these findings concerning goal setting are transferable to similar contexts encompassing other online courses.

The findings of Milligan et al. (2016) relate to those of Ferguson et al. (2015), in highlighting that the different approaches to learning design, i.e., "the ways in which courses are planned, sequenced and managed" (Ferguson et al., 2015, p. 70) influenced the engagement patterns of MOOC learners. Ferguson et al. (2015) focused primarily on two elements of learning design, course length and distribution of assessment in five MOOCs, delivered on the FutureLearn platform. The authors did not investigate which elements of learning design were associated with desirable self-regulatory processes in MOOCs. Further research should consider other elements of learning design, e.g., course structure, to examine if they have any bearing on the adoption of self-regulatory processes, especially goal setting.

The final characteristic of MOOCs discussed here involves the flexible approach to learning that these courses offer to their users. Even though "many MOOCs are structured" (Godwin-Jones, 2014, p. 12), learners can study at their own pace when engaging with these online courses (Hood, Littlejohn, & Milligan, 2015). Many authors also argue that content- and task-based MOOCs tend to provide a flexible learning experience (Beaven et al., 2014a; Lane, 2012; Motzo & Proudfoot, 2017), which might create spaces for SRL.

MOOC platform providers have continued to make their course content more flexible by offering shorter courses and flexible schedules (Shah, 2018). This flexibility is also connected to
the possibility of choosing a MOOC that best suits learners' skill levels and interests. For example, in Udacity, learners can select online courses according to skill levels (Beginner, Intermediate and Advanced programs) and estimated duration (Lane, 2018). In edX, learners can also toggle their catalogue search by skill level (Introductory, Intermediate, Advanced), the language of instruction, subject, and availability (Figure 2).

![Figure 2 edX course search page (edX, 2021)](image)

MOOC platform provider, edX, also classifies online courses into two learning pathways: instructor-paced and self-paced. The MOOC authors set a fixed schedule for assignments in the instructor-paced pathway; course materials are published periodically, and learners complete the online course within a specific time (edX Learner Help Center-Miguel, 2021a). Conversely, the self-paced path does not have due dates, pre-recorded lectures are available 24 hours a day, and learners progress through the online course at their own pace (edX Learner Help Center-Miguel, 2021a).

Unlike instructor-led courses, self-paced courses remain open over an extended period to allow flexibility; learners can review course material when it is more convenient for them (edX Learner Help Center- JJ File., 2021; edX Learner Help Center-Miguel, 2021b). This flexibility enables learners to "create their pathway to learning" (Ronaghi, Saberi, & Trumbore, 2014, p. 102), which facilitates the regulation of "their own time, resources and learning path" (McLoughlin & Magnoni, 2017, p. 61). However, not much evidence exists in the literature that
supports the link between self-regulation and this flexible learning pathway associated with self-paced courses.

Likewise, the flexibility of some MOOC platforms tends to create an environment where learners have a sense of control over their learning, which is enhanced by making their progress visible (Sokolik, 2016). Fisher, Frey, and Hattie (2016) argue that learners know what to do and how to do it when their learning is made visible. For example, FutureLearn shows learners’ course journey to make it clear what they have done, the current sections they are dealing with, and what comes next in the online course (Figure 3).

![Figure 3](https://via.placeholder.com/150)

**Figure 3** FutureLearn displaying learners’ course journey (FutureLearn, n.d.)

Figure 3 illustrates the 'To-Do list' of FutureLearn which provides learners with an overview of the online course. The blocks change colour from blue (on the left) to pink (on the right), showing both what has been covered and the upcoming content and activities. The progress bar also shows which sections learners have marked as complete (FutureLearn, n.d.). The Coursera platform also provides an overview of the online course that shows weekly resources and activities and learners’ progress. The latter is very precise since it shows how much progress learners have achieved and how much effort or time they need to invest in the upcoming weeks (Figure 4).
Most MOOCs display the same weekly activities for all learners (Margaryan et al., 2015). Nonetheless, they allow learners to engage with the material by alternative routes (Bates, 2012). Learners can work with the material in different ways based on their prior knowledge, individual interests, and needs (de Waard, Kukulska-Hulme, & Sharples, 2015; Motzo & Proudfoot, 2017). As Downes (2012) explains, "one big difference between a MOOC and a traditional course is that a MOOC is completely voluntary. You decide that you want to participate, you choose how to participate, then you participate" (para. 9, emphasis in original). Downes (2012) is referring specifically to participation in early connectivist MOOCs. In content- and task-based MOOCs, learners can also choose what course material they engage with and how and when to do so (de Waard et al., 2015; Hood et al., 2015a). As discussed above, many authors underscore the flexibility offered by platform providers to learners studying on their own in MOOCs. Yet, not much empirical work has been conducted to investigate the impact of the flexible nature of MOOCs on specific self-regulatory processes, such as goal setting, unlike the learning design of MOOCs.

Section 2.2.1 has presented the origins of the MOOC phenomenon followed by a description of five characteristics of these online courses, namely:

1. massiveness
2. openness
3. online learning material
4. structured course design
5. flexible approach to learning
More broadly, the section has identified the need for more research on the relationship between other elements of learning design and SRL while reviewing two studies examining the influence of different MOOC designs on learners' goal-setting processes and patterns of engagement. Additionally, this section has pointed out the lack of empirical evidence for the potential of the flexible nature of MOOCs in supporting learners' self-regulation, particularly their goal-setting behaviour. Similarly, not much research has examined whether the three remaining characteristics of MOOCs (massiveness, openness, and online learning material) have any bearing on specific self-regulatory processes of learners. Therefore, more evidence is needed to enlarge our understanding of the possible influence of these characteristics on learners' self-regulatory processes, especially goal setting, thereby bridging this gap found in the literature of MOOCs.

2.2.2 The role of goal setting in MOOC-based learning

Due to their characteristics, MOOCs might influence and challenge individuals' learning behaviour. Unlike in face-to-face courses where students can engage in dialogue with their teachers, learners in MOOCs have fewer opportunities to be seen by and to interact with instructors and receive feedback from them (Littlejohn & Milligan, 2015). Providing personal feedback to learners' written assignments is not feasible since it is sometimes hindered by the massiveness of the course (Sokolik, 2016). The lack of supervised learning and the flexibility in learning combined with the option of navigating a non-linear path through the course require strategies to organise information and maintain self-discipline in progressing through MOOCs (Bowden, 2018; Gimeno-Sanz, 2021). MOOC-based learning becomes a challenge for learners who are unaccustomed to learning independently since the overall course design favours "those who are able to self-regulate their learning" (Littlejohn & Hood, 2018, p. 31). Thus, learners should know how to self-regulate their learning to accomplish their goals and succeed in learning at a distance.

Previous research has shown that goal setting is one of the most prominent self-regulatory processes associated with MOOC success. In a large-scale study, Kizilcec, Pérez-Sanagustín and Maldonado (2017) studied the SRL subprocesses of 4,831 learners across six MOOCs in different subjects offered by the same provider in Coursera. Kizilcec et al. (2017) found that goal setting and strategic planning were the most effective self-regulatory processes in helping learners achieve their learning goals in MOOCs. They also emphasised that goal setting is a critical factor "underlying attrition and achievement in MOOCs" (Kizilcec et al., 2017, p. 28). In a similar quantitative study, Handoko, Gronseth, McNeil, Bonk, and Robin (2019) surveyed 643 learners in two Coursera MOOCs and found that "MOOC completers reported significantly higher use of the goal-setting SRL subprocess than did MOOC non-completers" (Handoko et al., 2019, p. 50). These two quantitative studies, together with similar research (Li, Johnsen & Canelas, 2021; Reparaz, Aznárez-Sanado & Mendoza, 2020; Vilkova, 2019), suggest that learners who engage in 40
goal setting are more likely to attain their goals in MOOCs. The main characteristics of those learners who are likely to report goal setting in MOOCs are described next.

The openness of MOOCs attracts various learners who differ in their ability to regulate their learning as they engage in these courses (Hood et al., 2015). In the case of goal setting, authors have found higher goal setting levels among women than men (Kizilcec et al., 2017; Li, 2019). No significant difference in goal-setting levels exists between MOOC learners studying toward a university qualification and those who are not university students (Hood et al., 2015). The literature does reveal discrepancies regarding professional status. Working professionals are more inclined to engage in goal setting than university students during MOOC learning (Kizilcec et al., 2017). Many researchers investigating goal setting in MOOCs focus on individuals with an average age of 25-44 years approximately (Kizilcec et al., 2017; Williams, Stafford, Corliss & Reilly, 2018; Li, 2019). Considering that MOOCs welcome a wide range of learners, research on goal setting excludes learners above 44 years old, thereby leaving a gap in our knowledge. Further research should address this gap to understand the goal-setting behaviour of older adult learners in MOOCs.

Apart from researching the goal-setting behaviour of mainly younger adult learners, most studies on SRL in MOOCs share a common understanding of personal goals, which relate to standard metrics of learning success in those online courses. The primary goal in MOOCs is usually associated with completing the online course (Handoko et al., 2019a); completion rates are "a common metric of student success" (Williams et al., 2018, p. 433). Obtaining a certificate of completion is another common goal found in the literature (Maldonado-Mahauad et al., 2018). "Earn course certificate, Complete all assessments and Complete all lectures" were among the "personal course goals" found in the survey administered by Kizilcec et al. (2017, p. 25). The metric of success, or goal attainment in this study, was "completing over 80% of assessments and lectures, respectively" (Kizilcec et al., 2017, p. 25). Assigning the 'personal' category to course-related goals in Kizilcec et al. (2017) creates confusion about the origin of goals. It remains unclear if these goals were formulated by the learners themselves, the MOOC researchers, or ultimately the MOOC authors or platform providers.

Additional empirical work found in the literature contradicts the shared understanding of goals among the authors mentioned above. Other researchers have found that not all learners aim to complete a MOOC or earn a certificate by the end of the course as their personal goals (Loizzo et al., 2017); instead, "learners usually set specific goals based on the development of knowledge" (Alonso-Mencía et al., 2020, p. 337). For instance, in a mixed-methods study of the learning behaviours of 788 MOOC learners, followed by interviews with 32 learners, Littlejohn et
al. (2016) found that low self-regulators set goals based on extrinsic measures, such as gaining a certificate and course completion. In contrast, high self-regulators set goals based on intrinsic measures, such as increasing knowledge and developing expertise in their field. Whereas high self-regulators "conceptualised the MOOC as a non-formal learning opportunity that supported their professional learning and development", low self-regulators conceptualised the MOOC "as a more formal learning opportunity, similar to a traditional HE course[s]" (Littlejohn et al., 2016, p. 45). MOOCs as non-formal learning environments appear to offer more learning possibilities for learners who set goals beyond completing assignments, watching all video lectures, and earning a certificate by the end of the course.

In the studies reviewed above, researchers tend to classify learners on a scale that ranges from high to low self-regulators. Others have attempted to classify learners' goals that focus on completion or learning in MOOCs. Some studies have followed the traditional dichotomy of mastery vs performance goals (Li et al., 2021) and specific vs general goals (Ding & Shen, 2019). Prior works have also attempted to identify different categories, such as "utilitarian goals" (Türkay et al., 2017, p. 212) and "alternative goals" (Henderikx & Kalz, 2019, p. 67). The issue here is that they have failed to clearly define what they mean by those goals in their studies. Other authors have distinguished between self-set goals and assigned goals, arguing that "in most medical MOOCs, like in most other courses, learning goals are still assigned" (Hendriks et al., 2020, pp.2-3). In traditional educational settings, "the teacher determined the achievement goals and students were expected to pursue these goals diligently and to ignore, neglect, or put on hold all other content goals that might divert them from reaching the end states that the teacher envisioned" (Boekaerts et al., 2006, p. 33). Conversely, in non-formal learning environments, MOOC educators and providers define a set of goals for the course (Henderikx, Kreijns & Kalz, 2017), but they do not assign goals to learners as teachers usually do in traditional educational settings.

However, MOOC researchers (Handoko et al., 2019; Kizilcec et al., 2017; Li et al., 2021; Reparaz et al., 2020; Vilkova, 2019) appear to endorse traditional goal-setting theory within their large-scale studies by limiting learners' goals to those defined by themselves. For example, Williams et al. (2018) claimed to examine the characteristics, goals, and engagement of 15,655 learners in Humanities and STEM courses delivered on edX. Instead of asking participants about the learning goals and performance outcomes they set for themselves at the start of the course, the authors asked them about their reasons for enrolment, which they had to choose from a predefined list of six "goal items" in a survey (Williams et al., 2018, p. 435). These researchers categorised the goals they were investigating in MOOCs in the same way previous L2 researchers categorised students' goals in classroom settings (Section 2.1.4).
As discussed in Section 2.1.4, generating goals for learners, and limiting their range of responses is a research trend found in investigations that extensively rely on quantitative data analysis to examine personal learning goals. This issue has permeated research on learners' goals in traditional educational settings (Brophy, 2005). It is now part of the MOOC research that also investigates this self-regulatory process mainly through quantitative methods (Alonso-Mencía et al., 2020; Cerón et al., 2020). Veletsianos and Shepherdson (2016) have also raised the issue that MOOC researchers have favoured a quantitative approach to studying "student-related topics" and have called for "an expansion of the methodological approaches used in MOOC research" (p. 214). Further research should address this issue by favouring a qualitative approach that employs several instruments to identify the goal types of MOOC learners from a holistic perspective.

If the literature intends to portray MOOCs as a means of online self-regulation, researchers should cease narrowing personal learning goals to a set of predefined goals related to standard success metrics and ask learners for their own goals. More broadly, a shift regarding the meaning of success in MOOCs should occur if these courses are to be considered driving forces behind online education at a large scale (Henderikx et al., 2017). Many authors have highlighted the need for refining the conception of 'successful learning' in these courses since "merely looking at course completion as a measure for MOOC and individual success does not suffice" (Henderikx et al., 2017, p. 364). For instance, a study by Henderikx et al. (2017) avoids framing success from "a certificate-and completion-centric view" (p. 354) and highlights that MOOC learners' sets of goals, i.e., their "individual intention is the starting point for measuring success or failure" (p. 360).

Even Williams and colleagues (2018) suggest that completion rates "may be a misleading measure of success unless learner intentions are considered" (p. 433). Authors also argue that the "binary division between completers and non-completers is not an adequate measure of quality or of learning in MOOCs. It fails to take into account the varied goals of learners or the ability of individual learners to determine personal markers of success" (Littlejohn et al., 2016, p. 47). Altogether, learners' own perspectives on success alongside their individual goal attainment should complement the framing of MOOC success (Henderikx et al., 2017). This shift in how MOOC success is conceptualised would be empowering for learners themselves. It would also enable researchers to examine precisely the "personal outcomes by which learners measure their learning" (Littlejohn et al., 2016, p. 47). Researchers should consider this shift as an opportunity to help learners learn more effectively and to gain insights into the personal goals that learners in broader age categories aim to achieve in MOOCs.
The work of Henderikx et al. (2017; 2019) has found a mismatch between the personal learning goals of learners and the goals of MOOC educators or platform providers. From a goal-setting perspective, the findings of these studies are similar to those of Lemos (1996), which also underscored that students' goals were not synonymous with teachers' goals in the classroom context (Section 2.1.3). Moreover, Henderikx et al. (2019) also studied the barriers related to the MOOC learners that could hinder the pursuit of personal learning goals. They did not investigate the barriers related to the MOOC design, such as course structure or quality of the course material. As highlighted in Section 2.2.1, more research that examines the influence of MOOC features on the pursuit of personal goals is needed to gain a comprehensive picture of the elements that support or hinder the goal-setting behaviour of MOOC learners. Section 2.2.3 deals with the goal-setting support provided in MOOCs to scaffold this self-regulatory process.

Overall, Section 2.2.2 has discussed the relevance of SRL, particularly goal setting, for a successful learning experience in MOOCs. It has described the characteristics of learners who set goals and how goals are understood in these online courses. Research has shown that learners do not normally formulate the goal of completing a MOOC as their personal goal. The section has also pointed out four gaps in knowledge concerning the need for:

1. researching the goal-setting behaviour of older adult learners in MOOCs.
2. more qualitative research that examines learners' goals beyond a dichotomous goal classification.
3. more research investigating personal learning goals of MOOC participants.
4. more research that examines the influence of MOOC features on the pursuit of personal goals.

Given that goal setting is associated with successful learning and academic achievement (Kizilcec et al., 2017), MOOC design should be equipped with appropriate scaffolding to support this self-regulatory process. Section 2.2.3 deals with the support provided in MOOCs to scaffold learners' goal-setting processes.

2.2.3 Goal-setting support in MOOCs

Learners must learn to regulate their learning process to accomplish their multiple content goals (Boekaerts et al., 2006). Nevertheless, as discussed in Section 2.1, SRL is not considered an innate attribute, and consequently, goal setting does not occur spontaneously (Brophy, 2005; Zimmerman, 2015). Assuming that learners effectively manage their learning while exploring online learning environments is part of the "pervasive urban legends in education" (Kirschner &
van Merriënboer, 2013, p. 169). Learners need to receive the necessary scaffolding to support their SRL in flexible online learning environments (Brand-Gruwel et al., 2014; McLoughlin & Lee, 2010; Van Merriënboer & Kirschner, 2017). Thus, a focus on personal goals alongside appropriate goal pursuit support should be part of the course design process of MOOCs (Colpaert, 2014; Papathoma, 2019). MOOC developers should encourage learners "to think of their own goals, and how they will use the course to achieve them" (Sokolik, 2014, p. 28).

De Waard and Kukulska-Hulme (2019) consider that "MOOCs allows learners to set out personal learning goals when registering for courses, as learners can access the content and interact based on their preferences or needs" (p. 138). However, Friðriksdóttir (2021) argue that MOOC learners are unlikely to set their own learning goals, especially if they find the presentation of course objectives helpful. Although these courses might allow learners to set goals, MOOCs do not necessarily guide them in the goal-setting process, and consequently, not all learners formulate clear goals (DeBoer et al., 2014; Watted & Barak, 2018). Several researchers have argued that more support is needed to help learners set, commit, monitor progress towards their goals, and ultimately achieve those goals during MOOC-based learning (Handoko et al., 2019a; Kizilcec et al., 2017; Li et al., 2021; Loizzo et al., 2017). However, as Weller (2020) notes, support in MOOCs "cannot be provided cheaply" (p. 131). Examples of goal-setting support in MOOCs are outlined below.

Self-regulatory processes can be scaffolded by adding SRL prompts, feedback, combining feedback with prompts, and integrated support systems in MOOCs (Hendriks et al., 2020; Wong et al., 2019). In the case of goal setting, the approaches designed to help MOOC learners with this process are very few (Cerón et al., 2020). One of them, 'MOOCnager' (Alonso-Mencía et al., 2019), is a Chrome plug-in tool in which "some predefined goal types are included: finishing a specific unit, watching a number of videos, doing a number of assignments, or completing a number of evaluations" (Alonso-Mencía et al., 2019, p. 26). After observing low usage on the part of the learners from six edX Java MOOCs, the authors concluded that "learners seem to prefer a seamless tool, integrated in the MOOC platform, which is able to assist them without any learner-tool interaction" (Alonso-Mencía et al., 2019, p. 20).

Following the recommendation of the previous study, Rohloff, Sauer and Meinel (2020) introduced the support of personal learning objectives as an extension and optional feature within MOOCs. The authors also asked learners to select their objectives from a list of predefined options, including "Complete Course Experience", "Explore", and "Active Participation with Certificate" (Rohloff et al., 2020, p. 151). These two approaches (Alonso-Mencía et al., 2019; Rohloff et al., 2020) reinforce the kind of traditional goals outlined in Section 2.2.2 and fail to
reflect the diversity of learners' goals in these courses. Encouraging learners to write/type their own goals and scaffolding this self-regulatory process is as rare in MOOCs as it is in the language classroom (Section 2.1.4). Although this process is considered essential in the literature of MOOCs, personal goal-setting support in these courses remains a critically underexplored area. Given that learners' goals are formed in context (Section 2.1), researchers investigating SRL in MOOCs should examine closely how the support provided in these courses might shape learners' goal-setting behaviour.

2.2.4 Summary of Section 2.2
Overall, the role of goal setting in helping learners engage with a course and achieve their personal goals is acknowledged in the literature of MOOCs. However, there is a lack of research investigating the pursuit of personal learning goals in such courses. Also, the research that focuses on goal setting typically relies on quantitative data analysis, leaving aside the personal voices of learners, which have primacy in qualitative studies. Similarly, little attention has been paid to the elements of MOOCs that are likely to influence the self-regulatory process of goal setting. Finally, the studies reported here examined the goal-setting behaviours of learners in MOOCs related to educational technology and STEM subjects, i.e., science, technology, engineering, and mathematics. Little is known about how learners in MOOCs set language-related goals, especially when working on these online courses as part of their classroom-based language courses. This gap in knowledge leads us to consider the limited literature that exists on the integration of MOOCs into language classrooms, synthesised in Section 2.3.

2.3 MOOCs in the L2 Classroom
Section 2.3.1 contains an account of language MOOCs and the benefits and realities these online courses offer to L2 learners. Then, Section 2.3.2 reviews previous studies that have integrated language MOOCs and content-based MOOCs in the L2 classroom. Section 2.3.3 ends by outlining the gaps in knowledge which remain despite these studies, given their limited research scope.

2.3.1 Benefits and realities of MOOCs
Initially, MOOCs targeted learners interested in connectivist pedagogies, artificial intelligence, and other STEM-related domains (Weller, 2020). As this form of ed tech continued to gain popularity, L2 practitioners also developed and offered language MOOCs to L2 learners worldwide from a range of online platforms. These online language courses, known as LMOOCs, "are dedicated Web-based online courses for second languages with unrestricted access and potentially unlimited participation" (Bárcena & Martín-Monje, 2014, p. 1). A more recent definition adds that
LMOOCs "are online courses offered for a limited period of time by higher education institutions worldwide for anybody wishing to learn a foreign language" (Gimeno-Sanz, 2021, p. 49).

By way of illustration, Travailler en français was one of the first LMOOCs for learners of French at level B1 of the Common European Framework of Reference for Languages (CEFR). The online course "aimed to develop language and employability skills for working in a francophone country" (Beaven, Codreanu & Creuzé, 2014b, p. 48). The LMOOC was designed by the Department of Languages at The Open University (UK) and the Instituts Français of Madrid, Milan, London, and Bremen in 2014. It ran for five weeks on the web application Google Sites. This French MOOC attracted more than 1000 learners globally (Beaven, Codreanu & Creuzé, 2014b).

Similarly, Basic Spanish 1: Getting Started was one of the first LMOOCs for beginner learners of Spanish, delivered on the edX platform; it was co-authored by Gimeno-Sanz (2021) and other language specialists from Universitat Politècnica de València (Spain) in 2016. Two years later, Gimeno-Sanz co-authored an LMOOC for upper-intermediate learners of English, also delivered on the edX platform (Gimeno-Sanz, 2021). The gradual growth of LMOOCs has involved the design of online courses for different purposes, including developing language skills, cultural knowledge, and employability skills for working in countries where the target language is spoken. LMOOCs and content-based MOOCs (henceforth, the term 'MOOCs' will be used to encompass both kinds of courses and avoid repetition, unless a distinction is considered necessary) can enrich and challenge L2 education. A series of benefits and realities of these online courses within the field of CALL is described next.

As for benefits, L2 learners may use MOOCs to study a new language and practise language skills through engaging content and well-structured learning material. These online courses promise to support and develop language knowledge and specialised language skills (Bárcena & Martín-Monje, 2014; Borthwick, 2020; Godwin-Jones, 2014). It is also claimed that studying a MOOC "offers exciting opportunities for lifelong, social, and participatory forms of language learning" (Mac Lochlainn et al., 2021, p. 124). English appears to be the medium of instruction of most MOOCs, with a total of 43,520 courses that have been announced at the time of writing, followed by Chinese with more than 8000 courses, Spanish with 3,889 courses, French with 1,064 courses and Italian with 301 courses (Class Central, 2021). This diversity of languages contradicts the Anglocentric view of Türkay et al. (2017), who claim that "the language of MOOCs is English" (p. 209). The wide range of online courses offered in different languages represents a learning opportunity for L2 learners who seek to learn or improve their target language for academic, professional, or lifelong learning purposes. By studying a MOOC, learners can access knowledge relevant to their disciplinary specialisms or personal interests in the target language.
The design of most MOOCs encompasses the presentation of audio-visual material, articles, automatically graded quizzes, written assignments, discussion forums and asynchronous tools for voice recording (Bárkányi, 2021; Mangenot, 2017; Sokolik, 2014). For example, LMOOCs include "short videos with linguistic and cultural content" (Martin-Monje & Borthwick, 2021, p. 107). Instructional videos in MOOCs also expose L2 learners to competent speakers of the target language (Read, Bárcena & Kukulska-Hulme, 2016). On some platforms, videos have a written script that scaffolds learners' listening comprehension practice (Rubio, Fuchs, & Dixon, 2016). L2 learners can benefit from these online activities and resources to practise pronunciation, listening, reading, and writing skills alongside other linguistic knowledge such as grammar and vocabulary in the target language (Beaven, 2013; Kukulska-Hulme et al., in press; Sokolik, 2016).

LMOOCs "make quality language learning resources available for free" (Martín-Monje & Borthwick, 2021, p. 108). Content-based MOOCs also claim to offer "high-quality content" (Rubio et al., 2016, p. 182) provided by different educational institutions and organisations (Klobas, Mackintosh & Murphy, 2015). This benefit enables L2 learners to practise their target language covering everyday topics or "develop specific vocabulary in a professional area of their interest" (de Waard & Demeulenaere, 2017, p. 39). Likewise, most MOOCs offer a well-organised presentation of their material easy to follow week by week. A group of experts in the field examined a sample of 76 MOOCs from Coursera, edX, Udacity, Canvas and FutureLearn, and concluded that these courses were "well-packaged, comprising well-organised, clearly articulated and attractively presented course material" (Margaryan et al., 2015, p. 82). Providing a logical structure and attractive material, made available weekly, can stimulate learners to practise their language competencies at their own pace (Beaven, 2013; Read et al., 2016).

As for realities, it is challenging for learners to have synchronous interaction in a MOOC and receive individual feedback on their writing or speaking performance (Bax, 2018). The massiveness and openness of these online courses hinder interaction among learners (de Waard et al., 2015; Fuchs, 2017). Despite the literature underscoring the benefit of communication at scale via discussion forums (Read et al., 2016; Rubio et al., 2016; Sokolik, 2016), empirical research challenges this feature of MOOCs. Discussion forums add a social dimension to a MOOC; however, "the opportunity for interaction is reduced in comparison with a face-to-face classroom setting" (Bax, 2018, p. 13). Findings show that LMOOC learners, especially older language learners, assume a passive role in the virtual communities that are built in discussion forums (Mac Lochlainn et al., 2021). The "silent language learner" (Mac Lochlainn et al., 2021, p. 123) avoids this kind of activity, thereby missing the opportunity to practise their writing skills in the target language.
One of the goals of language learning is to know "how to maintain communication despite having limitations in one's language knowledge" (Richards, 2006, p. 3). MOOCs are not equipped with sufficient scaffolding and technological infrastructure to achieve that goal when learning a language at scale (Kukulsk-Hulme et al., in press). The "tandemMOOC English–Spanish" course developed by Appel and Pujolà (2015; 2021) effectively delivered speaking interaction at scale, following the principles of an e-tandem learning approach to online language education (Stickler & Emke, 2011). However, synchronous speaking practice remains a challenging aspect of language learning in most online courses. Lastly, interaction between educators and learners is often missing due to the scale and openness of these online courses (Bax, 2018). Thus, low teacher presence and instructor feedback are disadvantages for learners who would rather have a teacher supervising their learning in these online courses.

These combined realities constitute challenges for L2 education in MOOCs, which adopt a learner-centred approach to the learning process. These online courses are "learner-centred, and learner-driven: a MOOC learner decides how, when, and how much to engage with a course" (Martín-Monje & Borthwick, 2021, p. 108). In the absence of interaction among learners and educators, a degree of interaction between learners and course content needs to exist to ensure effective engagement with a MOOC (Rubio, 2015). Learners should employ strategies to cope with those realities and maintain their online engagement with the course. When studying LMOOCs as part of a language teaching programme, Fuchs (2017) highlighted that participants employed metacognitive and help-seeking strategies to deal with the lack of support and scaffolding they reported in these online courses. Accordingly, MOOC learners "have to self-regulate their learning, very much relying on cognitive and resource management strategies, the latter to manage time, study environment, and the resources provided" (Gimeno-Sanz, 2021, p. 53).

Although MOOCs place the learner at the centre of the learning experience, most research to date in the field of CALL overlooks the self-regulating behaviour of learners in these online courses (Alonso-Mencía et al., 2020; Gillespie, 2020). The systematic literature review on LMOOCs conducted by Sallam, Martín-Monje and Li (2020) reported few studies examining learners’ self-regulatory processes, such as task strategy and self-efficacy (Bárkányi, 2021; Chacón-Beltrán, 2018). These correspond to cognitive processes and motivational beliefs identified in the cyclical model of Zimmerman and Moylan (2009) (Figure 1). However, there is a paucity of literature addressing goal setting in MOOCs within the field of CALL. Future work should acknowledge the goals that drive the learning behaviour of L2 learners in these online courses and provide further insights into our understanding of online self-regulation within traditional contexts, such as the L2 classroom.
In sum, MOOCs allow learners to access well-organised and engaging content about everyday topics or specific disciplines related to their academic studies, professions, or lifelong interests. The activities and audio-visual resources within these online courses help learners practise their receptive and productive skills (mainly writing) and expand their knowledge of the target language and target culture. Conversely, the lack of synchronous communication and instructor feedback in these online courses is a significant limitation L2 learners, who are anticipated to employ self-regulatory strategies to manage their online learning process. Integrating MOOCs into the L2 classroom may enhance language practice and build bridges towards SRL. Section 2.3.2 deals with works that have integrated MOOCs into formal language learning settings at different educational levels.

2.3.2 Integrating MOOCs into classroom-based language courses

The field of CALL refers to "the development and use of computer technology in relation to language teaching and learning" (Levy & Hubbard, 2005, p. 146). CALL encompasses research on every technological advance, including MOOCs, although these are among the least studied areas in this field (Gillespie, 2020). However, a growing body of evidence indicates that MOOCs and particularly the emerging phenomenon of LMOOCs have found a place in the L2 classroom. Using MOOCs in formal education is a hybrid approach that has been adopted in different academic disciplines (Bruff et al., 2013; Caulfield et al., 2013; De Lima Guedes, 2020; Weller, 2020). CALL practitioners have also embraced LMOOCs and content-based MOOCs within formal language education and explored the possibilities for hybrid models to provide meaningful L2 learning experiences. One commonality among the following studies is what Pérez-Sanagustín et al. (2017) label "the MOOC as an added value," i.e., using an online course in a classroom to "help acquire some extra knowledge or develop cross-curricular skills" (p. 52), as described below.

In a case study, Beaven (2013) used content-based MOOCs as an additional online resource for 20 students taking an English for Academic and Professional Purposes (EAP) course, with 50 hours of classroom contact, as part of their degree programmes at a university in Italy. Beaven encouraged participants to regulate their language learning by asking them to explore the Coursera platform, choose a MOOC related to their academic studies or future profession and "do what they felt would benefit their English the most" (Beaven, 2013, p. 221). Nevertheless, she restricted participants' range of choice to online courses offered on Coursera. The tools and

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6 The distinction between LMOOCs and content-based MOOCs is an arbitrary one, since the former frequently contain matter that is not solely linguistic. As used in this dissertation, these labels should be understood simply as a way of identifying the two different kinds of MOOCs used by participants to support their language study.
opportunities provided by other MOOC platforms might have enriched the learning of participants in their specific areas of interest. In this study, "regular opportunities to exchange opinions and discuss learning outcomes were provided in class" (Beaven, 2013, p. 223). At the end of the EAP course, participants presented their MOOCs to the class as part of a compulsory speaking task.

Beaven (2013) examined the usefulness of MOOCs in the EAP course through (1) a pre-questionnaire that gathered participants' initial expectations of the project, (2) discussions from the forum created in the EAP's Virtual Learning Environment for participants to share their learning experiences and (3) a post-questionnaire to obtain feedback about the project. Findings suggest that using MOOCs to supplement classroom-based learning positively impacts students' motivation, the practice and development of English for academic purposes, and confidence in using these online courses (Beaven, 2013). However, the study did not demonstrate how MOOCs could foster participants' responsibility and increase their readiness to set goals, monitor progress towards their goals, and ultimately enhance their language learning process. Although participants chose what and how much to study online and discussed their learning outcomes in class, not enough evidence was provided via the questionnaires and discussion forums about the processes employed to regulate their online learning. CALL researchers would be well advised to consider alternative methods to capture individuals' self-regulatory processes, especially goal setting, in scenarios where classroom-based learning is supported by MOOCs.

In a second study, Matthies Baraibar (2015) introduced content-based MOOCs to adult students studying towards a C1/B2 certificate in English at a public language institute in Spain. She surveyed 408 students aged 18-60 who worked with MOOCs while attending a face-to-face language course in different academic years (2013, 2014 and 2015). This quantitative study aimed to measure participants' enrolment and completion rate and student satisfaction with this learning experience. In the first academic year, students attended an information talk about MOOCs and the Coursera platform, followed by two in-class listening comprehension exercises based on the introductory videos of a Coursera MOOC that was active at that time (Matthies Baraibar, 2015). After these introductory activities, students were encouraged to enrol in a MOOC, but completing the online course remained optional.

In the two following academic years, Matthies Baraibar (2015) introduced the edX platform as part of the information talk and the listening exercises. She asked participants to choose their MOOCs from a pre-selected list of five online courses on Coursera and edX or any other course on those platforms that they found appealing. Akin to Beaven (2013), participants also engaged in small group discussions about their MOOC-based learning during class time. Those students who decided not to study a MOOC were instead asked to complete listening
exercises at home and talk about them during the group activity. Matthies Baraibar made a
laudable attempt to include older L2 learners during this MOOC-based learning initiative. In
common with others (Mac Lochlainn et al., 2021), she claims this demographic group deserves
further attention within the field.

Matthies Baraibar concluded that MOOCs "can be successfully used as a supplementary
resource for adult language learners at B2/C1 levels" (Matthies Baraibar, 2015, p. 54). She added
that "students who are encouraged to work on MOOCs on their own are going to be working
mainly on their listening comprehension skills" (Matthies Baraibar, 2015, p. 55). Arguably, the
explicit interest of the researcher in developing students' listening skills at the outset of the study
influenced the language focus of participants in their chosen MOOCs. Further research might
profitably be devoted to an in-depth analysis of other aspects of language adult learners express a
desire to focus on during their MOOC-based learning, with or without the influence of a
teacher/researcher.

At high-school level, an exploratory study using a mixed-methods approach was
conducted by de Waard and Demeulenaere (2017). Their MOOC-CLIL project observed the
possible motivational and linguistic benefits that 42 students (all 16-17 years old) could derive
from integrating content-based MOOCs into their English and French classes at a secondary
school in Belgium. The study followed a three-phase approach to increase participants' language
proficiency, study skills, and SRL. In the first phase, a MOOC description was presented to
familiarise participants with different MOOC platforms, structures, and elements, akin to Matthies
Baraibar (2015). Following a flipped-classroom approach, they worked with a given edX MOOC at
home and completed activities in class based on selected MOOC content. Then, participants chose
a MOOC from a list of three options and worked with it under the teacher's supervision. The in-
class teacher provided online language tools to help them understand specific terms. In the final
phase of the study, participants produced a short video clip to share their MOOC experience with
students of the next academic year.

The study by de Waard and Demeulenaere (2017) revealed that well-designed material
and activities in the MOOCs helped high-school students improve their motivation, practical
language use, collaborative learning and SRL skills. The SRL of participants was monitored through
semi-structured focus group interviews, limited to 9 students per group, and an adapted Skills and
Attitudes Measuring (SAM) scale used by the teacher. The researchers also administered pre-and
post- online surveys, adapted from the Motivated Strategies for Learning Questionnaire (MSLQ)
designed by Pintrich et al. (1991), which has a combined focus on SRL and motivation. The
findings from the online surveys showed that strategic planning increased 9% according to the
post-survey results and help-seeking from peers rose from 61% to 83% (de Waard & Demeulenaere, 2017). However, little evidence emerged from the surveys or focus group interviews to account for other self-regulatory processes, such as goal setting.

From 2013 until 2017, the studies reviewed above showed a preference for introducing content-based MOOCs rather than LMOOCs in universities, language institutions and high schools where participants were mainly taking English and French courses (Beaven, 2013; de Waard & Demeulenaere, 2017; Matthies Baraibar, 2015). They also opted to use MOOCs from the Coursera and edX platforms. During that period, content-based MOOCs and LMOOCs were integrated into formal higher education in other studies (Fuchs, 2017; Orsini-Jones et al., 2017; Titova, 2017). Their primary focus was on investigating student teachers of languages, a demographic group that remains outside the scope of this review.

Empirical work from 2018 onwards included introducing LMOOCs into L2 classes at university (Creelman & Löwe, 2019), expanding the range of MOOC platforms and increasing the attention to SRL within this research community (Conde Gafaro, 2019). For instance, Loizidou (2021) integrated a MOOC into a university course for three consecutive years. She specifically examined the self-regulatory skills of 39 undergraduate students who were studying two French LMOOCs as part of their course in French for university study. Different students with a B1-B2 language proficiency level took part in the study during three different academic years (N= 15 in 2018; N= 11 in 2019; N= 13 in 2020). Participants completed a weekly reflective journal, reviewed their journal every month and provided a reflective summary at the end of the semester. All three documents were shared with the in-class teacher.

Although Loizidou (2021) incorporated an extensive reflective component during each academic semester, evidence of goal setting was lacking when participants recorded their LMOOC-based learning experience in their journals. After conducting a content analysis of the qualitative data, the researcher found a considerably low level of SRL in areas such as goal setting and strategic planning "(10,39%, 45 references)” (Loizidou, 2021, p. 5). It remains unclear whether participants' goals were aligned with the content of both the LMOOC and the face-to-face course, since the researcher did not analyse the goals set by participants during their LMOOC-based study.

Loizidou concluded that the integration of LMOOCs in a formal learning environment helps to develop "an awareness of student self-regulation learning", and "human support in face-to-face classes seems to be critical for the successful participation of the LMOOCs" (Loizidou, 2021, p. 8). The active role of the in-class teacher in supporting students during their LMOOC-based learning was a common element found in the studies reviewed above. In this study, the in-
class teacher also familiarised students with the Coursera and Moodle platforms, encouraged them to set goals according to their needs, and proposed means to help them achieve their goals. Loizidou (2021) outlined ways in which the teacher supported students’ engagement and improved learning strategy choice. Nevertheless, the effectiveness of the goal-setting support provided by the in-class teacher remained unclear since a complete picture of students' goals was not captured in this study.

Table 3 summarises the six studies that have been discussed in Section 2.3.2, presenting them in publication order. The table identifies the focus of study; the participants and the context in which they were studying; the types of MOOC they were studying, and the methods used by the researchers.
<table>
<thead>
<tr>
<th>Study/Authors</th>
<th>Year</th>
<th>Focus</th>
<th>Participants/Context</th>
<th>MOOC type</th>
<th>Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beaven</td>
<td>2013</td>
<td>Students’ motivation and value of MOOCs for enhancing an EAP course</td>
<td>20 students of English registered in an Italian university</td>
<td>Content-based MOOCs from Coursera, used to supplement a face-to-face EAP course</td>
<td>Pre-and post-questionnaires and discussions taken from the EAP’s virtual learning environment (Canvas)</td>
</tr>
<tr>
<td>Matthies Baraibar</td>
<td>2015</td>
<td>Enrolment and completion rates and student satisfaction data on MOOC-based learning as part of B2/C1 English courses</td>
<td>408 adult students of English registered in a public language institute in Spain</td>
<td>Content-based MOOCs from Coursera and edX, used as supplementary materials for face-to-face English courses</td>
<td>A survey</td>
</tr>
<tr>
<td>Waard &amp; Demeulenaere</td>
<td>2017</td>
<td>Impact of MOOCs on Content and Language Integrated Learning (CLIL) courses, particularly on students’ motivation, language learning, social learning, critical learning skills and SRL</td>
<td>42 young students of English and French registered in a secondary school in Belgium</td>
<td>Content-based MOOCs from edX and Lumni, used to supplement classroom-based learning and to investigate SRL of L2 learners</td>
<td>A pre-and post-online survey, adapted from the MSLQ, follow-up semi-structured focus group interviews, and an adapted SAM scale</td>
</tr>
<tr>
<td>Creelman &amp; Löwe</td>
<td>2019</td>
<td>Testing virtual mobility for students by integrating an LMOOC into an academic German writing course</td>
<td>A group of students of German registered in a Swedish university</td>
<td>An LMOOC fromiversity, used as supplementary material for a face-to-face academic German writing course</td>
<td>Written assessment and student grades</td>
</tr>
<tr>
<td>Conde Gafaro</td>
<td>2019</td>
<td>Utility of MOOCs to supplement classroom activity and to identify students’ self-regulatory strategies before and after working with these online courses in an EAP course</td>
<td>13 students of English registered in an Italian university</td>
<td>Content-based MOOCs from Coursera, edX and FutureLearn, used to supplement classroom-based learning and to investigate SRL of L2 learners</td>
<td>Pre-and post-questionnaires, adapted from the MSLQ and follow-up semi-structured interviews, adapted from an interview designed by Littlejohn and Milligan, (2015) to probe SRL processes of MOOC users</td>
</tr>
<tr>
<td>Loizidou</td>
<td>2021</td>
<td>Impact of LMOOCs on students’ self-regulatory skills while working with these online courses in a French for academic purposes course</td>
<td>39 undergraduate students registered in a Cypriot university</td>
<td>LMOOCs from Coursera and Moodle, used to supplement classroom-based learning and to investigate SRL of L2 learners</td>
<td>A weekly reflective journal, a monthly résumé of students’ journals and a reflective summary at the end of the semester</td>
</tr>
</tbody>
</table>
In broad terms, in CALL, "the computer, the language learner, and the language learning objectives are at the heart of the matter" (Levy & Hubbard, 2005, p. 146). Although a distinction is not made between learners' and teachers' objectives, the concept of goals remains relevant to the CALL perspective (Colpaert, 2010). However, personal learning goals have not previously been studied in detail when LMOOCs and content-based MOOCs are introduced into a formal educational setting (Table 3). Nonetheless, Colpaert (2010) argues that "CALL should focus on how technology can support the learner in better achieving learning goals" (p. 273). Evidence of empirical studies exploring or developing SRL support in LMOOCs is scarce (Conde Gafaro & Seda Yildiz, 2020). None of the studies presented in Table 3 included this area within their scope. Future work can uncover the elements of these online courses that facilitate the goal-setting behaviour of L2 adult learners, an essential self-regulatory process in MOOCs, as discussed in Section 2.2.2.

