Toward Autonomous Learning: Exploring the Impact of Participating in an Online Second Language Learning Course

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***Abstract*—As online education programs increase their numbers, autonomous learning becomes more necessary to achieve academic success. The present research determines the impact that participating in an online course has on students' language learner autonomy. To quantify this impact the Measuring Instrument for Language Learner Autonomy was applied in the second and last week of the course. By means of a paired samples t-test, it was confirmed that the students participating in the course increased their language learner autonomy. Additionally, the specific behaviors that changed were revealed to be associated with self-regulated learning. Therefore, it can be asserted that participation in the online learning course led to an increase of the level of autonomy of the students by means of increasing the frequency of behaviors related to taking charge of their own learning process.**

***Index Terms*—Autonomy, EFL, ESL, online education.**

I. Introduction

For second language learners, the concept of autonomy has been important since the Council of Europe's modern languages project of 1981, which identified it as one of the most vital components of a successful language learner [1]. Currently, varied teaching methodologies have been promoted that insist on scaffolding from the dependence of the teacher as a linguistic model to the independence of the learner as an explorer of learning resources [2]. In other words, there is a clear trend that poses as one of the primary roles of ESL/EFL teachers of the 21st century to foster autonomy in their students [3]. In line with this, tertiary education, in general, has also shifted to a focus on developing the necessary abilities to function effectively in the world after graduating from university being one of the main factors that impact this process the level of autonomy achieved by the students [4].

It has been suggested that online learning environments may be conducive to the development of this autonomy considering they provide students with access to self-directed learning [5]. However, having access to technology does not necessarily result in learning; therefore, exploring this connection nowadays is of paramount importance [6] especially considering that enrollment in online courses continues to increase steadily [7], [8].

In this context, the present research examines how participating in an online English course impacts the degree of behavioral autonomy of students considering the design features the format of this course considers. To determine this a group of beginner students sat for the Measuring Instrument for Language Learner Autonomy during the first and last months of the semester in which they were coursing an English online course.

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II. Review of the Literature

A. Autonomy and Its Measurement

In the field of cognitive psychology and education, Everhard [3] identifies different terms used in the literature by which the experts analyze the movement from a continuum between heteronomy and autonomy. Some of these terms are self-reliance, independence, and ownership of learning, among others. Heteronomy is understood as being able to make decisions based on the presentation of different options and the advice of others whereas autonomy has to do with the creation of the paths one wants to follow. In heteronomy, the power relations involved may harm both the use of critical thinking as well the ability to distance oneself emotionally from the decisions one needs to make whereas in the case of autonomy the power relations are means to the development of the capacity of making one's own choices. When the individual is more autonomous, power relations are conceived as beneficial for both. Contrary to what one might think, heteronomy and autonomy are not opposites, in fact, at least under Piagetian conceptions, they are two moments of a continuum. First, the person, as a child, begins in a stage of absolute heteronomy and then moves, as the years pass, towards autonomy.

In the realm of language learning, autonomy has found its place quite recently. In 1981, learner autonomy was first defined as the ability students have to take charge of their own learning [9]. This definition has been considered essential for research on the concept of autonomy as well as studies on the benefits of learning autonomy. In line with Piagetian conceptions, learning autonomy in language learning is also seen as part of the development of students, which can be boosted by the use of the right strategies, methods, and techniques.

It is reasonable to expand on the notion of autonomy not as an individual's trait, but as part of an individual's learning process [10]. Autonomy can be said to develop through psychological factors (motivation, attitude, learning preferences, etc.) and environmental factors (adequate learning environments, appropriate task selection, a political

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power structure, etc.) [11]. These elements add to the definition of autonomy making it complex and dynamic in the sense of the personal and contextual dimensions that are involved. Autonomy is constantly changing even in the same individual as he participates in different contexts.

Consequently, it can be asserted that language learning autonomy is a multidimensional construct that involves features not only related to the capacity to take charge of one's own learning. For example, it has been noted that autonomous behavior presupposes and entails a particular frame of mind toward the learning process and the content that is being learned. In other words, students who believe that autonomous work is essential to learning will probably be more autonomous than those who do not believe so. Apart from this, autonomy unfolds in particular situations, thus, it can be analyzed also based on the context in which the learners find themselves [12].