2.3.3 Summary of Section 2.3

In sum, Section 2.3 has outlined the benefits and realities of learning a language with MOOCs. It has synthesised the main empirical works that have integrated LMOOCs and content-based MOOCs into the L2 classroom before highlighting four main gaps in the literature:

1. little research has been conducted into the linguistic knowledge and skills L2 learners decide to deal with when LMOOCs and content-based MOOCs are integrated into the L2 classroom.
2. adult learners, specifically older L2 learners, are underrepresented in this compelling area of CALL research. This demographic group merits further study within the field.
3. more research is needed on the elements that scaffold goal setting in LMOOCs.
4. a lack of insight into the personal learning goals L2 adult learners may set for themselves while working with LMOOCs and content-based MOOCs in the L2 classroom. This gap in knowledge is recurrently identified throughout the literature reviewed in Chapter 2.

2.4 Summary of Chapter 2

This literature review has demonstrated a considerable gap in knowledge about the content goals that adult language learners set for themselves, particularly in learning environments outside the classroom setting. The self-regulatory process of goal setting is nuanced and complex, and researchers and teachers have rarely paid attention to this process in L2 studies or the language classroom. L2 research often focuses on learners' goal orientation, i.e., the reasons for which they are studying a target language, instead of on the actual goals they might pursue during the language learning process. The goal-setting process is also essential to succeed in a non-formal
learning environment such as a MOOC, which requires high levels of self-regulation. MOOCs have also failed in acknowledging and supporting the personal goals of learners who enrol in these online courses.

Similarly, research on MOOCs in the L2 classroom has examined different elements of participants’ online learning experience, but not hitherto their goals. So far, little research within classrooms and MOOC contexts has examined the goal-setting behaviour of adult L2 learners. Considering that goals guide and stimulate learning, it is imperative to gain insights into the goal-setting behaviour of L2 learners who are taking their language learning outside the classroom. In doing so, we shall be able to understand the different ways in which learners’ goals give meaning, direction, and purpose to their online language learning, especially in the LMOOCs or content-based MOOCs they study as part of their classroom-based language courses.

2.5 Research Questions
After conducting an in-depth review of the literature across three sections (Section 2.1, 2.2 and 2.3) and highlighting several gaps in knowledge, the researcher responded to the following three research questions (henceforth, RQ):

**RQ1:** What aspects of language do adult language learners focus on the most when engaging with a MOOC as part of their classroom-based language course?

**RQ2:** What kinds of goal do adult language learners set for themselves in MOOCs that they select as part of their classroom-based language course?

**RQ3:** Which elements of MOOCs support learners' goal-setting behaviour?
3 Methodology

This chapter provides an account of the methodology adopted in this thesis. Section 3.1 presents the philosophical view and researcher’s positionality that underpinned the research. Section 3.2 includes the rationale for the research design, which entailed multiple-case study research as the approach to this qualitative investigation. The section also describes the cases, methods and instruments employed to answer the research questions. Section 3.3 presents reflective thematic analysis as the selected approach to data analysis. Then, a reflection on the ethical dimension of the study is outlined in Section 3.4. A summary of the chapter is provided in Section 3.5.

3.1 Philosophical Underpinnings and Positioning of the Researcher

The decision-making process of choosing an appropriate methodology is informed by philosophical views that outline how the phenomenon under consideration should be understood and addressed (Kuhn, 1962). The researcher believes individuals can become agents of their own learning and she understands learning through the lens of constructivism. In this constructivist worldview, individuals "develop subjective meanings of their experiences" and the role of the researcher is to "make sense of (or interpret) the meanings others have about the world" (Creswell & Poth, 2018, p. 24). The researcher’s intent was to interpret different and context-dependent views of learners regarding their online language learning experiences. She acknowledges that interpretations made in this study were shaped by her language teaching background and previous MOOC-based experiences. This philosophical view and researcher’s positionality underpinned the ontology and epistemology of the research presented below.

3.1.1 Ontological stance

The methodological approach of this study was driven by a constructivist paradigm whose ontology posits the existence of multiple understandings of reality. "Multiple realities are constructed through our lived experiences and interactions with others" (Creswell & Poth, 2018, p. 35). Researchers and participants will interpret a phenomenon in different ways "at different times in different circumstances" (Denscombe, 2017, p. 140). In the context of this study, the researcher focused on adult L2 learners and their varied understandings of MOOC-based learning, particularly their language focus, their personal learning goals and the elements identified in their online courses that helped them to define or achieve those goals.

3.1.2 Epistemological stance

The idea that "reality is not an objective entity; rather, there are multiple interpretations of reality" (Merriam, 1998, p.8) was linked to the epistemological tenet of this study. Drawing on the
constructivist paradigm, an understanding of the world is constructed from the varied meanings that participants develop of the phenomenon under consideration (Maxwell, 2012). Constructivist researchers "rely as much as possible on participants' views of the situation" (Creswell & Poth, 2018, p. 24). Meaning is also shaped by the interaction between personal factors (beliefs and previous experiences) and new situations people experience in social settings (Mertens, 2014). In the context of this study, the researcher paid attention to any potential influence of personal and environmental factors on the language focus and learning goals reported by adult L2 learners during MOOC-based learning.

Researchers with ontological and epistemological orientations that are driven by a constructivist paradigm, acknowledge the multiple and context-dependent perspectives of individuals when interpreting the phenomenon studied. To better understand the multiple interpretations of participants related to aspects of language, personal learning goals and goal-setting support in MOOCs, it was necessary to approach individual learners and observe their actions in great detail. Thus, the researcher of the present study opted for the comprehensive research design described in Section 3.2.

3.2 Research Design

A qualitative methodology was adopted within the design of this study. Qualitative research "is interested in uncovering the meaning of a phenomenon for those involved" (Merriam & Tisdell, 2016, p. 6). This qualitative field of inquiry entails interpretive practices adopted by researchers to make sense of processes and meanings developed by individuals in social settings (Denzin & Lincoln, 1998). Within qualitative methodologies, "all data is a symbolic representation, which needs to be interpreted and thus its meaning is subjective and context dependent" (Twining et al., 2017, p. A2). Conversely, quantitative methodologies are based on ontological and epistemological positions that emphasise one objective reality and stress the measurement of variables to reach a universal understanding of that reality (Denzin & Lincoln, 1998; Twining et al., 2017). Unlike quantitative studies, qualitative research seeks "to empower individuals to share their stories, hear their voices, and minimize the power relationships that often exist between a researcher and the participants in a study" (Creswell & Poth, 2018, p. 45).

In the context of this study, the literature showed a tendency for researchers to investigate MOOCs using quantitative methods (Zhu, Saria & Lee, 2018). As discussed in Section 2.2.2, researchers mainly adopted quantitative methods to examine the self-regulatory process of goal setting of big sample sizes in these online courses, since "personal contact does not scale up well" (Alonso-Mencía et al., 2020, p. 336). The present study goes beyond this quantitative research trend and offers a compelling qualitative perspective to the research community.
investigating goal setting and language learning in MOOCs. The study investigates the linguistic interests and goal-setting behaviour of adult L2 learners in these online courses by analysing the experiences and actions undertaken by the learners themselves.

The researcher was also interested in understanding participants' learning goals and specific MOOC elements that influenced the self-regulatory process of goal setting. Designing a quantitative study would not serve the purpose of providing a detailed and meaningful interpretation of participants' language learning experiences and goal-setting behaviour in MOOCs. What is more, quantitative research would not be as interested as qualitative research in acknowledging the individual voices of participants and their personal language learning experiences in these online courses. Hence, designing a qualitative study suited these purposes and remained consistent with the theoretical stance of this research (Section 3.1). Multiple-case study research was the chosen approach to conduct this qualitative study, as discussed below.

### 3.2.1 Multiple case study research

As part of the research design process, the researcher considered two approaches to conduct this qualitative study: phenomenology and case study research. Phenomenological research "describes the common meaning for several individuals of their lived experiences of a concept or a phenomenon" (Creswell & Poth, 2018, p. 75). At first, the researcher was interested in understanding how L2 learners self-regulate their learning in MOOCs, based on Zimmerman and Moylan's (2009) cyclical model of SRL (Figure 1), and what the learners thought of MOOC-based learning. A phenomenologist would focus on describing the essence of SRL and MOOC-based learning through the lens of participants who experienced the phenomenon by using "only interviews" (Creswell & Poth, 2018, p. 105). However, after uncovering the gaps in knowledge in the literature of SRL, MOOCs and CALL (Section 2.4), the researcher decided to address those gaps by conducting a detailed examination of the language focus, the goal-setting behaviour of adult L2 learners and goal-setting support in MOOCs.

Describing the essence of SRL and MOOC-based learning was no longer the focus of this research. To address the gaps identified in the literature, the researcher needed to draw on multiple sources of evidence to understand the accounts of participants and analyse the goal-setting support in MOOCs. Phenomenological research relies mainly on interviews (Creswell & Poth, 2018, p. 105). Although interviews are rarely used in MOOC research (Zhu et al., 2018), relying only on this data collection method to answer the three research questions would not suffice (Section 2.5). As Alonso-Mencía et al. (2020) suggest, employing several data collection methods may be more effective for obtaining unbiased data when researching MOOCs. Taken
together, phenomenology was not considered a suitable approach given the revised scope of this study.

Another approach considered was that of case study research whose intent is to "develop an in-depth understanding of a single case or explore an issue or problem using the case as a specific illustration" (Creswell & Poth, 2018, p. 96). Yin (2018) explains that this approach investigates a case (or cases) in depth and within its contemporary context. The case can entail people, decisions, or events (Thomas, 2011). Unlike the phenomenological approach, the case study approach blends description with analysis of events (Hitchcock & Hughes, 1995). Many authors (Whipp & Chiarelli, 2004; Shapiro et al., 2017; Beaven, 2013) have implemented this form of qualitative research to study SRL, MOOCs and L2 learning with the use of these online courses in the L2 classroom.

Moreover, case study research can encompass more than one case. A multiple-case study contains two or more cases to gain a nuanced understanding of a particular situation over time (Yin, 2018). Creswell and Poth (2018) mention that one of the issues in case study research is that "the more cases an individual studies, the less the depth in any single case can be" (p. 102). Nonetheless, examining various case studies contributes to having more rigorous and robust findings than those obtained solely based on a single case (Yin, 2018). Similarly, case study research acknowledges the existence of "multiple realities having multiple meanings, with findings that are observer dependent" (Yin, 2014, p. 44). This philosophical orientation of case study research suited the theoretical stance of this research.

This approach to qualitative research also relies on multiple sources of information. As Yin (2014) notes, "the case study's unique strength is its ability to deal with a full variety of evidence—documents, artifacts, interviews, and observations—beyond what might be available in a conventional historical study (p. 39). Conducting multiple-case study research was the most appropriate approach to gain a holistic picture of participants' multiple perspectives and meanings within the learning context of MOOCs. Indeed, this approach enabled the researcher to capture the online language learning experiences of different cases and subsequently answer the research questions (RQs).

A particular challenge inherent in this qualitative approach is "case selection", i.e., defining the case or cases that are "worthy of study" (Creswell & Poth, 2018, p. 102). However, the literature review helped establish a rationale for specifying the boundaries of the cases. Chapter 2 showed a lack of research examining the online language learning experiences and goal-setting behaviour of adult learners, a demographic group included in this multiple-case study research. "The research question should specify the boundaries of the case" (McKay, 2006, p. 73).
Hence, a purposeful sampling procedure (Creswell & Plano Clark, 2018) was used to search for cases that met the specific selection criteria identified in the RQs, i.e., adult L2 learners studying in classroom-based language courses with flexible syllabuses that support independent learning and embrace online education. These characteristics were essential for the researcher to examine learners’ language focus, personal learning goals and goal-setting support offered in MOOCs. A description of the two case studies that matched those selection criteria is provided below.

3.2.2 Case Study 1

The first Case Study was a group of ten adults studying Spanish, Italian and French in a non-traditional setting in Milton Keynes (UK). Community Learning MK is a Milton Keynes Council service that aims to provide outstanding adult education, continuing education, and lifelong learning opportunities to students of all ages (Milton Keynes Council, 2021a). Adult education, a part of Community Learning MK, offers a variety of courses in different topics, including foreign languages. Adults usually receive formal language instruction during ten weeks in a classroom-based setting; however, lessons have moved online due to the Covid-19 pandemic (Milton Keynes Council, 2021b). Community-based language learners attended face-to-face lessons once a week when this study was conducted between February and July 2019.

Case Study 1 matched the main characteristic of the case selection criteria regarding the age group of participants. Likewise, the strong emphasis on goal setting highlighted in the adult education courses played a decisive role when selecting this case. Community Learning MK pays special attention to the goal-setting process of adults while studying their courses, as follows:

1. In the first sessions, tutors should talk to learners about the group learning goals listed in the 'Course Information Sheet', their own learning goals and what they want to achieve.
2. During the course, tutors should consider learners’ personal learning goals and help them use their 'Individual Learning Plan' to record their learning progress.
3. At the end of the course, tutors should help learners reflect on their learning and identify if they have achieved their learning goals established in the first sessions (Milton Keynes Council, 2018).

Finally, the gatekeepers and in-class tutors of Spanish, Italian, and French were keen to introduce MOOC-based learning in their classroom-based language teaching. They enabled the researcher to contact students after the first face-to-face lessons with the aim of securing an initial expression of interest from the students and handing out the participant information sheet and consent form. Before giving students both documents, the researcher presented an animated...
video, which she created using the software Powtoon\textsuperscript{7}. The video engaged students' interest in the research and familiarised them with the research methods and requirements for joining the study, which facilitated the recruitment process.

The participant information sheet and consent form were signed and returned in the following lesson by the students who wanted to take part in the research. Ten community-based language learners volunteered to engage with MOOCs as part of their language courses with their in-class tutors. A description of participants' reported age group, language proficiency level, classroom-based language course and chosen MOOC is presented in Table 4.

\textsuperscript{7} Readers can access the original video here: https://drive.google.com/file/d/1NUlc5HkbFH2AYz3mNVisiY2JVLiiWstr/view?usp=sharing
Table 4 A description of participants in Case Study 1

<table>
<thead>
<tr>
<th>Participant</th>
<th>Age group</th>
<th>Language proficiency level</th>
<th>Classroom-based language course title</th>
<th>LMOOC</th>
<th>MOOC platform</th>
<th>Familiar with MOOCs?</th>
</tr>
</thead>
<tbody>
<tr>
<td>SILVIA</td>
<td>46-55</td>
<td>Intermediate</td>
<td>Spanish-Intermediate</td>
<td>Basic Spanish vocabulary specialisation. 6.3 Sports, travel &amp; the home</td>
<td>Coursera</td>
<td>No</td>
</tr>
<tr>
<td>SIMONA</td>
<td>56-65</td>
<td>Intermediate</td>
<td>Spanish-Intermediate</td>
<td>Basic Spanish vocabulary specialisation. 6.3 Sports, travel &amp; the home and 6.4 Careers and social events. Spanish for Beginners</td>
<td>Coursera &amp;iversity</td>
<td>No</td>
</tr>
<tr>
<td>SOFIA</td>
<td>66 +</td>
<td>Intermediate</td>
<td>Spanish-Intermediate</td>
<td>Spanish for beginners 6 out and about</td>
<td>FutureLearn</td>
<td>Yes</td>
</tr>
<tr>
<td>SARAH</td>
<td>56-65</td>
<td>Intermediate</td>
<td>Spanish-Intermediate</td>
<td>Spanish for beginners 6 out and about</td>
<td>FutureLearn</td>
<td>No</td>
</tr>
<tr>
<td>SANTOS</td>
<td>46-55</td>
<td>Intermediate</td>
<td>Spanish-Intermediate</td>
<td>Puertas Abiertas: Curso de español para necesidades inmediatas (II) [Open Doors: Spanish course for immediate needs (II)]</td>
<td>UNED Abierta</td>
<td>No</td>
</tr>
<tr>
<td>SALVADOR</td>
<td>66 +</td>
<td>Upper-Intermediate</td>
<td>Spanish-Intermediate</td>
<td>Basic Spanish vocabulary specialisation. 6.3 Sports, travel &amp; the home</td>
<td>Coursera</td>
<td>No</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
<td>---------------</td>
<td>------------------</td>
<td>------------------------------------------</td>
<td>----------------------------------</td>
<td>----</td>
</tr>
</tbody>
</table>
Community-based language learners were given pseudonyms to ensure participant anonymity. The first letter in their pseudonym indicates which languages they were studying. For example, Sarah and Sofia were learning Spanish, while Felix was learning French. They were asked to engage with a MOOC of their choice since students who find a learning task that aligns with their interests are likely to regulate their learning more effectively (Zimmerman, 2000). Similarly, research on SRL in MOOCs has shown that goal setting and task interest are essential self-regulatory processes for a successful learning experience in these online courses (Reparaz et al., 2020). Previous studies have also enabled participants to choose their MOOC when researchers and practitioners decide to integrate these online courses in the L2 classroom (Section 2.3.2).

Nevertheless, participants in Case Study 1 initially reported feeling overwhelmed by the large number of MOOCs on offer. The researcher searched for available online courses that matched participants’ reported language proficiency levels to minimise this negative feeling and create a more pleasant start to their online learning. In the second session, the researcher shared a list that classified relevant MOOCs by target language, content, level, platform, and availability (Appendix A-Appendix B-Appendix C). A follow-up presentation in the classroom showed participants how to enrol in the listed online courses. Participants chose LMOOCs from different online platforms (Table 4). Once they selected their online courses, they were free to decide how and when to work with the online material, though a minimum of two hours of study per week was suggested.

3.2.3 Case Study 2
The second Case Study was a group of nine adults studying English for Specific Purposes (ESP) in a non-formal learning environment in Ferrara (Italy). The gatekeeper, who also acted as the in-class tutor in Case Study 2, designed and delivered a ten-week English course for a local consortium in March 2019. The course titled 'English for Academic and Professional Purposes' took place once a week on an extra-curricular basis. The face-to-face course was offered to adults who had a minimum B1+ level of proficiency in English (CEFR) and were able to use English autonomously and interact confidently in their field of expertise (English for Academic and Professional Purposes 2019, 2019). Learners were also required to have an electronic device and an internet connection to access some of the material posted on Canvas, the learning management system of the course (English for Academic and Professional Purposes 2019, 2019).

Case Study 2 also met the case selection criteria regarding the age group of participants. Moreover, the in-class tutor had previously integrated MOOCs within her classroom-based language teaching to enhance ESP learners’ motivation, academic English, and practical language use in specific disciplines. The potential use of MOOCs in the learning context was another
characteristic specified in the case selection criteria. The familiarity of the in-class tutor with MOOCs facilitated the selection of the case and the recruitment process of participants. The in-class tutor was the one who presented the same animated Powtoon video to the class and distributed the consent forms, and participant information sheet during the first session of the course, since the researcher was not in Italy at the time. Nine ESP learners decided to participate in the study while studying in their face-to-face course. A description of participants' reported age group, language proficiency level and chosen MOOC is presented in Table 5.
<table>
<thead>
<tr>
<th>Participant</th>
<th>Age group</th>
<th>Language proficiency level</th>
<th>Classroom-based language course title</th>
<th>Content-based MOOC</th>
<th>MOOC platform</th>
<th>Familiar with MOOCs?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edwin</td>
<td>46-55</td>
<td>Intermediate</td>
<td>Empire: The Controversies of British Imperialism</td>
<td>FutureLearn</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Erik</td>
<td>18-25</td>
<td>Upper-Intermediate</td>
<td>Improving communication skills</td>
<td>Coursera</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Estella</td>
<td>46-55</td>
<td>Upper-Intermediate</td>
<td>English For Teaching Purposes</td>
<td>Coursera</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Elsa</td>
<td>26-35</td>
<td>Upper-Intermediate</td>
<td>Big Data Modeling and Management Systems</td>
<td>Coursera</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Ethan</td>
<td>36-45</td>
<td>Upper-Intermediate</td>
<td>Improving communication skills</td>
<td>Coursera</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Emily</td>
<td>18-25</td>
<td>Intermediate</td>
<td>Supporting children with difficulties in reading and writing</td>
<td>Coursera</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Elliot</td>
<td>56-65</td>
<td>Upper-Intermediate</td>
<td>Introduction to Thermodynamics: Transferring Energy from Here to There</td>
<td>Coursera</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Erica</td>
<td>26-35</td>
<td>Upper-Intermediate</td>
<td>Logical and Critical Thinking</td>
<td>FutureLearn</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
ESP learners were assigned pseudonyms beginning with the letter 'e' to indicate their target language and ensure anonymity. Participants in this case study chose their own MOOC relating to their academic and professional specialisations. It was essential that learners felt confident with the subject matter covered in the online course to facilitate their self-regulating experience. Research on SRL in computer-based learning environments has found that learners "with low prior domain knowledge do not have the requisite knowledge base to engage in metacognitive activities" (Moos, 2018, p. 247). Hence, they were encouraged to select an online course based on a subject that was familiar to them, which became an advantage when engaging with the metacognitive process of goal setting. Participants were asked to use Class Central, a search engine tool to browse MOOCs by subjects, languages, and providers.

Participants in Case Study 2 were more confident choosing the MOOC independently than participants in Case Study 1. The former did not need a list that suggested online courses for them. Nevertheless, the researcher provided participants with some guidelines on selecting their MOOCs through Class Central. These guidelines were also uploaded on Canvas (Appendix D). The in-class tutor also familiarised learners with the registration process for different platforms. The high level of language proficiency in English enabled them to select their MOOCs from a wide range of online courses that moved beyond the linguistic content usually offered in LMOOCs (Table 5). Participants in Case Study 2 chose specific content-based MOOCs that suited their disciplinary specialisms and language proficiency level.

3.2.4 Summary of cases
The research design of this multiple-case study followed a 'replication logic', i.e., cases replicate the exact conditions of the first case to predict similar or contrasting results based on anticipated reasons (Yin, 2018). The extent of the replication logic presented in this research is reflected in the following conditions: small groups of adult learners attending face-to-face language courses while engaging with MOOCs of their choice for a month to enhance classroom-based instruction. Learners in both cases were not required to take a formal assessment to move on to other language levels. The only contextual difference identified was related to in-class support. Case Study 2 received guidance from the in-class teacher, while Case Study 1 received less guidance during the research period.

Although participants were free to decide how to deal with their MOOCs, a minimum of two hours of study per week was suggested. They were also able to explore other online courses offered by different providers if they considered this necessary. MOOCs are hosted by global providers, mainly in North America, Europe, and Asia (Shah & Pickard, 2021). Participants in Case
Study 1 and Case Study 2 chose MOOCs from several platform providers based in North America and Europe:

- Coursera and edX in the USA
- FutureLearn in the UK
- iversity in Germany
- UNED Abierta (Universidad Nacional de Educación a Distancia) [National University of Distance Education] in Spain
- FUN (France Université Numérique) [France Digital University] in France.

The selection of MOOCs made by community-based language learners included six platform providers, while the selection made by ESP learners was narrowed to three leading platform providers (Coursera, edX and FutureLearn). Additionally, the selected online platforms fall into different categories: profit-oriented organisations (Coursera, FutureLearn, edX and iversity) and individual universities or university consortia (UNED Abierta and FUN). Those platform providers offered both LMOOCs and content-based MOOCs.

As for pedagogic approaches, most MOOCs follow an instructivist pedagogy approach in which "learning goals are predefined by an instructor, learning pathways structured by environment and learners have limited interactions with other learners (Littlejohn, 2013, p. 3). Conversely, MOOCs offered on the FutureLearn platform support a social-constructivist pedagogy approach, based on the Conversational Framework developed by Laurillard (2002) (Ferguson & Sharples, 2014).

In the Conversational Framework, each teaching component should promote discussions among learners willing to exchange ideas and information (Ferguson & Sharples, 2014). Facilitating reflective conversation is an essential element of this framework to support social learning online. MOOC educators who adopt the Conversational Framework in their courses have "the responsibility to suggest goals and objectives, to generate suitable activities and models to explore, and to facilitate discussions" (Papathoma, 2019, p. 18). Nevertheless, learners should regulate their learning in MOOCs that either adopt an instructivist or social-constructivist pedagogy approach.

Figure 5 summarises the two case studies that formed the basis of this multiple-case study research. It shows the type of learners in Case Study 1 and Case Study 2; participants' age profile and their reported language proficiency level; the country where the face-to-face course was offered, and the type of MOOC they chose to study.
The replication logic adopted in this multiple-case study research also entailed using the same methods and instruments in both case studies. Participants in Case Study 1 and Case Study 2 worked with their LMOOCs and content-based MOOCs for four weeks and shared their learning
experiences with the researcher at three stages: before, during and after MOOC-based learning. Before describing the qualitative methods used in each stage of the main study, an account of the pilot study and its impact on the changes the researcher made for data collection and methods is presented in Section 0.

3.2.5 Pilot study

The researcher conducted a pilot study during the first academic year of her PhD using an exploratory approach. As outlined in Table 3, the study focused on identifying the self-regulatory processes adopted by university students in an English for Academic Purposes (EAP) course using MOOCs. Thirteen students from different study programmes decided to take part in this pilot: 5 PhD candidates, 3 Master's students and 5 undergraduates. The level of proficiency in English of most participants was B2 as measured by the CEFR.

MOOCs were also used to supplement the EAP course, which was offered face-to-face at the time of the study (Conde Gafaro, 2019). The EAP course ran for eight weeks, from February to April 2018, at the University of Ferrara in Italy. During the EAP study sessions, students had 2 hours of classroom contact twice a week. They also worked with their chosen MOOCs as part of an independent study element specified in the EAP syllabus. However, participants were asked to engage with their MOOCs as part of the pilot study for only four weeks, since that is the average length of these online courses (Gimeno-Sanz, 2021).

The pilot study aimed to address the following questions:

1. What SRL processes do students in higher education employ before engaging with MOOCs that are integrated into an academic language module?

2. What SRL processes do students in higher education employ after engaging with MOOCs that are integrated into an academic language module?

3. To what extent does MOOC engagement promote the use of SRL processes of students in higher education?

A three-phase plan was designed to answer those initial questions. In the first phase, a pre-questionnaire was administered via Online surveys (formerly BOS) in week 1 of the EAP course. In the second phase, between week 2 and week 5, participants were asked to engage with a MOOC of their choice, since students who manage to develop personal interest in a learning task are more likely to regulate their learning (Zimmerman, 2000). In the last phase, a post-questionnaire was administered in week 5. A voluntary semi-structured interview was conducted between weeks 6 and 7 of the course, to avoid a potential clash with students' assessment activities in the final session of their EAP course.
The cyclical phase model of self-regulation (Zimmerman & Moylan 2009) was used as a reference for the analysis of the pre- and post-questionnaire responses and four semi-structured interview transcripts. Findings showed that strategic planning processes were more likely to be employed than help-seeking processes during MOOC engagement. A low presence of goal-setting processes was also identified during data analysis, particularly while coding the transcripts of the semi-structured interviews. Despite the involvement of only a small number of participants in this initial MOOC-based research, the results of the pilot study provided an interesting picture of the self-regulatory processes that young adult learners were more likely to use when online courses were used as an adjunct to classroom-based language courses.

This pilot study was also carried out to test the methods and instruments that would be appropriate to implement when researching the self-regulating behaviour of language learners in MOOCs. Administering online questionnaires was not found suitable for examining how learners develop self-regulating processes during four weeks of MOOC-based learning. The instrument used in the pilot study was originally designed by Pintrich et al. (1991) to measure the levels of self-regulation of students in classroom settings. However, the research questions did not seek to quantify but to identify the self-regulatory processes of participants studying in a MOOC. Besides, surveying participants before and after their online learning activity offered only limited insight into how their self-regulatory processes unfolded over the four weeks of engagement with the chosen online courses. This prompted the researcher to consider alternative methods for investigating participants' SRL development during each week of MOOC-based learning.

By the end of the pilot study, the researcher was curious to find out more about the goal-setting behaviour of participants, which analysis of the semi-structured interviews revealed to be the least common self-regulatory process to be observed on this occasion. The researcher used such interviews to generate supportive evidence about participants’ self-regulatory processes. Nonetheless, she realised she could gather essential information if the semi-structured interviews occurred not just at the end of the online activity but throughout. Hence, this method was considered the most appropriate, in conjunction with open-ended questionnaires, to generate richer evidence and a closer understanding of participants’ views of the purpose for learning in a MOOC, but also the specific aims they could set for themselves during this online activity.

As for research question three, the pilot study did not generate sufficient data, with the methods initially chosen, to address the last question of it. The items of the two questionnaires did not successfully target the support offered by MOOCs for the adoption of SRL processes. Likewise, the semi-structured interviews were too few to offer adequate evidence in answer to this last question. This led the researcher to refine the items included in the data collection tools.
to address a similar question concerning the SRL support available in MOOCs. Moreover, instead of carrying out optional semi-structured interviews, the researcher decided that these would be an integral part of the main research design to generate more information regarding the online environment chosen by participants when studying a target language for academic and professional purposes. Yet, she wanted to obtain a more transparent view on the chosen MOOCs, which prompted her to consider alternative methods, such as reflexive photography, to represent participants' MOOC-based learning beyond words.

Finally, the researcher wanted to continue examining the online behaviour of students at university level. However, after conducting the literature review, it was evident that a different demographic group had been largely overlooked by those researching MOOC-based learning. Therefore, it was imperative to highlight this gap in the knowledge contained in the literature, to represent this group of learners, and focus on unravelling the goal setting behaviour of adult language learners in MOOCs. It was therefore necessary to update the research methods in the light of lessons learned from the pilot study to address this gap. Section 3.2.6 describes the revised and alternative methods included in the main study to gain a better understanding of the self-regulatory process of goal setting adopted by adult language learners in MOOCs.

### 3.2.6 Methods

The methodological position of constructivism aligns with several qualitative methods. Within qualitative methodologies, researchers employ "a wide range of interconnected methods" to deepen understanding of the phenomenon under consideration (Denzin & Lincoln, 1998, p. 3). Likewise, as Thomas (2011) explains, case studies can be "studied holistically by one or more methods" (p. 513). The design of the multiple-case study reported in this thesis used multiple methods to answer the three RQs (Section 2.5). Semi-structured interviews, weekly monitoring surveys, reflexive photography, and an open-ended questionnaire were the qualitative methods used to secure an in-depth understanding of the aspects of language, personal learning goals and goal-setting support reported by participants in this study.

The researcher approached the participants and generated relevant data before they started learning in a MOOC, during the engagement with their chosen MOOC and after studying in their MOOC. Figure 6 illustrates the methods that were employed in each stage of the study.
Figure 6 Research methods used before, during and after participants' MOOC-based learning

In the first stage of the study, the researcher conducted a semi-structured interview before participants had begun to work with the MOOC of their choice, as shown in Figure 6. This qualitative research method "typically takes the form of a conversation where questions are asked to elicit information" (Farrow et al., 2020, p. 47). Interviewing becomes an opportunity whereby "participants can construct the meaning of a situation, a meaning typically forged in discussions or interactions with other persons" (Creswell & Poth, 2018, p. 24). This one-to-one dialogue held between the researcher and each participant in week one of the study was essential to learn about their previous L2 learning experiences, their learning behaviour in the L2 classroom and their beliefs about online language learning.

The researcher could have conducted focus groups with participants to identify their similar or different opinions about online courses. The key feature of this method is group interaction (Krueger & Casey, 2000). However, the researcher discarded focus groups since she was more interested in learning about individual learning experiences and beliefs about online learning than generating data through group interaction. Therefore, she employed semi-structured interviews to approach participants individually. This method helped her identify individual beliefs and establish the self-regulatory processes that participants were already using to regulate their own L2 learning. This initial interview served to build a learning profile for each participant, which was used during data analysis to respond to RQ1 and RQ2.

In the second stage of the study, participants were asked to complete weekly monitoring surveys during the engagement with their MOOC over a 4-week period (Figure 6). Introspective methods can also take the form of portfolios, online diaries or journals (Moeller, Theiler & Wu, 2012; Hilliard et al., 2019; O’Connor, 2018; Loizidou, 2021). For instance, the 'LinguaFolio'
developed by Moeller, Theiler, and Wu (2012) asked L2 students to set their goals at the beginning of their classroom-based lessons. Similarly, Hilliard et al. (2019) employed a structured online diary to identify the emotions of adult distance learners at six time points during a specific group activity. Loizidou (2021) asked L2 students to complete a weekly reflective journal during their MOOC-based learning, which was integrated in a French for academic purposes course at university.

The researcher opted to administer a structured online survey to examine the MOOC-based learning of adult L2 learners at four time points during the engagement with their MOOC. As Dörnyei (2003) notes, surveys can provide 'behavioural information' that shows what individuals have done or regularly do in relation to their language learning. The survey was sent at the end of each week for participants to reflect on the work they had done that week in their MOOCs. This information addressing participants' reported learning behaviour contributed to an understanding of the language focus of participants and helped to answer RQ1.

The researcher also used this method to generate data about the personal learning goals of participants. Very few authors have asked L2 learners to describe their goals in their own words, as discussed in the literature (Section 2.1.4; Section 2.3.2). Within empirical work informed by goal theory, Brophy (2005) also found that researchers "who did not focus specifically on goals but simply asked students about their work yielded little evidence of any goal-oriented thinking at all" (p. 170). Therefore, the author of this present study used this method to explicitly inquire about participants' learning goals and identify the kinds of goal they formulated in their own words. This information helped to answer RQ2.

Given that SRL is an ongoing process that unfolds over time (Butler, 2011; Zimmerman, 2000), the researcher administered the same survey for four weeks to capture the dynamic nature of SRL, especially the self-regulatory process of goal setting during MOOC-based learning. Zimmerman (2008) points out that structured diaries or learning logs can be applied during a learning activity to assess changes in "students' SRL online" (p. 169). Research on SRL in MOOCs usually focus on learners' behaviour before and after the learning activity, missing relevant information that can unravel the self-regulatory processes developed during the learning activity.

Hence, the researcher employed weekly monitoring surveys to uncover the development of participants' goal-setting behaviour during four weeks of online learning. The internal processes and the external elements that influenced said self-regulating behaviour were also identified. All this information helped to answer the three RQs. Participants completed all weekly monitoring surveys, except for two learners in Case Study 2. One of them completed only three surveys and the other one failed to complete the surveys. The latter nonetheless shared valuable
information with the researcher through other research techniques; hence, the participant was not withdrawn from the study.

In the same stage of the study, the researcher employed a visual method called **reflective photography**, as shown in Figure 6. This was another method used to monitor participants' engagement with their online course. Reflective photography is described as "a convenient and effective way to investigate learners' subjective experiences with technology and language learning" (Wallace, 2015, p. 451). The method has been used to examine distance language learning and gaming experiences. For instance, Wallace (2015) implemented reflexive photography to study specific everyday events that influenced the oral production of L2 teaching assistants in English. Participants in this study were asked to photograph "what they deemed to be helpful and what they felt obstructed the improvement of their oral English production" (Wallace, 2015, p. 449). Likewise, Hall et al. (2021) implemented reflexive photography to capture creative behaviour of players in digital games and examine design elements of games that support player creativity. Research on MOOCs has not previously employed reflexive photography to investigate MOOC-based learning experiences of adult L2 learners.

Initially, the researcher considered using think-aloud protocols. Following this method, researchers ask participants to verbalise their thoughts and cognitive processes as they perform the task (Ericsson, 2006). Empirical research has used this method to study participants' self-regulatory processes in an online learning environment (Greene & Azevedo, 2007). However, after piloting a think-aloud protocol with two PhD colleagues who volunteered to verbalise their experience while navigating a chosen MOOC, the researcher of the present study found the technique intrusive and time-consuming.

The researcher opted for reflexive photography, enabling her to witness MOOC-based learning through the lens of participants more effectively than in think-aloud protocols. Photographs are described as "a more transparent representation of the life experiences of participants in [a] study" (Dodman, 2003, p. 294). As an educational technologist, the researcher favoured the idea of using technology to capture learners' perspectives of MOOC-based learning. Hence, participants were asked to provide a screenshot of a MOOC section that facilitated their online learning (Figure 7).
As shown in Figure 7, participants were asked to reflect upon their MOOC-based learning and illustrate what contributed towards their learning efforts, by taking a screenshot of a course section. Participants also had to write a caption underneath explaining the choice of what they had captured. Photographs are popular among social researchers since they "can carry or evoke three things- information, affect and reflection- particularly well" (Rose, 2007, p. 238). In this study, this technique combined visual and textual data, which helped to generate attitudinal and behavioural information regarding MOOC-based learning.

This creative research method (Kara, 2020) enabled the researcher to see the world through the eyes of her participants, more precisely to interpret a snapshot of their learning experiences within the MOOC of their choice. This additional method employed in stage two of
the study provided context for the data generated from the weekly surveys. The screenshot taken by participants helped to provide a visual representation of the aspects of language they focused on the most, the activities they used to work towards their goals and the elements of MOOCs that facilitated their online learning. The information generated through the chosen reflective photography method helped to answer all three RQs of this study. Participants were reminded to take the screenshot between week three and four of their MOOC-based learning, so they were not overloaded with multiple research instruments at once.

In the final stage of the study, the researcher administered an **online open-ended questionnaire** (Figure 6). This method was used to generate factual and attitudinal information regarding the experience of participants with the overall study. Dörnyei (2003) points out that questionnaires can provide information regarding characteristics of individual learners, including age, gender, and language proficiency level. Questionnaires can also shed light on the interests and opinions of learners, without taking too much time (Dörnyei, 2003). One of the disadvantages of this method is that it can provide superficial responses (McKay, 2006). The researcher dealt with this issue by incorporating some of those responses – both shallow and complex – into the last semi-structured interview, thereby verifying and expanding the data generated from the questionnaire. The secondary data generated by using this method helped to answer the three RQs.

As shown in Figure 6, the researcher also conducted a **second semi-structured interview** in the last stage of the study. Interviews as research methods are deemed to be "attempts to understand the world from the subjects' point of view, to unfold the meaning of their experience, to uncover their lived world" (Brinkmann & Kvale, 2015, p. 3). Lincoln and Guba (1985) argue that semi-structured interviews provide opportunities for clarification and exploration of atypical responses. Adopting this method at the end of the MOOC-based learning experience was indispensable for unpacking and expanding the online learning behaviour that participants had reported in previous weeks of the study. Some of the questions were written in advance, and other open-ended questions built on the answers of the weekly monitoring surveys, photographic data, and the open-ended questionnaire responses.

Experts in the field of SRL initially used structured interviews to assess students' use of self-regulatory strategies inside and outside the classroom (Zimmerman & Martinez-Pons, 1986, 1988). Although those authors developed a 'Self-Regulated Learning Interview Scale' (Zimmerman & Martinez-Pons, 1986), the researcher discarded this instrument since one of the aims of the current study was to identify personal learning goals rather than measure the self-regulatory levels of goal setting. In the literature of goal setting, Lemos (1996) conducted semi-structured
interviews to identify learners' goals instead of measuring those metacognitive processes. She also used semi-structured interviews at the start and at the end of her study, which offered greater depth of insight into the kinds of goal students set for themselves in a classroom (Section 2.1.3).

Focus groups have also been used to elicit personal goals to enhance the design process of a learning environment (Colpaert, 2010). However, the researcher believes that a personal goal should be addressed individually, not as a group where participants might feel uncomfortable sharing their thoughts with others. Colpaert (2010) also notes that "participants are not used to this kind of session; they are rather afraid of being confronted with themselves" (p. 267). Additionally, asking participants to join a couple of focus group sessions could have overstretched their willingness to contribute to this study and become a potential limitation during the recruitment process. Thus, the researcher opted to conduct another semi-structured interview to hold one last in-depth discussion with each participant after their MOOC-based learning. The holistic data generated through this method helped to answer the three RQs.

In case study research, it is necessary to have sufficient data to obtain a richer understanding of the observed phenomenon (Yin, 2014). The data used to answer the three RQs was generated using diverse qualitative methods: semi-structured interviews, weekly monitoring surveys, reflexive photography, and an open-ended questionnaire. The methods were cross-referenced to the research questions to ensure those methods aligned with the questions of this study. Table 6 illustrates the methods that were used to respond to each research question.

Table 6 Research methods linked to research questions of this study

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<tr>
<th>Building Bridges towards Self-regulation: The Goal-setting Behaviour of Adult Language Learners in MOOCs</th>
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<tbody>
<tr>
<td>RQ1</td>
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<td>RQ2</td>
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<td>RQ3</td>
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<tr>
<th>Question</th>
<th>Semi-structured interview 1</th>
<th>Weekly Monitoring Surveys</th>
<th>Reflexive Photography</th>
<th>Open-ended Questionnaire</th>
<th>Semi-structured interview 2</th>
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<td>RQ1</td>
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<td>RQ2</td>
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<td>RQ3</td>
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Section 3.2.7 provides a detailed description of the specific tools that were used to generate relevant and appropriate information to shed light on the phenomena under consideration:

1. the various aspects of language adult learners prefer to explore in MOOCs
2. the complexity of the self-regulatory process of goal setting employed by participants during MOOC-based learning and
3. the elements that support participants' goal setting during this online learning experience.

3.2.7 Summary of instruments
This study employed five different instruments that helped the researcher understand the linguistic interests of adult L2 learners in a MOOC of their choice and how they formulated goals when transitioning from classroom-based learning to MOOC-based learning. The data generated with the following instruments contributed to understanding the elements participants found helpful in the online learning environments in which participants chose to study their target language. Table 7 shows the methods and instruments used in this study.

<table>
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<tr>
<th>Research Method</th>
<th>Description of Instrument</th>
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<td>Semi-structured interview 1</td>
<td>A semi-structured interview conducted in week one of the study. It comprised 13 pre-determined and open-ended questions. As a prelude to the interview, each participant was asked to reflect on their role as an L2 learner and how they assumed responsibility for their learning. The interview questions addressed participants' background, language proficiency levels and learning behaviour in a typical language lesson. They were asked to describe how they prepared for the learning activities in the L2 classroom and how they monitored and evaluated their performance after completing such activities. The researcher also probed their understanding of SRL, online courses and expectations of studying their target language online (Appendix E). The data generated from this method was subsequently used to build a participant profile that was later used in answering RQ1 and RQ2. The semi-structured interview was conducted face-to-face. Questions were asked in English; participants in Case Study 1 were comfortable expressing ideas in their L1 and participants in Case Study 2 saw it as an opportunity to practise their speaking in their L2. Each interview session lasted 30...</td>
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minutes approximately. The interviews were recorded digitally using personal recording devices and subsequently transcribed and pseudonymised by the researcher.

| Weekly Monitoring Surveys (WSURV) | A monitoring survey administered over a four-week period (weeks two, three, four and five of the study). The survey comprised seven questions. Two close-ended questions addressing ‘factual information’ (Dörnyei, 2003) and five open-ended questions that allowed participants to write about their weekly learning goals, the challenges they experienced, and what they did to deal with those obstacles. They were also asked to report their average study time and describe what they enjoyed the most from that week alongside their plans for the following week. The researcher explicitly asked participants to state their personal learning goal in their own words. The second question in this instrument (what was your learning goal for this week?) allowed the researcher to uncover the kinds of goal participants set for the online courses (Appendix F). This is not a common research practice observed in the literature (Section 2); only few authors have asked learners to state their goals in their own words, as discussed in Sections 2.1 and 2.3.

The design of the instrument was based on Zimmerman and Moylan’s (2009) SRL cyclical model (Figure 1) to identify personal learning goals, monitor the development of goal setting over four weeks and survey the processes that participants were likely to employ to work towards their learning goals. The data generated from the weekly surveys also shed light on the elements that influenced participants’ goal-setting behaviour. Participants received the survey at the end of each week of engagement with their MOOC to foster self-reflection. The survey was administered electronically through the Online Surveys tool. |
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<tr>
<td>Reflexive Photography (RPHO)</td>
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<td>Open-ended Questionnaire</td>
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Four close-ended questions addressing demographic information and five open-ended questions that allowed participants to explain the choice of MOOC and the learning expectations they had when joining the study. They also provided their opinions about the main characteristics of MOOCs and summarised in one sentence what they thought about studying in a MOOC as part of their face-to-face course (Appendix G).

**Semi-structured interview 2 (INV2)**

A second semi-structured interview conducted at the end of the study (between week seven & week eight). It comprised 23 open-ended questions. The instrument was an adapted version of the interview designed by Littlejohn and Milligan (2015), which is an acceptable and valid instrument designed to "probe self-regulated learning sub-processes" of MOOC learners (p. 41). The interview followed a structure similar to the original design since the questions were classified based on Zimmerman and Moylan (2009) SRL Phases (Appendix H).

As a prelude to the interview, participants were asked to reflect on their learning with their MOOC and its possible contribution to their language learning process. The interview questions sought to uncover their online learning experiences in more detail. The researcher probed participants' language focus and delved into the forethought process of goal setting in their online courses. The questions in this instrument also addressed any potential goal-setting support identified by participants in their MOOCs. Each interview session lasted between 40 and 60 minutes. The interviews were recorded digitally using personal recording devices and subsequently transcribed and pseudonymised.

All the transcripts and responses of participants generated from each instrument were then exported to NVivo 12 Plus, a software package for data analysis. A detailed account of the selected approach to data analysis is provided in Section 3.3.

### 3.2.8 Awareness of the researcher role

The researcher was aware of her leading role in this study; she oversaw the initial contact with the gatekeepers, the recruitment of participants, and was responsible for the clear explanation of every stage involved in the research design described in Section 3.2.6. For example, she obtained permission from gatekeepers to attend the first part of the classroom-based lessons to introduce herself, her research and create a space for learners to ask her any question regarding their role in the study. The researcher also obtained access to attend learners’ in-class presentations about
their MOOC-based learning at the end of the online activity. Likewise, participants were reminded of each research stage via email, particularly when sending the links to the weekly monitoring surveys and the open-ended questionnaire. This action was conducted to guide participants and ensure they could contact her anytime during this research journey.

The researcher aimed to forge a trustworthy relationship with both gatekeepers and participants, thus she welcomed their suggestions on how to adjust the research to their preferences, without modifying the core elements of the investigation. For instance, learners in Case Study 1 felt overwhelmed by the vast offer of LMOOCs and indicated they would feel more comfortable by having a more focused presentation of online courses for them to consider during the study. Therefore, the researcher conducted a detailed search of LMOOCs on their behalf, as mentioned in Section 3.2.2. She was aware that the options presented on that list could influence participants’ MOOC choices. Nonetheless, she avoided potential bias by running multiple searches from different platform providers, including the least advertised ones, such as Miriadax and UNED Abierta. In that sense, a fair and diverse list containing suitable course titles, according to their reported language proficiency level, was presented to participants.

In sum, the position of the researcher in this study was a delicate one, which involved maintaining an appropriate distance from the participants and their classroom-based setting, while supporting their engagement with the research design. Accordingly, the researcher clarified, guided, and accompanied participants on various occasions to make sure the research plan was effectively and ethically executed, but scrupulously avoided any intervention in their actual learning activity.

3.3 Approach to Data Analysis

The analysis of the findings reported in this thesis is underpinned by thematic analysis (TA). TA is a method of qualitative data analysis that allows to identify, organise, and offer insight into themes, also known as “stories about particular patterns of shared meaning across the dataset” (Braun & Clarke, 2019a, p.592). This method, developed by Braun and Clarke (2006) in relation to psychology, is deemed as a systematic, yet fluid and recursive approach to coding and theme development (Braun & Clarke, 2019a).

The researcher opted for a reflexive approach to TA, which represents a “view of qualitative research as creative, reflexive and subjective” (Braun & Clarke, 2019a, p.591). The coding process conducted in reflexive TA is “an organic and open iterative process; it is not “fixed” at the start of the process (e.g., through the use of a codebook or coding frame)” (Braun, Clarke, Hayfield, & Terry, 2018, p. 848). As for the conceptualisation of themes, these are meant to capture the shared meaning across a dataset within a reflexive TA approach. Regarding the
creation of themes, these are actively generated by the researcher at the end of the data analysis. Likewise, reflexive TA places the researcher’s active role in the creation of knowledge at the centre of the approach (Braun et al., 2018), since the researcher subjectivity is valued as a resource to interpret the data instead of “a potential threat to knowledge production” (Braun & Clarke, 2019a, p. 591).

Altogether, the analysis of the data used to answer the RQs followed a less rigid, thematic approach. The themes were the output of the in-depth analysis developed by the researcher through and from the iterative coding process. The iterative nature of reflexive TA and its emphasis on the researcher subjectivity aligned with the qualitative approach mapped above to answer the RQs. Hence, the reflexive approach to TA has been chosen to answer the RQs of this study.

3.3.1 Phases in doing reflexive thematic analysis

The researcher followed the six-phase process (Braun & Clarke, 2012, 2019b) involved in this approach for doing a systematic and accurate analysis of the data. The phases are described next:

1. **Familiarisation with the data:** The main aim of this phase is to immerse in and become familiar with the content of the data generated from the instruments summarised in Section 3.2.7. The researcher made notes that guided her initial observations about the information that was relevant to answer the RQs. In parallel to this first stage of data analysis, the researcher employed a ‘pattern matching’ analytic technique (Trochim, 1989) that aligned with the flexible analytic strategy used within reflexive TA. In the pattern-matching logic, a predicted pattern is compared with an empirically based pattern- that is, one based on the evidence of the case study (Yin, 2018). The goal of this analytic technique is to match the empirically based pattern with the predicted one. If the “patterns appear to be similar, the results can help a case study to strengthen its internal validity” (Yin, 2018, p. 175).

   The pattern of predicted descriptive features is meant to be defined prior to data collection. The alternative predictions outlined by the researcher in this study were drawn from the literature review mainly related to types of goals and MOOC features in response to RQ2 and RQ3. The data analysis in response to RQ1 was mainly done inductively. Yet, it relied on the literature discussed in Section 2.3 to reflect upon the learning opportunities offered to learners to practise a target language in a MOOC and during MOOC-based projects integrated in the L2 classroom.
2. **Coding:** In this phase, the researcher identified and provided labels for the features of the data that appeared relevant to answer the RQs. The coding followed a twofold process: generating succinct codes and organising them together with the appropriate data extracts to be the basis of the subsequent phases of analysis. The coding process can be done at different levels of meaning (Braun & Clarke, 2012). At the beginning, coding was done at the semantic level, i.e., codes reflected the explicit content of the data (Braun & Clarke, 2019b) to stay close to the information provided by the participants.

As discussed earlier, the coding process in reflexive TA is an iterative, open process, meaning that the codes can be divided into different codes, renamed, or mixed with other codes (Braun et al., 2018). Hence, in the second iteration, the coding process became a combination of descriptive and interpretative codes, the latter were done at the latent level, i.e., codes provided an interpretation that “lie[d] beneath the semantic surface of the data” (Braun & Clarke, 2012, p. 61). These changes in the coding process reflected the active role of the researcher in making sense of the data and attempting to identify patterns of shared meaning across the dataset.

The coding process applied to the screenshots taken by participants during their MOOC-based learning varied slightly. After uploading the screenshots to NVivo 12 Plus, the researcher coded the images and photo captions, following Saldaña's (2016) approach to visual data analysis. First, she wrote down some initial impressions and holistic interpretations of the screenshots. This first part was done through annotations in NVivo and analytic memos. Then, she assessed the credibility of the visual reading through participants’ captions given to the images. The captions captured the essence of the screenshots, and they were the evidence used to confirm the researcher’s personal assertions. The codes generated from the screenshots were analysed together with the codes generated from the other sources of evidence.

The purpose of assigning captions to the images was to allow data to speak for itself. Indeed, “images can present things that words cannot and can therefore be used as evidence to develop and support, or to supplement, research findings. Nonetheless, images still need to be contextualized to some degree by words” (Rose, 2007, p. 256). Therefore, participants were asked to write a caption underneath their screenshots for the researcher to make sense of this visual data during data analysis and corroborate initial impressions.

These images were also part of an in-class speaking task organised in conjunction with the in-class teachers at the end of the study. Participants shared their MOOC-based learning experience with their classmates, which they captured in one or two images. The
presentations were not part of the generation of data. However, attending these oral presentations enabled the researcher to confirm her previous interpretations, since it was likely that participants and the researcher were not going to interpret the visual data the same way. Hence, the need for corroboration, which took place during the study. Accordingly, the screenshots were not just ‘things’ analysed by the researcher after being taken by the participants. These were considered as ‘processes’ analysed during the study, as suggested by Clark (2011, p. 142). The following phases of data analysis were applied to both textual and visual data across the dataset.

3. **Generating initial themes:** In the third phase, the researcher moved from describing the data through coding to “developing conceptualisation of the data” through the generation of themes (Braun et al., 2018, p. 848). Reflexive TA conceptualises themes “as patterns of shared meaning underpinned or united by a core concept” (Braun & Clarke, 2019a, p. 593). The development of themes involves “reviewing the coded data to identify areas of similarity and overlap between codes” (Braun & Clarke, 2012, p. 63). However, the generation of themes “requires depth of (close and critical) engagement to move beyond the surface or obvious content of the data and to identify implicitly or unexpected unifying patterns of meaning” (Braun et al., 2018, p. 848). Accordingly, the researcher undertook four detailed steps in the creation of themes. She:

1. Clustered codes that appeared to “share some unifying feature together, so that they reflect and describe a coherent and meaningful pattern in the data” (Braun & Clarke, 2012, p. 63). The researcher used the frequency of codes table, designed in NVivo, as a tool to identify the areas of similarities between codes. This step was repeated multiple times, using Whimsical, an online mind map tool, until the codes fitted into the right cluster.

2. Identified the broad topics or issues within the clusters. In this step, the researcher clustered the codes into headings using the same mind map tool, which helped to visualise potential themes.

3. Examined those broad topics in more detail to identify the main aspects that codes focused on within those topics.

4. Constructed a candidate theme using all the codes relating to one of those main aspects previously identified.
At the end of this third analytic stage, the researcher collated the data extracts relevant to each candidate theme to begin the process of reviewing the coherent relationship between the data set and the generated themes.

4. **Reviewing themes**: This phase was mainly about quality checking. It involved checking the candidate themes against the collated extracts of data and determining whether the proposed themes suited the dataset. In this stage, themes were refined, combined, or discarded in case those did not work in relation to the data (Braun & Clarke, 2012, 2019b). Once a coherent set of themes were presented, those were reviewed against the entire data set. This revision was essential to determine that all the themes told a cohesive and compelling interpretation of the data, grounded in the data (Braun et al., 2018), and they capture the essential points of the data to answer the RQs.

5. **Defining and naming themes**: In this phase, the researcher stated what was unique and specific about each theme. As part of this stage, the researcher decided on an informative name for each theme. Phase 5 was interconnected with phase 6 of this analysis since both phases involved selecting extracts across the data set to show the coverage of the themes and develop a detailed analysis of each theme.

6. **Writing up**: In the final phase, an analytic narrative was produced in the form of a report in which themes were presented in a logical and meaningful way. The aim was to provide a compelling story of the data, based on the data analysis, to answer the RQs. Throughout the findings report, the researcher took the role of the “storyteller” (Braun et al., 2018, p. 848) who showed the analysis of data extracts, contextualised the analysis in relation to existing literature and commented on the degree to which the empirically based pattern from the findings matched the predicted based patterns set out at the beginning of the study.

### 3.3.2 Ensuring trustworthiness

The methods used in this study relied on retrospective responses from participants. The researcher aimed to generate an accurate and reliable picture of participants' online behaviour by drawing from multiple sources of evidence. The researcher interrogated patterns within data and made comparisons across cases to ensure a systematic approach to data analysis (Silver & Lewins, 2014, p. 19). Once data was exported to NVivo 12 Plus, data was analysed ‘horizontally’, which entails “focusing on one area of interest across all data (or subsets)” (Silver & Lewins, 2014, p. 19). For instance, after coding all data sets about goal setting, the researcher focused on each goal.
type and then retrieved all data segments associated to that type of goal. Framework Matrices were created in NVivo 12 Plus to gather the information from multiple data sources in one place, which helped to see the data from multiple angles and build a robust understanding to confirm a particular finding. Constructivist researchers analyse the complexity of views of a specific situation by relying on subjective evidence collected from participants (Creswell & Poth, 2018). Through triangulation of weekly learning reflections, photographic data, open-ended questions and semi-structured interviews, a rich and detailed understanding of participants’ subjective experiences was gained.

Altogether, constructivist researchers employ multiple forms of evidence in themes to present different perspectives of participants (Creswell & Poth, 2018). The researcher reported different perspectives identified in the data as themes to capture the multiple interpretations of participants related to aspects of language, personal learning goals and goal-setting support in MOOCs. As part of the data analysis of this research, participants’ data was analysed separately and merged during the interpretation. This enabled the researcher to examine each case study in-depth and then proceed to make comparisons across cases. This is a common data analysis practice within case study research to strengthen the interpretation of the findings (Creswell & Plano Clark, 2018). The process of data analysis is illustrated in the structure of Chapter 4, 5, and 6, which report the findings of participants in Case Study 1 and Case Study 2, followed by a Discussion around the patterns and relationships identified in each case to respond to RQ1, RQ2 and RQ3, respectively.

3.4 Ethics

The researcher sought to maintain the integrity of this research and the participants themselves with the following reflection on the ethical dimension that was assumed throughout the study. Once the study received approval from The Open University’s Human Research Ethics Committee in January 2019 (HREC/2758/Conde-Gafaro), the researcher contacted the gatekeepers of each Case to discuss the main objectives of the main study and to be transparent about how, when and what type of data would be generated from the participants in order to establish a relationship of trust throughout the research (Fox & Jones, 2015). A consent form and a participant information sheet were designed and distributed to inform participants about the research purposes in a clear and understandable way. Students who were willing to become research participants signed and returned the consent form during the following lesson. During the recruitment process, the researcher reminded participants that they had the right to withdraw from the study at any time, in conformity with the conditions for data erasure outlined in Article 17 of the EU GDPR (European Commission, 2018).
The data gathered relating to participants’ online behaviour were not expected to be distressing, sensitive or highly confidential. Nevertheless, the set of data generated from the study remained confidential in accordance with the EU General Data Protection Regulation (GDPR) (European Commission, 2018) and the ethics guidelines published by the British Educational Research Association (BERA) (2018). To ensure data transparency and participant confidentiality, the data generated from all participants was pseudonymised as shown in Table 8.

Table 8 Participants data coding description

<table>
<thead>
<tr>
<th>Participant Identifier</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silvia</td>
<td>Participant pseudonym, which also indicates studied target language</td>
</tr>
<tr>
<td>INV1</td>
<td>Semi-structured interview 1</td>
</tr>
<tr>
<td>INV2</td>
<td>Semi-structured interview 2</td>
</tr>
<tr>
<td>WSURV</td>
<td>Weekly monitoring surveys</td>
</tr>
<tr>
<td>RPHOCaption</td>
<td>Reflexive photography Caption</td>
</tr>
<tr>
<td>OQ</td>
<td>Open-ended Questionnaire</td>
</tr>
</tbody>
</table>

Additionally, the weekly monitoring surveys and open-ended questionnaire were administered electronically via Online Surveys, online survey software that meets EU and UK data protection regulations. Interview data was generated via Skype for Business to carry out the interviews, since it provides strong authentication and encryption that protect conversations. The right to receive a copy of the pseudonymised findings report was possible if requested in advance and stated in their consent form. Some pseudonymised data was shared exclusively with the researcher’s supervisors during supervision meetings.

Data was privately stored in The Open University’s (OU) research data repository, OneDrive, where the project owner, i.e., the P.I. of this study, retained control of data, since this cloud-based service is licensed for The Open University’s corporate use (The Open University, 2018). Files stored in OneDrive are encrypted to keep the data secure (The Open University, 2018). Hence, data was accessed with the researcher’s OU credentials only. Data generated was also stored electronically in an encrypted, password protected, USB back-up. Data stored electronically used participants’ coded references so that individuals could not be identified. Data is planned to be stored until September 2023 to permit post-viva publication. Data will be destroyed afterwards.

Overall, the access and security measures described above helped the researcher meet the ethical compliance and data protection obligations for this study, particularly the "Principles relating to processing of personal data" stated in Article 5 of the EU GDPR (European Commission, 2018).
By following these standards, she was committed to maintaining the assurances of confidentiality and pseudonymity given to the gatekeepers and participants at the outset of the study.

3.5 Summary of Chapter 3
A multiple-case study approach underpinned the qualitative research design reported in this thesis. The researcher adopted conventional and creative methods to understand the language focus of adult L2 learners in MOOCs, the complex self-regulatory process of goal setting alongside the elements that influenced said self-regulating behaviour. Thematic analysis was the selected approach to data analysis. Conducting an ethical approach to research was considered at each stage of the study. The findings derived from thematic analysis of the data are presented in the following chapters.

4 Aspects of Language Identified in MOOCs
This section presents a description of each aspect of language identified within the data to answer RQ1. Analytic commentaries are included to discuss the themes that were generated for each aspect of language. It also comments on how the engagement with a MOOC of their choice led participants to explore these aspects. It then summarises the main findings regarding the aspects of language that participants focused on the most when engaging with a MOOC as part of (1) community-based language course and (2) their English course for specific purposes (ESP).

4.1 Case Study 1
The ten participants enrolled in three language courses at Community Learning MK (CL-MK) chose a MOOC according to their self-reported intermediate/upper-intermediate language proficiency level. Most of the participants agreed that the courses they had selected enabled them to carry out a revision of their target language. They used the MOOC to consolidate what they learned in their classroom-based language course. Participants in this first case study had the opportunity to reinforce previous language topics and engage in additional practice of the target language throughout the MOOC. The main aspects of language that these participants focused on to enhance their language learning process are presented below.

After analysing the data set gathered from the ten participants in the first case study, a total of 60 initial codes were identified, renamed, mixed, and reduced to 40 codes. This last set of codes clustered around four broad topics that reflected the diversity and patterns within the data: grammar, listening, vocabulary and pronunciation. Examining these broad topics in more detail, the researcher identified that the codes focused on:
1. Grammar revision
2. Listening practice
3. Vocabulary learning
4. Linguistic and cultural topics
5. Pronunciation practice

These four patterns observed within the broad topics were considered whilst generating the candidate themes. The name and content of the created themes have a coherent relationship with the data generated from the following sources: the weekly monitoring survey responses (WSURV), the last semi-structured interview (INV2), the captions written as part of the MOOC screenshots (RPHOCaption) and the written responses from the open-ended questionnaire (OQ). Each participant statement is followed by the corresponding abbreviation of the data source, followed by the participant identifier. The final version of the themes generated around those broad topics is discussed next.

4.1.1 Revising grammar from start to finish
The first theme refers to the constant attention participants in Case Study 1 gave to the grammatical aspect of the target language during MOOC-based learning. Once the ten participants began their weekly MOOC engagement, they focused on different grammar topics related to their target language. The researcher relied on the content participants reportedly covered within the MOOC to draw a more detailed picture of their grammar interests. Table 9 presents the main topics that participants mentioned when studying an intermediate/advanced level of Spanish, Italian and French within a MOOC.

Table 9 Grammar focus reported by participants in Case Study 1

<table>
<thead>
<tr>
<th>Participant</th>
<th>Weekly Grammar Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silvia</td>
<td>“past tenses” (WSURV1-Silvia).</td>
</tr>
<tr>
<td></td>
<td>“Preterit and Imperfect” (WSURV3/4-Silvia).</td>
</tr>
<tr>
<td>Simona</td>
<td>“adjectives” (WSURV1-Simona).</td>
</tr>
<tr>
<td></td>
<td>“present participles” (WSURV1-Simona).</td>
</tr>
<tr>
<td>Sofia</td>
<td>“absolute superlatives” (WSURV1-Sofia).</td>
</tr>
<tr>
<td>Sarah</td>
<td>“superlatives” (WSURV2-Sarah).</td>
</tr>
<tr>
<td>Santos</td>
<td>“perfect tense” (WSURV3-Santos).</td>
</tr>
<tr>
<td>Salvador</td>
<td>“present progressive tense” (WSURV2-Salvador)</td>
</tr>
<tr>
<td></td>
<td>“Verbs in the past tenses” (WSURV3-Salvador)</td>
</tr>
</tbody>
</table>

8 Please note that these examples reproduce participants’ comments verbatim. These occasionally contain linguistic or expressive errors, which will remain unamended and uncommented on.
Participants worked with different grammar content throughout the four weeks of their engagement with the MOOC. As observed in Table 9, most of the Spanish participants undertook a revision of present and past tenses such as present progressive and imperfect. Italian participants also reviewed reflexive and pronominal verbs as well as conjunctions. Apart from covering topics that were familiar to the students, the MOOC also offered them the opportunity to explore new grammar topics such as the subjunctive, superlatives adjectives and logical connectors.

All the participants agreed that the MOOC enabled them to reinforce the grammar topics they had previously covered in the classroom. By way of illustration, participant Isabella claimed that “as far as the grammar was concerned, we have actually covered it all in class, but it was very useful revision” (INV2-Isabella). Similarly, participant Santos stated the following about his chosen course: “it has given me the opportunity to revise the perfect tense, it just seemed it was quite appealing a bit, and it was linked to what we’d done in a sense [in class]” (INV2-Santos). Participants covered relevant grammar content accorded with their language proficiency level, which enabled them to practise and review grammar topics they had previously learned in their L2 classroom.

The participants in Case Study 1 also found opportunities within the MOOC to practise specific grammar topics that they did not correctly understand during their face-to-face lessons:

When we are in the classroom, I feel the teacher has to keep to a certain program, and we never go back really to properly address things that we don’t, we haven’t grasped, you know some of us are quicker than others and so, this [MOOC] I can sit and relearned some of the grammar that we’ve done already, but I haven’t actually mastered. So, I’ve got time to do it my way and, in my time, which is useful (INV2-Ines).

Some grammar topics were reportedly overlooked by the in-class teacher, who needed to comply with the course schedule for the Advanced Italian class. According to participant Ines, the MOOC enabled her to consolidate those grammar topics that were not fully mastered in the classroom-based Italian course. The teacher allocated one session out of the ten weeks for revision
of prior grammar topics, as noticed in the schedule of the face-to-face class. Nevertheless, in the class, there was limited time to revise grammar points, whereas the MOOC, allowed this participant the flexibility to fill in grammar gaps in her own time. The MOOC activities alongside the grammar explanation presented through the videos enabled participants to focus on new and familiar grammar topics from start to finish of their MOOC engagement.

4.1.2 Practising listening comprehension skills
The second theme describes the language focus participants had on the receptive skill of listening while working with a MOOC as part of their instructional language course. One of the learners enrolled in the Italian course described the MOOC as an “opportunity to hear spoken language” (OQ-Ines). The other eight participants shared the same view on MOOCs, and they mentioned the opportunity to listen to and understand information in the target language within the online course. Conceptualising MOOCs as spaces that enabled learners to practise their listening skills led most of the participants to focus on ways to improve their listening comprehension throughout their engagement with an online course.

The nine participants agreed that the MOOC provided good audio-visual resources that they could use to develop their listening skills. Participant Silvia stated that she “liked the video spoken by a native speaker and found her story very interesting when she was talking about the different kind of flats/houses she had lived in” (RPHOCaption-Silvia). Those types of resources included short video clips and audio files with a diversity of content. The audio-visual content went from listening to specific words or “an example of an expression used in context” (RPHOCaption-Isabella) to short dialogues, “interesting conversations with useful contexts for learning” (WSURV4-Salvador) or even “just a picture and then a sound tape of somebody in a bar talking [in the background]” (INV2-Sarah). Giving examples of verb phrases used in context or presenting a story within familiar settings, as in a house or a bar, became more meaningful and easier to understand for the participants who were interested in this receptive skill.

4.1.3 Expanding everyday spoken vocabulary
The third theme maps the opportunity participants had to focus on learning new vocabulary in the target language throughout the MOOC engagement. All participants were keen to expand their vocabulary. However, three learners of Spanish outlined that the lexicon they were receiving in the Coursera MOOC was different from that provided in their in-class material. Participant Silvia believed this occurred “because it was an American course, they used slightly different vocabulary as well than the one we have in the book” (INV2-Silvia).

Participant Salvador also remarked that “the meanings that were given were not as good as they were saying. But, I think that was partly due to some other things looked a little bit South
American, but I could be wrong about that” (INV2-Salvador). The three participants acknowledged experiencing misunderstandings when revising the vocabulary due to the variety of Spanish that supposedly was more prominent in the MOOC. Nevertheless, it could be argued that the MOOC enabled participants to explore new lexicon beyond that covered in their coursebook and contrast the varieties of Spanish in Spain and South America.

Once the participants moved forward on their online courses, they all focused on specific activities that helped them to learn and practise new vocabulary. For example, there were activities in which learners had to associate a list of words with their correct meanings. Those tasks sometimes included the definition of words with example sentences and either the translation into English or the pronunciation in the target language. MOOC activities that asked learners to match words with a corresponding picture were one of the most popular.

Participants did not find useful the lengthy repetition of words to remember vocabulary. They preferred engaging in other type of activities they found helpful to build their vocabulary in the target language, such as “checking the meaning of some verbs and phrases” (WSURV1-Salvador), doing “picture-oriented learning activities” (WSURV4-Sarah) or even taking “enjoyable vocabulary tests” (OQ-Ines). Regardless of the activities focused on word repetition, the ten participants in this first case study agreed that the MOOC enabled them to explore and practise new vocabulary in Spanish, Italian and French.

4.1.4 Learning about language and culture
This theme builds on the previous theme about vocabulary. Participants also focused on linguistic and cultural topics. Figure 8 shows the socio-cultural and language-related subjects they came across within their chosen MOOC.

![Figure 8 Main topics covered by Case Study 1 in MOOCs](image-url)
While engaging with those learning materials, learners of Spanish focused on everyday spoken terminology related to the topics displayed on the right-hand side of Figure 8. These participants were interested in common topics that they wanted to “be able to talk about with other people” (INV2-Simona). In particular, they engaged with lexical content that was connected to their hobbies such as “sports and travelling in Spain” (INV2-Salvador).

Other learners of Spanish were drawn instead to topics which enabled them to connect with the lexical information they had covered in class. For instance, participant Santos commented that the MOOC content “was linked to what we’d done in a sense. For example, we talked a little bit about houses, flats, furniture and work. So, I thought I could use it to supplement what I have done in the class” (INV2-Santos). In general, learners of Spanish focused on vocabulary that was relevant to their daily life, as stated by participant Silvia, who estimated that the content of week 2 (trips and travel), would help her “in the future and in real life situations” (WSURV1-Silvia).

Meanwhile, learners of Italian and French focused on lexical information relating to specific sociocultural elements of Italy and France, as displayed on the left-hand side of Figure 8. One of them was eager to cover “information about Italian life and culture” (OQ-Isabella) before starting the MOOC. Participant Isabella justified her MOOC choice by saying: “it is language AND culture. And I think it’s important to study the culture as well as the language” (INV2-Isabella). Apart from focusing on the linguistic dimension that included vocabulary about these specific topics, four out of ten participants decided to learn about the sociocultural content presented through the MOOC. Some sociocultural elements that participants encountered in their chosen MOOC included:

- “the economic situation in Italy” (WSURV4-Isabella).
- “How Italians find working abroad, giving various national stereotypes - very funny!” (WSURV3-Ines).
- “Times for eating in Spain” (INV2-Sarah)
- “French society” (OQ-Felix).

Participant Ines found learning about Italian stereotypes “more engaging, and I did use my knowledge of Italian” (WSURV3-Ines). Similarly, participant Isabella stated that she enjoyed “reading an interview about the Italian economy, which I found much more interesting” (INV2-Isabella). Once they started progressing through the MOOC, they realised the importance of both language and culture, and then it became a “dual-purpose really which is yes improve your French but also learn something about the French way of life” (INV2-Felix). Overall, participants not only
focused on everyday spoken vocabulary, but also some of them covered specific sociocultural content related to the countries where the target language is spoken.

**4.1.5 Looking for practise pronunciation opportunities**

Another element that the researcher identified within the data was the participants’ work on pronunciation. Some participants listened carefully to the intonation of the MOOC educators when they were explaining specific grammar topics. For instance, participant Ines highlighted the benefits of watching the video-based grammar explanations given by the Italian MOOC educator, since “it’s useful to hear her speaking because obviously, you can understand, you hear her intonation and how she pronounces the words” (INV2-Ines). Interest in this aspect of language increased among participants during their engagement with the MOOC. Eventually, eight out of ten participants focused on the pronunciation of words and expressions in the target language, while they were engaging in listening comprehension activities, grammar revision and vocabulary learning.

Meanwhile, there were other participants who not only listened but also attempted to imitate the pronunciation of the speakers in the MOOC even though it was not part of the proposed activities. This situation was the case of participant Sarah, who enjoyed “reading aloud or copying the voices on the recordings” (WSURV3-Sarah). She went on to explain: “Okay, so what they were talking sometimes, I don’t think you had to copy what they were saying, but I did it because I wanted to copy their pronunciation as I went through” (INV2-Sarah).

Salvador also decided to work on the pronunciation of some verbs in the past tense during a grammar activity: “Well, I think the MOOC was probably asking me to look at the verb endings in the past tenses. But I wanted to be sure about the pronunciation as well because this is one of the things that has been a slight frustration for me” (INV2-Salvador). This participant’s attempt at pronouncing verbs that required a fixed accent in the past tense enabled him to tackle a problematic area already mentioned in the vocabulary theme, Spanish stress patterns and accentuation rules. Both participants Sarah and Salvador acknowledged the need to improve their pronunciation once they started going through the MOOC sections that did not necessarily focus directly on this aspect of language.

Although the opportunity to work on their pronunciation was there, sometimes the way it was presented within the MOOC content was not evident to the learners. In some MOOC activities delivered on Coursera, for example, learners were asked to repeat what the speaker said in the videos. Nevertheless, participants Silvia and Salvador, considered that just repeating the vocabulary after the teacher in the MOOC was not useful. Participant Silvia argued that:
the thing is you don’t know if you say it right or not [in the MOOC activity]. It’s when you are in the evening class, [the teacher] will tell you: ‘Oh no, that’s not...you should say it like this’. And, then explain why it is like that and not the way you said it, so which is more helpful (INV2-Silvia).

The lack of immediate feedback from the MOOC educator confirming the pronunciation of words in the target language was outlined as a downside of the online course. This limitation on feedback is linked to the teacher-student relationship that was also missing from the MOOC. Having live interaction with a teacher and receiving personalised feedback on this learner’s pronunciation was considered essential to improve this aspect of language.

4.1.6 Summary of RQ1- Case Study 1

Thus far, this section has presented five themes that were generated from the data relating to community-based language learners. The first theme described the constant focus the participants placed on grammar revision throughout the MOOC. Since the participants already knew the grammar topics in the chosen MOOC, they decided to engage with activities that contributed to their revision of grammar topics previously learned in the face-to-face class. The course activities and grammar content identified within the data were often related to verb tenses and sentence structures. The attention given to these activities and the content revised by the participants revealed their interest in the morphosyntactic element of the target language.

The scope of the second theme covered the participants’ aim of improving their listening skills. According to the participants, the MOOC gave them the opportunity to practise their listening comprehension skills by engaging with interesting audio-visual materials offered in the target language. The third and fourth theme outlined the focus of the participants on vocabulary learning, and cultural topics. All the community-based learners saw an opportunity to expand their everyday spoken lexical repertoire, especially as it was related to hobbies, in-class content, or sociocultural elements. Some participants reportedly struggled to grasp the meaning of some words and phrases due to the variety of the language presented in the MOOC. Nevertheless, it provided an opportunity to identify and contrast lexicon that belonged to other varieties of the target language, which some participants were not very familiar with.

Lastly, the fifth theme mapped the attempts of participants to tackle their pronunciation practice in the target language. While some students received direct instruction on the phonology of French and Italian, others found their own ways to work on their pronunciation by focusing on the intonation of the speakers in the videos and on word stress during grammar and vocabulary revision. Altogether, participants in this first case study focused their attention on grammar revision, listening, pronunciation practice, vocabulary learning, and socio-cultural topics while
engaging with a MOOC as part of their community language course. Section 4.2 moves on to consider the main themes derived from the data regarding the aspects of language that received significant attention from the very different participants in the second case study.

### 4.2 Case Study 2

The nine participants enrolled in an ESP course chose MOOCs related to their jobs, academic studies, and personal interests. Working with a MOOC as part of their face-to-face English course served a twofold purpose for participants in this case study: practising the target language and gaining domain-specific knowledge. Erica noted that “the complex approach to all language skills [in the MOOC] allows foreign students to improve their knowledge of a specific academic or cultural field” (OQ-Erica). Participants in Case Study 2 found opportunities to practise English throughout the MOOC while learning about domain-specific content related to their academic and personal interests. The main aspects of language that these participants focused on in studying their chosen subjects in a MOOC are presented below.

A total of 30 codes were created during the analysis of the data set generated from the nine participants in the second case study. The codes clustered around five broad topics presented across the data: language register, vocabulary, pronunciation, listening and productive skills. Examining these broad topics in more detail, the researcher identified that the codes focused on:

1. Language register
2. Vocabulary learning
3. Pronunciation practice
4. Listening practice
5. Communication skills

The construction of the themes in this second case study followed the same theme generation process carried out in the Case Study 1. The themes are based on the data gathered from the same four data sources outlined in Section 4.1. The final version of the themes generated around those broad topics is discussed next.

#### 4.2.1 Moving from grammar to language register

Once they began to interact with the activities and the course content in the MOOC, six out of nine participants paid increasing amounts of attention to grammar elements. For example, participant Elton decided to study specific verb tenses during weeks two and four of the MOOC engagement to complete the scheduled writing tasks in the online course (WSURV2/4-Elton). Similarly, participant Estella tested her grammar knowledge while completing two English tests included in the MOOC about English and teaching methodology (INV2-Estella). Although both
participants did not deliberately set an initial focus on grammar, the MOOC activities they decided to engage in subtly led them to revise their knowledge of English grammar.

The six participants turned their attention to specific elements of grammar that were present within the MOOC materials. For instance, participant Edwin identified some grammatical structures while engaging with the video lessons of the course (WSURV3-Edwin), more precisely he looked at the transcript of the video and tried to “analyse that phrase by phrase also from my grammatical point of view” (INV2-Edwin). This practice was shared by participant Elsa, who noticed the sentence structures that composed the reading material she covered in the course (INV2-Elsa). Another participant presented a more specific focus on grammar that involved “the competence in using the correct syntactic structures, focusing on the right preposition after verbs” (WSURV4-Emily). As they went through the course content, most of the grammar attention reported by participants was at a syntactic level, i.e., participants focused on the arrangement of words in sentences that appeared in the video transcripts and articles of the course.

Despite this attention to grammar, it took only second place in ESP learners’ linguistic priorities as they studied their MOOCs. The first position was held by a constant focus on register, i.e., the language used within their chosen domain-specific subjects. All nine participants focused on this aspect of language within the course. This was evident in the case of participant Edwin, who was interested in the formal expressions that were used when describing historical events from week one of their engagement with the MOOC (WSURV1-Edwin). Participant Emily also focused on the academic register employed in scientific articles that were related to her academic studies. Likewise, the terminology used by the MOOC educators was carefully reviewed by participants Estella and Elliot while watching video lectures about English teaching methods and physics, respectively. Even though most participants were interested in familiarising themselves with the academic register used in their particular MOOC, participants Erik and Ethan were more focused on the language used in social and work contexts. This was partly due to the nature of the Coursera MOOC both chose, which was aimed at teaching them how to communicate more effectively in business and in life.

Three participants also made connections between the MOOC content and the work on language register already covered in the ESP class. According to participant Elton, “the teacher [in the class] gave us the relation from different parts of the letter, for example, the first part of the letter with the one it says ‘yours faithfully’... this relation, for example. So, I related this with my exercise inside the MOOC” (INV2-Elton). Attention to the academic and professional language used in the MOOC content and activities was partly prompted by the in-class teacher, who also
covered the aspect of register in the lessons. The focus on English register led participants to explore specialised vocabulary related to their topics of interest, as discussed in the theme that follows.

4.2.2 Increasing the English lexical repertoire

The second theme relates to vocabulary learning. Five out of nine participants set an initial focus on learning vocabulary at the beginning of the MOOC. Participants encountered new concepts, phrasal verbs, and expressions throughout the four weeks of the MOOC engagement. For example, participant Ethan stated the following at the end of the first week: “I often come across idiomatic expressions when I see videos” (WSURV1-Ethan). Similarly, participant Edwin acknowledged “the chance to increase my linguistic knowledge by switching to new terms and phrasal expressions” (WSURV4-Edwin). Regardless of the content of the course, all the participants had the opportunity to expand their English lexicon.