Recently the importance of attending to psychological and social factors related to autonomy has gained popularity in the field [1], [3], [13]. Concrete actions such as detaching oneself from the immediate input, reflecting critically, and taking action independently relate closely to a psychological component. Regarding the social component, it is clear that taking control of learning a language frequently involves collective decision-making processes. Consequently, understanding, for example, that one may ask a classmate for help and not only the teacher increases the opportunities for learning a language. On the contrary, the belief that one is only supposed to follow the teachers' instructions inhibits not only the capacity to learn in general but to develop linguistic competence in particular. In fact, being less dependent on the teacher can significantly increase the capacity to establish one's own goals and targets, which leads to the need of searching for more exposure to the foreign language [3].

If heteronomy and autonomy are part of a continuum, it is possible and necessary to identify at which point of this continuum students are. However, due to its complexity, the operationalization of autonomy as well as its measurement is currently still challenging [13]. Several techniques have been used for research purposes to quantify the level of autonomy. In fact, qualitative and quantitative tools have been proposed for the assessment of autonomy. The main challenge for these techniques is to account for the multidimensionality of the construct.

Qualitative strategies for evaluating students' autonomy are the use of portfolios, interviews, reflective essays, and self-assessment. Tassinari [14] proposes a dynamic model of learner autonomy that considers competencies, skills, and actions that autonomous students put to use. Some examples are the capacities to evaluate, monitor, plan, and complete tasks. These and other skills interact with each other under a superordinate concept labeled 'managing my own learning'. In addition, each of the components entails descriptors (in the form of can-do statements) that specify the corresponding competencies, skills, and actions of learners. During the evaluation process, students may choose which aspects to reflect on based on the descriptors offered. Then, they can tick each of the descriptors based on three options that refer to whether the student thinks he has achieved it, would like to develop it, or does not consider it important. Subsequently, the student and advisor have a conversation about the results, so that the student can later make decisions for further learning. This process is recursive; thus, it can continue being implemented during the course. Although this, as well as other qualitative strategies, are clearly useful and powerful, in most contexts they are not feasible to implement. It is almost impossible for a teacher to serve as a personal advisor for the hundreds of students he may have in two or three courses during the semester. Therefore, quantitative strategies may be more easily implemented in these particular contexts.

From a quantitative perspective, few instruments have been designed for the assessment of second language learning autonomy particularly. One of the recent successful research efforts is the Measuring Instrument for Language Learning Autonomy (MILLA). The MILLA considers four dimensions as constituents of the construct of second language learning autonomy considering the research on the field: technical, psychological, political-philosophical, and sociocultural. However, after its implementation and validation with Japanese EFL students, factor analysis showed that the psychological and political-philosophical dimensions were too highly correlated to justify their separation, hence, they were merged. The final three dimensions of the updated version of the MILLA are technical, psycho-political, and socio-cultural [13].

1) Technical Autonomy: This dimension of autonomy is one of the most important for university students since it refers to what students do in practical terms according to the degree of autonomy they have. These behaviors can be motivated by the need to work autonomously or due to the conscious effort to use strategies in order to progress in self-directed learning. At the level of higher education, technical autonomy is vital since students are just one step away from becoming professionals independent of the academic context [15], [16].
2) Psycho-political autonomy: This dimension considers the emotional component of the individual and how he or she is able to regulate it in order to take control of their learning [1], [17]. This is very important because, in environments where there is a lack of feedback or extrinsic motivation, it is the students who have to motivate themselves in case of having vocational doubts or problems regarding their academic performance.
3) Socio-cultural autonomy: This dimension is related to the context in which the participants involved in the educational experience live. Chirkov [18] points out that even though autonomy is a universal concept, it is valued differently around the world, which implies that the concept of autonomy may acquire a different connotation depending on the context. The term context does not only include the general national context, but also the specific context of an educational classroom in terms of what students expect, for example, from their teachers [19], [20]. In summary, the vision of learning in different cultures (Eastern and Western) has an impact on the perception of autonomy, whether due to national identity or the expected role in the classroom. This affects whether students want to be autonomous, therefore, it is important to consider it when evaluating student

autonomy.