Some participants also made connections between the academic register previously explained in class and the formal lexical information they were gathering as they engaged with the course material. This is the case of participant Edwin who recalled:

[teacher’s name] made a lesson about formal and informal speech and in this case formal and informal was corresponding to the use of Germanic or Latin words/verbs, so I noticed that in the MOOC because a lot of expressions, which are let’s say, high cultural expressions used by…normally, it is expected to be used by a university professor, I found quite similar to what I could learn when I attended the university (INV2-Edwin).

According to the participants’ report, the teacher in the face-to-face English class introduced them to the concept of academic register. Seven of them transferred that knowledge to identify the specialised lexical information presented in the audio-visual content of the course. One of the two remaining participants, whose course content was not entirely academic, claimed that “even if the course was very short, you could learn something about words or expressions” (INV2-Ethan). The addition of a MOOC to participants’ face-to-face class allowed them to explore both academic and job-related vocabulary beyond the English classroom.

Most of the participants did not specify the expressions and concepts they learned within the MOOC. Nonetheless, the researcher noticed that the vocabulary they focused on was typically related to their academic and personal interests displayed in Figure 9, which illustrates the main subjects reportedly covered in their chosen MOOC.
As illustrated in Figure 9, participants focused on a wide variety of areas in their chosen MOOC. The topics displayed on the right-hand side of Figure 9 represent participants’ personal interests identified within the data. Conversely, the list of topics displayed on the left-hand side of the mind map shows the disciplinary subjects that the rest of the participants decided to study in the course. The lexical information participants focused on in the MOOC was mainly linked to the topics mentioned above.

Four of the participants also had the opportunity to revise familiar concepts from their academic disciplines. Knowing the key concepts in advance was an advantage for the learners when embarking on an online course delivered in the target language. Participant Emily, for instance, argued that “because I am familiar with the content, it is easy because I know the lexicon, so I can concentrate my attention on the general meaning of the sentence” (INV2-Emily). Familiarity with the lexical information encountered in the domain-specific MOOCs enabled participants to gain a better comprehension of the course content. Focusing on acquiring new vocabulary and revising familiar concepts in English both led participants to consider other aspects of the target language, such as pronunciation, which is discussed below.

4.2.3 Improving pronunciation
The third theme encapsulates participants’ attention to enhancing their English pronunciation and the issues they found while doing so in MOOCs. Improving pronunciation was deemed necessary, but more than half of the participants found it difficult to do it on their own. Five out of nine participants focused on their pronunciation practice throughout their weekly MOOC engagement. Participant Estella commented that she had struggled with pronunciation in the past; therefore, her “main aim was to get better with pronunciation” (INV2-Estella). Half of the participants who showed some interest in this aspect of language used the audio-visual material of the chosen MOOC to practise their pronunciation, as discussed below.
An example of how participants worked on their pronunciation while engaging with the course videos was Estella, who “stopped the videos and tried to repeat some words that, for me, it was a different pronunciation” (INV2-Estella). However, she argued that “the modality to join the MOOC doesn’t permit me to get better in pronunciation because I can’t speak to anyone” (INV2-Estella). Participants considered that personalised feedback and oral interaction were crucial to assess their progress in pronunciation. Unfortunately, the MOOC did not provide the participants with these features.

According to Erica, the in-class teacher “also did a lesson, a short lesson on phonetics” (INV2-Erica). This face-to-face instruction in phonetics prompted some students to focus on the English sounds uttered by the video lecturers in the online course. However, understanding the MOOC speakers’ accents was another difficulty that participants encountered while trying to apply what they had learned in class to their pronunciation practice in the MOOC. Participant Elsa recounted the following:

[Teacher’s name] also told us about English sounds. So, during the MOOC, I tried to focus on the English sounds. But, the professors were from [a country where English is used as a second language] on that course. So, they had the kind of strange accent to me and not really British or American. So, I tried to apply that, but I couldn’t really (INV2-Elsa).

Understanding accents that were not necessarily British or American became a challenge for the participants when trying to identify some features of the speakers’ pronunciation by themselves. Participant Emily also noticed differences between two speakers: “one of them had a correct pronunciation because it was mother tongue of English, but the other, the pronunciation was different from the other, so I didn’t know what the correct pronunciation was” (INV2-Emily). The strategies employed by the participants to cope with this situation are covered in my response to RQ2.

By contrast, some participants did not seem disconcerted by diverse English accents. Erica claimed that “a good way to learn a new language is listening to people with different accents, for example, and try to understand them because the first step is to understand their accent and then their language” (INV2-Erica). For these participants, being exposed to different English accents was a positive challenge to their listening skills, which is another aspect that they focused on, as discussed next.

4.2.4 Developing listening skills
The fourth theme maps another widely held focus: the understanding of the spoken domain-specific content in a MOOC. All nine participants focused on their listening skills from the outset.
The presentation of English video lessons in the MOOC enabled them to practise their listening comprehension. For instance, participant Elliot “found useful this type of study, particularly for improving my understanding of spoken English” (WSURV4-Elliot), since the MOOC offered “an opportunity [to have] two hours of listening in every unit” (INV2-Elliot). Interacting with online audio-visual material offered an opportunity for learners to work on their listening skills.

Some of the video lessons included prompts or questions that helped participants with their listening comprehension. Participant Estella claimed:

*it was a good thing, for example, that during the videos, one lecture used some keywords in the front side of the video. Some words appeared like keywords in the video. It was a help for someone who is looking at the video* (INV2-Estella).

Likewise, Elliot considered that the feature of embedded questions in the video was “Useful. if the question is related to what the teacher is saying, the lecturer, sometimes [it] is necessary to stop, to try to think what they are saying” (INV2-Elliot). The format of these videos enabled participants to check their understanding of the information they were receiving.

Most of the participants focused on listening for gist to gain an overall understanding of the information given in the video lectures. For instance, participant Elsa explained that “most of the time, I just receive the information because maybe I focus on the meaning of the sentences instead of the structure of the sentence. And that happens mostly when I watch the videos” (INV2-Elsa). Participant Emily also pointed out that “if the video is interesting for me, I can listen to it in English. So, for me it is an improvement because I didn’t expect this” (INV2-Ellmy). Meanwhile, other participants, such as participant Edwin, focused on listening for specific details while watching the videos:

*The main issue I encountered was the passage from a professorial tone during an online lesson to a more colloquial tone used during a debate between two professors where it wasn’t so easy to grasp the whole meaning just by listening* (WSURV4-Edwin).

In this case, Edwin noticed the change of register by speakers in a video, particularly the level of formality used by the speakers to express their ideas. This focus on language register used in the video lessons was also perceived by participant Elliot who claimed that “the video lecture of week 8 of the MOOC [was] less technical but more spoken with respect to the other weeks. I had more difficulty in understanding the lecturer with her strong American accent” (WSURV4-Elliot). The tone and strongly accented English identified in the video lectures represented two main obstacles for both participants when trying to listen to more than just single words.
As noted in the vocabulary theme, familiarity with the domain-specific content of the MOOC could facilitate participants’ understanding of the main ideas in a video lecture. However, the different types of register and the variety of English accents of the MOOC speakers could challenge their listening skills. Even so, the MOOC offered them the opportunity to engage in additional listening practice while receiving specialised information from different speakers of the target language.

4.2.5 Using the language for communicative purposes

The last theme deals with productive skills. Four participants started the MOOC with a focus on communication. Erik and Ethan even chose a MOOC that taught them how to improve their communication skills. As they engaged with the course, six out of nine participants found opportunities to use the target language and express what they wanted to say in a written form. For example, participant Elton wrote job application letters, participant Emily summarised scientific texts and participants Edwin and Erica posted comments on the discussion forums of their courses. Although participants approached their writing skills by completing different tasks, they were able to use the target language for communicative purposes related to their academic and personal interests.

Moreover, the discussion forum allowed two participants to use the target language to “bring my opinion to a discussion and to receive feedback from my colleagues” (INV2-Erica). Apart from using the forum to “express my own opinion directly in English” (INV2-Edwin), participant Edwin focused on the language employed by his other fellows while taking part in discussions forums, as described next:

Through the forum you can also get able to recognize different registers of the language used, ranging from the very colloquial to the doctoral one (including to find difficult in understanding some written speeches because of lack of every punctuation mark). In any case it’s a very useful tool to learn how to manage in explaining something the clearer as possible (RPHOCaption-Edwin).

The focus on language register appeared one more time while participants engaged in such communicative activities. Edwin and Erica both read other learners’ opinions to understand the way they expressed themselves about the subject matter. The style of language used by their fellow MOOC participants was considered before writing a response in the target language. As a result, the discussion forum became a tool used by a few participants to improve their writing skills by interacting with learners from outside their language classroom.
Although the MOOC did not offer participants enough spaces to deliver a speech or interact synchronously with others in the target language, as discussed under Theme 3, only one participant set an initial focus on speaking practice. This was the case of participant Emily, who used the final week of the MOOC to “explain orally what I’ve read and learn from scientific articles” (WSURV4-Emily). Even though this activity was not part of the MOOC, she decided to work on this aspect of language to try to communicate what she had been learning in the past weeks. This emphasis on speaking helped her to prepare for the oral presentation given at the end of their face-to-face English course.

4.2.6 Summary of RQ1- Case Study 2

Overall, this section has presented five themes derived from the data provided by participants in this second case study. The first theme started by outlining participants’ attention to the morphosyntactic elements of English, which they reviewed while working with the content and activities of the MOOC. Then, it showed participants’ focus on the academic and communicative use of language associated with the subjects they chose to study in the MOOC. They also took advantage of the MOOC content to make links with what they had been taught in class about academic register. The following theme conveyed the constant attention given to vocabulary learning in the MOOC. Participants focused on academic and technical lexicon related to their subjects of expertise and topics of personal interest. Most of them also established a relationship between the lexical repertoire offered in the MOOC and their background knowledge of English register acquired in the classroom.

The third theme was constructed around pronunciation. Not all the participants paid attention to this aspect of language. However, some found opportunities to work on their pronunciation by imitating the intonation of the speakers in the online video recordings. This technique was suggested by their in-class teacher, who reportedly covered some elements of English phonetics in the classroom. Nevertheless, some participants reportedly struggled not only to practise pronunciation on their own, but also to consolidate their understanding of English sounds while engaging with the audio-visual material in the MOOC. These issues were caused by a lack of feedback, oral interaction and the variety of English accents they encountered within the course videos, respectively.

The fourth theme focused on participants' listening skills. The content of their chosen MOOC was usually structured around video lectures, which created a good opportunity for participants to practise their listening skills. The different register and variety of English accents presented in the video lectures also impacted on their understanding of the spoken message, yet
the features embedded in some videos (such as keywords and questions) and the familiarity with
the subject eased their ability to acquire information about their topics of interest.

The last theme dealt with the opportunity that most of the participants had to use the
target language for communicative purposes in the MOOC. They were able to work on their
writing skills either by completing communicative tasks, summarising the main information from
online material or joining the discussion forums. The two participants who joined the forums
outlined a twofold purpose: testing their writing skills and identifying the language used by other
MOOC participants while interacting with them. The productive skill of speaking was covered by
only one participant in this case study, who attempted to present to herself what she learned
from the course content.

Altogether, chapter 4 has reported the main findings related to RQ1 of this study. Section
4.1, which comprised data from participants in Case Study 1, presented five themes that covered
the aspects of grammar, listening, vocabulary and pronunciation. Conversely, Section 4.2, which
included responses from participants in Case Study 2, presented five themes regarding the
aspects of language they focused on the most while working with a MOOC. The additional theme
generated from the data of this last group referred to a continuous focus on register during the
MOOC engagement. Section 4.3 moves on to discuss the patterns identified within the data,
already presented in these findings, by drawing a comparison between the participants from the
two cases of this research study.

4.3 Discussion

This section articulates the implications of findings in response to RQ1 (What aspects of language
do adult language learners focus on the most when engaging with a MOOC as part of their
classroom-based language course?). Then, it questions and compares the attention given to the
reported aspects of language by the participants in the two case studies. This discussion also
relates to the literature to support the main points drawn from the comparison.

In response to RQ1, analysis shows that the community-based language learners and ESP
learners differed considerably in language proficiency. Most of the learners in the first group
(eight out of ten) self-reported a B1 level of proficiency in Spanish, Italian and French, using the
Common European Framework of Reference for Languages (CEFR) (Table 4). By contrast, the level
of proficiency in English of most learners in the second group (seven out of nine) is reportedly at
the B2 level of the CEFR (Table 5). The CEFR regroups learners at B1 and B2 levels into a broad
category called ‘Independent User’, yet the process of mastering a foreign language varies
significantly between these two levels (Council of Europe, 2020). This discrepancy in language
proficiency between the two groups accounts for their choice of MOOC and the aspects of language they focused on during four weeks of engagement with their online courses.

Moreover, participants in Case Study 1 showed interest in MOOCs that displayed familiar topics. Participants ensure that the content of their LMOOCs at least covers appealing situations for a learner at a CEFR B1 level. Learners at this intermediate proficiency level are able to “understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc.” (Council of Europe, 2020). Conversely, the ESP learners in Case Study 2 chose MOOCs that not only suited their upper-intermediate language proficiency in English, but also aligned with their disciplinary specialisms such as English history and big data management. The CEFR B2 proficiency level of the ESP learners enabled them to explore other MOOC options that went beyond everyday topics. Learners at this level can “understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation” (Council of Europe, 2020). Those learning English typically aim to improve the target language while studying topics in their MOOCs that are of personal interest or relevant to their jobs, as suggested in previous MOOC-class integration English projects (Beaven, 2013; Matthies Baraibar, 2015).

The different language proficiency levels observed in both groups of learners influenced their MOOC selection process. The higher English proficiency level of the ESP learners gave them a more extensive scope for further exploration of the language used in diverse MOOCs related to their areas of interest. Meanwhile, the lower level of language proficiency of community-based learners, as well as the lack of suitable intermediate Spanish MOOCs, limited their scope for engaging with online courses that could provide challenge and stimulus to their learning of Spanish, Italian and French. The language proficiency disparity between the two groups also influenced the linguistic focus of participants in their MOOCs, as summarised in Table 10.

<table>
<thead>
<tr>
<th>Aspect of language</th>
<th>Community-based learners [focus on]</th>
<th>ESP learners [focus on]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammar</td>
<td>Revising grammar to enhance their understanding of specific grammar topics previously covered in the face-to-face class, mainly verb conjugation and tenses. Their grammar training involves watching video-based grammar explanations and testing their grammar knowledge through quizzes and non-assessed activities.</td>
<td>Sentence structures and the meaning of those sentences that appear in the audio-visual content as well as in the written materials of the MOOC.</td>
</tr>
<tr>
<td>Register</td>
<td>-</td>
<td>The language that is used within the domain-specific content presented in the</td>
</tr>
</tbody>
</table>
Learning Skills: Practising their listening skills by engaging with the audio-visual materials offered in the MOOC. They complete listening comprehension activities to test their understanding of the information given in the target language. Improving their listening comprehension of domain-specific content while engaging with the video lessons of the online course. Participants focus on identifying not only the overall meaning of the speech but also the language register and diverse English accents employed by the educators in the MOOC videos.

Vocabulary: Exploring and practising new lexicon related to conversational topics in the target language throughout their MOOC engagement. Lexical items related to their academic and professional subjects of interest, which enable them to have a better comprehension of the MOOC content.

Socio-cultural Aspects: Gaining socio-cultural information about the countries where the target language is spoken. ‘Empire: The Controversies of British Imperialism’ is the only online course that covers socio-cultural aspects by presenting the relationship between the British Empire and social themes such as race, religion, gender, and propaganda (Toye, n.d.). However, Edwin made no comment on any of those aspects during his engagement with that MOOC.

Pronunciation: Repeating the pronunciation of words and imitating the intonation of the speakers in the audio-visual content, even when it is not part of the proposed activities in the MOOC. Imitating the intonation and pronunciation of the educators in the video lessons, as suggested by the teacher in the face-to-face class.

Communication Skills: Writing: Communicative activities that enable them to use the target language to communicate what they want to say in written form. Speaking: Most of the ESP learners did not find opportunities to speak in the target language within the online course, except for one participant, who deliberately focused on this aspect of language in the last week of the MOOC.

The findings from this first enquiry suggest that both groups were afforded ample opportunity for listening practice by the repeated exposure to the audio-visual resources available in the MOOC. In common with others (Matthies Baraibar, 2015; Beaven, 2013; Motzo & Proudfoot, 2017), most participants in this study focused on listening comprehension skills either by hearing short dialogues on familiar topics or watching video lectures involving technical
discussions in their areas of interest. Similarly, learners often found spaces for vocabulary learning within the MOOC, as highlighted in previous research on the use of MOOCs in the L2 classroom (de Waard & Demeulenaere, 2017). Most participants also focused on their lexical repertoire in the target language while going through the online course content, including everyday spoken words in Spanish, Italian and French as well as formal expressions in English. Therefore, this study adds to current knowledge by identifying the common aspects of language that learners with different levels of language proficiency are likely to deal with when learning in a MOOC.

However, there is a marked contrast between the two groups regarding register and communication skills. Register is described as “an idealised concept which allows us to make predictions about what lexicogrammatical features are likely to occur in any given situation” (Flowerdew, 2012, p.13). Community-based learners show no interest in the linguistic choices associated with any of their MOOC topics. In contrast, the attention that ESP learners give to this linguistic feature stems from their initial work on grammar, particularly the review of syntactic aspects found in the material of the online course. Learners’ interest in sentence structures leads them to decode the language used to convey meaning related to the subject matter presented in their chosen MOOCs.

A prior orientation to register by the in-class tutor can in part explain the strong inclination of ESP learners towards this feature. The face-to-face course included a lesson on ‘register, style and tone’ in the fifth lesson (Figure 10).

![Figure 10 ESP Course summary](image)
As part of the fifth lesson of the ESP course, learners were presented with the standard lexicogrammatical features used in colloquial and formal registers (Figure 10). When enrolling in a MOOC, participants have access to a variety of examples that can complement their understanding of this aspect of language. Accordingly, the MOOC is leveraged to review the registers used within other fields of interest not covered in the face-to-face class. Taken together, the findings suggest that the aspect of register is covered within a MOOC by learners who are more proficient in the target language and those who also receive in-class instruction on this linguistic feature.

Both, the in-class support received from the in-class teacher in Case Study 2 and the content of the face-to-face course influenced the language focus of ESP participants, particularly the linguistic interest in register and pronunciation. This was not the case for participants in Case Study 1, who did not receive any guidance on how to interact with the online material offered during their MOOC-based learning. Future practices integrating MOOCs into L2 classroom should acknowledge the influential role of the in-class teacher and their syllabus of the face-to-face course. These two external factors can shape the online learning experience of adult learners engaging in LMOOCs and MOOCs for leisure and professional purposes.

5 A Taxonomy of Personal Learning Goals in MOOCs

This section identifies the different goal-setting processes that Case Study 1 and Case Study 2 adopted when engaging with their chosen MOOCs. Zimmerman and Moylan’s (2009) cyclical phase model of self-regulated learning (SRL) and the main goal types identified in Table 1 underpin the data analysis for this second enquiry. The section concludes by discussing participants’ preferences regarding the types of goals they set to chart a path for their learning in a MOOC. The data analysis derived from the weekly monitoring surveys responses (WSURV), the two semi-structured interviews (INV1/INV2), the captions in the MOOC screenshots (RPHOCaption) and the open-ended responses from the online questionnaire (OQ). Data is presented as transcribed, or in the case of open-ended responses from the WSURVs, the OQ or the RPHOCaption, as it was written by the participants without editing (though insertions are made occasionally for clarity).

Participants’ data was analysed to identify their goal setting processes which fall into the forethought phase of the cyclical model of self-regulation (Figure 1). Likewise, the types of goal set by the participants during their MOOC-based learning were identified within the data.
Section 5.1 introduces the goal setting process of ten participants in Case Study 1 and Section 5.2 presents the goal setting process identified in nine participants in Case Study 2 while working with their MOOCs.

5.1 Case Study 1

5.1.1 Goal-setting processes of community-based language learners

Zimmerman and Moylan (2009) state that “Goal setting refers to specifying the outcomes that one expects to attain” (p. 301). This could for instance be learning five expressions in Spanish used in a restaurant during a one-hour study session. Community-based language learners showed evidence of the learning process of goal setting included in the forethought phase of the SRL cyclical model (Figure 1). However, during the first interview, most community-based language learners did not report clear expectations of what they thought would be the ultimate result of their participation in their chosen language MOOCs (henceforth, LMOOCs). For example, Sarah said: “I don’t really know, to be honest, I don’t have particularly strong expectations, I don’t know” (INV1-Sarah).

Only two learners articulated outcome expectations that specified what they thought they would achieve by the end of the LMOOC. Irene, who had enrolled in the Italian Intermediate EdX course at the time of the first interview, said:

My expectation is that I am going to find it difficult, to find my way around the course it’s going to take a lot of time. And I am a bit afraid that I am not going to have enough time to do it because I have other commitments [...] but, what I want to do is that I don’t want to turn into a dinosaur and I am hoping that by the end not only my Italian would have improved, but my expertise in accessing this [the LMOOC] would have improved (INV1-Irene).

Irene anticipated that she would have problems with the course navigation and lack of time. Nonetheless, she then restated what she expected to gain after studying a LMOOC: improving her target language and her Information Communication Technology (ICT) skills. By taking part in the study, Irene also hoped to avoid becoming one of those people who never uses technology, or a ‘dinosaur’, as she described it above. Conversely, Salvador had a rather negative expectation of his LMOOC performance: “I would do some, but I know I would fail at it in the end because I know I won’t get used to it” (INV1-Salvador). Except for Irene and Salvador, nearly all

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9 As previously stated in the literature review, goal setting is a complex process that encompasses specific attributes and motivational variables, so the order in which the sections below are organised was considered to be the most logical manner to build upon and connect the findings in this study with the goal setting theory.
the participants joined the online course without having clear and strong expectations of the outcomes relating to their online learning experience.

The low outcome expectations of participants identified during the first interview provided a clear picture of the limited presence of goals set at the beginning of their online courses. Almost all community-based language learners stated that they did not formulate specific goals at the start of their MOOC-based learning. The following response given by one of the interviewees illustrates this salient point made by the great majority of participants:

I: Did you set specific goals at the outset of this MOOC? (INV2, Question 6)

Possibly not as much as I could have if I thought about it a bit more because we just generally signed up for it. But, in terms of specific goals, I don’t think I’ve really had any clear specific goals: ‘I want to learn this aspect of it or that aspect’. No, I didn’t do anything like that. I would just check out maybe to think about: ‘I’ve done this aspect of Spanish, how will the FutureLearn course enhance that in some way or another’, but prior I didn’t really have any specific goals (laughs). Perhaps, I should have (INV2-Sofia).

Nine out of ten participants initially adopted the goals or objectives specified by the course, implicitly leaving regulation of their learning in the hands of the course authors, rather than setting their own goals. Half of the participants explained that they did not engage with that forethought process at the outset of their online learning since they were not familiar with such courses and did not know what to expect from them. For instance, Silvia said she did not set goals from the beginning. When the researcher asked her to explain why she did not do it, she argued: “because I didn’t really know how it would be like the course” (INV2-Silvia). Accordingly, at first learners “just went along with it” (INV2-Santos) and followed the online course learning outcomes to compensate for their lack of experience with MOOCs. Having unclear outcome expectations before joining the online course was related to the fact that most of them (nine out of ten) were doing a MOOC for the first time.

Most learners who were joining a MOOC for the first time relied on what the online course could offer them to start a possible process of goal setting. This attitude of expecting to be told what to do once they were in the online course was rooted in their classroom-based language course where a teacher set the learning outcomes for them. By way of illustration, Ines described the practice of completing an in-class form called records of achievement:

Well, [teacher’s name] writes on the blackboard, I mean the whiteboard, sorry, excuse my age, whiteboard, the focus of the lesson and then we copy that into the green form. You can say that is a goal of the lesson, yes (INV1-Ines).
I: But would it be your personal goal?

_No, no. it’s the one that [she] says_ (INV1-Ines).

Sarah also added the following about the same form:

_The teacher will tell us at the beginning of the course what the learning objective is, so s/he would say like: ‘we’re going to learn about, I don’t know, the preterite and we’re going to do some vocabulary about blah and then we’ll do something else’. And, actually, I suppose it’s nice to kind of get in your head what you’re doing_ (INV1-Sarah).

As a result, at first learners did what they were anticipated to do with the proposed material in the LMOOC. They delegated the power to make learning decisions to the authors of the online course. Thus, the LMOOC educators took the role of the in-class teacher, who had often shaped participants’ learning outcomes at the start of the lessons.

Goal setting was not a self-initiated process for the community-based language learners. Nonetheless, they transitioned from goals of external origin to self-set goals during their online experience. All community-based language learners attempted to set goals for themselves once they started exploring their LMOOCs, despite this being the first time most of them had worked with such online courses. Simona’s response during the second interview illustrates her effort towards self-regulation:

_So, after seeing the course outline, then I’d say: ‘oh well, I’ll aim to do this’ or ‘I’ll do this much’ or ‘I’ll get this far’. So, I did sort of set targets like that, but not something you could write down: ‘I’m going to learn this, this week’ because when I looked at the MOOC, there wasn’t anything there that I really thought: ‘I want to learn about this’ because really it was all revision that we’ve covered everything either in the class or the other bits I’ve been doing_ (INV2-Simona).

Reading the overview and the learning objectives outlined in the LMOOCs was a step taken by most participants to initiate a process of goal setting. Participants noticed they had already covered most of the content offered in their online courses during previous learning experiences, such as their classroom-based lessons. Accordingly, they decided to set goals aimed at consolidating their linguistic competence in the target language throughout their online learning experience.

Being familiar with the LMOOC content not only counteracted learners’ initial lack of understanding and uncertainty about those online courses, but also enabled them to start
considering their own goals for their MOOC-based learning. Apart from the course outline which displayed what learners were expected to learn by the end of the course, participants did not receive much guidance from their online course which might have enabled them to set their own learning outcomes at an earlier stage of their online study.

There was a lack of initiative on the part of the participants to self-regulate their learning at the outset of this online experience. Learners did not have clear outcome expectations nor defined learning targets when they were enrolling on their LMOOCs. Nevertheless, one external element helped participants take a step towards self-regulation: the MOOC outline. This section of the online course enabled learners to initiate a process of goal setting once they started progressing through their online courses. The types of goal participants attempted to frame in their MOOCs are described next in Section 5.1.2.

5.1.2 Participants’ goal types
Community-based language learners set different types of goal throughout the four weeks of engagement with their LMOOCs. The researcher identified five types of goals within the self-reported data of participants:

1. **Mastery (or learning goals):** This first category (Locke & Latham, 2012) refers to learners wanting to improve their linguistic and sociocultural knowledge of the target language as well as their language skills development.

2. **Reinforcement goals:** Learners’ efforts to revise aspects of the target language they already know fall under the second category.

3. **Ability goals:** The third category is linked to learners’ efforts to demonstrate their linguistic competence, not only by performing well in a task (Grant & Dweck, 2003; Brophy, 2005), but also by challenging their ability in relation to a specific language knowledge/skill within their MOOC-based learning.

4. **Process goals:** The actions or techniques that learners employ to attain their goals (Kitsantas, et al., 2017) were included in the fourth category.

5. **External goals:** The last category reflects the influence of external sources, such as the authors of the MOOC or the in-class teacher, on the goal setting process of learners.

Table 11 provides an overview of the goals that participants self-reported within their MOOC-based learning as well as retrospective reflections they made during this study. The first row of this table presents the responses of participants to the fifth question of the second semi-structured interview (INV2) that asked learners for their main goal in the MOOC.
The remaining four rows classify participants’ data based on their responses to the second question of the weekly surveys (WSURVQ2: What was your learning goal for this week?). Examples of the five types of goals listed above are also identified in Table 11. The following guidelines are made for clarity when reading the information within the table:

2. Reinforcement goals are underlined.
3. Ability goals are highlighted in blue.
4. Process goals are bolded.
5. External goals appear with a red asterisk next to them (*).

The self-reported goals of participants occasionally included characteristics of more than one type of goal, such as reinforcement goals and process goals. Following that example, the response would appear underlined and bolded in Table 11. Therefore, those kinds of responses present more than one pattern from the abovementioned guidelines to identify each type of goal accordingly. This mixed classification also shed some light on the complex goal setting process reported by community-based learners in LMOOCs, presented next.
Table 11 Main aim reported by Case Study 1 in INV2 alongside their weekly goals and retrospective reflections obtained from the second question of the WSURV that asked them for the learning goal in each week of their LMOOC

<table>
<thead>
<tr>
<th>Learner</th>
<th>Silvia</th>
<th>Simona</th>
<th>Sofia</th>
<th>Sarah</th>
<th>Santos</th>
<th>Salvador</th>
<th>Isabella</th>
<th>Irene</th>
<th>Ines</th>
<th>Felix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q5: Can you please summarise your main aim in this MOOC? (INV2)</td>
<td>“My main aim was to practise grammar that we have already learned in class, in the evening class and to remind me of things that I had already done before but just to practise a bit more what we have already been learning in class. So that was my aim really” (INV2).</td>
<td>“What I really wanted was to have some opportunities of listening to something and then some way of checking my understanding” (INV2).</td>
<td>“To complete it to start with (‘), make sure that I remember to do it and not forget within the time limits. To be curious about what it is I might learn from ‘Out and About’ FutureLearn. And to, I suppose, help you with the research” (INV2).</td>
<td>“Well to revise existing knowledge, I guess…and to see whether I knew enough or whether there were things that I’d forgotten or whatever, yeah” (INV2).</td>
<td>“The main objective was to I guess understand more about how elements of applying for a job, let’s say or looking for property (‘)…So my main aim was to use that element of the course and add it to what I have learned in the class, so to expand the knowledge. Learn a little bit more, but also to complete the weeks (‘) and manage to get the correct answers within the number of attempts they would allow” (INV2).</td>
<td>“My main objective was just to expand in another direction a sort of more general sort of moves towards Spanish just another way of doing it. Another opportunity [towards learning to speak Spanish]” (INV2).</td>
<td>“To learn and practise grammar and listening and writing and some understanding of Italian culture” (INV2).</td>
<td>“My main aim was …the first aim was to improve my listening comprehension, the second one was to improve my vocabulary. And, thirdly to revise, so there was some grammatical revision that I did as well. So, [improve] listening, [improve] vocabulary and [do] grammatical revision. And to support and to consolidate things that I have missed out on the face-to-face lessons” (INV2).</td>
<td>“learning to speak Italian and I wanted more understanding of the grammar and also the videos to hear the Italian being spoken” (INV2).</td>
<td>“Well, I mean the main objective was to practise and improve my French really and to get more fluent actually and rather than just learn more French, you know, sound more French” (INV2).</td>
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<tr>
<td>Learning Goal</td>
<td>“To learn as much as possible about past tenses and adjectives”</td>
<td>“To see how the MOOC worked. Making adjectives”</td>
<td>“To complete the first week with future learn [sic]” out</td>
<td>“To complete week 1 of the structured course” (‘)</td>
<td>“Complete module one about plans”</td>
<td>“vocabulary” (‘) (WSURV1- Salvador).</td>
<td>“to familiarise myself with the course (‘) and start using the”</td>
<td>“to familiarise myself with the course” (‘)</td>
<td>“read about and familiarise myself with the on line”</td>
<td>“To work through the first section of the Vivre en...”</td>
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<tr>
<td>Learning Goal Weekly Survey 1</td>
<td>Weekly Survey 1</td>
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<td><em>imperfect</em> as verbs around the house* (WSURV3-Silvia).</td>
<td><em>learn new vocabulary regarding sports, travel, and past tenses</em> (<em>). <em>I want to learn as many new words as possible. I will spend more time on this week’s tasks to finish them all!</em> (</em>). (WSURV1-Silvia).</td>
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<td><em>improve my grammar. I have now downloaded the syllabus and will do some pre-research on the subject matter and the grammar points</em> (WSURV3-Felix).</td>
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<td><em>better comprehension of fast spoken French</em></td>
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<td>Learning Goal</td>
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<td>Weekly Survey 4</td>
<td>(WSURV4-Simona).</td>
<td><strong>over the indirect pronouns</strong> (WSURV4-Sofia).</td>
<td>(WSURV4-Santos).</td>
<td>Listening skills” (WSURV4-Salvador).</td>
<td>(WSURV4-Isabella).</td>
<td>and broaden my vocabulary plus <strong>continue to practise my listening</strong> (WSURV4-Irene).</td>
<td>(WSURV4-Ines).</td>
<td><strong>Listening better and faster comprehension</strong> (WSURV4-Felix).</td>
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As displayed in Table 11, almost all participants formulated multiple goals as part of their goal setting process in the MOOCs. All of them reported more than one goal that targeted different aspects of language, and others even reported having three goals. For instance, Simona set a hierarchical organisation of her goals in the third weekly survey which consisted of three goals: 1. To improve her use of Spanish accent marks and word stress (orthography); 2. To perform well in the online course tasks within the first attempt, and 3. To do more listening (WSURV3-Simona). The three goals reported by Simona were classified as mastery goal, ability goal and process goal, respectively.

Most of the participants’ self-reported goals were classified as mastery and reinforcement goals, which covered vocabulary learning, the mastery of language skills (mainly listening skills) and the revision of grammar topics. Despite focusing on different aspects of language as they progressed through the four weeks of this study, their weekly learning goals were aligned with their common overarching goal: to consolidate their linguistic knowledge and skills in the target language. Hence, participants set sequentially interdependent goals in which their weekly self-reported goals contributed to their main goals of language development and revision.

The responses from six out of ten learners also revealed ability goals in Table 11. What stand out in the table are learners’ intentions to demonstrate their language learning ability while following an LMOOC. Some learners wanted to confirm their linguistic knowledge as pointed out by Sarah when stating her main aim for the LMOOC: “to see whether I knew enough or whether there were things that I’d forgotten” (INV2-Sarah). Other learners tried to challenge their linguistic competence. By way of example, Felix aimed at “Listening better and faster comprehension” (WSURV4-Felix). This type of goal showed that more than half of the learners in this case study took advantage of their LMOOC-based learning to prove their linguistic competencies to themselves, rather than to others.

Other sources of data revealed complementary information about the process goals shown in Table 11. This type of goal also identified in the transcript of the second semi-structured interview revealed the actions all learners adopted to work effectively in their LMOOCs. For instance, Silvia’s process goals consisted mainly of two techniques: writing down new words (self-recording) and looking up words online [Google translate], which she described as “the same strategies of what I do in class or for my homework as well” (INV2-Silvia). She remarked that those strategies had worked well in her classroom-based lessons, so she reused them for her LMOOC-based learning. Those process goals were connected to her vocabulary learning purposes reported in week one, two and three and her ability goal in week one (Table 11). Hence, the
process goals identified in the data became the means that enabled all participants to work towards their mastery, reinforcement, and ability goals.

Improving listening skills was another common learning goal reported by eight out of ten participants, who adopted different process goals to develop their receptive language skills. Simona’s process goals around listening involved spending more time practising this skill, as displayed in her week two and three of Table 11. She also mentioned the technique of skipping longer videos and only listening to the short video clips that summarised the stories to “stretch yourself” (RPHOCaption-Simona). However, Simona’s primary technique was changing MOOCs when she noticed that Coursera was not offering her enough opportunities to listen to the spoken version of the target language (environmental structuring). Hence, she switched to an iiversity LMOOC, which contained more audio-visual material to practise her listening skills.

Likewise, Isabella took advantage of the flexible nature of the LMOOC to practise her listening comprehension skills, as she explained during the second interview:

I found the dialogue quite hard but just because it’s on the computer, you can just listen to it as many times as you like. I mean that’s one big advantage. You’re not dependent on the ability of other people in the class. If you want to do something quickly or skip it, you can. If you want to go over and over and over, you can. So, that’s what I did with the video: I listened to it three times and then I listened to it with the text and then I listened to it again after I had seen the text. So, I was learning something so that was good (INV2-Isabella).

Isabella noticed that listening to dialogues in the LMOOC differed from the limited listening practice she reportedly experienced in the face-to-face class. She wanted to “spend as long as possible on the oral dialogues” (WSURV1Q6-Isabella) and the flexibility of the MOOC afforded her the opportunity to carry out this action linked to the pursuit of her listening skills development. Unlike Simona, Isabella did not change LMOOCs even when she found the oral dialogues challenging to understand. She said: “No, I decided to stick with it. I knew it was an option [changing MOOCs]. But I wanted to stretch myself” (INV2-Isabella). She aimed to challenge herself and demonstrate her ability to understand a spoken message in Italian, as she suggested it in her second weekly survey response (“[do] more listening to stretch myself” (WSURV2-Isabella)) classified as ability goal in Table 11.

Similarly, Felix also wanted to develop his receptive language skill by employing clear process goals. The set of actions he outlined were also connected to his goals, labelled as ability and mastery goal in Figure 11. The graph below represents the interrelations between those three types of goals as perceived by the researcher when analysing the self-reported goals of Felix.
Many learners were aware of the actions they needed to carry out to improve the chosen areas of their target language while learning in a MOOC. In the case of Felix, he identified the necessary techniques and LMOOC activities (‘the rencontre sessions’) to challenge and improve his listening skills in French. Although he self-reported process goals of his own, the last process goal listed above was mediated by the authors of the LMOOC, who proposed those exercises to master the oral comprehension in the target language. Nevertheless, Felix deliberately took part in this activity as a step to pursue his self-set goals.

Finally, all participants included external goals (marked with a red asterisk (*) in Table 11) that were shaped by the authors of their chosen online courses. This goal type of external origin occasionally was linked to a specific LMOOC criterion that learners decided to follow during their online learning experience. Participants like Sofia, Sarah, and Santos often formulated goals oriented towards completing each week or module in the LMOOC. One of them expanded about this type of goal during the second interview and said: “I did what they expected [me] to do which was 1 [unit] per week. And it’s a four-week course. So, I just did the four weeks. I completed within the four weeks” (INV2-Sofia). Completing one unit per week was the level of performance suggested by the LMOOC provider as an appropriate standard. Accordingly, participants’ external
goals were closely related to the criterion outlined by their MOOCs to learn or perform well within these online courses.

Nevertheless, most participants not only complied with the course standards of success set by the authors of the LMOOC, but also gradually regulated their own goal setting behaviour as they progressed through the online course. For example, Salvador made this distinction between external and self-set goals when looking at his weekly survey responses during the second semi-structured interview:

*I set specific goals on one of the tenses, in terms of my pronunciation, my listening, and in one of the areas where I'm not very good at using the accents in Spanish. So, in the imperfect I did set goals for that because that was useful to me (INV2-Salvador).*

*I: And what you wrote here [pointed at the weekly survey responses] was something that you decided to write or was something advised by the MOOC?*

*That really came from the MOOC, yeah. These came from the MOOC [pointed at week one-two-three] and that one came from me [pointed at week 4] (INV2-Salvador).*

The extract above illustrates a shift from following external goals to formulating self-set goals identified across the data. In the case of Salvador, the material offered in the LMOOC served him as a basis to start his goal setting process. He reported that the work around verb tenses was shaped by the LMOOC in the first couple of weeks. However, Salvador reported self-set goals in the last week that focused on his listening skills and the practice of a particular verb tense he considered relevant for his language learning. By the end of the study, Salvador took advantage of the content of the MOOC to set goals that suit his own learning purposes.

Participants like Salvador and Felix intentionally aimed to do the LMOOC activities that suited their own goals. Similarly, those participants who also aimed at revising their linguistic knowledge intended to do grammar exercises offered in the LMOOC as a technique to work towards their reinforcement goals. Deciding to take part in the activities proposed by the LMOOC authors that fitted their language learning purposes revealed an implicit level of intentionality within those goals shaped by an external source. Therefore, participants in this case study not only reported goals of an external type, but also assumed a level of intentionality that had a bearing on their learning decisions and subsequent goal setting behaviour in the LMOOC.

5.1.3 Summary of RQ2- Case Study 1

The following graph summarises the kinds of goal formulated by the participants in Case Study 1 during MOOC-based learning and the influence of MOOC educators on those goals: mastery, ability, process, and reinforcement goals (Figure 12).
Figure 12: A summary of the kinds of goal reported by participants in Case Study 1 during MOOC-based learning
In sum, this chapter has identified the goal-setting processes of participants in Case Study 1, including the classification of five types of goals based on their responses gathered to answer RQ2. One of the main findings highlighted in this chapter was the notion that goal setting was not a self-initiated process for community-based language learners studying in LMOOCs. They initially let the online course authors regulate their goal-setting behaviours for them. However, the goal setting process of participants changed over time. Although nearly all learners did not set goals at the start of the online course, they looked at the course outline for orientation in their MOOC-based learning, which facilitated their first steps in this forethought process of the self-regulated learning cycle.

All community-based language learners reported numerous targets that encompassed mastery, reinforcement, ability, process, and external goals. Learners pursued reinforcement and mastery goals around the consolidation of their target language, mainly focused on revising grammar, learning vocabulary, and practising the receptive skill of listening. More than half of the learners also aimed at demonstrating their abilities in the target language. Likewise, all learners reported setting a sequence of techniques, either shaped by themselves or by the LMOOC authors, to pursue their main goals. Lastly, most learners included external and self-set goals as part of their goal setting behaviour in LMOOCs. The implications of these findings will be discussed in Section 5.4.

5.2 Case Study 2
5.2.1 Goal setting processes of learners of ESP

All nine learners in Case Study 2 self-reported goals while working with their chosen MOOCs as part of their English for Specific Purposes (ESP) course. However, most learners did not have clear outcome expectations at the beginning of their MOOC-based learning. The first semi-structured interview offered no indication of what learners expected to attain by the end of this online learning experience. Eight out of nine ESP participants had a broad idea of what they would like to do, yet they did not specify what they thought they would achieve by the end of their MOOCs. For instance, Edwin wanted to work on his use of the spoken language, but the result he would like to obtain from that work was unclear, as reported in the following extract:

They [MOOCs] should be able to stimulate your curiosity, yeah to be able to not just...for example, I’d like also to be able to manage with my speech not only about chemistry or technical problems, but also about literature, history, and other different subjects in English (INV1-Edwin).
Three out of those eight participants adopted a rather reluctant and even passive approach towards their online learning and subsequent outcome expectations. Estella was not keen on learning a language online. She argued: “I am not so interested in online because it’s a cold way to approach the language. I am traditional (laughs). I think they are a cold way to teach, a cold way to communicate. I’m not so enthusiastic” (INV1-Estella). She also added: “I had not specific intentions to realise [do] something. I was open to what they told me, the lectures and not something else” (INV2-Estella). This defensive attitude towards online learning influenced her low outcome expectations and lack of initiative to set goals for herself, as she recounted how she approached the MOOC during the second interview. Likewise, Erik said: “I don’t have any expectation. I try always to not have expectation because expectations can change your point of view. So, I try to do everything the best I can and no more” (INV1-Erik).

Lastly, Emily believed she could rely on MOOCs to work towards her learning outcomes. She said: “these online courses can help me to fix my goals. So, I think that it can be a guide to do [this] because I need someone to tell me ‘do it, do it’ because alone it’s difficult for me” (INV1-Emerly). Despite specifying her learning outcome for her face-to-face ESP course (“I expect to learn strategies to study a text in English” (INV1-Emily)), she did not indicate her intended outcome for her MOOC-based learning. Instead, Emily expected to receive some support from the online courses to formulate and reach goals within her chosen MOOC.

Estella, Erik, and Emily, alongside three other participants, stated that they did not specify their goals at the outset of their learning in a MOOC. Only three participants, who also had a general idea of what they wanted to do at the start, reported specific goals when they joined their MOOCs. Thus, most of the participants in this case study joined their online courses with a general sense of what they wanted to do, but not many of them narrowed their focus and concentrated upon their goals at the beginning of this online learning experience.

Once participants started working with their MOOCs, their goal setting process was partially triggered by external sources. The selected online courses and the in-class teacher had a bearing on what learners wanted to pursue during this study. Some of the learners’ goals were shaped by the audio-visual content and activities in their MOOCs. The following response given by one of the interviewees illustrates this point made by more than half of the participants:

*the MOOC was well built. So, every week they had a lot of exercises more and more complicated, from simple to complicated. And I thought: ‘I don’t have a very clear objective’. My focus was on writing. So, I followed the steps inside the MOOC, all the things about writing (INV2-Elton).*
Participants selected their MOOCs based on their personal and professional interests. In the case of Elton, he focused on his writing skills when he enrolled on the edX ‘Upper-Intermediate English: Business’ online course offered by Universitat Politècnica de Valencia (UPValenciaX). Nevertheless, he was aware that he had not set any specific goals to organise his learning efforts around this productive language skill. Hence, Elton opted to follow those sections of the MOOC that consisted exclusively of writing exercises as a guide to set up weekly objectives for his personal writing purposes.

Similarly, some of the learners’ goals were shaped by the advice of the English teacher given in their face-to-face course. The in-class teacher provided guidance on how to benefit from the MOOCs’ online resources for specific language development. Six out of nine participants said they incorporated the teacher’s advice into their intended actions to improve aspects of language, such as intonation, reading, writing and vocabulary. By way of illustration, one of the goals reported by Erica in week two of her engagement with the MOOC was “to improve my intonation and pronunciation” (WSURV2Q6-Erica). When she was asked to expand on her response during the second interview, she added:

*We did a lesson, a short lesson on phonetics. So, [in-class teacher’s name] said to us: ‘when the teacher speaks, then listen to the video. Stop it and try to read by yourself’. Okay, so to get the intonation of the teacher. I did it by myself, so I don’t know if I managed (laughs) (INV2-Erica).*

The goal that Erica reported in week two of her engagement with the MOOC revealed the link she made between her in-class work on phonetics and her online learning to enhance her intonation in the target language. Erica’s follow-up response also illustrated the influence of the in-class tutor’s suggestion on her approach to work towards her learning goal while interacting with the multimedia resources in the MOOC. The missing element from this attempt to regulate her language practice was feedback, since Erica did not have the presence of an educator, speech recognition software, or even an intelligent personal assistant, to comment on her speaking practice within this independent learning mode. Neither she intended to record herself and play back the recording as a follow-up activity to self-monitor her language practice.

Participants’ statements that were similar to the aforementioned samples taken from Elton and Erica were labelled as goals of external origin, since they came from two external sources: the MOOC and the in-class teacher. These types of goals differed from assigned goals, since neither their MOOCs nor the in-class teacher were setting those objectives on behalf of the learners. Although ESP participants showed evidence of external goals, they reported self-set
goals as they progressed through their online courses. Section 5.2.2 describes the different types of goal ESP learners set for themselves during this study.

5.2.2 Participants’ goal types

What follows is an account of the classification of goals the pursuit of which was reported in multiple sources, to shed some light on the complex goal-setting process adopted by ESP learners in MOOCs. Participants’ responses were classified into four types of goals: mastery (or learning), external, ability, and process goals. The data was classified following the definition of goals previously described in Section 5.1.2.

Table 12 provides an overall picture of the goal setting behaviour of participants in their MOOCs alongside the classification of the types of goals identified in this case study. The first row in the table presents the main goal stated by participants in response to question five of the second interview. Then, the added four rows show the input gathered in response to the second question in the weekly monitoring surveys (WSURVQ2: What was your learning goal for this week?).

The same guidelines outlined for Table 11 in Section 5.1.2. are used in Table 12, excluding the one assigned to reinforcement goals. Some of the responses presented below also include retrospective reflections made by participants during this research project. Subsequently, selected extracts of data obtained from other instruments in this research are examined in this section to corroborate the information shown next in Table 12.
Table 12 Main aim reported by Case Study 2 in INV2 alongside their weekly goals and retrospective reflections obtained from the second question of the WSURV that asked them for the learning goal in each week of their MOOCs

<table>
<thead>
<tr>
<th>Learner</th>
<th>Elton</th>
<th>Edwin</th>
<th>Erik</th>
<th>Estella</th>
<th>Elsa</th>
<th>Ethan</th>
<th>Emily</th>
<th>Elliot</th>
<th>Erica</th>
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<td>Q5: Can you please summarise your main aim in this MOOC? (INV2)</td>
<td>“the goal is writing, to improve my writing skills in English Language. Writing letters and scientific articles” (INV2).</td>
<td>“I read the introduction of this MOOC, so I decided to match the utility of this MOOC to learn better…to improve my English and also with my historical interest on this part of the history. Well, mostly to become more confident with some let’s say…some expressions…to collect much more speaking expressions as possible also terms yeah because I have noticed that from this point of view my English is lacking, so I try to improve this part of my English” (INV2).</td>
<td>“To understand more or less everything about each week because I think the MOOC was made for this, to understand everything about [a topic]” (*) (INV2).</td>
<td>“My main aim was to get better with pronunciation (<em>). I was also interested in to know what is the best method to teach English even if I am not a native English [teacher] and what about an academic course could tell me about the methods, the ways, the supporters and the connectors” (</em>) (INV2).</td>
<td>“The main aim was to understand the basics of that course. And, trying to I mean, to learn something from that and not just watching some videos or reading something, but really understand how in that case data works and how I can use them in my job” (*) (INV2).</td>
<td>“Well as I said before if I could improve my communication skills, it would be a good goal for my job, as I said, in this work I have to exchange information with my workmates maybe my workmates some of them work in the workshop or they are accountants and they don’t have my technical vocabulary” (INV2).</td>
<td>“Improve my lexicon because I am not very well at learning new lexicon. So, in this way I could do it…my principal goal was to try to learn to explain others about my work area. Before this course I couldn’t give an explanation about my job. So, now I am quite good” (INV2).</td>
<td>“Umm, main goals…well, I think improve or do some kind of exercise, listening exercise to improve…to understand spoken English, in this case also with the American accent. Yeah and also the main goal but also related to the methodology of teaching. Well, I am interested in any case in use this support to improve my teaching capacity. to improve my knowledge of the English words and also to test my English level” (INV2).</td>
<td>My main aim was to improve my English, my professional English because this course is related to matters, to issues that can interest me. So, like Elliot said, I knew the arguments, but I liked to improve my specific English knowledge” (INV2).</td>
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<tr>
<td>Learning Goal Weekly Survey 1</td>
<td>“Writing papers/letter” (*) (WSURV1-Elton).</td>
<td>“To focus on formal expressions in a cultural speech, how to build the [historic] period in different ways” (*) (WSURV1-Edwin).</td>
<td>“how to get the best of yourself from every situation” (*) (WSURV1-Erik).</td>
<td>Estella did not complete any of the weekly surveys.</td>
<td>“My learning goal was to watch at least 2/3 of the videos and to complete the readings” (*) (WSURV1-Elsa).</td>
<td>‘ending the Mooc’s first week; mechanisms behind competition [sic] and collaboration’ (*) (WSURV1-Ethan).</td>
<td>“Specific lexicon, listening” (WSURV1-Ely).</td>
<td>“Familiarise myself with the MOOC and understand how it works. Watch some video lessons (*)” (WSURV1-Elliot).</td>
<td>“I listened to video lessons and read some articles [sic] about what logical and critical thinking is. I also took part in the discussion with other students” (*) (WSURV1-Erica).</td>
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<td>Learning Goal Weekly Survey 2</td>
<td>&quot;Writing a letter and reading in a more effective way&quot; (*) (WSURV2-Elton).</td>
<td>He did not complete this second week. When asked why during INV2, he said: INV2: Yeah, I skipped this week. I: May I know the reason why? INV2: Umm, well the truth is that this week [pointed at week 2 on the table] I have not so much more to add compared to what I wrote previously&quot; (INV2-Edwin).</td>
<td>&quot;Learning how to build trust and have a better communicatio n&quot; (*) (WSURV2- Erik).</td>
<td>&quot;My goal was to complete at least half of the tasks&quot; (*) (WSURV2- Elsa).</td>
<td>&quot;It was to keep on learning topics from the course I: I hoped to learn something I could use with people in day-by-day life. It turned out it was really like that (*).&quot; (WSURV2- Ethan).</td>
<td>&quot;specific lexicon&quot; (WSURV2- Emily).</td>
<td>&quot;This week (actually 2 weeks because I had not enough time to work on the mooc [sic]) the course goes more deeply into the topics and definitions. I realise I was able to understand quite well the teacher (despite her strong American accent). I also found some words (mainly of processes or tools) of which I do not know the meaning&quot; (WSURV2- Erica).</td>
<td>&quot;I learnt what an argument is, how to put in a standard form and how to distinguish premises and conclusions&quot; (*) (WSURV2-Erica).</td>
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<td>Learning Goal Weekly Survey 3</td>
<td>&quot;Reading comprehensi on [sic]: computer game at work&quot; (*) (WSURV3-Elton).</td>
<td>&quot;To improve formal way of expression by analyzing the main forms and structures of the academic way of exposition of the subject&quot; (*) (WSURV3- Edwin).</td>
<td>&quot;understandin g the deception&quot; (*) (WSURV3- Erik).</td>
<td>&quot;My learning goal was to finish the first week of the mooc [sic] (*). I realize I cannot jump lessons because then it becomes difficult to understand the lessons of the following weeks.&quot; (WSURV3- Elsa).</td>
<td>&quot;This week I had to learn how to discover [sic] deceptions: a practical guide to discover [sic] when people lie&quot; (*) (WSURV3- Ethan).</td>
<td>&quot;Summarize&quot; (*) (WSURV3- Emily).</td>
<td>&quot;This week it was quite difficult to work on the MOOC, due to the lack of time. The topics treated on the video lecture were partially known from a technical point of view. Some of the video lectures should have been repeated more than once to better understand the content. In any case, from a linguistic point of view, there were no problems to understand&quot; (WSURV3-Ethio).</td>
<td>&quot;I learnt new vocabulary&quot; (WSURV3-Erica).</td>
<td></td>
</tr>
<tr>
<td>Learning Goal Weekly Survey 4</td>
<td>&quot;Writing a report (one page)&quot; (*) and writing new texts to improve my writing skills&quot;</td>
<td>&quot;To increase my personal dictionary of formal English following the past class lesson for which the MOOC lessons, being of university [sic] level, fit understandin g communicatio n goals, asking questions and benefits of&quot;</td>
<td>&quot;My goal was to finish the second week&quot; (*) (WSURV4- Elsa).</td>
<td>&quot;This week the course has been going ahead with practical rules to communicate to people: I learned, or I had some Explain orally what I've read and learn from scientific articles and improve my lexicon and the competence in&quot;</td>
<td>&quot;This week I completed the MOOC using a shortcut. As this was the last survey, I decided to complete the listening of two&quot;</td>
<td>&quot;Learning new words and improve my intonation&quot; (*) (WSURV4-Enica).</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
very well this goal (*)
(WSURV4- Edvin).

goals (*)
(WSURV4- Erik).

cues, to be persuasive, asking question in the right way, etc (*)
(WSURV4- Ethan).

using the correct syntactic structures, focusing on the right preposition after verbs (*)
(WSURV4- Emily).

video lectures of week 3 (*), then go towards the end of the MOOC completing only the final tests of weeks 5, 6 and 7 and going directly to the last week (week 8) of the MOOC.

As I already know many parts of the technical contents of the MOOC, I was able to complete correctly the final test of every week until 7 (*). Then I decided to listen to all the week 8 because I was interested in the contents and I did not know them (*)
(WSURV4-Elliot).
As displayed in Table 12, most ESP participants reported different kinds of goals during four weeks of engagement with their chosen online courses. The overarching learning goals reported by participants involved the understanding of the subject matter covered in their MOOCs. By way of example, all nine learners wanted to learn about the subjects presented in their online courses with the aim of relating them to their personal or professional interests, as mentioned by Elsa: “The main aim was to understand the basics of that course (...) understand how in that case data works and how I can use them in my job” (INV2-Elsa).

Likewise, the overarching learning goals included the mastery of various aspects of the target language such as academic register, specialised lexicon, receptive and productive skills development. Six out of nine participants matched the content and activities of their MOOCs to work towards their linguistic goals regarding their productive skills in English. Emily’s response to question five of INV2 (“my principal goal was to try to learn to explain others about my work area”) represents the point made by her classmates who aimed to communicate a message related to their subject knowledge in a more accessible way to others using the target language.

This dual overarching mastery goals was also reflected in the learners’ responses to the WSURVQ2, in which MOOC content-related goals and linguistic goals were identified. The former was usually mediated by the authors of the online course and the latter in most cases by the in-class teacher, as described in Section 5.2.1. The responses obtained from Ethan’s WSURV3 and Edwin’s WSURV4 are a good illustration of both kinds of external influence, respectively (Table 12). Although these examples fall under the category of external goals, these kinds of goals suited participants’ personal and professional learning purposes. Hence, setting mastery goals of external origin in this case study did not necessarily represent a passive approach to self-regulated learning. Instead, learners deliberately decided to embrace the MOOC content and the in-class teacher’s advice that fit with what they wanted to attain during this study.

ESP participants also formulated self-set goals during their online learning experience, which took the form of ability goals. As participants engaged with the MOOC material, seven of them saw the opportunity to demonstrate their linguistic competencies in the target language. One learner, for example, said: “I discovered the forum as a good chance to share opinions with others and also to challenge my abilities in explaining them” (WSURV1Q5-Edwin). Participants like Edwin aimed to prove their language proficiency when writing, listening, and reading in English within the four weeks of this study.

Five learners also aimed to test their listening comprehension skills in English, especially when listening to MOOC educators in the video lessons who spoke different varieties of English, including American, British, Indian and New Zealand English. For example, Elliot said he wanted:
“to check my language capacity to understand spoken English, in this case also with the American accent” (RPHOCaption-Elliot). Listening to educators from University of Michigan, which was the American institution offering his chosen MOOC in Coursera, was an opportunity to challenge his proficiency in comprehending a message spoken in another variety of the target language.

Similarly, after working on his writing skills in week one of the MOOC, Elton aimed at “writing more and better letters, articles and other English texts” (WSURV2Q6-Elton). This ability goal of Elton was connected to his need to prove to himself he could write texts without the help of an English translator. He added: “I was particularly interested to the writing exercises, because I would like to write a scientific article by myself, without (if it is possible) the help of a specialized translator” (RPHOCaption-Elton).

Elton’s goals oscillated between ability and mastery goals during his weekly engagement with the MOOC. He attempted to challenge his ability to write more and better texts and subsequently improve said productive language skill in the target language without any assistant translator. Likewise, he wanted to strengthen his writing skills to pursue a long-term outcome stated below:

How can I explain my necessities [needs]? I would like to write my book because I have a lot of knowledge about political communication or religions, etc. I wrote years ago scientific papers, but they are written normally in English because it is the common language inside the scientific world. My English level is low. So, I must approve [pass] this level because every time I want to publish something, I must pay a lot of money to other people that translate my articles because my translation is very poor (INV2-Elton).

Elton reported a specific personal goal to be attained beyond the MOOC. However, he was aware of his low language proficiency level, which was an obstacle to reach his long-term goal of writing a book in English. He decided to work on his writing skills and perform well in his chosen Upper-Intermediate Business English MOOC. Hence, intending to do the writing activities proposed in the online course became the means to validate Elton’s writing competencies in English and subsequently work towards his long-term mastery goal.

Thinking of carrying out specific actions was part of the process of working towards the self-reported goals identified in the data. Those actions, also known as process goals, were put in place by all learners to improve or demonstrate their linguistic competencies during their MOOC-based learning. A noteworthy point about process goals in this case study is that they were mainly shaped by the in-class teacher instead of the MOOC authors. Edwin, for example, wanted “to improve formal way of expression by analysing the main forms and structures of the academic
way of exposition of the subject” (WSURV3- Edwin). The emphasis on academic register presented in Edwin’s goal was aligned with the in-class teachers’ scheme of work, particularly the content in lesson 5: ‘Register, Style and Tone’ (Figure 10).

A similar example of this kind of process goals influenced by the in-class teacher was identified in the caption that Emily wrote for her MOOC screenshot. She intended to follow a set of strategic actions to pursue her goals, classified as ability and mastery goals. Figure 13 represents the interrelations between those three types of goals, as perceived by the researcher when analysing Emily’s self-reported goals.

Emily outlined the process goals shown in Figure 13 to demonstrate she could effectively understand a text in English and eventually develop her analytical skills when reading a text related to her area of specialism. The learner planned to conduct a sequence that revealed the use of techniques previously taught by her in-class teacher in lessons 2 and 4, which focused on ‘Effective Reading’ and ‘Paraphrasing and Summarising’, respectively (Figure 10). She intended to write summaries of every paragraph, “as [teacher’s name] advised” (INV2-Emily). When Emily was asked to explain why she aimed to follow that sequence, she argued: “I did it because for me it was a good way to integrate the course and the MOOC” (INV2-Emily). Setting up those process goals that aligned with the content of the in-class lessons contributed to Emily’s efforts to
transfer, validate, and expand her classroom-based lessons with the teacher to her online work with the MOOC.

Another significant point is that ESP learners in this case study also formulated process goals for themselves. Apart from complying with voluntary instructions from the in-class teacher, all learners self-reported and carried out techniques to pursue their main goals. The researcher identified and classified the main process goals across the data according to two kinds of goal previously labelled based on the responses of participants. Table 13 summarises the steps that participants decided to take to work towards their ability and mastery goals.

Table 13 Main process goals set by ESP participants to pursue ability and mastery goals

<table>
<thead>
<tr>
<th>Process goal</th>
<th>Ability goal</th>
<th>Mastery goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Listening to the video lessons without the transcript.</td>
<td>Testing their listening comprehension skills</td>
<td></td>
</tr>
<tr>
<td>• Occasionally, playing them again with the transcript to confirm the overall comprehension.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Checking the spelling of unknown words in the transcript/subtitles of the video lessons.</td>
<td></td>
<td>Learning vocabulary</td>
</tr>
<tr>
<td>• Looking for the definition of unknown words in an online English dictionary, using WordReference, Cambridge Dictionary or Reverso Dictionary.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Translating words into mother tongue using WordReference, Reverso Translation or Google Translate.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Noting down new words or set of expressions in the same notebook used for the face-to-face class.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Checking pronunciation of words in an online English dictionary.</td>
<td>Improving Pronunciation/Intonation</td>
<td></td>
</tr>
<tr>
<td>• Replaying some sections of the video lessons and imitate MOOC educators’ intonation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Note-taking main ideas from the video lessons.</td>
<td>Understanding the MOOC topics</td>
<td></td>
</tr>
<tr>
<td>• Watching the videos more than once.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Downloading the learning material.</td>
<td></td>
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</table>

Table 13 first shows a set of techniques set by learners themselves to demonstrate their ability to understand spoken input in the target language and to learn vocabulary during their MOOC-based learning. The process goals outlined for the two remaining mastery goals above consisted of a combination of self-set and external goals. For example, the technique around intonation suggested by the in-class teacher within the functional syllabus of the English course was adapted by more than half of the participants to work on this aspect of language. Similarly,
the process goal of reproducing the video lessons several times to understand the subject-matter was triggered by the flexible nature of the online courses, as discussed in Section 6.3.

The in-class teacher alongside her scheme of work and the MOOC authors alongside their flexible course design had a direct bearing on some learners’ process goals. However, there was a level of intentionality on the part of the learners who opted to follow and combine the external suggestions with techniques of their own to pursue the goals they wanted to attain in their chosen MOOCs. Edwin’s caption illustrates this point clearly.

*The tool I found very stimulating for my learning was the forum attached to every lessons of the MOOC. Reading and particularly answering to some notes left on it by my online course fellows, I was able to improve my communicative skills, especially by trying also to fit my verbal expressions to those ones used by other participants of the forum* (RPHOCaption-Edwin).

At first, a degree of compliance with the MOOC authors’ instruction regarding forum participation is noticeable. Equally, a level of intentionality on Edwin’s part exists when deciding to use the forum as a tool to fulfil his mastery goals. He not only used the forum to focus on different registers in English, as highlighted Section 4.2.5, but also to improve his formal use of the target language when exchanging opinions with others. In this case, Edwin followed the external instructions when participating in the online forum. He also adopted a specific technique formulated by himself to improve his communication skills, which was not an outcome included in the outline of his online course. Thus, participants like Edwin deliberately combined external suggestions and self-set process goals to achieve their main goals.

### 5.2.3 Summary of RQ2- Case Study 2

The following graph summarises the kinds of goal formulated by the participants in Case Study 2 during MOOC-based learning. It shows the mastery, ability, and process goals. It also shows the influence of the MOOC educator and in-class teacher on the goal-setting behaviour of participants (Figure 14).
Figure 14 A summary of the kinds of goal reported by participants in Case Study 2 during MOOC-based learning
Overall, all nine ESP learners displayed the self-regulatory process of goal setting as part of their online learning experience with MOOCs. Four types of goals were identified and classified based on participants’ responses. All participants set mastery goals that focused on language skills improvement and continuous professional development. The content of their online courses also played a role in learners’ goal setting, which included learning about different MOOC topics. This kind of influence of external origin noticed in participants’ self-reported goals were classified as external goals. More than half of the learners also formulated ability goals to demonstrate their linguistic competencies when interacting with the online course material.

Likewise, process goals were identified across the data to support learners’ efforts to attain their mastery and ability goals reported during their engagement with their online courses. Process goals integrated both self-set techniques and external suggestions shaped mainly by the in-class teacher, since learners transferred elements taught in the class into their process goals repertoire. This implicit balance between external and self-set goals identified in the data is discussed in Section 5.4.

### 5.3 Summary of RQ2- Case Study 1 and Case Study 2

The following graph summarises the kinds of goals formulated by the participants in Case Study 1 and Case Study 2 during MOOC-based learning to meet both external and self-expectations (Figure 15).
Figure 15 A summary of the kinds of goal reported by participants in Case Study 1 and Case Study 2 during MOOC-based learning
5.4 Discussion

This empirical study has examined the self-regulatory process of goal setting in the field of foreign language education. It has particularly looked at the goal setting behaviour of 19 adult language learners in two different contexts to respond to RQ2 (What kinds of goal do adult language learners set for themselves in MOOCs that they select as part of their classroom-based language course?). This section explains how this self-regulatory process unfolds over four weeks of MOOC-based learning and details the predominant types of goals identified in the data. Lastly, it discusses the practical implications of these findings for the development and support of the goal setting behaviour of MOOC learners studying solely online or as part of a face-to-face course.

The multiple-case study carried out indicates that adult L2 learners in two case studies did not automatically set goals for themselves when initiating their self-regulated learning in MOOCs. At the start of their online learning, most Community-based language learners and ESP learners had no clear outcome expectations. They relied on goals set by the authors of the MOOC, classified as external goals in this study. However, the goal setting behaviour of participants changed as they went through their chosen online courses. They began to have a clear idea of what they wanted to do with their MOOCs and developed their own goals based on different personal and professional interests. These goals included mastery, reinforcement, ability, process and external or complying goals (Figure 15). Participants in Case Study 1 mainly self-reported linguistic or L2 learning goals, influenced by the nature of their chosen LMOOCs. Meanwhile, participants in Case Study 2 set both linguistic and MOOC subject-related goals. These goals of ESP learners which reflected a content and language integrated learning (CLIL) approach were also influenced by the specialised discipline covered in the MOOC they selected, according to their academic and professional interests.

Participants in both case studies complied with external goals shaped by suggestions from the online course authors or the in-class teacher. Likewise, they deliberately pursued self-set goals that focused on improving, reinforcing, and validating linguistic knowledge and skills in an online academic context. They even specified process goals that were intended to support the achievement of those mastery, reinforcement, and ability goals. Although adult L2 learners within the context of this study initially left regulation of their learning in the hands of the MOOC authors, this study shows that learners could set different types of goals for themselves to master, strengthen and demonstrate language competencies, and develop techniques to attain their primary goals.
Interestingly, completing the MOOC, having a certificate, or obtaining high scores in the online exercises were not the principal outcomes reported across the data, as outlined in the literature (Loizzo et al., 2017). The emphasis was on mastering and reinforcing linguistic knowledge and skills. Learning about the subject matter covered in their online courses was also a priority, mainly for participants in Case Study 2, since the MOOC content aligned with their job-related interests. Personal and professional motivators, therefore, drove all 19 adult learners in their online courses. This pattern identified in the goal setting behaviour of both case studies explains the preponderance of self-reported goals classified as mastery (or learning) and reinforcement goals rather than performance or working goals (Elliot & McGregor, 2001; Lemos, 1996).

These results reflect those of Williams et al. (2018), who also found that the primary goal for taking a MOOC varies depending on the discipline of the course and the age of learners taking the course. A total of 15,655 edX participants (aged 32-49 years) in the Williams et al. (2018) study was asked to choose their goals based on six predefined goal items instead of reporting their goals in their own words as in the present multiple-case study. Learners in Humanities/Liberal Arts courses were less likely than learners in STEM courses to have primary goals of 'preparing for a credit or placement exam'. Most of the MOOCs selected in the present study were related to the area of Humanities. Participants in both case studies who studied a language MOOC, or a content-related MOOC in the Humanities did not report performance goals that focused on grades or exams as their primary goal. This result is consistent with the data obtained by Williams et al. (2018).

Likewise, Williams et al. (2018) found that older students were significantly more likely to select 'personal interest and lifelong learning' from the given list of goals as their primary goal. In contrast, younger students were more likely to choose "using the knowledge in their future studies or career" (Williams et al., 2018, p. 440) as their primary goal. The researchers' results align with the predominant type of goal self-reported by older participants in Case Study 1 (with an average of 62 years of age) and younger participants in Case Study 2 (with an average of 41 years of age). Participants in both case studies reported mastery goals that reflected a personal interest in language learning and understanding the MOOC content. However, older adult learners in Case Study 1 were more driven by lifelong learning goals than younger adult learners in Case Study 2, who revealed more professional interests in their goal repertoire. Hence, this study further supports the relationship between age and primary goals for taking an online course, particularly the theoretical perspective stating that adult learners tend to be motivated by internal interests (Knowles, 1970). This study also shows that those following an ESP course rather
than a standard language course are more interested in professional rather than lifelong learning goals.

Conversely, the findings of this study do not appear compatible with cognitive goal-setting theory, which primarily focuses on the relationship between goals and performance outcomes. Locke and Bryan (1969) suggest that goals have specific task-related standards for evaluating performance outcomes. However, findings show that adult learners in both case studies did not set specific standards by which to measure their attainment of goals because they did not seek to evaluate their performance when studying a MOOC in the first place. Instead, learners wanted to explore and learn from their online learning experience, especially when it was the first time that most of them had worked with these types of online courses.

In a typical classroom-based language course, learners often focus on completing any homework that has been set, performing well, and obtaining good results as their ultimate goals. These examples of working and evaluation goals were classified by Lemos (1996) as the most frequent types of goals that 17 sixth graders pursued in their classroom. However, as shown by Williams et al. (2018), learners in MOOCs have other interests and motivations apart from the extrinsic motivation that embodies the type of performance goals set by learners in traditional courses. The findings of this study build on existing evidence of learners' goals in MOOCs and coincide with the results indicating that adult learners taking a MOOC in Humanities are more likely to have personal interests and intrinsic goals than extrinsically motivated goals.

This intrinsic motivation can be linked to the fact that participants in this study engaged with a MOOC of their choice based on either personal or professional reasons. This pattern aligns with much of the literature on motivation, including goal orientation theory (Zimmerman, 2002) and self-determination theory (Ryan & Deci, 2000), which describe intrinsic and extrinsic mechanisms of motivation to engage with a task. Learners who are already interested in the topic of a MOOC have a higher level of engagement in a course (Williams et al., 2018, p.441) and are more likely to regulate their learning (Zimmerman, 2000). Most of the participants in this study reported a learning goal orientation, i.e., "valuing the process of learning for its own merits" (Zimmerman, 2002, p. 68). Thus, they engaged with intrinsic goal-directed behaviour and maintained their engagement by practising goal-relevant techniques (process goals) until they perceived they had done a good job concerning what they wanted to learn, revise, or demonstrate in their online courses. Although most participants in this study were not aiming to complete the MOOC, they enjoyed taking part in this online experience for different intrinsic motivations. 15 out of 19 learners affirmed that they wanted to do a MOOC again in the future.
More than half of the participants in both case studies aimed to prove their linguistic competence to themselves, rather than to others. This pattern appears under the category of ability goals identified in the data. Analysis has shown that participants wanted to demonstrate that they were as capable as others of understanding and communicating in the target language. One learner of Spanish says, for example, "I'm doing it because I want to prove that I am not stupid and I am capable of learning a language not particularly well, but as well as anyone else can" (INV2-Sarah). This statement represents the reasons behind those learners that self-reported ability goals in this study.

It has been suggested that learners usually engage in achievement behaviours to outperform peers or avoid performing worse. Achievement goal theorists propose a framework that includes two types of goals to describe these behaviours: mastery and performance goals (Elliot & McGregor, 2001; Elliot & Murayama, 2008). However, findings from this study indicate that most participants did not want to outperform other learners in a MOOC and demonstrate their superior competence (performance goals). Instead, participants in both case studies sought to 'outperform' their own linguistic knowledge and skills and demonstrate their linguistic competence while engaging with the MOOC audio-visual resources. Hence, the results of this study inform the field of goal setting by contributing to a more refined taxonomy within the context of L2 learning.

The scope of performance-approach goals on achievement should be further distinguished (Brophy, 2005). Locke and Latham (2012) also state that: "Research is needed on what are called performance goals, because such goals can be of many types (e.g., winning at competition, trying to impress others, gaining rewards), which may not be equally effective" (p. 625). In this study, ability goals were seen as offering an alternative to performance-approach goals. Ability goals represented a kind of middle term between mastery goals and performance achievement goals. Participants wanted to develop their linguistic knowledge/skills and they strove to demonstrate and validate that linguistic competence. Therefore, this study contributes to expanding goal theory by confirming the existence of another type of goal that emphasises achievement but not competition, unlike performance goals in the traditional goal-setting literature.

These results should be considered when encouraging learners to formulate other types of goals that do not involve peer comparisons. Locke and Latham (2012) state that "performance and learning approach goals work best, and they may work even better when they are combined" (p. 625). Perhaps one way of doing this is to avoid distinguishing between learning-mastery goals and validation goals and combining them into a single goal named ability goals. However, clear
assessment criteria should be designed to help learners self-assess their linguistic competence when learning independently. Although this study phased out the term performance goals, educators should still suggest goals that help learners succeed in specific achievement situations without necessarily encompassing the social comparison connotation typical of the term performance goals.

Last but not least, what stands out from this study is that the self-regulatory process of goal setting was not an innate ability for most participants. The intentionality that is anticipated in Zimmerman and Moylan (2009)’s cyclical model of self-regulation was not present at the start of the learners’ self-regulatory cycle, meaning that they did not set goals for themselves in the forethought phase. Although the study focused on learning in MOOCs, the behaviour examined has been formed in classroom-based learning, where goals are rarely generated spontaneously by students (Brophy, 2005). In this respect at least, the goal setting behaviour of adult learners in MOOCs did not occur automatically. One can argue that this type of behaviour is reasonable because learners were unpacking the MOOC-based learning task (with which not many were familiar) in that forethought phase and trying to determine how to map and sustain their independent learning outside the language classroom.

Although goal setting was not a self-initiated process for language learners studying in MOOCs, this study shows that it can be taught, refined, and scaffolded. By way of example, in Case Study 2 the in-class teacher and her scheme of work played a crucial role in supporting the so-called process goals that most learners deliberately followed to work towards their mastery and ability goals. The absence of the in-class teacher’s support in the first case study resulted in a less refined set of techniques during their MOOC-based learning. Instead, learners combined the MOOC authors' instruction with techniques they used in the classroom or from past learning experiences to pursue their mastery, reinforcement, and ability goals. Hence, the importance of guiding and scaffolding the development of learners’ goal setting behaviour in MOOCs.

This multiple-case study provides new insight into the goal setting behaviour of adult language learners in MOOCs. It moves beyond the classic binary classification of goal types (Mastery vs Performance goals). The study contributes to a nuanced understanding of the multiple types of goals adult learners formulate when studying independently in online courses. As opposed to the goal criteria proposed by Locke and Latham (2002; 2012), specificity, proximity and difficulty, this qualitative study identifies and categorises five kinds of goal (mastery goals, reinforcement goals, external or complying goals, ability goals and process goals). These goals help language learners chart a path for learning in a MOOC.
Taken together, self-regulation is not an innate ability – it is a set of skills that can be taught, scaffolded, and developed. In the case of participants’ goal setting, no spontaneous generation of goals was evident in the data. At first, learners followed the online course objectives and gradually arrived at a balance between what the MOOC authors offered and what they wanted to obtain from their MOOC-based learning. Subsequently, they attempted to formulate goals for themselves. They also integrated the in-class teacher suggestions and the topics covered in the face-to-face class into their goal setting behaviour. Although goals were shaped by external sources in the beginning, there was a level of intentionality on the part of the learners who not only accepted those external suggestions that suited their personal purposes but also made decisions through self-set goals to regulate their learning in their MOOCs. Yet, that external support is still needed to activate and refine students' goal-setting behaviour during their self-regulated online learning. Section 6 examines closely the elements from the MOOC that influence that forethought process of goal setting, encouraging learners to take their first steps towards their self-regulated learning in MOOCs.

6 Goal-setting Support in MOOCs

Section 6.1 first examines how MOOCs support (or not) the self-regulatory process of goal setting, drawing from evidence captured by the researcher herself from the online courses chosen by participants in this multiple-case study. Then, Section 6.2 and 6.3 identify and discuss elements belonging to MOOCs that facilitated the goal setting processes of participants in Case Study 1 and Case Study 2 during their online study.

6.1 Delving into the Chosen MOOCs of Participants

Following the cyclical model of self-regulated learning proposed by Zimmerman and Moylan (2009), learners are anticipated to employ goal-setting processes at the start of their learning (Figure 1). Participants in this multiple-case study did not spontaneously generate goals for themselves at the outset of their MOOC-based learning, as discussed in Section 5.4. This finding led the researcher to enrol in each online course chosen by participants to explore the goal-setting support that MOOCs potentially offered to learners when they began their online learning experience. What follows is a representation of how MOOC authors dealt with the self-regulatory process of goal setting within eight online courses. The patterns shown next are based on all the six platforms that offered the MOOCs selected by participants in Case Study 1 and Case Study 2, drawing particular attention to the online courses studied by learners in Case Study 1 since this case encompassed all platforms that also appeared in the second case study.
Community-based language learners enrolled in eight LMOOCs to study Spanish, Italian and French. The online language courses were available on six platforms: Coursera, FutureLearn, UNED Abierta, iversity, edX and FUN. Although the LMOOCs were designed for learners with different language proficiency levels, they all provided the same minimum level of support to help learners set goals for themselves at the start of their learning. A series of screenshots taken by the researcher are presented below to illustrate this point and comment on specific sections of each online course that covered the aspect of goal setting.

6.1.1 Basic Spanish vocabulary specialisation— Spanish Vocabulary 3: Sports, Travel, and the Home & Spanish Vocabulary 4: Careers and Social Events (Coursera)
The goal-setting support offered in this Spanish vocabulary specialisation consisted of a pop-up box labelled 'My Weekly Goal' designed by the platform provider, Coursera. This generic prompt currently embedded within the overview section of Coursera courses asks learners to choose the number of days they want to spend learning in a week. When the researcher clicked on the ‘set goal’ option of that box, a message appeared: ‘Learners who set a goal are 75% more likely to complete the course. You can always change it’ (Figure 16).

Figure 16 Generic goal setting prompt embedded in the Coursera platform

Figure 16 shows that learning three days a week was the option recommended by the platform provider to achieve the primary learning outcome: to complete the online course. As the researcher went through the LMOOCs, another message popped up that praised her efforts for working towards her chosen weekly goal (“You’re off to a great start! You’re doing a great job of..."
developing positive study habits. Keep Learning”). The notification that congratulates learners for what they have achieved is an effort from the platform provider to keep learners engaged with the online course. If learners decided not to set a goal at the start of their learning, a new notification labelled ‘set a weekly goal’ would continue to appear on the left side of the screen during the following weeks. Self-regulated learning is not a fixed trait. Thus, this continuous reminder to set or update a weekly goal might be helpful to develop a self-regulatory process of goal setting during MOOC-based learning.

At first, it appeared as if learners were asked to set goals for their language development in both LMOOCs. However, the generic goal setting prompt of Coursera sought to reinforce study habits directed towards course completion, which was evident in the pop-up message that praised and emphasised the development of positive study habits. Learners were not invited to set goals for themselves that resonated with the learning objectives of each week. Instead, the MOOC providers asked them to choose their study schedules from a list that suggested three options for completing the course, which was the main goal by default.

As for the MOOC educators, they outlined each week’s ‘learning objectives’ in the course, but they did not ask learners to set their own weekly goals in the Spanish LMOOCs delivered on Coursera. Prompting learners to select goals prescribed by the platform provider was the only goal setting related feature embedded in the MOOC. Hence, it remains unclear how learners can develop their personal goals in MOOCs when they do not receive adequate scaffolding to hone this forethought process in the online course.

6.1.2 Spanish for Beginners 6: Out and About (FutureLearn)

The authors of this Spanish LMOOC delivered on FutureLearn did not foster the pursuit of individual learners’ goals at the outset of online learning. They focused on displaying what learners would achieve by the end of the LMOOC in the introductory section before enrolment. The authors of the LMOOC listed the learning outcomes in terms of the communicative skills of the target language. Meanwhile, the platform provider emphasised the learning outcomes of completing the online course and earning the course certificate in the ‘Learning on FutureLearn' description that appeared at the bottom of the same introductory page (Figure 17).
Figure 17 offers a clear example of learners receiving two different sets of information on the same introductory page from two different sources: the MOOC authors and the platform provider. Either party could have outlined how studying on FutureLearn would help learners attain the learning outcomes listed at the top of the introductory page. For example, stating that learners would be able to “engage in simple communication in Spanish” through the affordance of joining a global classroom where they could “experience the power of social learning” and “apply the language introduced in the course” (Figure 17). However, the MOOC authors and the platform provider opted for providing learners with different learning outcomes, facing the risk of leading learners to prioritise course completion over language development or vice versa.

6.1.3 Puertas Abiertas: Curso de español para necesidades inmediatas (II) [Open Doors: Spanish course for immediate needs (II)] (UNED Abierta)
The authors of this Spanish LMOOC offered on the UNED Abierta platform (and powered by the Open edX Learning Management System) did not encourage learners to set goals for themselves
during their online learning. They focused on presenting the course aims under the section 'What is it for?' on the introductory page of the online course (Figure 18).