B. Autonomy and Online Education

Learner autonomy can be understood as the shift in control from the teacher to the student [21]. Under the world's current events and the fast pace at which our society moves, new and better online tools for learning, such as Moodle, BlackBoard, Zoom, Screencasting, etc., are flourishing as key aspects of independent and asynchronous learning.

Online learning environments are defined as instances in which learning takes place on the internet [22]. Online tools offer a wide range of possibilities to students, from allowing them to set the time and place where learning could take place, to selecting the most appropriate online tools and materials available based on a personal criterion. Another relevant aspect is the possibility to access real-world environments where they could interact with native speakers in real-time despite the geographical distances through video conferencing alternatives, or engage in collaborative learning opportunities through blogs, instant messaging, or discussion forums.

Positive findings connecting the use of technology and the promotion of autonomy can be found in recent research. Zhong [21] did a case study in China whose objective was to investigate changes in the subject's path towards autonomy in online environments. By means of two in-depth interviews, the researcher compared a student's experience in China and New Zealand considering the impact the different learning environments had on this students' learning.

Three key aspects emerged from the interviews. The first one is related to the student becoming a critical user of multiple online resources. As Zhong puts it, the student used the internet as a learning resource center for his self-directed English language learning after some online research on how to better learn English back in China. The second one refers to the student becoming a collaborative online learner. Here, Zhong establishes a change in self-directed language learning. The third one relates to the student becoming a more capable manager and organizer, where the changes emerged from the use of metacognitive strategies. All these findings point towards the role and importance that instructors have in the formation of learner autonomy when creating the learning conditions and environments that are conducive to autonomous learning.

As for quantitative studies, there is also evidence supporting the role technology has in promoting learner autonomy. Liu, Liu and Tu [23] carried out an experimental study with a control group and an experimental group. The experiment had as its main objective to explore the impact of multimedia-assisted instruction on reading ability and learner autonomy. The experimental group underwent multimedia-assisted instruction, which consisted of the implementation of multimedia technology in the English lesson. In contrast with the control group receiving normal lessons, the experimental group adopted reading strategies more frequently and significantly increased their levels of learner autonomy. In the context of MOOC EFL courses, research has also shown that having students naturally interact in courses that offer meaningful choices, self-paced learning, and task involvement lead to the development of language learner autonomy [24].

III. Methodology

A. Context of the Study

This research took place in a private university where English is compulsory in different study programs such as nursing, accounting, and special education. LCE (Language Communicative English) courses take place in a fully virtual learning environment due to the COVID-19 pandemic. The courses are asynchronous and implemented by means of a Learning Management System (LMS). All the students within the programs have to take two levels of English, which are LCE001 and LCE002 respectively.

During the first three weeks of the LCE001 course, some important milestones occur. In the first week, the induction stage is introduced. During this period, students are informed about the program and modality they are in so that they can better prepare for the challenges of learning a second language online. During the second week, students are given the opportunity to sit for a placement test in which their current level of English is tested, and based on the results they can be exempted from the course. In the third week, students gain access to the English Discovery platform and they are oriented through a series of tutorials to guide them through the process.

The EDUSOFT platform offers a learning management system for each teacher in order to keep track of each student's progress. Within the platform it is possible to download students' reports on the amount of time spent on tasks, their latest access to the platform, as well as the overall progress in the form of a percentage. Students' contact with their facilitators is through emails, virtual classroom alerts, videos, and optional Zoom meetings since there is not a fixed schedule for this type of courses. The methodology of the English courses is based upon the facilitator assessing the students' work and progress in the LMS after sharing the learning outcomes for the expected performance and the specification tables for the assessment tools. In addition to this, the course uses the Blackboard platform which has material available for the students to practice their critical thinking skills and their language skills. Lastly, optional weekly workshops are available for students to sign up in case they are interested in the topics offered and have the time to do so.

B. Sample

Ninety-one college students from a university in Chile participated in this study voluntarily based on principles of convenience sampling. They were all enrolled in the LCE001 course. These ninety-one students read and signed an informed consent approved by the bioethical committee of the university. Although all ninety-one participants sat for the first instance of the application of the questionnaire MILLA, only fifty of the ninety-one students participated in the second application. Thirty-six were female (72%) and fourteen were male (28%). The high attrition rate is not rare in online learning contexts. It may be in fact twice as high as the one in traditional classrooms [25].

C. Objectives

The study had the following specific objectives:

1) Determine if participating in an online EFL course had a positive impact on students' behavioral autonomy.
2) Examine the behaviors, indicative of autonomous behavior, that were the most positively impacted by the participation in an online EFL course.

D. Instrument

The Measuring Instrument for Language Learning Autonomy (MILLA) is made of 113 statements, which allow the evaluation of 3 sub-dimensions of the construct: technical autonomy, psycho-political autonomy, and sociocultural autonomy. While all three dimensions are essential to understand language learning autonomy, the technical dimension is the one that focuses on the actual actions that students take toward improving their learning outcomes. That is, it refers to the strategies and techniques the students use to learn without the teacher's supervision once they are outside the classroom.

Only the statements related to this dimension of the autonomy construct were considered for the study. The reasoning underlying this decision was that the interest of the research was in whether participating in an online course affected the behaviors students had while learning English and not on how they viewed themselves (psycho-political) or their surroundings (sociocultural).

The statements from the MILLA that encapsulate behaviors are twenty-five and follow the format of a Likert-5 scale. Thus, students have to score from 1 to 5 (1 being never and 5 always) in order to report how often they implement the corresponding actions. Examples of these statements are the following ones:

- I set long-term goals in learning English.
- I make study plans that match my goals in learning English.

The Cronbach alpha coefficient of the instrument for this study was .936, so it has excellent internal consistency [13].

E. Procedure

Within the first and second week after the start of the course, potential participants were first contacted by their course facilitators through email and passed on the message the research team prepared inviting them to participate in this study. The ones who accepted the invitation received informed consent approved by the bioethical committee of the university in which the study took place.

The survey was made available to the participants in the form of a Google Form survey that collected their responses. During the third and fourth week, the researchers asked the course facilitators to remind their students about the MILLA survey to increase the number of answers.

Two months prior to the end of the semester, the students who responded to the MILLA the first time were contacted via email by the researchers to remind them about the second application of the MILLA. The reason for only contacting students that answered during the first call was to ensure that we would be able to compare the data of the first and second applications. All data were registered and analyzed using SPSS V. 25.

During the experience in their online EFL course, the students could interact with 2 platforms: Edusoft LMS and Blackboard. The first one was made available to the students while asking them to focus on the units of the student's book whereas the latter was used to make available material related to units about university life, critical thinking, and EFL learning.

IV. Results

A. Impact of Online Course on Behavioral Language Learning Autonomy

Descriptive statistics for the pre-test (M = 79.4; SD = 20.37) and post-test (M = 85.62; SD = 19.31) revealed an average increase of 6 points from the pre-test to the post-test. The instrument showed in both instances high internal reliability (pretest α = 0.944; posttest α = 0.942).

To confirm if the difference showed in the descriptive statistics was statistically significant paired-samples t-test was run. Prior to running the test, the assumption of normality was confirmed using the Shapiro-Wilk test of normality. No outliers were detected using the interquartile range. The corresponding paired-sample t-test ($t(49) = 2.25$, $p < 0.5$) confirmed the difference was statistically significant (Table I). Therefore, it can be stated that participation in the online English course had a positive impact on the students' level of behavioral autonomy.

TABLE I: Paired-Samples t-Test

Mean	Std dev	Std Error Mean	T	df	Sig (2-tailed)
-6,26	19,69337	2.78506	-2.248	49	0.29

Cohen's d was estimated at 0.344 using the software GPower. Based on Cohen's [26] guidelines this effect size can be considered between small to moderate. That is, although participation in the course does make a statistically significant impact, this should probably be accompanied by other measures to have a more noticeable impact on students' behavior.