![Course aims displayed in the introductory page of the Spanish LMOOC on UNED Abierta](moonlite.png)

**WHAT IS THIS COURSE?**
It is an elementary Spanish course. There is another more basic course called "Open Doors I". If we speak a bit of Spanish, we can do this course, "Puertas Abiertas II", directly.
This course can be independent or part of a classroom-based Spanish course.

**WHAT IS IT FOR?**
- To help with the use of Spanish in common situations when arriving in Spain.
- To help with the basic aspects of Spanish life and culture.
- To help with the autonomous learning and online collaborative practice of oral and written Spanish.

*Figure 18 Course aims displayed in the introductory page of the Spanish LMOOC on UNED Abierta*

The last course aim shown in Figure 18 emphasised helping learners with their autonomous learning. One would expect appropriate scaffolding to support goal setting at the start of the online course and throughout as needed. However, there was no sign of that autonomous learning support once learners enrolled in the LMOOC, not even in the introductory video titled 'Video 6: Cómo aprender y cómo practicar más [how to learn and practice more]'. This audio-visual resource presented at the top of the course outline, akin to the welcome letter of the LMOOCs on Coursera, provided advice on additional language practice. However, it did not mention the importance of setting goals to learn effectively in the online course. Likewise, the LMOOC authors included the learning outcomes at the start of each module under the sections named ‘¿Qué aprendemos en este módulo? [What do we learn in this module?]’. Yet, no opportunities were given to formulate individual learners’ goals for each module.

6.1.4 Spanish for Beginners (iversity)
The authors of the Spanish LMOOC offered on iversity followed the same pattern as the Spanish online course provided by UNED Abierta. They displayed the course aims on the introductory page, but under the heading 'Learning Objectives' (Figure 19). This page shows what the authors wanted the course to achieve instead of what learners could achieve with the course, thereby placing the LMOOC authors’ intentions at the centre of the learning process from the beginning.
As shown in Figure 19, this LMOOC displays the course aims under the learning objectives; the information given is nevertheless to explain the objectives of the course not the ones of the learners. The learning outcomes were also included in the online course, as in the Spanish LMOOCs hosted on FutureLearn and UNED Abierta. The authors embedded what learners would learn into the introductory videos of each chapter of this iversity course. They also outlined the outcomes in the ‘Additional Materials’ section under ‘Objetivos de la Unidad’ [‘Objectives of the Unit’]. Yet, no evidence of goal setting support was discernible within the online course. Instead, the evidence showed that course authors assumed that learners’ goals were fully aligned with the aims of the course for which they had enrolled. This questions whether MOOCs cater for the personal goals of their users.


The goal setting support offered in these Italian LMOOCs consisted of a generic prompt issued by the platform provider, edX, at the start of the online courses. It asks learners to set a ‘course goal’ by selecting one option that best describes their learning plan. Figure 20 shows the two different versions of how this prompt appears in the overview section of the intermediate and advanced LMOOCs.
The goal setting prompt in both LMOOCs displayed a set of prescribed goals: (1) earn a certificate, (2) complete the course, (3) explore the course. The goals on offer remain fixed and impersonal, especially when asking learners to set a ‘course goal’ rather than their own goals. Personal learning goals might include the actual linguistic content of the online course rather than just completing the tasks in the LMOOC.

6.1.6 Vivre en France B1 [Living in France B1] (FUN)

The authors of this French LMOOC offered on the FUN platform (and powered by the Open edX Learning Management System) inquired about learners’ intentions in a pre- and post-questionnaire. However, the questionnaires were embedded in the MOOC for the purposes of the MOOCs authors’ research, rather than to help learners to reflect upon their goals before and after working with the online course.

Most of the platform providers and MOOC authors did not genuinely encourage learners to set their own goals in the online courses they offered to them. They did not make a great effort to scaffold the pursuit of individual learners’ goals either. Table 14 summarises how goal-setting support was contextualised in the various LMOOCs presented in this section.

Figure 20 Generic goal-setting prompt embedded in the edX platform
Table 14 Summary of goal-setting support identified in the LMOOCs chosen by Case Study 1

<table>
<thead>
<tr>
<th>LMOOCs</th>
<th>Goal-Setting Support by MOOC Authors/educators</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOOC</td>
<td>Authors/educators</td>
</tr>
<tr>
<td>Platform Providers</td>
<td>The platform provider issued a prompt at the start of the LMOOC that asked learners to ‘set a weekly goal’ by choosing their work schedule from a list of three prescribed options, which would help learners attain the <strong>learning outcome</strong> of course completion. Learners had to choose the number of days they wanted to spend learning in a week. The prompt popped up on other pages as a reminder to select a schedule rather than formulate their own weekly goals if they had not done so initially.</td>
</tr>
</tbody>
</table>
Table 14 compares the goal setting support found in each LMOOC chosen by Community-based language learners. It also shows the various terms course authors and platform providers used to address the notion of goals in the online courses, such as course aims, learning objectives, learning outcomes, course goals and learning goals. Some LMOOC authors used those terms interchangeably, disregarding their distinct meanings in relation to curriculum design. This variability in usage might generate considerable confusion among learners like Salvador, who already found it difficult to distinguish between two goal-related terms. When asked for his goal-setting behaviour, he stated: "I don’t know the difference between learning goals and targets" (INV2-Salvador). In the majority of the online courses studied, the authors dictated what learners would be able to achieve by the end of their MOOC-based learning through prescribed goals. Learners rarely had the opportunity to formulate personal goals related to the content of their LMOOCs. This disparity is very likely to constrain learners from initiating their self-regulated learning, leaving them with no choice but to follow goals of external origin, as observed in the findings in response to RQ2 (Section 5). This issue also reveals the minimal scaffolding that was provided to enable learners to move beyond complying goals, reinforcing learning regulated by MOOC educators and providers and minimising self-regulated learning in LMOOCs.

In sum, the authors, and providers of the LMOOCs chosen by Case Study 1 did not provide enough opportunity for learners to set goals for themselves at the initial stage of their online learning. Instead, they presented learners with the learning outcomes and, in some cases, the course aims of the LMOOC itself alongside prompts and questionnaires that asked learners for their goal orientation. Learners were expected to follow the self-paced online courses while implicitly ceding control over their self-regulated learning to the LMOOC authors or platform providers. Despite the scarcity of goal setting support identified in those online language courses, some elements of the chosen LMOOCs managed to trigger and influence the types of goals reported by participants as they progressed through the online courses. These elements are presented in Section 6.2.

6.1.7 Summary of Section 6.1

Overall, this section has illustrated and discussed the minimal goal-setting support that eight online courses from six different platforms provide to learners at the outset of their learning. This review has raised the question: how seriously do platform providers and MOOC authors seek to develop self-regulation in learners, particularly goal setting? This contextual information was necessary to gain a nuanced understanding of the elements that can potentially help learners to work towards their different goals, especially when evidence showed the little opportunities that learners have in MOOCs to set personal goals from the start of their online learning.
6.2 Case Study 1

The participants in this multiple-case study reported specific elements of their chosen MOOCs, which facilitated their goal setting process during their online learning. The researcher identified six elements that Community-based language learners used to scaffold their learning and pursue their goals. The sections below explain how the following MOOC features influenced the goal setting behaviour of learners.

1. The flexibility offered by a MOOC
2. Quizzes
3. Activities aligned with learners’ interests
4. Transcript support
5. Course outlines
6. The structured learning design of the online course

6.2.1 Influence on goal-setting behaviour 1: The flexibility offered by a MOOC

All ten participants in Case Study 1 appreciated the flexible nature of MOOC-based learning. After working with an LMOOC of their choice for a month, they highlighted that when learning in an LMOOC, "you could skip things, you can do things at your own pace, at your own choice and that was up-to-date and flexible" (INV2-Irene). "[It] can be studied at any time" (OQ8- Sofia), one of them concluded. They all valued having the opportunity to approach the online course flexibly and engage with the content and activities as much or as little as they wanted during the four weeks of the study.

The possibility of engaging with the LMOOC material at their own choice, and as many times as they wanted, contributed to pursuing both mastery and reinforcement goals. For instance, participants enjoyed the choice of having the "repetition of grammatical phrases test" (WSURV1Q5-Ines) as well as the repetition of audio-visual resources. Silvia explained: "You can play it, you can go back, you can repeat it if you don't understand. You can just stop and go back as well. It's like a video on YouTube, really" (INV2-Silvia).

The flexibility offered by their LMOOCs enabled participants to listen to the audio-visual resources multiple times, go through the vocabulary as many times as they wanted, and have more than one attempt to complete the exercises, focusing especially on the aspect of grammar they aimed to revise. This MOOC feature helped language learners to pursue their goals in relation to the mastery, development, and reinforcement of specific linguistic knowledge and receptive skills.
6.2.2 Influence on goal-setting behaviour 2: Quizzes

The second element reported by all participants was the assessment component of MOOC-based learning via quizzes. Participants were aware of the strong presence of this element during their online learning within different platforms. By way of example, Sofia stated: "I think the organisation is pretty good of FutureLearn. They do a lot of quizzes. Everything is done via a quiz. There might be some explanation, but you learn through the use of quizzes. I quite like quizzes" (INV2-Sofia). Likewise, the chosen LMOOCs from Coursera included a weekly module review test that learners appreciated doing at the end of each week. For instance, Silvia noted: "I found the grammar test helpful, once I got to the end and submitted, I could see what was correct and which were incorrect. I could then do the questions again incl. the correct answers" (RPHOCaption-Silvia).

Participants saw the value of quizzes in helping them to learn and strengthen aspects of the target language, especially vocabulary and grammar. The numerous quizzes included in the MOOC-based learning led learners to think of the LMOOC as an exam and, subsequently, an opportunity to reinforce and validate their competencies in the target language. Despite describing his LMOOC as "a multiple-choice course; it's very much black and white" (INV2-Santos), Santos enjoyed taking the multiple-choice tests of his online course to have "a refresh of the perfect tense" (WSURV3Q5-Santos; RPHOCaption-Santos). Similarly, Felix said of his LMOOC: “this is testing what you’ve learned” (INV2-Felix), which may explain why he referred to MOOCs as "learning through reinforcement" (OQ8-Felix). Lastly, Sarah, who also chose the same LMOOC as Sofia, said:

> The whole thing is like that. So, it’s structured questions and answers, revision, yeah (...) and because it was slightly easier than I was expecting, it was almost like doing a test and saying: ‘well, okay I’ve done that now and I can do it and it’s fine and I didn’t get many of them wrong’ (INV2-Sarah).

The perceived purpose of the quizzes was to test what learners covered during their MOOC-based learning. However, all learners reported that most of the linguistic content of their LMOOCs had previously been taught in class, as mentioned in Section 4.1. Participants took advantage of those quizzes to strengthen and confirm their prior linguistic knowledge and capabilities instead. Accordingly, completing those assessments became part of the learners’ process goals to work towards their reinforcement and ability goals.

6.2.3 Influence on goal-setting behaviour 3: Activities aligned with learners’ interests

The compendium of activities aligned with learners’ linguistic interests was the third element that sustained their goal-directed behaviour. All participants very much enjoyed having interactive listening comprehension tasks, completing the exercises of familiar grammar topics, or learning...
vocabulary through images. They had the opportunity to develop and test their skills as well as reinforce their linguistic knowledge through these activities, which helped them work towards their mastery, ability, and reinforcement goals.

One type of activity stood out in the data. Participants thoroughly enjoyed the listening comprehension activities partly thanks to the segmentation of the task. Participants preferred the listening activities that contained a series of preparatory stages, building up to the comprehension questions, as described below:

*I particularly like the videos where they give you the vocabulary in advance. It is well-structured. Once you have done some work on the vocabulary, then watch it with the transcript and then try to watch it again without the transcript until you sort of got it and understood it. And then there were comprehension exercises, which were comprehension exercises on these particular topics. So, I found that worked very well for me. And that helped me and gave me a way in to then understand the native speakers in the native language. So, I needed that support first* (INV2- Irene).

The LMOOC authors supported learners’ listening skills by presenting a pre-listening activity that included words related to the main listening topic. Then, learners could listen to the dialogue with or without the transcript before doing the comprehension exercises. Half of the participants in this case study valued the support of the transcript in mastering the oral comprehension of videos in the target language. Using the transcript became part of the process goals reported by learners who aimed at improving their listening skills. As part of the activity, the MOOC authors also embedded the comprehension questions within the videos in the edX LMOOC, as illustrated in Figure 21.
The Ciak! videos included L1 speakers and proficient Italian speakers talking about various subjects. The comprehension questions were embedded within the video clips, which automatically stopped showing the questions in seven instances, as observed at the bottom of Figure 21. Irene added: “Then, you got an immediate feedback. And, they were checking comprehension, but it was all very immediate. That was the type of task that was given” (RPHOCaption-Irene). Isabella and Ines also favoured those listening tasks. The latter said she found enjoyable “watching and participating in interactive videos” (WSURV4-Ines), as part of the MOOC-based learning.

The three Spanish learners who followed the same Coursera LMOOC, Silvia, Simona, and Salvador, also liked the listening tasks divided into three parts: a video introduction, the main video, and a video summary of the main listening topic. The listening comprehension questions were presented at the end of the section. Figure 22 shows an example of this task captured by the learners of Spanish.

Figure 21 Example of a listening task captured by Irene- edX platform

Figure 22 Example of a listening task captured by the learners of Spanish.
Figure 22 Example of a listening task captured by Silvia and Simona- Coursera platform

The caption given to the screenshot shown in Figure 22, as part of the reflexive photography technique, was: “I like these short video clips (2-3 minutes). There is a brief introduction with some detail. They don’t speak too quickly” (RPHOCaption-Simona). Before moving to the listening comprehension questions, they could first listen to an introductory video of the topic. Alternatively, they could watch directly a more extended video clip that presented the main story. “Then, the teacher also gave explanations afterwards. So that was done in a good way, so it was good to understand the whole thing really. So, yeah that was sort of a bit more modern than the other lessons” (INV2-Silvia). Learners liked the ‘modern’ listening tasks facilitated by the LMOOC educator at the end of the section.

As shown on the left side of Figure 22, the spoken summary was given in a separate video clip, “so you can avoid listening to the first [two clips] if you want to stretch yourself” (RPHOCaption-Simona). The summary was followed by a ‘Discussion Prompt’ that all participants decided to skip. Learners were then presented with the comprehension check, which appeared within the ‘Practice Quiz’ section at the end. Participants valued the segmented task design and its flexible nature, which contributed to their mastery goal of improving their listening comprehension.

Moreover, the variety of questions in some listening tasks challenged the oral comprehension of the learners. By increasing the difficulty level of the questions, the LMOOC authors scaffolded the development of learners’ listening skills in the target language. For
instance, the authors of the FUN LMOOC, Vivre en France [Living in France] gradually changed the complexity level of the questions, which helped Felix practise and improve his listening comprehension skills, as he described in the caption for the screenshot illustrated in Figure 23:

![Figure 23 Example of a listening task captured by Felix- FUN platform](image)

So, this is a screenshot of a section called Je Rencontre (I meet). In this case, it is a video of a young lady named Fransisca who is interviewing people at a hospital. All these sections follow the same pattern, which is: Play a video, ask some questions, simple at first and progressively more in-depth on each repetition. The video and question session are repeated three or four times until you have pretty much understood the whole thing. This is very useful because the spoken word becomes clearer on each repetition, and you feel that you have made progress (RPHOCaption-Felix).

Felix also added that at the start of the comprehension check of this top-down listening activity, he was asked to watch the video without sound and infer meaning by using contextual clues to figure out what was happening (INV2-Felix). Then, they practised listening for gist to gain a global understanding of the information in the video. Figure 23 shows the type of question that asked learners to identify and choose the expressions, including prepositions and adverbs, they heard in the video (‘Quelles sont les expressions que vous avez entendues?’). Lastly, learners were asked to answer detailed comprehension questions such as putting events in order.
Learners like Felix might benefit from this compound task not only to practise and improve their listening comprehension skills, but also to “prove that you understood and remembered the material itself” (INV2-Felix). The design of this listening task facilitated the pursuit of the ability goals that Felix reported in week two (“Better comprehension of fast spoken French” (WSURV2-Felix)) and week four (“Listening better and faster comprehension” (WSURV4-Felix)) of his engagement with the online course. Completing this type of listening comprehension task became part of his process goals to challenge his understanding of a spoken message in French (Figure 11), thereby working towards his ability goals in this language skill.

The common aspect identified in the listening comprehension tasks reviewed so far was the scaffolding learners received from the authors of the LMOOCs offered on edX, Coursera and FUN. Segmenting the activities into pre-listening, listening, and post-listening sections contributed to better oral comprehension. Likewise, embedding or adding difficult questions between listening sections also helped learners master and validate their capabilities when listening to a spoken message in the target language. Offering both kinds of support was necessary for learners to sustain their work towards attaining their mastery and ability goals in listening.

6.2.4 Influence on goal-setting behaviour 4: The structured learning design of the online course

Lastly, some community-based language learners referred to the highly organised nature of their chosen LMOOCs, which made their online learning more manageable. Five out of ten participants found the audio-visual material in their online courses clear and well-structured. For instance, Salvador noted: “there is much that is very good in terms of the structure of the course. In particular, the presentations on the endings of verbs in the past tense were particularly clear and useful” (INV2-Salvador). Likewise, Irene said she had enjoyed “looking at the video and doing the exercises because it’s well structured” (WSURV4Q5-Irene). This last element contributed to participants' work towards their goals, more precisely the reinforcement goals around grammar topics and the mastery goals regarding the listening skills development.

Participants also considered the structured organisation of the content a positive aspect that facilitated engagement with their self-paced courses, thereby supporting their goal-directed behaviour. By way of illustration, when Sofia was talking about her FutureLearn LMOOC, she said: “you have to do it within this period of time. And, you know it is making [it] more structured the FutureLearn, I think it makes you pay more attention” (INV2-Sofia). Similarly, Salvador evaluated the fixed structure of his Coursera LMOOC positively:
So, it was like I was almost constrained within that, which was probably a good thing in that context; it meant I couldn't just drift outside it. The MOOC helped me focused on things I should be targeting at that point. So that was the added dimension I've never really been good at before. So, from that point, I will use a MOOC for that sort of thing [to keep you focused on what you want to learn], but I don't think I'd ever sign up for a full course of it (laughs) (INV2-Salvador).

This last element helped learners organise their independent learning and kept them on track about their goals. At first, it seemed as if the MOOC authors controlled the scope of learning through a fixed pattern of organisation. Nevertheless, learners could still decide what they wanted to focus on within the margins of the online course. The findings may seem contradictory but offering a structured learning path that still allows learners to approach the material flexibly may help gain a sense of independent and non-overwhelming learning thanks to that structured organisation. Hence, this balance between structured material and flexible learning within MOOCs might help learners initiate or sustain the first steps towards their self-regulated learning in an online course.

6.2.5 Summary of RQ3- Case Study 1

To respond to this research question, the researcher identified and analysed the elements of eight online courses offered on six different platforms, which influenced the goal-setting behaviour of ten adult language learners in this multiple case study. The main elements found to support this self-regulatory process of participants in Case Study 1 were: The flexibility offered by a MOOC, quizzes, activities aligned with learners' interests and the structured learning design of the online course. These elements helped participants work towards their mastery, reinforcement, ability and process goals during their MOOC-based learning.

6.3 Case Study 2

The learners of English for Specific Purposes (ESP) in Case Study 2 reported elements belonging to their online courses, which facilitated their goal-setting process during their MOOC-based learning. The researcher identified four elements that ESP learners found valuable to support their learning and pursue their goals. The following sections explain how the following MOOC features influenced the goal-setting behaviour of those learners.

1. MOOC content aligned with learners' interests
2. The flexibility of the online course
3. MOOC multimedia resources
4. The structured learning design of the online course
6.3.1 Influence on goal-setting behaviour 1: MOOC content alignment with learners' interest

There was a close link between what MOOC authors offered in their courses and what participants wanted to learn in those online courses. Participants in Case Study 2 were driven by professional and personal motivators when they were asked to choose a MOOC as part of their face-to-face ESP course. All nine participants matched the information contained in their MOOCs with their learning interests. Erica said: “I’ve chosen a MOOC that regards to logical and critical thinking. So, as a lawyer, this course is related to matters that can interest me” (INV1-Erica).

Similarly, Ethan stated: “My course is direct and easy. Made for managers who need communication skills with colleagues. I’m not a manager, but I often communicate to people from other company fields. It means it fitted to me” (OQ8-Ethan). This fit between MOOC content and learners' interests facilitated mastery goals focused on understanding specific information presented in their online courses and developing language skills.

This alignment contributed to the development of learners' mastery goals in learning about online course content, which were primarily shaped by the MOOC authors, as reported in Section 5.2.2. For instance, Erik noted: “In general, it was the same goal, understanding everything about the MOOC. But, during the MOOC, my goals were changing. It depended on the week I studied because every week the content changed” (INV2-Erik). The different goals reported by Erik were related to the content covered by the MOOC authors in each week of the online course. However, participants also opted for setting these content-based goals by themselves since the MOOC content was compatible with their professional purposes. Erik also stated:

*everything about this course is so interesting for me because as I told you I love everything about communication, and it could also help me to improve a part of my job because part of my job is stay in a context and speak with people* (INV2-Erik).

Having meaningful content that aligns with learners’ interests helped participants develop mastery goals, particularly content-related goals that dealt with understanding the subject matter and improving their continuous professional development.

Likewise, course content related to the area of specialism of learners facilitated their mastery and ability goals in developing and validating specific aspects of the language. The information contained in the MOOCs that was familiar to participants helped them enrich their lexicon and language skills. Emily was aware of this support and said: “in this MOOC, I was facilitated by the contents. I realised that if I have confidence with the content, I understand very good a text instead of an unknown content” (INV2-Emily). Elliot also pointed out: “First time with a MOOC. I started with a topic well known [thermodynamics] to check my language capacity to
understand spoken English” (RPHOCaption-Elliot). Emily and Elliot wanted to improve and test their receptive skills. Familiarity with the content supported their work towards attaining their mastery and ability goals in reading and comprehending oral speech about the subject matter in the target language. Overall, MOOCs with meaningful and familiar content that aligns with learners’ interests facilitate course content-related goals and linguistic goals that sustain their motivation when learning in these online courses.

6.3.2 Influence on goal-setting behaviour 2: The flexibility offered by the online course

The nine participants in Case Study 2 appreciated the flexible nature of MOOC-based learning, which assisted them in the pursuit of the goals they reported during their online experience. Participants were able to skip sections and focus on the content they wanted to study or the linguistic aspect they wanted to practise using the learning material within the MOOC. Emily mentioned that one of the advantages of MOOC-based learning was “the possibility of choose what English Ability you need to strengthen” (RPHOCaption-Emily). Enabling learners to choose what they wanted to study within the online course facilitated their mastery goals which targeted the enrichment of their specialised knowledge and enhancement of specific areas in their target language.

The flexible nature of MOOCs also provided learners with an opportunity to assume an active role in their learning, which contributed to the self-regulatory process of goal setting. Edwin described his experience of doing a MOOC as “a way of learning which is complementary to the face-to-face course because it involves yourself as teacher and student at the same time” (OQ9-Edwin). The flexibility of these online courses enabled learners to make decisions that teachers in classroom-based courses usually make. Elton noted the following when learning in a MOOC:

I decide what I can do, what I can choose, how I do that, the time I dedicate to this as a sort of ‘autoaprendimiento’ or self-learning. So, I organise...it’s my organization with this material, the material of the MOOC (INV2-Elton).

This element of the MOOC implicitly offered learners the option of managing their learning by choosing how and when to approach the material that best suited them and their goals. For instance, Elliot intended to “do the final quiz of the lessons before watching the video lessons in order to check the unknown vocabulary and pay more attention when watching the video lesson” (WSURV2Q6-Elliot). He could follow a path that differed from the standard one (watching the video first and then taking the final quiz), which facilitated his process goal to improve his lexicon and listening in English.
The flexibility offered by the online course also supported the selection of process goals which might aid the pursuit of learners' mastery goals, such as replaying the video lessons to work on their intonation and oral comprehension or downloading the learning materials from the MOOC to expand their knowledge of the subject matter, their specialised vocabulary and provide reading comprehension practice in the target language. In sum, the flexibility of the online course enabled learners to develop an active role in their MOOC-based learning while supporting their process goals towards attaining their mastery and ability goals during the online learning experience.

6.3.3 Influence on goal-setting behaviour 3: MOOC multimedia resources

MOOC authors use a mixture of video, sound, texts, and pictures to convey information about the subject matter covered in the online course. This mix of multimedia resources contributed to the goal-setting process of most ESP learners during their MOOC-based learning. The selected online courses contained audio-visual and written material that supported the mastery and ability goals reported by participants. The audio-visual resources consisted of video lessons, and the written resources included articles, transcripts, and subtitles of those video lessons. This group of MOOC multimedia resources facilitated participants’ work towards developing their professional knowledge and English competencies.

Six out of nine participants referred to the video lessons as crucial resources that facilitated their main mastery goal: learning about the MOOC content. In response to question five of the weekly monitoring survey [Q5: What part of this week have you enjoyed most and why?], Erica pointed out that “the video lessons are full of funny examples; They're amazing! They show the Topic in an amazing Way; The videos make the learning easier and funnier” (WSURV1-2-3-4-Erica). Figure 24 illustrates one of the comical examples Erica captured in one of the video lessons.
Learners valued having clear examples to enhance their specialised knowledge and apply it to their jobs. Ethan explained: “during the first week, the teacher gave some theoretical concepts, and I said: ‘ok, not bad, but they weren’t useful for my goal’” (INV2-Ethan). After the first week, Ethan’s MOOC covered more applied examples during the video lectures, which suited his mastery goal. He added:

Topics are not difficult because the lecturer makes clear example to explain what is talking about; applied examples are useful to apply topics of the course in every-day life. Scholar concepts are interesting, but I prefer the “down to-earth way”. It’s a very useful part of the course; after the pretty boring first week, now I have a collection of practical rules to use at work (WSURV2Q3; WSURV2Q5; WSURV3Q5 -Ethan).

Practical examples presented by MOOC educators within the videos helped learners understand technical subjects in the target language. This support also enabled learners to apply the course content to their current situation, thereby minimising the barrier between theoretical and practical content. Likewise, the MOOC educators included keywords, recommendations, questions, case studies, and summaries in their video lectures. Emily highlighted a diagram shown within the video lessons that helped her master information about her future job as a speech therapist:

they made a pause in the middle of the videos where teachers showed us the scheme of what they told us, what they explained, a sort of a slide that summarised the content of
the explanation. So, it was useful because it made me organise my concept linked to my future competences area (INV2-Emily).

When participants were asked to take a screenshot of a feature of their MOOCs that facilitated their learning, Emily chose the same diagram to be part of her reflexive photography log. Figure 25 represents the slide captured by Emily while watching a video lesson in her chosen online course.

![Figure 25 Screenshot taken by Emily of her Coursera MOOC](image)

She also included the diagram in the slides of her in-class presentation in which she wrote: “everything is summarized here, including the impact of every single component on Reading Difficulties” (RPHOCaption1-Emily). Most ESP participants considered helpful the inclusion of practical examples, complementary data, and visual summaries in the video lessons. The presentation of concepts through this type of multimedia helped learners understand technical content in the target language. Thus, this element made feasible one of the mastery goals of participants during their online learning with MOOCs, expanding their work-related specialised knowledge.

Participants also valued the support of the video lessons to pursue their mastery goal in improving their oral comprehension in English. Five out of nine participants highlighted the utility of their MOOCs in enabling them to improve this receptive skill. Listening to multiple video lectures became an opportunity for them to train their listening skills. Elliot stated: “I found useful
this type of study, particularly for improving my understanding of spoken English” (WSURV4Q6-Elliot). He added:

choosing to do a MOOC automatically give the possibility to know the content of the course but also to improve the English because I am not well trained on the American accent. This certainly was good because it was an opportunity [to have] two hours of listening in every unit. So, eight to ten hours of listening to the spoken English during the MOOC (INV2-Elliot).

Elliot and his classmates were exposed to different varieties of English during their MOOC-based learning, as presented in our discussion of research questions 1 and 2. They had the opportunity to practise their receptive skill while listening to university lectures from both English- and non-English speaking countries. Hence, the audio-visual resources of MOOCs helped participants both to learn about a particular subject related to their profession, and to enhance their comprehension of spoken input given in the target language by educators from America, Europe, and Asia.

Eight out of nine participants also considered articles, transcripts, and subtitles as valuable multimedia resources that scaffolded the pursuit of their mastery and ability goals in the online course. Half of the learners pointed out the possibility of learning about the subject matter and practising reading through articles curated by the creators of their MOOCs. Learners could either access those by downloading the articles or via links to external websites. For instance, Emily stated: “In particular, into each lesson, I found so useful the section “Resources”, because it has got so many scientific articles of furtherance. In fact, my purpose of this English course was to become able to approach a written text” (RPHOCaption2-Emily). This kind of written material offered during the MOOCs suited learners’ mastery goals in developing their reading comprehension of English texts and enlarging their background knowledge in a specific field.

Lastly, the use of transcripts and subtitles was a common practice among nearly all participants during this online experience. Eight out of nine participants found these resources valuable to verify their understanding when listening to educators in video lessons and checking the spelling of specific words. Ethan explained:

For example, the teacher can speak too fast, or he can use, as I said before, expressions that I don’t know, or he can have a strong accent. So, the solution is stopping the video and going back a little bit and activate the subtitles and then check on Google translator or other websites (INV2-Ethan).
Using this written resource became optional for some participants. For instance, Erica decided not to look at the transcription when watching the video lessons. She argued: “if I looked at the transcript, it would be too easy for me to understand what people were saying. So, after the first week, I tried to listen again and to understand what people were saying without reading it” (INV2-Erica). Conversely, Eric decided to approach the video lessons with the help of the transcript:

I had a strategy. I watched the video more than once. In the first time, I just watched the video and the second time I replayed the movie...the video, but without watching it. Just listening and reading the transcript. And it helped me to understand better the context (INV2-Erik).

The strategy that Erik described to improve his listening was enabled by the flexibility of the course and the transcript support available as part of the video lessons. Having this written resource combined with the course flexibility in adding or removing the transcription while replaying the video lessons was helpful for participants like Erica and Erik to challenge their listening skills and better understand the course content. Accordingly, the multimedia resources reviewed here, alongside the flexibility of the online course were beneficial for participants seeking to develop their area of knowledge, specialised lexicon and demonstrate their linguistic competencies in understanding written and oral information in the target language.

6.3.4 Influence on goal-setting behaviour 4: The structured learning design of the online course

The structured learning design of MOOCs contributed to the start of a goal-setting process for most participants. This element scaffolded the independent learning path of seven out of nine participants and their work towards their goals. Emily highlighted that “the structure of MOOC, divided in modules, was a way to organise my study and time to dedicate on the English learning, so it was a good way” (INV2-Emily). Elsa also said: “I think MOOC is very good because you can learn something you’re interested in, in an organised way” (INV2-Elsa). The structured format of the MOOC sections gave participants a guide to managing their online learning.

Although it might seem paradoxical to present MOOCs' highly structured learning design as beneficial as the flexible nature of these courses for goal setting, both elements played a unique role in supporting the development of this self-regulatory process. As Edwin pointed out, “in the MOOC, you can be stimulated to be more autonomous in learning and also it gives you a path, a learning path” (INV2-Edwin). While the flexibility offered by a MOOC gave participants implicit freedom to assume an active role in their online learning, the course structure provided a
fixed path to organise said learning. Edwin's case reflects the experience of most of his classmates regarding the support they obtained from this last element:

Normally, I ... of course, the starting was quite ... I had to set my way of learning and almost after a few lessons, I decided to follow a fixed pattern (INV2-Edwin).

I: What was that fixed pattern?

Most of all the lessons were based on a video with a transcript and in the end a forum about the main topic. The matters where different from section to section, but they were fixed in the same way (INV2-Edwin).

The fixed pattern regarding the organisation of the MOOC sections served as a guide that helped Edwin to approach his areas of interest in an organised way. Edwin wanted to understand the coverage of the course content presented in the target language, expand his specialised lexicon, and demonstrate his writing skills when expressing opinions about the subject matter. The solid structure of the sections scaffolded the pursuit of those mastery and ability goals by providing Edwin with video lessons, transcripts, and discussion forums that he could use to work towards his goals in an organised and sequential manner, as follows:

First of all, I listened to the video without reading the transcript, then I opened the transcript and I started again listening to the video and reading. Then, I took the text and I tried to analyse that phrase by phrase also from my grammatical point of view and learning new terms or new words, taking notes in my notebook. At the end, I read the comments of the other fellows, I tried to see how they were able to express their ideas about the matter, and I tried to enter in the discussion (INV2-Edwin).

Even though the sections were highly structured, the flexibility of the course enabled him to work with the material of those sections in the way that best suited him and his goals. Edwin added: “I decided my learning pattern by myself, so without asking [in-class teacher], I chose what I thought maybe right or wrong to be the most suitable for me. Now I can be more confident in learning by myself” (INV2-Edwin). Participants like Edwin were presented with divided sections containing well-organised material that facilitated their learning goals and scaffolded their decision-making process concerning what they thought appropriate for their learning when engaging with that material. In sum, the highly structured sections of MOOCs helped participants approach topics of interest and work on aspects of their target language in an organised way, thereby supporting their mastery and ability goals.
6.3.5 Summary of RQ3- Case Study 2

Overall, Section 6.3 has presented the elements of eight MOOCs from three platforms that facilitated the goal-setting behaviour of participants in Case Study 2. Based on the testimony of participants, the researcher identified four elements they found helpful to support their learning and work towards their goals. These elements were: 1. MOOC content aligned with learners’ interests; 2. the flexibility offered by the online course; 3. MOOC multimedia resources and 4. the structured learning design of the online course. All these elements helped participants define and pursue their mastery, ability goals and process goals during their MOOC-based learning.

6.4 Discussion

The previous sections reported elements from specific MOOCs that contributed to the self-regulatory process of goal setting in this multiple-case study to respond to RQ3 (Which elements of MOOCs support learners’ goal-setting behaviour?). It also explored how goals are understood (or not) in those online courses. This section first details the main elements that scaffolded the goal-setting behaviour of 19 participants during their MOOC-based learning. Then, it debates whether MOOC authors and MOOC providers genuinely foster the pursuit of personal learning goals while the researcher reviews the conceptualisation of goals in those online courses. Lastly, it discusses the practical implications of these findings for developing better goal-setting support in online education.

Many elements support goal-setting behaviour in language MOOCs (LMOOCs) and content-based MOOCs. Three main elements were identified in both case studies: Multimedia resources, course flexibility and structured learning. In common with some researchers (Beaven, 2013; Gimeno-Sanz, 2021), participants found opportunities to revise specific aspects of the language, learn about meaningful subjects, and practise their language skills using multimedia resources. Sokolik (2016) has pointed out that many MOOCs are designed around the presentation of videos, specialised articles, and forums. These resources, alongside the video transcripts, helped participants work on their mastery, reinforcement, and ability goals.

The qualitative data analysis also highlighted that the flexibility offered by a MOOC was another element that helped participants in both case studies pursue their individual learning goals. The flexibility participants encountered in their online courses was related to the freedom of choice, meaning that they could select the material they wanted to learn or revise, the activities by which to develop or demonstrate their language skills, and flexible schedules to study online. This element also enabled participants to rehearse specific techniques (process goals) to work towards their mastery or ability goals– for example, replaying the audio-visual material and
imitating speakers’ voices to improve intonation in the target language or activating or deactivating subtitles while listening to videos to challenge the receptive skill of listening.

Although several authors have written about the flexible nature of MOOCs (Hood, Littlejohn & Milligan, 2015; de Waard et al., 2015), not much research on MOOCs has studied how this element influences learners’ ability to set goals as part of the self-regulatory process. Previous research has focused on identifying factors related to the learners that prevent them from reaching their personal learning goals, such as “family issues, work issues, lack of time, insufficient academic knowledge, and course content too hard” (Henderikx et al., 2019, p. 200). Instead, the present study examined those features of MOOCs that enabled learners to construct a pathway toward the pursuit of personal learning goals.

Analysis of the data in this study contributes to a clearer understanding of how the flexible learning permitted in these online courses facilitates the goal-setting behaviour of adult learners. This distinctive element offered by MOOCs enabled participants to assume a more active role in their online learning, and it supported the development of process goals, thereby facilitating the pursuit of mastery, reinforcement, and ability goals. However, flexibility on its own does not guarantee that learners should be able to self-regulate their learning and set goals for themselves in those online courses. Further guidance is still needed to scaffold the goal-setting process of learners who do not automatically set themselves goals when starting their independent online learning.

Data analysis showed that the structured learning design of LMOOCs and content-based MOOCs provided participants in both case studies with a guided path that helped them organise their flexible, independent study. Most participants followed the learning path proposed by their MOOCs while familiarising themselves with the course material and working towards their goals. They praised the clarity of the course design, which facilitated learning and revising information and practising aspects of the target language in an organised manner. Despite not having regular contact with a teacher in those online courses, the clear organisation of the content and multimedia resources helped participants structure their self-paced engagement with the course and made their work towards their goals more manageable.

These results build on existing evidence of the role of learning design in MOOC-based learning. Previous research has indicated that decisions about learning design influence how learners engage in MOOCs. Ferguson et al. (2015) found that engagement patterns are influenced by changes in learning design – the number of weeks for which a MOOC runs and the way content is delivered affect how learners deploy different strategies to self-regulate their learning process. Dividing the course material into clear sections, steps, or weeks was beneficial for participants to
sustain their work towards their goals during their self-paced courses, which have no start or end date and less supervision by educators.

Having well-structured online courses can only be helpful for learners who think of independent learning as daunting and overwhelming because they do not know where to start or how to organise their studies. Participants in this multiple-case study were used to having a teacher to organise a course programme for them. Although MOOC educators also arrange the content, activities and occasionally suggest deadlines for learners within highly structured sections, this acts as a guide that helps learners organise their online learning and make decisions to achieve their goals. The onus remains on the learners to use the structured organisation of the MOOC as scaffolding to initiate and sustain their goal-directed behaviour. Nevertheless, MOOC authors and platform providers can still support the development of that goal-setting behaviour, as will be discussed next.

More explicit support directed towards helping individuals to formulate learning goals should be provided in both LMOOCs and content-based MOOCs. Before including that support, it is imperative to understand the conceptualisation of goals across these online courses. The conceptualisation of goals differed across 16 MOOCs selected by participants in this multiple-case study. The online course authors and the platforms hosting their MOOCs conceived the notion of goals differently. Course authors’ and providers’ understanding of goals cover a spectrum encompassing expressions with slightly different meanings. Table 15 summarises the various meanings of goal-related expressions identified in the selected MOOCs.
Table 15 Classification of goal-related concepts and terms

<table>
<thead>
<tr>
<th>Course Aims</th>
<th>Learning Objectives</th>
<th>Learning Outcomes</th>
<th>Personal learning goals</th>
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<tr>
<td>Drawing from the evidence, course aims define what authors want the course to achieve.</td>
<td>These state what learners will be able to do after the learning experience (that they could not do before) (Mager, 1962; MacDonald-Ross, 1973)</td>
<td>These reflect what educators intend their students to learn and “achieve in relation to subject content, personal transferable skills and academic outcomes” (Allan, 1996, p.104).</td>
<td>Eisner (1979) referred to these as ‘student-specific outcomes’ or ‘personal outcomes’ which are to an extent individualised and unpredictable (the educator cannot fully control them); they are dependent upon the extent to which learners engage in the learning experience and take responsibility for their learning.</td>
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<td>In a UK-based educational context, they are labelled ‘learning aims’ which are thought “as concise descriptions of the overall goals or purposes of a piece of learning (a programme, a module or even an individual lecture or seminar)” (Imperial College London, 2021a).</td>
<td>In a UK-based educational context, the learning objectives explain how educators intend to fulfil the learning aims (course aims), “and they are written from the perspective of the educator” (Imperial College London, 2021b).</td>
<td>In a UK-based educational context, intended learning outcomes “focus on what the student will be able to do on completion of the programme, or the session or the module” (Ippolito, 2017).</td>
<td>In a MOOC-based learning context, personal learning goals “do not necessarily equal achievement in the traditional sense of finishing the course, but may comprise any individual goal a learner may have, for example, finishing the first three modules, following the whole course without taking the tests, or getting a certificate” (Henderikx et al., 2019, p. 188; Henderikx et al., 2017).</td>
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Drawing on the evidence, course authors and providers used different terminology to define teaching and learning intentions in MOOCs (Table 15). The usage of these goal-related terms appeared somewhat imprecise. Authors and platform providers used terms in ways that seemed highly questionable in the introductory sections of some online courses (Figure 19). The liberal use of different labels to express statements of purpose, goals, and achievement is not a recent issue (Allan, 1996). Many authors have noticed that terms such as goals, aims, objectives and outcomes are “used freely and apparently indiscriminately” (Cohen & Manion, 1977, p. 28), transforming the literature of educational intention into “a minefield of terminological confusion” (Rowntree, 1982, p. 31). This multiple-case study shows that this issue identified in the literature of curricula design of Higher Education programmes (Allan, 1996) has permeated online education at scale.