B. Behavioral Change after Being Part of Online EFL Course

The MILLA contains statements that are representative of autonomous language learning behavior. A critical behavior was conceived in this study as one that was significantly low before the participation in the online language learning course. Descriptive statistics were run on each of the statements to determine which were rarely shown by the participants of the study in the pretest. Six behaviors were identified as least used (mean below 3). These were the statements 1, 4, 21, 22, 23, and 25 of the MILLA instrument, which are the following ones:

- s3: I set goals for the day before I start studying English.
- s4: I make study plans for the day before I start studying English.
- s21: I take notes about how much time I spent on my English study.
- s22: I keep records of what kind of methods I used for my English study.

- s23: I write down what kinds of materials I used for my English study.
- s25: I take notes of my feelings while I am studying English.

After the participation in the online course, all six behaviors identified as critically showed an increase in terms of frequency. This can be seen in Table II.

TABLE II: INCREASE IN FREQUENCY IN CRITICAL BEHAVIORS

Behavior	Pre-test mean	Post-test mean
S3	2.8	2.96
S4	2.62	3.2
S21	2.64	2.94
S22	2.94	3.14
S23	2.74	2.68
S25	2.04	2.56

Finding a significant improvement in the frequency in which these behaviors are exhibited makes sense when considering the nature of the interactive platform and its implementation in the course.

First of all, in the course, as in most online courses, students have to comply with completing a certain number of units before set deadlines. This feature naturally promotes the increase of the frequency of behaviors in statements 3 and 4. The freedom to interact with the platform at the time that the student prefers probably moves them to set specific goals when they open the platform to work on it as well as to make specific plans the day prior.

As for statements 21, 22, 23, and 25, these are behaviors associated with self-regulated learners. McCormick [27] defines self-regulated learners as those who engage in metacognitive processes constantly evaluating the effectiveness of the regulatory cognitive processes used. Note-taking strategies, specifically, have been shown to be crucial to support all phases of self-regulation [28], [29].

It is important to notice that although these four behaviors show a change, statement 23 did not increase as the others did in terms of frequency. It actually decreased. A possible explanation for this is the nature of the platforms the students interacted with. These platforms contain the activities the students are supposed to use; therefore, there is no need for the students to write down the materials being used during their study sessions.

V. DISCUSSION

The positive impact of the implementation of this online EFL course can be related to two dimensions of the framework for self-determination in MOOCS proposed by Martin, Kelly, and Terry [24]. These two are related to the features of the design of the course itself and to the support offered to the learners. As for the former, four characteristics can be highlighted, which will be explained in light of the course format and then discussed considering the results:

1) Offering meaningful choice: the LMS platform is implemented in this course in a way in which the student has to follow the units in order, but the students are also offered other learning opportunities to foster their learning. These are a Blackboard platform with material available for them to explore on topics related to EFL as well as university life and optional workshops that focus on varied issues related to their learning experience. Naturally, the opportunity to make meaningful choices fosters the autonomous behaviors of setting goals as well as making study plans in advance since the students have the responsibility to select which activities to do out of the range offered.
2) Allowing self-paced learning: Even though there is a calendar with the recommended pace for the students to work on the activities offered in the LMS as well as Blackboard platforms, the students are the ones to decide if they stick to it and how they organize their time to work on the platform. Self-paced learning may have been beneficial in the promotion of behaviors associated with keeping track of the activities and methods that have been working.
3) Limiting task imposition: Out of all the possibilities the students have (LMS, Blackboard, and workshops), only the LMS component partially contributes to grades. Therefore, although Blackboard and workshops are available to students. Similar to the first feature, limiting task imposition relates to the opportunities students get to make study plans and set goals for the days in which they decide to work on the course.
4) Providing task involvement and sense of presence: Teachers in charge of the online EFL courses have the responsibility to monitor and guide the students enrolled. They can use the QMS system of the LMS platform, for example, to check students' progress. Based on this input, facilitators contact the students to congratulate them on their progress, ask them to speed up their work if they are significantly falling behind, and inform them about their results in the course. This aspect is more difficult to interpret in light of the behaviors that the students adopted during the course. However, it could be stated that students taking notes of how they feel as well as their accomplishments can be related to this feature on the grounds that in the interactions with the teachers taking into consideration these ones require the delivery of explanations justifying their performance.