Research on MOOCs suggests that the limited understanding of MOOC educators about learning design has a bearing on this lack of clarity about goals. The FutureLearn learning design guidelines (Sharples, 2015) indicate that the design of a course starts by identifying a learning objective or a question. Papathoma (2019) found that most MOOC educators in her multiple-case study did not follow the FutureLearn guidelines. “Designing the courses was mostly content driven and rarely seen as a process that would start by deciding the learning objectives and putting the learner in the centre” (Papathoma, 2019, p. 127). She concluded that “Most educators had very limited understanding of learning design and did not consciously engage in the process” (Papathoma, 2019, p. 183). MOOC educators may disregard the importance of learning objectives because they lack expertise in designing online courses. The findings of the present study, alongside Papathoma’s findings, highlight the need to support educators in developing their knowledge of MOOC learning design and helping them understand the panoply of goal-related concepts and terms so that they can adequately acknowledge the learning objectives of their learners and how they can support them in achieving those objectives.

Moreover, educators should also acknowledge and accommodate the development of personal learning goals in MOOCs. Analysis of the data revealed a significant lack of acknowledgement of personal learning goals on the part of MOOC authors and platform providers. The goals presented in the online courses were written from the perspective of the course author or the providers, also known as the ‘institutional perspective’, which focuses on course completion or gaining institutional credit in the form of a course certificate (Henderikx et al., 2017). In most cases, the goals were written for the course, not for the learners, meaning that course authors and providers positioned the institutional perspective over individual perspectives when defining personal goal achievement and success in MOOCs.
Findings also highlighted a lack of opportunity for learners to set their goals at the start of the MOOC and very little embedded support within the course for attaining their personal learning goals. The learning design process of these online courses should acknowledge that personal learning goals “generally may or may not overlap, match, or even encompass the MOOC provider's set of goals” (Henderikx et al., 2017, p. 358). Presenting mainly goals that summarise what authors and platform providers expect from the learners and not leaving space for learners to consider what they want to achieve during or by the end of the MOOC may explain participants’ lack of initiative to develop goals for themselves. If goals are already set for them, as typically happens in MOOCs with an instructivist approach to learning and teaching (Littlejohn, 2013), learners are very likely to rely on MOOC author or platform provider to chart a path for their MOOC-based learning (Henderikx et al., 2017).

MOOCs should provide learners with appropriate scaffolding to support goal setting “at the beginning of the course and throughout as needed” (Kizilcec et al., 2017, p.28). A previous study has attempted to incorporate personalised goal-setting support in MOOCs (Rohloff, Sauer & Meinel, 2020). These initiatives offer learners a choice of pre-defined learning goals, as captured in LMOOCs and content-based MOOCs offered by Coursera, edX, UNED Abierta, and FUN (Section 6.1). However, MOOC authors, platform providers and action-based researchers fail to ask learners to define their outcome expectations or provide explicit scaffolding that helps them work effectively towards goal achievement.

Helping learners move beyond compliance and acceptance of the goals set for them by the MOOC authors and platform providers should be part of the design of MOOCs. Learners should be encouraged to start formulating their individual goals within the online course, thereby scaffolding their self-regulated learning online and possibly beyond the MOOC. They should teach learners how to master their MOOC-based learning but offer them continuous guidance on how to behave like masters of their learning. Practitioners involved in learning and teaching at scale with MOOCs should acknowledge and support the pursuit of personal learning goals. They should also encourage other course authors, educators, and platform providers to follow this initiative since MOOCs do not just offer a platform to deliver learning to millions of people worldwide, but these online courses have the potential to transform learning and teaching at a large scale. The following statement addressed to university lecturers encapsulates the rationale behind suggestions for a change of practice on the part of MOOC educators and platform providers:
This is not to undermine or denigrate the role of the lecturer, but rather to emphasise the role of the student in accepting responsibility for his/her own learning and to acknowledge that learning might take place in a variety of settings (Allan, 1996, p. 104).

Goal setting is not a self-initiated process for adult L2 language learners studying in LMOOCs and content-based MOOCs, at least within the context of this multiple-case study. However, this self-regulatory process can be supported during the learning process. This section identified three main elements belonging to those online courses that scaffolded the goal-setting process of 19 adult language learners in a multiple-case study. However, much work is still needed to clarify and, if possible, agree on a clear taxonomy of goals when designing LMOOCs and content-based MOOCs. Stating the aim of educators and providers when offering a MOOC is essential but providing spaces for learners to formulate their goals and a suitable scaffolding to ensure goal attainment by the end of the online course is even more indispensable. Otherwise, the idea of offering personalised learning through massive open online courses will remain a utopia of this digital era.

7 Conclusions

The previous chapters addressed the relevant literature, methodology, methods, research findings and discussions that comprised this doctoral thesis. This final chapter reports on how the research provided answers to three research questions. Then, it presents the novel contributions of this study to the fields of online language education and self-regulated learning. A series of recommendations are provided, followed by a summary of the limitations of this research. The chapter concludes by providing proposals for future research directions and a personal reflection on the process of pursuing a doctoral research degree.

7.1 Answers to the Research Questions

The participation of 19 foreign language learners in a study that required them to follow a MOOC of their choice as part of a classroom-based language course helped to address three research questions (RQs) outlined in this thesis. Moreover, conducting a multiple-case study (Yin, 2018) with the help of those participants (ten community-based language learners in Case Study 1 and nine learners of English for Specific Purposes in Case Study 2) offered a richer and more comprehensive understanding of the scope of the RQs. A summary of the main thought-provoking findings that provided answers to each research question is presented below.
7.1.1 RQ1: What aspects of language do adult language learners focus on the most when engaging with a MOOC as part of their classroom-based language course?

Responses to this first question are provided by the voices of 19 adult language learners explaining their interest in enrolling in content-based MOOCs and language MOOCs (LMOOCs) as part of their face-to-face language courses in English, Spanish, Italian and French. Initially, the researcher expected to find a straightforward answer to research question one; nevertheless, an in-depth analysis of the data revealed a variety of language-related and cultural interests reported by adult language learners in Case Study 1 and Case Study 2. Accordingly, the findings chart a range of linguistic and sociocultural foci espoused by learners using MOOCs to support and extend their classroom-based language learning.

Adult learners in this study drew attention to specific aspects of their target language, which are not often examined in the literature on MOOCs. Participants in both case study groups focused on similar aspects of language when engaging with the MOOC of their choice, mainly listening practice, vocabulary learning, and dealing with language variety. Nevertheless, the attention of participants to other aspects of language was more variable, and included register, intonation, communication skills, and sociocultural content. The reasons for this are explored in the following paragraphs.

The first fact to note is that the members of our two case study groups had very diverse language proficiency levels. The proficiency levels of participants in the two case studies had a clear bearing on the language focus they identified as having adopted during MOOC-based learning. For instance, ESP learners reported a CEFR B2 language proficiency level that helped them explore specific elements of English in-depth. In contrast, community-based language learners, who reported a CEFR B1 language proficiency level, paid little attention to advanced topics such as register or the syntax of extended sentences.

The group in Case Study 1 opted instead to revise verb morphology, i.e., verb conjugation and tenses in the target language, particularly focusing on individual structures. Meanwhile, those in Case Study 2 were keener to study the course content on a semantic or sociolinguistic level, particularly focusing on the meaning of specialised lexicon and the change of register used by lecturers and other learners in the online courses.

It was interesting to identify the sheer variety of aspects of language that MOOC learners seek to address, depending on their proficiency levels and their personal interests, as evidenced in each case study. The present study adds to the growing body of research in the field of CALL that indicates the benefits of working with both MOOCs and LMOOCs for L2 learning purposes, as
discussed in Section 2.3. What is more, it was fascinating to fill gaps in knowledge by identifying and highlighting other aspects of language, such as register, syntax, pronunciation, sociocultural knowledge, and the acknowledgment of linguistic diversity, which exceeded what pre-existing literature had identified as likely areas of focus when learning a target language in a MOOC.

Enquiring about the linguistic and sociocultural interests of learners in MOOCs can benefit future learners by showing them the advantages that these online courses can offer to them. Moreover, if they are focusing on similar aspects of language as the ones covered by participants, this study can inform them about the factors that influenced participants' decisions to study a specific aspect of the target language and the activities that helped them do so. Future learners can then decide what aspect of language they want to develop, what resources befit their language and cultural interests and how they can harness MOOCs for personal language learning purposes.

Other main factors that shaped the language focus of participants were the content of the face-to-face courses and the in-class support offered during the online activity with MOOCs, which differed between the two case studies. The classroom syllabus influenced participants' attention to specific aspects of the target language, such as verb tenses and register. Likewise, the in-class teacher role (of support and guidance to participants) was crucial, especially in Case Study 2. The classroom teachers in Case Study 1 did not want to intervene in the MOOC-based learning experience of their students whereas the classroom teacher in Case Study 2 was more present and attentive to the online learning activity of her students. She covered the topics of register and pronunciation during her lessons and guided her students on how they could identify and practise both aspects of language using their chosen MOOCs.

This contextual difference is one of the more significant findings to emerge from this study. The degree of involvement of in-class teachers played a vital role as participants engaged in learning a foreign language beyond the classroom. These findings assist in our understanding of the role of classroom teachers during the transition from formal learning to MOOC-based learning. In future pedagogical contexts, where MOOCs are used as an adjunct to classroom-based language courses, teachers should ideally see their role as being similar to that adopted by the teacher in Case Study 2. The classroom teacher or mentor is concerned with guiding students through their online learning activity, starting from the selection of the MOOCs that fit the linguistic (or cultural) purposes of students most closely, followed by constant support for how they can expand their classroom learning using the audio-visual material included in their online courses. Therefore, the insights gained from this study can be of assistance to language teachers
with future MOOC use in mind, who want to understand their new role as supportive mentors who guide learners in their transition from formal to non-formal learning.

Lastly, these findings are relevant for the design of upcoming LMOOCs. The pedagogy of online language teaching underlying these courses needs to consider new tools and resources to effectively address the diverse interests of adult learners when studying a target language. First, participants reported a constant search for pronunciation practice and speaking interaction. MOOC providers should improve the technological infrastructure of MOOC platforms to enable the incorporation of tools that are targeted at developing and enhancing the pronunciation of learners in the target language. A similar approach should be considered to create spaces for synchronous interaction at scale. Secondly, participants in Case Study 1 noticed the different varieties of Spanish used in Latin America and Spain; participants in Case Study 2 also encountered various English accents while working with the online course material. MOOCs can provide rich and authentic multimedia resources that acknowledge and explain the existence of linguistic diversity within the world. These can sustain the mediating role of future LMOOCs, in respect of both language and sociocultural information. Finally, the researcher expects to witness an increase in the production of MOOCs in many languages and disciplines. This growth will make MOOC-based learning available to learners worldwide, with different language proficiency levels, who may also be interested in distinguishing among academic, professional, and colloquial registers in order to use the target language in specific contexts.

Overall, the findings discussed here show the reality of moving from formal learning to non-formal learning environments. They depict what adult language learners decided to focus on during four weeks of online activity with MOOCs. Participants continued working on familiar grammar rules and language skills, explored new concepts and skills, expanded classroom learning and began to apply what they had learnt to other learning contexts. This study strengthens the idea that MOOC-based learning can be of benefit to lifelong learners who aim to develop and practise their target language outside the classroom. Likewise, the integration of MOOCs into classroom-based learning can be of benefit to the curriculum and to teachers who seek to help learners transition from formal learning to non-formal learning. Lastly, this approach will prove useful in expanding our understanding of how we can harness MOOCs as digital learning spaces for learners to expand their language learning outside the classroom and begin to assume an active role in that process. Voices such as those of the participants recorded in this thesis need to be heard and considered when we are thinking of designing future experiences in MOOC-based learning.
7.1.2 RQ2: What kinds of goal do adult language learners set for themselves in MOOCs that they select as part of their classroom-based language course?

The information generated in this thesis to address research question two not only shows the goal setting behaviour of 19 adult language learners, but also reflects the diversity of learners' goals in MOOCs. To the best of the researcher's knowledge, no previous case studies have examined the types of goal that adult learners formulate for themselves when they engage with a MOOC offered in their target language, for personal or professional development. This is also the first CALL study on goal setting in MOOCs by an internationally representative cohort of adult language learners in the UK and Italy. In this sense, the present study has provided evidence enabling me to unravel the development of personal learning goals in MOOCs, as discussed next.

When devising the design of the study, as a researcher, I thought of following the same methodological steps undertaken by previous researchers investigating goal setting in MOOCs. In their work, 'personal' learning goals were conceptualised purely in terms of how they were framed in the goal-setting items of surveys administered to MOOC learners before and after their online learning activity. Survey results from such studies have usually indicated the levels of self-regulation of learners and whether they set performance goals targeting the completion of a MOOC or earning the course certificate. Having this in mind, researching the goal-setting behaviour of participants in this study shifted from confirming whether adult language learners self-regulate their learning to examining how the self-regulatory process of goal setting unfolds during this online activity. By adopting this rather different perspective, the author of this empirical study offers a new understanding of how self-regulation, particularly the setting of personal learning goals, develops over time.

The administration of weekly monitoring surveys supported by MOOC screenshots, an open-ended questionnaire and a second semi-structured interview, helped the researcher to trace the goal-setting behaviour of participants in Case Study 1 and Case Study 2 during four weeks of MOOC-based learning. Most participants from both case studies did not have clear outcome expectations at the start of their online learning. They initially opted for external or complying goals, which aimed at meeting the targets specified by MOOC authors, platform providers or even the in-class teacher. These goals were usually associated with watching all the video lectures, completing the quizzes and activities, and eventually finishing the MOOC and gaining a certificate, which are deemed to be the primary goals of successful MOOC-based learning, as identified in the literature review (Section 2.2.2). A lack of specific outcome expectations combined with the pursuit of external goals show how adult learners implicitly leave
the regulation of their learning in the hands of others rather than setting their own goals at the outset of their online learning.

Nevertheless, participants in both case studies gradually shifted from pursuing goals of external origin to self-set goals during their engagement with their chosen online courses. They used the online course material as a basis for formulating overarching personal goals that suited their distinct learning purposes. Participants in Case Study 1 adopted goals that aimed at developing receptive language skills, increasing vocabulary, and revising linguistic knowledge in their LMOOCs. Conversely, participants in Case Study 2 pursued goals geared toward the comprehension of a specific topic related to their disciplines and the mastery of academic register, specialised vocabulary, and communication skills in their content-based MOOCs. Apart from revealing that learners combined language-related goals with content-based goals, the findings of this study emphasise the idea that the self-regulatory process of goal setting in adult learners is not a fixed trait. The goal-setting behaviour of participants developed over time, thereby expanding their repertoire of personal learning goals.

Adult language learners in this study reported four types of goals they set for themselves during their MOOC-based learning. These included mastery (or learning) goals that dealt with developing a specific aspect of the target language (identified in response to research question one) or learning information about the subject matter covered in the MOOC of their choice. Another goal type mainly identified in Case Study 1 was reinforcement goals which covered the revision of aspects of the language previously known by the learners, especially grammar topics that had been taught in the classroom. A third type was ability goals which focused on demonstrating or validating learners’ target language competencies regarding grammatical knowledge, the use of specialised vocabulary, academic register, and receptive and productive skills. The last type, also known as process goals, involved the practice of specific techniques to enable the pursuit of mastery, reinforcement, or ability goals. These techniques included, for instance, listening to the video lessons with or without the transcript to enhance listening comprehension skills.

In response to research question two, the researcher identified and classified five types of goals (including complying goals) that participants in this study reported during their four-week engagement with MOOCs, which they selected as part of their classroom-based language course. Given the main findings outlined here, a summary of the implications raised by this research question is required. The present study has emphasised the importance of enquiring about goal setting as a form of self-regulation that learners should be equipped with to have a satisfactory learning experience and eventually succeed in MOOCs. The findings have made clear that goal
setting, which may appear for some practitioners as a straightforward act, is in reality a complex, nuanced and powerful process of self-regulated learning.

Contrary to what Zimmerman and Moylan (2009) appear to suggest in their cyclical model of self-regulation (Figure 1), goal setting was not a self-initiated process for most participants in this study, meaning that they did not take the initiative to self-regulate their learning and set language-related goals at the beginning of their MOOC-based learning. This self-regulatory process evolved over four weeks, as became clear under observation and following the exhaustive qualitative analysis of the data reviewed in this thesis. For example, once participants in Case Study 1 started to set their own goals, the researcher observed a tendency towards goals that oscillated between mastery and reinforcement, whereas the goals of participants in Case Study 2 oscillated between mastery and ability. This set of personal learning intentions also included process goals, which were influenced by MOOC authors and in-class teachers. An absence of performance goals was also noted during the analysis. This detailed goal-setting behaviour of adult language learners in online courses had not been studied before, making this research a novel contribution to the fields of self-regulated learning, goal setting theory, MOOC-based learning, and online language education.

The literature review conducted at the outset of this research showed a significant gap in knowledge about the nature of the goals adult language learners develop during MOOC study. Previous research has focused on goals espoused in classroom settings, by secondary-level participants studying a range of subjects other than foreign languages. Studies of goal setting in MOOCs have rarely included learners in middle and late adulthood. By contrast, this study has given learners from these demographic groups a voice to express their personal educational intentions, especially when learning a target language for leisure or professional purposes in these online courses.

Additionally, the evidence discussed in this thesis can help L2 educators and course designers form a better understanding of the types of goal that draw the attention of learners and influence the selection of activities they decide to undertake when embarking in the world of MOOCs. For example, this study has highlighted the existence of reinforcement goals and how engaging activities and quizzes are useful in pursuing those goals, which had not been considered in previous work conducted on goal setting theory. Likewise, the work on process goals is commonly known in the field of sports psychology. These are now part of the field of CALL thanks to this study, which has filled a gap in knowledge regarding the techniques that adult learners of varying ages rehearse to pursue other language-related goals in content-based MOOCs and LMOOCs. New insight is also provided into learners’ ability goals, which are adopted to
demonstrate their linguistic competencies to themselves, rather than to others. The five types of goal reported here surpass the traditional dichotomy between learning and performance goals, thereby contributing to a richer taxonomy of personal learning goals within the context of L2 learning.

The research has focused on the goal-setting behaviour of learners who are engaging with MOOCs. Nonetheless, the findings also provide insights into the potential roles of in-class teachers who want to help learners initiate and develop a self-regulatory process of goal setting in both classroom learning and MOOC-based learning. Teachers offering future goal-setting training in classroom settings should encourage learners to formulate and pursue SMART goals (Doran, 1981) within and beyond the classroom. MOOCs have shown themselves to offer a helpful scenario where learners can put into practice such self-regulating behaviour in response to the shift in teacher-learner dynamics identified in those online courses. Therefore, teachers should be aware that the incorporation of these online courses into classroom-based learning, with the aim of promoting goal-setting practices, entails new teacher-student relationships.

As observed in this study, the onus was on the learners to select their own MOOCs and decide what they wanted to study. The active participation of learners in their MOOC-based learning presupposes a novel understanding of the role of the in-class teacher. The latter moves from being a 'sage on the stage' to a facilitator guiding learners in their journey to become self-regulated learners through the formulation of clear outcome expectations (i.e., specific learning goals) during their language learning process. A particular finding that should be acknowledged by teachers embarking on this new role is the tendency of participants to set mastery (or learning) goals rather than performance goals in MOOCs. Arguing along similar lines (Seijts, Latham & Woodwarm, 2012), this study suggests that mastery (or learning) goals are a priority when learners deal with new and complex tasks. Hence, teachers should help learners specify, monitor, and attain mastery goals instead of promoting only the pursuit of performance goals, especially when the incorporation of MOOCs in face-to-face lessons becomes part of the goal-setting training agenda for the first time.

This study also confirms that even when examining the self-regulating behaviour of learners, the power of in-class teachers should not be underestimated, particularly in relation to goal setting. For example, the findings demonstrated how process goals (set by participants to challenge and develop their own linguistic competencies) were triggered by the advice given by the teacher in Case Study 2. A closer look at the exemplars of process goals outlined in this thesis suggests that what teachers say to learners goes a long way to shaping what learners do to work towards their language-related goals in their MOOCs. Although there is a degree of intentionality
on the part of the learners who opt to combine external suggestions and techniques of their own when pursuing learning goals, the support of the teacher is key to facilitating this self-regulatory process.

Accordingly, teachers who aim at developing a self-regulatory process of goal setting among their learners should help them narrow their language focus and concentrate their learning efforts on the clear formulation and achievement of personal learning goals. Teachers willing to assume this new role during their lessons should be prepared to:

✓ explain what a goal is (as discussed in Section 2.1.2, p. 20)
✓ present the distinct types of goal that learners can pursue (as shown in Section 5.3, p. 141)
✓ illustrate how these goals can be scaffolded either by teachers, peers, or even MOOC elements (as reviewed in Section 6)
✓ celebrate learners’ achievements to prompt future cycles of self-regulated learning (as shown in Figure 1)

Finally, if teachers want to supplement this training with MOOC-based learning, they should ensure that learners have prior domain knowledge about the topics covered in their chosen MOOCs to facilitate learner engagement with the metacognitive process of goal setting. In line with researchers (Moos, 2018; Zimmerman, 2000), learners with high prior knowledge have the competence to engage in metacognitive activities, especially when confronting interesting tasks. Altogether, this research has raised important questions about the role of classroom teachers in promoting the development of a goal-setting process to help learners master their learning and effectively access and profit fully from learning opportunities available beyond the classroom.

Within the context of this study, adult L2 learners left the regulation of their learning in the hands of MOOC educators and in-class teachers at the start of their online activity. Yet, this study shows that these learners began to set different types of goal for themselves to improve, consolidate and validate their language competencies. What is more, they formulated and put into practice techniques to accomplish what they intended to do during their four weeks of MOOC-based learning. In closing, the researcher found it fascinating to create a taxonomy of personal learning goals set by adult language learners in MOOCs. These promising results advance the research agenda of CALL and its special interest group around LMOOCs and the integration of these online courses into classroom-based language courses.
7.1.3 RQ3: Which elements of MOOCs support learners' goal-setting behaviour?

Research question three deals with the elements of MOOCs that influence goal setting, a self-regulatory process discussed throughout this thesis. Before identifying those elements, the researcher undertook a comprehensive analysis of the kind of goal-setting support offered in those online courses, to complement the information generated about the goal-setting behaviour of 19 adult language learners in this multiple-case study. Then, she reviewed the terminology used by course authors and platform providers to express educational intention in MOOCs. Lastly, the flexibility offered by MOOCs, their multimedia resources (especially audio-visual material and transcripts/subtitles), and their structured learning design were identified as the salient MOOC elements that helped participants in both case studies initiate and sustain a self-regulatory process. What follows is a summary of the implications raised by this last question for future research on - and the design of - MOOCs.

Looking into the support offered for goal setting in MOOCs required direct engagement with selected online courses on the part of the researcher. She registered for all the online courses chosen by the participants, focusing especially on the ones selected by participants in Case Study 1, because those represented all six platforms involved in this study. Methodologically speaking, the researcher used reflexive photography to generate information about the potential scaffolding offered by platform providers and MOOC authors to help learners set their own goals. Capturing specific sections of the online courses was therefore not only a task for the participants. It was also carried out by the researcher, who examined goal-related sections of the MOOCs to respond to this last research question.

Using reflexive photography for two different purposes testifies to the dual role assumed by the researcher in this study. First, as an outsider who gains an insight into participants' experiences through their MOOC screenshots. Secondly, as an insider who dives into the online learning context to obtain a closer view and secure evidence to complement participants' accounts of their MOOC-based learning. A similar dual role is advised for future researchers wishing to depict an accurate version of elements that support learners' goal-setting behaviour as well as other self-regulatory processes in MOOCs.

One of the key findings identified in response to research question three relates to the lack of opportunities participants had to state their personal learning goals in their chosen MOOCs. Support for the self-regulatory process is actually very rare in these online courses. This minimises the chances of developing a process of goal setting that can lead learners to a more satisfactory and enjoyable online learning experience. If MOOCs are to favour those who wish to learn independently, this cannot be confined to those who have already formed the necessary
study habits, while simply leaving other novice learners to their own devices. Participants in this study did not naturally establish clear goals at the outset of their MOOC-based learning. Therefore, MOOC authors and platform providers should think of and create various means that seek to scaffold goal setting in their online courses to help both novice and expert learners master their learning effectively.

These findings have significant implications for the understanding of how personalised support can be integrated into a MOOC. Catering for the goals of a very large number of individuals is challenging for MOOC authors and platform providers. However, the pedagogic aim of promoting SMART goals can be strengthened by foregrounding goal setting as a metacognitive skill that successful learners employ to initiate and motivate their learning in MOOCs. New users of MOOCs bring with them a system of beliefs about how education works. For example, they may think that successful learning involves listening to what teachers say and following the goals teachers have set for them. This kind of belief leaves no room for learners to organise their own learning priorities and specify the outcomes they wish to accomplish at a particular time. It becomes necessary to introduce learners to a different model of education to avoid the risk of transferring traditional teacher-led practices to learner-centred environments.

Accordingly, the new role of MOOC authors, mentors and platform providers is to persuade learners of the importance of goal setting and how it is connected to successful online learning, as reviewed in the literature. They should convince learners that setting goals is motivating, and it helps them focus on their learning, which becomes authentic, meaningful, and relevant when they pursue goals that are personal to them or adopt those that resonate with their interests. Assuming this new role becomes more significant within post-pandemic scenarios, since many learners are transitioning from classroom-based learning to distance learning. Given the benefit of this initial introduction to goal setting and its links to successful self-regulating behaviour in MOOCs, learners can make the leap from traditional formal learning to supportive non-formal learning.

Moreover, MOOC learners should receive clear guidance on how to formulate specific, meaningful, and realistic goals at early stages of their online activity. Any criticism raised in this thesis regarding the model of self-regulation, developed by Zimmerman and Moylan (2009), is connected to the lack of initiative shown by learners in setting their own goals at the start of a task. From the cyclical model perspective, each self-regulatory process is self-initiated, i.e., learners take the lead to unpack a task, formulate goals, define a strategic plan, and use relevant strategies to perform well and assess their progress towards goal achievement (Figure 1). Nevertheless, the findings discussed in this thesis do not bear out the ideal self-regulating
behaviour of learners illustrated in the model because adult language learners in this study did not define goals at the beginning of their online learning. This bespeaks the need for a role model who guides and facilitates the setting of personal learning goals in MOOCs. This role model may be developed in the form of a supportive tool, a chatbot, or intellectually stimulating content that prompts learners to think of their specific outcomes to be accomplished during their MOOC-based learning.

As evidenced in the literature review, goal setting can be learnt. To enable this, MOOC authors and platform providers should provide models and examples of effective goals, to assist learners who have not encountered the opportunity to set their own goals before. They should also help learners define and monitor their SMART goals, since this self-regulatory process can be developed over time. Hence the need for ongoing goal setting and goal checking reminders to be embedded throughout future MOOCs.

One way of implementing goal-setting support in MOOCs is through the creation of friendly spaces for learners to share their goals with others. These online spaces can take the form of study rooms embedded in the online course. Learners can be asked to type their SMART goals before entering a study room. In those online study communities, a chatbot may ask learners to post their goal in a specific section. Once the goal is posted, the chatbot can set a timer to remind learners about their goals and keep them on track of their learning efforts to achieve those personal learning outcomes. This strategy can serve a two-fold purpose: developing a goal-setting behaviour among MOOC learners and generating new opportunities for goal sharing, thereby fostering an active study community at scale.

The findings suggest that learners should be supported in playing an active role from the start. Although a few platform providers embedded prompts in early stages that asked learners to select pre-defined goals, they were not asked to formulate their personal learning goals during their MOOC-based activity. Supporting personally meaningful goals should go beyond asking learners to choose study schedules for completing a MOOC, as reviewed in Section 6.1.1. Encouraging learners to develop self-set goals can take the form of a simple prompt that asks learners "What is/was your goal in relation to this specific task/activity, or while working on the MOOC today/this week?" It is essential to provide a structure that helps learners specify their learning target. This kind of scaffolding can make learners feel less overwhelmed or confused by what they have to do when they start learning in a MOOC, especially when it is their first time dealing with an online course. In short, this first set of findings has shown that acknowledging and scaffolding personal learning goals is still very much needed in these online courses. Knowing that
goals guide and stimulate learners, MOOC educators and platform providers need to help learners give meaning, direction, and purpose to their online learning.

Another finding with relevance to research question three concerns the terminological confusion around the goal-related expressions used to state teaching and learning intentions in the overview or introductory sections of MOOCs. This appears to be connected with a bigger problem that occurs during the creation of these online courses. As discussed in Section 6.4, MOOC authors rarely define the learning objectives at the outset of the learning design process neither do they place the learners in the centre of the process. The findings of this study were resonant with this observation concerning the practice of educators when designing MOOCs. Corroborating the findings of Papathoma (2019), this study shows that prioritising the selection of course content over the identification of learning objectives, as a first step in the design of an online course, is compounded by the indiscriminate use of goal-related terms. This suggests significant terminological (and conceptual) confusion within online learning at scale.

This second set of findings raises questions about how MOOC learning designers can avoid following this problematic practice, which has already been identified in the curricula design of Higher Education programmes (Allan, 1996). This study suggests a need for educators, instructional designers, and platform providers to be able to differentiate between the various meanings of goal-related expressions for stating educational intention. Goal-setting training is necessary to understand and avoid confusion among these distinct concepts, such as course aims, learning objectives, learning outcomes and personal learning goals, as was attempted in Table 15. Undertaking such training should be part of the process of designing online courses responsibly.

MOOC educators do not necessarily have to suggest overcomplicated aims, objectives, and outcomes, since those may serve as models for thousands of learners when setting their personal learning goals. Enumerating relevant goals as part of the initial design phase of a MOOC can facilitate the creation of online materials that are better aligned with those goals and eventually contribute towards the pursuit of both institutional and personal learning. Accordingly, it is imperative to dispel terminological misunderstanding to effectively design online courses that acknowledge the importance of formulating explicit goals that are easy to understand by learners, who should be at the centre of the learning design process.

The in-depth analysis of various online courses from six different platforms has extended our knowledge of the support currently offered in these courses to enable learners to work towards their personal goals. This is the first CALL study so far documenting the main elements of MOOCs that contribute towards the pursuit of personal learning goals. Apart from highlighting the minimum goal-setting support required for this and pointing out the terminological confusion
around goal-related expressions employed in the early sections of MOOCs, the researcher reported the following three elements that supported participants' goal-setting behaviour in their chosen online courses.

The last set of findings in relation to this final research question concerns the value of offering high-quality multimedia resources that are likely to lead learners to consider using videos, quizzes, specialised articles, forums, and transcripts to support their mastery, reinforcement, and ability goals. The findings also suggest the importance of offering engaging material that gradually increases in difficulty to contribute to the development of mastery and ability goals.

Secondly, this set of findings connects the flexible nature of MOOCs with the self-regulatory process of goal setting. As discussed in the literature, learners can work with MOOCs at their own pace, which facilitates the adoption of a more active role in their online learning. This flexibility offered by a MOOC enables learners to think of and explore various techniques and strategies they can rehearse to effectively master their learning. This second element especially contributes to the development of process goals and subsequently the pursuit of mastery, reinforcement, and ability goals.

The third element providing support for self-regulation is the structured learning design of MOOCs. Offering well-organised and readable learning materials helps learners direct their learning and establish priorities. MOOC authors and platform providers who carefully plan effective ways of presenting the course content support learners' goal-setting behaviour. They help learners identify a clear path they can follow to direct their learning efforts and select the material they consider useful to pursue their personal learning goals. Providing organised and sequential learning material also reduces negative feelings among participants, who may feel lost when planning their online learning. This kind of structured learning increases the chances of learners becoming more active participants in their own learning process, which is the ultimate characteristic of self-regulated learners.

The pedagogy of online teaching needs to consider the elements of MOOCs that are likely to benefit the development of a goal-setting process for thousands of learners. The support offered by MOOC authors and platform providers to help learners define, monitor, and attain their personal learning goals is currently minimal. Yet, the role of existing MOOC elements in terms of shaping the goal-setting behaviour of learners should not be underestimated. Continuous effort should be invested in enhancing the three elements of MOOCs outlined above, to contribute towards a better version of goal-setting support at scale. For example, instructional designers could embed questions about learners' personal goals at the start of a video lesson.
suggestion becomes even more relevant when knowing that any learning design decision influences how learners engage in different online courses (Ferguson et al., 2015; Nguyen et al., 2017). Of course, it is a challenge to embed goal-setting support at large scale. Yet, any small change made in the design of MOOCs may have a large impact on the future of online learning. This may also influence subsequent research into goal-setting support and its impact on learners’ engagement and success in these online courses.

In Voltaire’s words: with great power comes great responsibility. Investing in goal-setting support in MOOCs also entails big responsibilities in terms of the learning design, especially when dealing with the kind of recent circumstances that have witnessed an increase of newly registered users of these online courses (Shah, 2020). This kind of support may start by establishing a clear definition and systematic presentation of goal-related concepts and expressions when writing an online course. Thinking of ways to promote and support personal learning goals in MOOCs also requires high levels of creativity and willingness to consider and accept other people’s ideas. Thus, the design of supporting tools and online materials that facilitate goal setting involves a team of open-minded and empathetic educators, mentors, course authors, learning designers and platform providers who can cater for the goals of a very large number of learners. A commitment to high-quality online learning and personalised support lies in their hands.

Challenging times in education demand new approaches that support learning at scale. The COVID-19 pandemic has reminded us that learning can take place in different settings. It has highlighted the importance of knowing how to cope with distance learning by bringing about thought-provoking discussions on learning how to learn more effectively in new environments. These may include virtual or blended learning scenarios with a partial classroom setting. Unforeseen circumstances, such as the ones we lived through during 2020, require high levels of innovation on the part of educators, instructional designers, and Ed tech researchers to explore and implement new approaches that support modern ways of learning. All these agents of change should remember that any small adaptation made to support learners may have a large impact on the future of massive online learning.

Altogether, this study has examined the language focus and self-regulatory process of goal setting in the field of online language education in MOOCs. 19 adult language learners who participated in this research focused on various aspects of language, as summarised in Section 7.1.1. They all developed goal-setting behaviours and reported five kinds of goal during their online learning activity, as discussed in Section 7.1.2. Although little support was offered to learners in MOOCs to engage in a goal-setting behaviour, a deeper analysis revealed three elements of these online courses that influenced this self-regulatory process adopted by
participants. The researcher has also provided challenging insights into the field of MOOC learning design, as outlined in Section 7.1.3. Taken together, the findings discussed above aim to encourage further efforts directed at the investigation of personal learning goals. The implications raised by all three research questions also seek to promote an understanding of the new roles involved when transitioning from formal to non-formal learning. Lastly, this expansive account of the implications covered in response to research question three aims to improve online learning design and the development of tools, strategies and elements that support personal learning goals within the context of MOOCs and LMOOCs. Research on this self-regulatory process remains promising within and beyond MOOC-based learning.

7.2 Contributions

This study contributes to the areas of self-regulated learning and online language education from three aspects: theoretical, methodological, and practical.

7.2.1 Theoretical contribution 1: Identification of the main aspects of language dealt with during MOOC-based learning

This study addressed a specific gap in the literature relating to practices that integrate MOOCs into language education:

- A dearth of understanding of the aspects of language that adult learners decide to focus on when working independently with a MOOC as part of a classroom-based language course.

Previous research, which integrated MOOCs into the curriculum of face-to-face language courses, mainly studied the benefits of using the audio-visual content of MOOCs for developing collaborative learning and digital skills. Studies have also used this approach to enhance the motivation and language proficiency level of learners in university, high school and language institutions (Beaven, 2013; Matthies Baraibar, 2015; de Waard & Demeulenaere, 2017; Creelman & Löwe, 2019; Loizidou, 2021). English was the primary language studied by most of the participants in those studies, followed by French and German. Coursera and edX were also the leading providers of the online courses selected as part of those studies.

Most research to date has focused on the impact of MOOC-Class integration practices on the language learning process of young learners in academic settings that range from secondary to higher education. Matthies Baraibar (2015) conducted a study that used MOOCs with adult learners who were working towards a C1/B2 certificate in English at a public language institution. Yet, her study did not aim to examine the aspects of language her participants dealt with during
their MOOC-based learning. Instead, she enquired about the attitudes of participants towards MOOCs and how difficult it was for them "to complete a whole course working on their own" (p. 55). Apart from listening comprehension practice, she did not consider additional skills or topics learners would be focusing on when learning English in those online courses.

Accordingly, the contribution of the present study was to create a new understanding of an existing MOOC-Class integration practice but from a different educational context. The study provided evidence based on adult learners studying languages for leisure and professional purposes in a non-traditional setting, meaning they were not required to take a formal assessment to move on to other levels. Following LMOOCs and content-based MOOCs in various target languages (Spanish, Italian, French, and English) from different platforms (Coursera, edX, FutureLearn, FUN, iversity and UNED Abierta) enabled the researcher to gain detailed insights into the aspects of language adult learners explored or disregarded when learning online, on their own. For instance, it is claimed that language learners can use discussion forums to practise their writing skills when working with MOOCs (Sokolik, 2016). However, the findings of this study corroborate those of Mac Lochlainn et al. (2021), in showing that most adult learners were more engaged in practising their listening skills and were less keen to contribute to those forums, hence missing the opportunity to develop their online writing skills in the target language.

This study also highlighted the role of the in-class teacher and the content of the face-to-face course in shaping MOOC-based activity, since most learners preferred to focus on topics previously dealt with in class with their teacher. The former also shaped how some learners practised specific language competencies, including intonation, and reading skills. In sum, the findings arrived at in answer to RQ1 enlarged our knowledge regarding the benefits of using LMOOCs and content-based MOOCs for language education. More precisely, the findings established the aspects of language that adult learners practise and the ones they avoid in a MOOC, at least within the context of this multiple-case study. Lastly, the study acknowledged the importance of receiving guidance from the in-class teacher, as highlighted in the literature on integrating MOOCs into formal language education.

7.2.2 Theoretical contribution 2: A taxonomy of goal types set by language learners in MOOCs

The literature review covering research on goal setting in MOOCs pointed to a gap in knowledge about language learners’ goal-setting behaviour when learning on those online courses. In 2020, Gillespie (2020) asserted that MOOCs were among "the least published topics" in computer-assisted language learning (CALL) (p. 133). In that sense, RQ2 of this study sought to address the gap regarding the under-researched topic of MOOCs within the scope of CALL, specifically by:
• researching the kinds of goal adult language learners set during MOOC-based learning.

As discussed in Section 5.4, the findings of this study also add another layer of information to the research on goal setting by identifying other types of goals that move beyond the binary classification between learning and performance goals. Indeed, the study showed that language learners set goals for themselves that did not necessarily include performance goals, which mainly cover completing quizzes, watching all video lectures, and earning a certificate by the end of a MOOC. Participants in this multiple-case study reported other goals that dealt with revising linguistic knowledge, learning about non-linguistic topics, and demonstrating their language competencies to themselves, rather than to others.

Likewise, the findings reached in answering research question two showed that participants formulated process goals, meaning that they could practise a series of techniques to improve and demonstrate their language competencies in an online learning context. Despite some of the goals reported in this study being shaped by MOOC authors, platform providers and in-class teachers, language learners managed to set personal learning goals to chart a path for their learning in a MOOC. Altogether, these findings provided evidence which has led to a more nuanced understanding of the goal-setting behaviour of language learners in a MOOC, particularly by enabling a classification of goals that adult learners are very likely to formulate when engaging with LMOOCs and content-based MOOCs.

7.2.3 Theoretical contribution 3: A detailed understanding of the elements of MOOCs that support the goal-setting behaviour of language learners

The literature of educational intention within MOOCs usually examines factors connected to the learners that influence the pursuit of their personal learning goals in these online courses (Henderikx et al., 2019). However, the literature review revealed a gap in knowledge about the elements related to MOOCs that support the self-regulatory process of goal setting by learners in these online courses. The findings offered in response to research question three addressed this gap by:

• Revealing a list of elements related to LMOOCs and content-based MOOCs that scaffolded the goal-setting behaviour of language learners in this multiple-case study.

• Providing a detailed understanding of how those elements helped adult language learners in this study initiate and sustain their self-regulatory process of goal setting during MOOC-based learning.
The contribution to knowledge that emerged from answering RQ3 also raises awareness of a current issue: a lack of clear understanding concerning goal-related concepts and terms on the part of some MOOC authors and providers. As discussed in Section 6.4, the findings highlighted this terminological confusion evident in the multiple online courses reviewed within this study. Finally, these findings relating to RQ3 shed light on the limited space provided for learners to formulate their goals in both types of MOOCs and the lack of adequate scaffolding to enable learners to refine and pursue their personal goals. Other researchers have also called for more scaffolding to support goal setting within MOOCs (Kizilcec et al., 2017). Nonetheless, embedding that support is still needed to enhance learners' goal-setting behaviour and self-regulated learning in many LMOOCs and content-based MOOCs.

7.2.4 Methodological contribution

This thesis provided an example of a research design encompassing innovative practices and alternative methods that future studies should consider when conducting a multiple-case study involving learners working with digital technologies. The first methodological contribution this study made was related to the practice adopted for the recruitment of participants. Researchers are usually advised to communicate their studies to potential participants via an information sheet which "should give sufficient detail about the research study and the data collection from the potential participants so that they can make an informed choice as to whether or not to take part" (Potter, 2006, p. 213). Consent was gained and documented by combining that participant information sheet and a consent form, as Potter (2006) suggested. However, an additional multimedia tool enabled the researcher to recruit participants and familiarise them with the study before giving them the consent form and participant information sheet.

Since this was "person-based research" (Potter, 2006, p. 201), the researcher wanted to build a close rapport with the learners from the beginning of the study. Therefore, she created an animated explainer video using the software Powtoon. The video encouraged viewers to "join my research journey where we can learn together!" It succeeded in engaging language learners with the study by:

1. introducing the researcher and her interest in MOOCs and self-regulated learning,
2. presenting three points about MOOCs drawn from the literature,
3. indicating the research methods in plain English together with the minimum requirements for joining the study (e.g., a device with a Wi-Fi connection),
4. showing the opinions of previous participants who had worked with MOOCs in the pilot study, and finally
5. highlighting the benefits of taking part in the study.

Moreover, the researcher wanted to acknowledge the voice of learners, which has been "largely absent" in the literature of empirical MOOC research, even when focused on student-related topics (Veletsianos & Shepherdson, 2016, p. 214). Previous work on learners' self-regulated learning in MOOCs relied exclusively on learning analytics and/or online questionnaires (Kizilcec et al., 2017; Rohloff, Sauer, & Meinel, 2020). The present study did not primarily employ questionnaires that examine participants' learning intentions based on metrics, which inevitably end up "missing part of the picture of what actually happens in practice" (Beaven, 2015, p. 170). By using qualitative tools to generate data from the participant's voices before, during and after their MOOC-based learning, the study provided thorough, multifaceted insights into the complex yet fascinating self-regulatory process of goal setting.

One of the methods that is worth highlighting is the creative method of reflexive photography. This method is rarely used in language and MOOOC research. However, the researcher used it in this investigation to gain a clear representation of MOOC-based learning through the lens of participants. What is more, evidence gathered in the form of screenshots was incorporated in the oral presentations given by participants to the class at the end of the study. In case study research, it is advised to integrate real-world events as part of a "data collection plan" (Yin, 2018, p. 98). Including the screenshots as part of an in-class activity served as the basis for meaningful discussion among classmates. Participants shared their stories behind the images, drawing special attention to the elements within the MOOC that facilitated participants' self-regulating behaviour. Researchers in the field can embrace creativity in their future studies by using reflective photography as part of their research methods agenda.

Opting for examining in-depth qualitative evidence also contributed to unravelling a more nuanced classification of goals apart from the two commonly established short-term and long-term goals. These conventional goals are included in questionnaires that measure goal setting and other self-regulatory processes (Barnard et al., 2009; Pintrich et al., 1991). Likewise, the researcher triangulated and corroborated data, which was generated from learners' weekly reflections, screenshots, interviews, and one open-ended questionnaire, to build a robust understanding of the findings. Altogether, this study drew attention to the value of incorporating qualitative methods, such as semi-structured interviews, weekly monitoring surveys, open-ended questionnaires, and reflexive photography, to investigate language focus and goal-setting behaviour in MOOCs.
7.2.5 Practical contributions

In addition to contributing to current methodologies for qualitative research on MOOCs and self-regulated language learning, this research also makes several practical contributions. The first one relates to the practice adopted during the second stage of the research: MOOC selection. Participants in Case Study 1 outlined the feeling of being overwhelmed by the number of MOOCs available on different platforms. This issue is raised by Chapman (2021), who states that "MOOCs, and to some extent LMOOCs, are oversupplied and so the prospect of a learner selecting the most suitable resources in an informed way is limited" (p. 4). Hence, the researcher narrowed the search for community-based language learners by classifying the online courses available at the start of the study per language proficiency level, platform provider and start date (Appendix A-Appendix B-Appendix C). Participants found this approach helpful, as one of them indicated:

*the choice was overwhelming. It was actually quite scary, and so it is a confidence thing to do with the older generation (laughs), which would need to be tackle. So, when you narrowed it down to these are the possible Italian courses that may suit you, then I could access it. But that was very important that step was taken for me. So, I am very glad that you were able to narrow it down for us* (INV2-Irene).

Additionally, in-class teachers in both case studies allocated time within the lesson to explain how to access and register for the online courses. This short induction was found helpful in previous studies (de Waard & Demeulemaere, 2017; Matthies Baraibar, 2015). The researcher explained the enrolment process in different platforms to participants in Case Study 1, while the in-class teacher who had prior experience with MOOCs gave instructions to participants in Case Study 2. The researcher also created a PDF document titled "guidelines for signing up for your MOOC", sent to all participants in both case studies (Appendix D). The in-class teacher in Case Study 2 also uploaded the document to the course programme on Canvas, the learning management platform where learners could access the content and material covered in the face-to-face course.

This study also provided adult learners with a unique language learning experience that transcended the four walls of a traditional classroom. One of the participants argued: "*I decided to join this project because I am really quite curious about this kind of learning because it's quite different from the way of learning I have met until now.*" (INV1-Edwin). Engaging with MOOCs for four weeks introduced participants to new possibilities of strengthening their language learning. As discussed in Chapters 4 and 5, participants had the opportunity to be exposed to other varieties of the target language which differed from the standard one presented in their
classroom. In that sense, MOOCs acted as a dynamic bridge that connected the world of the classroom with the real world where different varieties of a language co-exist.

Lastly, this study managed to attract the attention of educators and learners to consider MOOCs as another source of teaching, learning and practice of the target language as well as an opportunity where learners can become masters of their learning process, starting with the setting of their own goals. The four in-class teachers and two gatekeepers in this study opened the doors of their classrooms and institutions to this online practice. Even one lecturer in English for Academic Purposes (EAP) external to this study said: "I've just watched your presentation and it was very informative. I'll definitely implement independent learning with MOOCs into the course I'm leading" (Lecturer in EAP from a UK-based university. personal e-mail communication to the researcher 06/06/2019). Regarding language learners, one participant concluded: "I was very happy to have a go and to try it because it is something I haven't really considered, I wasn't really aware of, as I said to you earlier. And it was nice with your kind of guidance to try something new" (INV2-Irene). In total, 15 out of 19 participants stated they would like to continue learning with MOOCs in the future.

7.2.6 Summary of Section 7.2

This thesis highlights the issue that MOOCs remain under-researched, especially in relation to language learning (Gillespie, 2020; Sallam et al., 2020) and the area of self-regulated learning (Alonso-Mencía et al., 2020). The evidence obtained and analysed in this study provided a more profound understanding of the self-regulated learning process of adult language learners during MOOC-based learning. The findings shed light on the types of goals language learners set for themselves when learning online and the elements of MOOCs that supported their goal-setting behaviour, at least in the context of this multiple-case study.

In addition to contributing to current knowledge about self-regulated language learning and goal setting in MOOCs, this research also made several methodological and practical contributions. The study emphasised the benefits of adopting qualitative methods when conducting a multiple-case study involving language learners working with MOOCs. Similarly, the combination of original multimedia resources and practical support facilitated the start of MOOC-based learning for language learners within this multiple-case study. The adoption of similar practices should be considered when integrating MOOCs into the classroom-based learning activity of adult language learners. Overall, the study worked towards increasing the attention of research-related practices on MOOCs, particularly in online language education.
7.3 Recommendations

This study concludes with guidance and recommendations for:

1. MOOC educators, course designers and platform providers looking for better ways to support learners online,

2. learners who want to assume a responsible role in their learning by adopting goal-directed behaviour to contribute to a practical and more satisfactory learning experience in MOOCs, and finally,

3. teachers planning to integrate MOOCs into their lessons and promote more active learning as part of a post-pandemic reality.

7.3.1 For practitioners

Findings showed that most adult learners who took part in this study initially relied on goals set by MOOC educators or platform providers. The study acknowledged the influence of both external agents on the forethought process of participants' goal setting. Nevertheless, educators working with MOOCs often do not acknowledge "the learning objectives for their learners and the ways they would support learners in achieving those objectives" (Papathoma, 2019, p. 183). Similarly, a previous study suggests that MOOC mentors, in particular, may have little experience of pedagogy and the skills required for teaching and learning in a massive open environment (Urrutia et al., 2016). Hence, the following guidelines could be of particular interest to educators, mentors, course designers and platform providers who want to be equipped with the necessary pedagogical skills to scaffold learners' goal-setting processes in these online courses.

- Engage learners in a goal-setting process at an early stage of their online study, thereby activating the forethought phase of learners' self-regulated learning cycle (Zimmerman & Moylan, 2009). For instance, learners may be asked to look at the learning outcomes displayed at the start of a MOOC and then see which resonate with them the most and set their own goals based on those. This action can also help learners have a clear idea of their outcome expectations from the beginning. Likewise, practitioners may outline examples of goals formulated by previous learners and prompt new learners to set their own. LMOOC authors might even include goal setting as part of the language learning process by asking learners to listen to goals in the target language, translate them, and finally write their personal learning goals.
• Prompt learners to formulate clear personal learning goals during their MOOC learning experience, but avoid narrowing these into fixed options, such as course completion, earning a certificate or watching all video lectures.

• Provide adequate space and support for the formulation and pursuit of learners' personal goals throughout the MOOC. Even course surveys that ask learners about their goals should be accompanied by supporting material that consistently guides learners towards goal achievement during their MOOC-based learning.

• Write specific, measurable, attainable, relevant, and time-bound goals (SMART) during the course design process. Although learners' personal goals may or may not resonate with those goals (Henderikx et al., 2019), offer these as good examples that learners may follow when writing their own goals.

• The researcher noted that most of the MOOCs selected by participants did not present the course aims or learning objectives in specific sections within the online course. Mager (1962) emphasises the importance of clearly distinguishing between course description and an objective when preparing courses. Thus, educators and course designers should ensure that an exclusive section for introducing course goals should appear before and after enrolment on an introductory page of the online course.

• A change of criteria for measuring success in MOOCs should be adopted to emphasise the importance of personalised learning goals. Apart from tracking the number of certificates earned by the end of an online course, consider including the degree of achievement of personal learning goals when assessing MOOC success and dropout (Henderikx et al., 2017). In other words, prioritise learners' achievement of personal goals over course completion when assessing the success of an open online course.

• As Brown (1990) states, "Those who dare to teach must never cease to learn. Teachers who subscribe to these postulates will produce significantly greater learning outcomes for their students" (p. 306). Therefore, it is suggested that practitioners undertake relevant training focused on understanding various goal-related concepts and terms, writing SMART goals, and helping learners attain their own. Not acknowledging the importance of stating SMART goals during the course design process may represent another issue for MOOC educators when attempting to support learners in achieving those goals, as Papathoma (2019) highlighted.

• Emphasise and include more variety regarding aspects of the target language in LMOOCs. Learners in this study mainly set goals based on what was available to them in their online
courses. Listening comprehension, vocabulary and grammar activities were the salient aspects of language covered in the LMOOCs available at the start of the study. However, learning a language goes beyond learning fixed structures, remembering long lists of words, or recalling the exact words and order in which information was given in a conversation. Hence, during the course design process, LMOOC authors should consider including more compelling content and intellectually stimulating material (adapted to the language proficiency level of learners) about sociocultural topics, language variety, writing tasks, and speech recognition activities to practise pronunciation and intonation in the target language. In line with researchers (Appel & Pujolà, 2021; Kukulska-Hulme et al., in press), MOOC providers should also enhance the technological advancement of their platforms so that speaking interaction tasks can be implemented at scale.

- If the availability of LMOOCs that suit the language proficiency level of learners is scarce, learners should be given an option within their chosen online course to increase the range of difficulty of activities if they find the content of the LMOOC easy or not challenging enough. This embedded feature may facilitate the development of ability goals for learners to challenge themselves and demonstrate their language competencies at higher levels of difficulty within an online course.

Learners in this study reported a range of personal learning goals during their MOOC-based learning. Nevertheless, support is still needed to help them refine and achieve those goals when following these online courses. Likewise, educators, mentors, course designers, and platform providers still need to harness the potential of MOOC platforms to accommodate the individual perspectives of learners when asking them to set their own goals. Accordingly, the researcher hopes the findings of this thesis will benefit practitioners involved in making changes to improve this aspect of online education.

7.3.2 For learners

This study demonstrated that studying a MOOC opened an alternative door to consolidating foreign language learning and self-regulated learning. Choosing a MOOC related to personal and professional interests led most learners in this study to take a more active role in their language learning for leisure, academic or professional purposes. Learners should engage in goal-directed actions, especially in learning environments where a teacher is less present.

Moreover, active learning should be both a goal and part of learners' self-regulated learning. Learners should harness the MOOCs' potential for independent learning to initiate their self-regulated learning. They are encouraged to start an online course by considering their
outcome expectations before enrolment. Identifying the goals specified by educators in a MOOC may facilitate this step.

The next step towards self-regulation is for MOOC users to formulate personal learning goals to be attained by the end of their learning experience. Learners are also encouraged to think about what they want to obtain during the online learning experience and transform that educational intention into SMART goals. It is suggested that learners studying MOOCs as part of a face-to-face class follow a similar strategy when starting a classroom-based lesson, thereby adopting an active role in both the MOOC and the classroom.

7.3.3 For teachers

This study acknowledged the role of the in-class teacher, whose involvement played an important role whilst learners engaged in their respective MOOCs. Findings showed that participants’ goals were sometimes shaped by an in-class teacher. Nevertheless, not all teachers in this study actively took part in the online experience of their learners. Thus, the following recommendations could be of particular interest to in-class teachers who want to integrate MOOCs into their classes to support language learning and learners’ goal setting. Some of the suggestions stem from participants’ experiences, and some participants even shared their opinions to enhance future MOOC-Class integration.

**Before integrating MOOC-based learning into a classroom-based language course**

- Present MOOC-based learning to the class as another opportunity to access a wealth of material from online platforms, which may complement different aspects of the target language dealt with in the face-to-face class and expand their learning beyond the L2 classroom. “So, it was a very different aspect of Italian of what we do in the evening classes, which I enjoyed” (INV2: Irene). Also, highlight the advantages of adopting goal setting to enhance their learning either in class or in the MOOC.

- Students taking an introductory or lower intermediate language course (CEFR A1-A2-B1 level) should be encouraged to choose either LMOOCs or content-based MOOCs to practice and challenge their L2 learning. Students taking an advanced language course (CEFR B2+ level) should be encouraged to work through a content-based MOOC in the target language rather than an LMOOC to expand their L2 competencies in their field of specialisation. Independent and proficient users of the target language can understand complex and technical information in their field of specialisation and use the language for social, academic, and professional purposes (Council of Europe, 2021).
• Allow students to choose a MOOC based on their personal, academic, or professional interests; "starting learning English from any interesting topic is better than learning English in general" (INV2-Emily).

• The enormous number of MOOCs was overwhelming for some participants. Helping students find what MOOCs are available and choose an appropriate online course should be done in advance. Teachers are encouraged to follow a similar classification of MOOCs to that carried out by the researcher at the start of the study (Appendix A-Appendix B-Appendix C).

• “The teacher should show the students the different possibilities, maybe look together to the websites, explore the platforms and say: ‘you can see this, the other is structure like this, etc’ to explore a bit together could be useful” (INV2-Elliot). Teachers are encouraged to design a step-by-step guide similar to that written by the researcher at the beginning, containing instructions on accessing and registering for the online courses.

• However, if it is decided that the class should follow a single MOOC, then “the teacher would have to have a very good overview of the MOOCs and have an in-depth understanding of what is available in order to direct us to the ones the teacher wants us to do” (INV2-Irene).

• Explain the benefits of goal setting, especially when learning occurs outside the classroom, and provide examples of SMART goals. Then, ask the class to set personal learning goals before starting their MOOC-based learning. Depending on the language proficiency level of students, goals can be even written in the target language to include goal setting as part of the language learning process.

• If possible, students can follow a MOOC in pairs and do this goal-setting activity together to be held accountable for each other’s goals, thereby promoting self-regulation and shared regulation. The latter was not part of the scope of this research, but it is worth considering for future studies (Section 7.5).

• Suggest a minimum amount of time to work with the MOOC outside the classroom and the aspects students should focus on during the learning experience.

• Lastly, teachers can follow a MOOC with the class to witness this online experience from the perspective of a learner instead of an educator. This may be helpful when taking part in the in-class activities suggested below.

During the integration of MOOC-based learning into a classroom-based language course

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• Provide regular in-class guidance on working with MOOCs to effectively explore the structured course design and use multimedia resources to work towards personal learning goals.

• Allow students to change their MOOC if it covers topics they already mastered in previous studies and does not provide the learning opportunities they wanted. “Then, I looked at the other MOOC because I wasn’t really getting anywhere with one. And I wanted to try something else as well” (INV2-Simona). Also, give them the option to change platforms, if possible

• “The teacher can actually use the online as part of the lesson. So, they have got the [online] content and then they explain it face-to-face, but that’s when this could become more powerful” (INV2-Santos). Although some MOOC resources cannot be reused since they are not under a free license, teachers should still “be open to resolve any issues that were not clear and probably also having an awareness of where the challenges would be” (INV2-Santos). Proficient language students can benefit from follow-up explanations about other advanced topics, such as register, syntax or phonetics.

• Combine MOOC-based learning as part of homework: “instead of struggling to find the time to do the MOOC and Italian tasks, they could be one and the same. Say: ‘now go online and complete these exercises from edX module 5, section 3’- that would be good” (INV2-Irene). Then, teachers can hold an in-class discussion of solutions to those online exercises that do not let learners submit and validate their answers unless they pay for an upgrade.

• Introduce students to the varieties of the target language through the MOOC audio-visual material that might cover other accents, expressions, and cultural information from other countries where the target language is spoken. “I think because it is an American course, they use slightly different vocabulary compared to the book we are using in the evening class” (INV2-Silvia).

• Lastly, allocate in-class time for students to have small group discussions about their MOOC-based learning and their progress towards achieving personal goals set at the outset. Narrow the conversation into specific points: “I don’t mean sharing general things but say ‘I’ve learned this...’ or ‘this is a good way to learn this’ or ‘I found this’ and then being able to ask the teacher questions” (INV2-Simona). Providing these spaces may also enable students to share resources and ideas with others beyond the classroom: “It got us talking in the class and one of the things we’ve set up since then is an e-mail group with
everybody to share some ideas. And I think that's a spin-off of us talking about the MOOCs” (INV2-Simona).

After integrating MOOC-based learning into a classroom-based language course

- Prompt students to reflect on their goal-setting behaviour by asking them to either assess the achievement of their goals or identify the strengths and weaknesses of their goal-setting process during their MOOCs. Students can share their reflections with other classmates.

- Since oral production is underexplored in some MOOCs, propose individual or collaborative activities in which students talk about their MOOC-based learning in the target language to the class. “I would suggest increasing the speaking experience” (INV2-Elsa). “There’s hardly any spoken element in there at all” (INV2-Felix). Writing activities should also be promoted after working with the online courses since students do not usually focus on that productive skill in MOOCs.

- Ask students to include screenshots of MOOCs in an oral presentation (as they did at the end of this study) to show others their online course and reflect upon their experience of doing a MOOC as part of their classroom-based course. “It was interesting to see how people did it differently” (INV2-Salvador).

- Challenge students’ speaking skills by asking them to share their MOOC work with the class through a PechaKucha presentation format. “My PechaKucha was about the experience with the MOOC. So, I interacted with others, and someone made some comments about my presentation. It was good” (INV2-Elliot).

Most learners in this study welcomed the opportunity to extend their language learning process with MOOCs. They thought of this online experience as "a good complement to a class” (INV2-Felix). Language teachers are strongly encouraged to use MOOCs as part of their classroom-based courses to offer a different learning experience that is likely to enhance the language competencies of their in-class students and challenge their self-regulating behaviour, especially their goal setting. In sum, the researcher long for in-class teachers to consider the previous recommendations to consolidate their future MOOC-Class integration practices.

7.4 Limitations

The researcher recognised some limitations of this research. Although this was a multiple-case study consisting of two case studies from different contexts, the total number of participants (19) could be deemed a small data sample that may not lead to generalisable findings. Whether the
two groups of participants in this study, also known as cases, serve as an adequately sized sample to represent any larger population is open to question. However, the goal of case studies is to expand and shed empirical light on theoretical concepts or principles (“analytic generalisations”) instead of extrapolating probabilities (“statistical generalisations”) (Yin, 2018, p. 21). In that sense, findings cannot be generalised, but the design of the study and results can be transferred to contexts that share the same characteristics of the cases described in this study.

Potential interpretation and self-report biases were also acknowledged since the research dealt with retrospective responses from participants. Interpretation bias is another challenge researchers face when conducting interpretative research (Ruggiano & Perry, 2019; G Thomas, 2013). Several measures were adopted to mitigate this bias. For instance, the researcher kept a written memo of potential assumptions during the data analysis to limit the effects of bias. One supervisor and two PhD students also reviewed the coding of the data on multiple occasions as another step to ensure credibility and rigour of the research findings. However, the researcher recognised her active role in collecting and interpreting the data, meaning that her positionality could have introduced bias into the analysis of the findings. Readers may also have different interpretations of the data due to the complexity of the terms and technology presented in this study.

Although the engagement with the MOOCs was monitored through four weekly surveys, this study did not assess whether participants achieved their goals by the end of their MOOC-based learning. This aspect was beyond the scope of this PhD. A longitudinal study would need to be conducted to monitor the development of goals over time and assess the attainment of those goals. Using a trace-based analytic technique (e.g., Siadaty et al., 2016) to measure goal achievement in MOOCs could be another way to address this limitation.

Lastly, while slimming down a list of potential online courses for the participants, the researcher found out that most of the Spanish MOOCs available were offered at beginners (CEFR A1) or elementary (CEFR A2) levels. Not many courses were available on other platforms, such as Miriádax, where the content is usually presented in Spanish. The few online courses aligned with the learners’ intermediate level in Spanish were archived (i.e., one can access course content, but activities are no longer active). This limited availability of online courses in Spanish suggests the need for an increasing number of LMOOCs or updated versions of those designed at different language proficiency levels. Altogether, the limitations of this study provided avenues for future research, as described next.
7.5  Future Directions

In addition to providing recommendations and signalling study limitations, the researcher hopes the findings of this thesis prompt researchers to carry out similar work that can contribute to the fields of online language education and self-regulated learning. Hence, suggestions for possible future research can be found below.

7.5.1  Research on MOOC elements hindering self-regulated learning

As explained in Section 2.3, the field of LMOOCs is still under-researched (Gillespie, 2020). One contribution of the research reported here is that it unpacks the elements of MOOCs that support the goal-setting behaviour of language learners, at least within the context of this study. During data analysis, the researcher of this study identified factors that affected participants' attitudes towards language learning using MOOCs. Some of these included:

- Limited feedback
- Accessibility issues (e.g., unclear instructions and obscure navigation)
- Excessive attention to detail
- Restricted language practice due to paywalls
- Transcription errors made by automatic translators
- Absence of study time support
- Lack of intellectually stimulating content
- No speaking interaction
- A 'real' teacher is not present.

The challenge, however, is to identify how those factors may hinder the development of goal-directed behaviour in MOOCs. Therefore, one crucial step moving forward is to examine the relationship between goal setting and one of those factors within the scope of LMOOCs. Using self-report data alongside a trace-based analytic technique is suggested to gain an accurate understanding of this area of research and enable reflection on future LMOOC designs.

7.5.2  Research on shared regulated learning: the role of the teacher and peers

This study also unpacked a range of goals reported by language learners when working with MOOCs. A more extensive study would have given more weight to the role of the teachers and classmates during this process of goal setting. Since it was demonstrated that in-class teachers played an essential role in this study, further exploration of how teachers conceptualise goals and
how those views influence the goal-setting behaviour of their learners is needed. As a follow-up study, it would be interesting to ascertain how teachers work with learners to formulate shared goals for MOOC-based learning. Alternatively, how learners work with their peers to formulate goals for a collaborative task that stems from a MOOC could be explored. Shared regulated learning (e.g., Järvelä et al., 2016) was not examined in this study, but it appears to be an avenue of future work that might provide valuable insights into the types of goals learners and teachers co-formulate when working together in MOOCs.

7.5.3 Research on artificial intelligence: the case of intelligent assistants in MOOCs

This study also supports a broad and ambitious research agenda regarding the design of intelligent personal assistants to support language learning and self-regulated learning in MOOCs. Given the rarity of educators in online courses, education at scale calls for more innovative ways of providing personalised support. One of the participants even suggested: "I would like artificial intelligence to talk to me in Spanish and to correct what I’m saying. There you go. That’s what I want. If you can just arrange that, that would be lovely (laughs)” (INV2-Sarah). Action-based researchers should design and embed conversational agents, such as chatbots, into MOOCs (e.g., Tegos et al., 2020). These personal assistants could be programmed to help learners practise communication skills in the target language and set SMART personal learning goals. Artificial intelligence, are you there yet?

7.6 One Last Section: Reflection on Doing a PhD

I began this study thinking of an innovative way to engage learners to practise and develop their language competencies using educational technologies. I had previously examined blended MOOC practices but reading about self-regulated learning and particularly about goal setting as a key to self-regulation was crucial to refining my research. As a PhD student, I had the opportunity to put these concepts into practice, which made me realise how important it was to set goals, plan and ask for help when feeling lost or overwhelmed. Undoubtedly, studying an LMOOC in French and co-designing and monitoring a Spanish MOOC for Erasmus students allowed me to experience different roles and understand the complexities of being a learner, course designer, and mentor in the landscape of LMOOCs. I was glad I took that leap into the unknown.

Now my PhD-cycle of self-regulated learning is coming to an end. I have stated the contributions of this study to the areas of educational psychology, goal setting theory and CALL, especially for those who once questioned the purpose of conducting this research in the first place. I also doubted the value of this study and questioned my research skills during the unprecedented times caused by the COVID-19 pandemic. However, the help I received from the
gatekeepers, my participants, my supervisors, their support, and their time invested in this five-year project reminded me that I needed to contribute to them and my area of specialisation. I know the findings of this study did not influence the ground-breaking discovery of the COVID-19 vaccine. Nonetheless, the goal has been achieved: offer a unique experience to adventurous adult learners while providing a rich understanding of the aspects of language they covered in MOOCs, their goal-setting behaviour and the support offered for goal setting in those online courses.

7.7 Summary of Chapter 7

Altogether, this last chapter has summarised the answers provided to the three research questions in this study. Then, it has presented the contributions of this study to the fields of CALL and self-regulated learning, particularly the self-regulatory process of goal setting. A series of theoretical, methodological, and practical recommendations have been provided to practitioners, learners, and teachers. This was followed by a summary of the limitations of this research. The researcher has reached the end of her PhD journey by suggesting future research directions to inform research on MOOCs and self-regulated learning, within and beyond the context of language education.
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# Appendix A

## MOOC Classification: Spanish Courses

<table>
<thead>
<tr>
<th>OPTION</th>
<th>SPANISH MOOCS</th>
<th>PLATFORM</th>
<th>START DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Spanish for Beginners 1: Meeting and Greeting (Beginner level)</td>
<td>FutureLearn</td>
<td>May 13th 2019</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Available now</td>
</tr>
<tr>
<td>2</td>
<td>Spanish for Beginners 6: Out and About (Beginner level)</td>
<td>Self-paced:</td>
<td>Available now</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3.1. Basic Spanish 2: One Step Further (Beginner level)</td>
<td>edX</td>
<td>Available now (3.1)</td>
</tr>
<tr>
<td>3.2. Spanish for beginners: Learn in paradise Introductory (Beginner level)</td>
<td></td>
<td>Self-paced:</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>AP® Spanish Language and Culture Intermediate (Intermediate level)</td>
<td></td>
<td>Both courses (3.2 &amp; 4) are archived, which means you can review course content, but it is no longer active.</td>
</tr>
<tr>
<td>5</td>
<td>Spanish for Successful Communication in Healthcare Settings Intermediate</td>
<td>Coursera</td>
<td>Self-paced:</td>
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<tr>
<td><strong>6</strong></td>
<td><strong>Learn Spanish: Basic Spanish Vocabulary Specialization (Beginner/Intermediate level)</strong></td>
<td>Available now</td>
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</tr>
<tr>
<td></td>
<td><em>You can choose one of the 5 courses from this specialization:</em></td>
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<tr>
<td></td>
<td>6.1 Spanish Vocabulary: Meeting People</td>
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<td></td>
<td>6.2 Spanish Vocabulary: Cultural Experience</td>
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<td></td>
<td>6.3 Spanish Vocabulary: Sports, Travel, and the Home</td>
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<td></td>
<td>6.4 Spanish Vocabulary: Careers and Social Events</td>
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<tr>
<td></td>
<td>6.5 Spanish Vocabulary Project</td>
<td></td>
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<tr>
<td></td>
<td><strong>7</strong></td>
<td><strong>Spanish for Beginners</strong></td>
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<tr>
<td></td>
<td><strong>(Beginner level)</strong></td>
<td>edX</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Self-paced: Available now</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>8</strong></td>
<td><strong>Puertas Abiertas: Curso de español para necesidades inmediatas (I)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>(Beginner level)</strong></td>
<td>UNED Abierta</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Self-paced: Available now</td>
<td></td>
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<tr>
<td></td>
<td><strong>9</strong></td>
<td><strong>Puertas Abiertas: Curso de español para necesidades inmediatas (II)</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>(Intermediate level)</strong></td>
<td>UNED Abierta</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Self-paced: Available now</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>10</strong></td>
<td><strong>Basic Spanish 1: Getting Started</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>(Content is very introductory, but feel free to explore it)</em> <strong>(Beginner level)</strong></td>
<td>edX</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-paced: Available now</td>
<td></td>
</tr>
</tbody>
</table>
11 | Español Salamanca A2 (5.ª edición) (Access to content and videos, but no the activities) **(Beginner level)** | Miríadax | Self-paced: Available now

12 | Comunicación y Cultura en España (Access to content and videos, but no the activities) **(Intermediate level)** | Miríadax | Self-paced: Available now

### Appendix B

**MOOC Classification: Italian Courses**

<table>
<thead>
<tr>
<th>OPTION</th>
<th>ITALIAN MOOCS</th>
<th>PLATFORM</th>
<th>START DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Italian Language and Culture: Beginner (2019-2020) <em>(Introductory level)</em></td>
<td>edX</td>
<td>11&lt;sup&gt;th&lt;/sup&gt; Feb 2019 (Self-Paced)</td>
</tr>
<tr>
<td>2</td>
<td>Italian Language and Culture: Intermediate (2019-2010) <em>(Intermediate level)</em></td>
<td>edX</td>
<td>11&lt;sup&gt;th&lt;/sup&gt; Feb 2019 (Self-Paced)</td>
</tr>
<tr>
<td>3</td>
<td>Italian Language and Culture: Advanced (2019-2020) <em>(Advanced level)</em></td>
<td>edX</td>
<td>11&lt;sup&gt;th&lt;/sup&gt; Feb 2019 (Self-Paced)</td>
</tr>
<tr>
<td>4</td>
<td>AP® Italian Language and Culture (2018-2019) <em>(Advanced level)</em></td>
<td>edX</td>
<td>Enrol now (Self-Paced)</td>
</tr>
<tr>
<td></td>
<td>Paesaggi di Roma Antica. Archeologia e storia del Palatino. <em>(Beginner level)</em></td>
<td>Coursera</td>
<td>6(^{th}) Feb, 2019</td>
</tr>
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<tr>
<td>5</td>
<td>Lingue e culture del Mediterraneo e dei Balcani: un’introduzione (2a ed.) <em>(Advanced level)</em></td>
<td>Eduopen</td>
<td>4(^{th}) Feb, 2019</td>
</tr>
<tr>
<td>6</td>
<td>Introduzione all’Egittologia (2a ed.) <em>(Advanced level)</em></td>
<td>Eduopen</td>
<td>4(^{th}) Feb, 2019</td>
</tr>
<tr>
<td>7</td>
<td>Principi delle buone pratiche di insegnamento nella classe CLIL, didattica per competenze <em>(Advanced level)</em></td>
<td>Eduopen</td>
<td>2(^{nd}) Feb, 2019</td>
</tr>
</tbody>
</table>
## Appendix C

### MOOC Classification: French Courses

<table>
<thead>
<tr>
<th>OPTION</th>
<th>FRENCH MOOCS</th>
<th>PLATFORM</th>
<th>START DATE</th>
</tr>
</thead>
</table>
| 1      | Vivre en France – **A1**  
     (Beginner level) | **FUN** | Registration open until Dec 31 2020 |
| 2      | Vivre en France - **A2**  
     (Beginner level) | **FUN** | Registration open until Dec 31 2020 |
| 3      | Vivre en France – **B1**  
     (Intermediate level) | **FUN** | Registration open until Dec 31 2020 |
| 4      | À la découverte des télécommunications  
     (Intermediate level) | **FUN** | 28th Jan 2019 |
| 5      | Développer sa pensée critique  
     (Intermediate level) | **FUN** | 30th Jan 2019 |
| 6      | Changer le monde: passons a l'action (creer son entreprise sociale)  
     (Advanced level) | **Coursera** | 4th Feb, 2019 |
| 7      | Psychologie de la négociation  
     (Intermediate level) | **edX** | 4th Feb, 2019 |
<p>| 8      | Découvrir la science politique | <strong>edX</strong> | 6th Feb 2019 |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>9</td>
<td></td>
<td>Étudier en France: French Intermediate course <strong>B1-B2</strong></td>
<td>edX</td>
<td>6&lt;sup&gt;th&lt;/sup&gt; Feb, 2019</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Penser critique</td>
<td>edX</td>
<td>12&lt;sup&gt;th&lt;/sup&gt; Feb, 2019</td>
</tr>
</tbody>
</table>

**Intermediate level**
Appendix D

Class Central Guidelines

1. Type the key word of the subject/discipline of your personal interest and press enter.

2. Then, tick the “Recently started or starting soon” option.
3. Make sure you also tick “English” in the box below called By language.

4. Click on the top arrow of “Start date” to put the starting dates in order.
5. Finally, choose the course that you would like to study to have access to its description. Then, click the "Go to class" button on the right to go to the official website of the course provider.

*Remember all you need to do is the free version of the course. So, after creating an account (on Coursera, edX or FutureLearn, etc), make sure you select audit the course/free version when enrolling on the course.

*You do not have to pay for the certificate usually offered at the end of these courses.
Appendix E

Semi-structured Interview (I) Questions

*Could you please tell me the participant code that was given to you at the start of this project? _________

1. What language course are you currently studying? (e.g., Spanish Intermediate, Italian Advanced, French Advanced, or English for Specific purposes)
2. What is your current profession/study programme at university?
3. What is (are) your native language(s)?
4. What is your level of proficiency in the language you are studying? (e.g., CEFR B1: Intermediate, B2: Upper Intermediate, C1: Advanced, C2: Proficient) [probe: How long have you been studying Spanish/Italian/French/English as a foreign language?]
5. From your previous learning experience, could you please describe a typical Spanish/Italian/French/English lesson? [probe: anything you liked or didn’t like.]
6. How do you prepare for Spanish/Italian/French/English learning activities in the classroom? [probe: In what ways (if any) do you work differently, when completing activities outside the classroom?]
7. How do you monitor your own performance while doing a specific language activity in Spanish/Italian/French/English?
8. How do you evaluate your own performance after completing such activity?
9. What behaviours do you engage in which tell you that you are taking responsibility of your own learning? [probe: how do you understand the term SRL.]
10. Why are you taking the Spanish/Italian/French/English course? [probe: any expectations (e.g., possible contribution of this course to your leisure activities/studies/profession]
11. Have you studied in a free online course before? [probe: if yes, ask for the name of the course and the reason why participant has studied the course]
12. What do you think are the key characteristics of free online courses?
13. Do you think that free online courses can influence the way students learn Spanish/Italian/French/English? [probe: why?]
Appendix F

Weekly-monitoring Survey

Instruction: Please take a short time to reflect on the following aspects before answering the questions related to the work that you have done with your MOOC this week.

1. Please enter the participant code that was given to you at the start of this project
2. What was your learning goal for this week?
3. Have you encountered any challenges/issues this week?
   3.a If yes, what have you done to deal with them?
4. Approximately, how much time have you spent studying this week?
5. What part of this week have you enjoyed most?
   5.a Why?
6. What do you plan to do next in terms of improving your Spanish/Italian/French/English?
7. Anything else you want to note down about this week?
Appendix G

Open-ended Questionnaire

Demographic questions

1. Please enter the participant code that was given to you at the start of this project
2. What is your age?
   o 18-25
   o 26-35
   o 36-45
   o 46-55
   o 56-65
   o 66 and above
3. What is your gender?
   o Male
   o Female
   o Prefer not to say
4. What is your level of proficiency in English?
   o B1: Intermediate
   o B2: Upper Intermediate
   o C1: Advanced
   o C2: Proficient

Open ended questions

5. What is the name of the MOOC you signed up for?
6. Why did you sign up for this MOOC?
7. What new knowledge did you expect to gain of studying on a MOOC as part of your EAP course?
8. What do you think are the key characteristics of MOOCs?
9. Please summarise in one sentence the experience of doing a MOOC as part of your face-to-face Spanish/Italian/French/English course.
### Appendix H

**Semi-structured Interview (II) Questions**

Instrument adapted from an interview designed by Littlejohn and Milligan (2015) to research MOOC-based learning.

<table>
<thead>
<tr>
<th>Context</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Could you please tell me the participant code that was given to you at the start of this project?</em></td>
</tr>
<tr>
<td></td>
<td>1. What is the name of the MOOC you signed up for? [probe: from which platform?]</td>
</tr>
<tr>
<td></td>
<td>2. Why did you sign up for this MOOC?</td>
</tr>
<tr>
<td></td>
<td>3. How many units did you complete on the MOOC?</td>
</tr>
<tr>
<td></td>
<td>4. How would you define a MOOC in your own words?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FORETHOUGHT</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Task Analysis</td>
<td></td>
</tr>
<tr>
<td>• Goal setting</td>
<td>5. Can you summarise your main aim in this MOOC? [Probe: try to determine whether their aim was restricted to the MOOC, or extended beyond it (to their studies)]</td>
</tr>
<tr>
<td></td>
<td>6. Did you set specific goals at the outset of this MOOC? [Probe: What were they?]</td>
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<td></td>
<td>7. Did your goals change as you progressed through the MOOC course? [probe: how?]</td>
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<tr>
<td>• Strategic planning</td>
<td>8. Did you think about the MOOC content in advance? [probe: why?]</td>
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<tr>
<td></td>
<td>9. Did you organise your study time to accomplish your learning goals? [probe: how?]</td>
</tr>
</tbody>
</table>
- **Self-motivation beliefs**

  - **Task interest/value**
    10. How did you find the experience of engaging with a MOOC as part of your face-to-face Spanish/Italian/French/English course? [probe: anything you liked or didn’t like]
    11. Did the engagement with the MOOC give you new ideas on how to learn a language? [probe: why?]

  - **Self-efficacy**
    12. Has this MOOC language learning experience made you more able to manage your own learning? [probe: if yes, can you give an example or two?]
    13. Does this MOOC language learning experience fit with your personal learning interests/profession/study programme? [probe: how?]

- **PERFORMANCE**

  - **Self-control**

  - **Task strategy**
    14. Has your learning involved the creation of anything? E.g., did you make notes; did you collect content for yourself; did you post anything you created online? [probe: Can I see it?]
    - If so, would you reuse what you have mentioned or is it only of value during this learning experience itself?
    15. Did you experience any difficulties when following a MOOC offered in Spanish/Italian/French/English?
    16. Which tools have you used to support your language learning experience? [probe: look for
<table>
<thead>
<tr>
<th>HELP SEEKING</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>17.</strong> Did you interact with other classmates (including the teacher, MOOC users, MOOC mentors) during this language learning experience? [probe: why, in what ways?]</td>
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<tr>
<td><strong>18.</strong> Did you share anything about your learning experience with anyone else formally or informally? [probe: who?]</td>
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<tr>
<td><strong>19.</strong> How easy have you found it to engage with the MOOC [probe: look for the knowledge or the skills (technical, linguistic, social) that are needed when using MOOCs in an academic language course] [probe: did you ask for help at any time, who?]</td>
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</table>

<table>
<thead>
<tr>
<th>SELF-REFLECTION</th>
<th>Questions</th>
</tr>
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<tbody>
<tr>
<td><strong>-Self-judgement</strong></td>
<td></td>
</tr>
<tr>
<td><strong>20.</strong> Has learning in a MOOC helped you to meet your initial expectations? [probe: why, in what ways?]</td>
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</tr>
<tr>
<td><strong>21.</strong> Apart from completing the weekly monitoring surveys, have you made any informal or formal record reflecting on your language learning experience? [probe: have you shared it with anyone? Would you share it with me?]</td>
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<tr>
<th>SELF-REFLECTION</th>
<th>Questions</th>
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<tbody>
<tr>
<td><strong>-Self-reaction</strong></td>
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<tr>
<td><strong>22.</strong> Have you modified your learning approach to improve your learning in the MOOC that you selected as part of your face-to-face Spanish/Italian/French/English course? [probe: how?]</td>
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<td>23. Would you like to take a MOOC again?</td>
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<td>- if so, what kind of help would you like to receive from the Spanish/Italian/French/English teachers or the MOOC mentors to facilitate your learning?</td>
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<td>- if no, what kind of things prevent you from using MOOCs in the future?</td>
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</table>