Regarding the aspects that foster competence by supporting the learner, the framework created by Martin, Kelly, and Terry [24] considers four, which will be discussed in relation to the program and results obtained.

1) Provides structure, supportive information, and clear task rationales: The beginning of the online course includes an asynchronous lesson by means of which the course facilitator outlines the course, shares the program, communicates the assessment instances, and offers other administrative information of potential use for the students. This lesson especially focuses on the importance of taking control over one's learning as well as managing the platforms rigorously and in an organized manner. Consequently, it can be understood as the planting of the seeds for fostering autonomous behavior. In addition, the two weeks of the course are dedicated to activities related to the information and tasks students need to know and do in order to be successful by means of an induction unit available on Blackboard before the

students have access to their LMS.

2) Creates an optimal level of challenge: Edusoft English Discoveries, the LMS platform, guides students to the achievement of an A1 level based on the standards of the Common European Framework of Reference for Languages. Considering that this is the first English course students have at the university and the existence of a placement test at the beginning of the semester, it can be asserted with certainty that this is the ideal level for the students. With regard to the importance, this has on the development of the students' autonomy, suffice to say, that an ideal challenge is the best catalyst for the development of autonomous behaviors. It is important for the student to feel that they can do it, so they can keep track of how they move toward this goal as well as the techniques that are helping them do so.
3) Gives an indication of progress: The LMS by nature gives students' the feeling of progress since it alerts students of the progress made in each unit. This feature also helps students identify if they missed any part of the unit. As for the material in Blackboard, this is organized in units as well based on complexity. The student receives the suggested pace at which they can work on this material by means of a calendar. Thus, the planning of their work becomes imperative and behavior that students can benefit from since it is naturally promoted.
4) Provides positive and constructive feedback with unexpected rewards: Regarding this aspect, the main role of the teacher in the online course is to provide students with positive and constructive feedback as the course progresses based on the monitoring of their work. Having said that, although rewards are provided based on the students' performance in the forms of grades and exam exemption, these are informed in advance as advised in the literature on goal-setting theory and assessment [30], [31]. Therefore, this is something that needs further investigation.

One final point to comment on is the significant attrition in participation from the first application of the MILLA to the second one. This big dropout number was expected based on the context of the study. The study, due to the nature of the course as well as the impact of the pandemic, was done entirely online. Studies carried out in this manner tend to have a very high attrition rate [25]. Research on online learning environments has shown that one of the main reasons for this is not being able to handle the complexities of an online course due to the lack of experience with learning environments that rely on the students' responsibility and organization, which is related to low autonomy levels [32], [33]. Therefore, it could be argued that the students who drop out, inadvertently miss the opportunity of developing the autonomy they need to succeed in the course as they work on it. As the findings reveal, participation in the online course leads to a better overall ability to self-regulate, which, in turn, should help lower dropout rates [34].

VI. Conclusion

Increasing students' autonomy has been one of the most relevant challenges educational institutions have been facing during the pandemic due to the natural switch to online learning. The present study has shown that interacting with an interactive learning platform during a semester has an overall moderate positive impact on increasing students' second language learner autonomy as well as the behaviors on which interacting with online platforms impacts the most.

This study adds to the incipient line of research exploring the impact that learning in an online environment with interactive platforms has on language learner autonomy.

Although the study contributes to the field, there is one important limitation that needs to be acknowledged. It was not possible to account for other variables related to the development of language learner autonomy that might have affected students apart from the participation in the course. For example, students might have taken on other activities that could have helped them develop their language learner autonomy, such as workshop participation or language learning app use. This weakness could have been avoided if it had been possible to implement a survey to gather this information during the posttest. However, due to the number of surveys being conducted at the time in which the study took place, it was not feasible. In a future replication, this will be addressed.

Future studies are necessary in this area of study to achieve two objectives. First, it is necessary to narrow down the scope of the study in order to identify the specific activities that have the biggest effect on language learner autonomy out of all the wide variety offered by the platform. Secondly, more research done using a mixed methods approach should be done. Complementing quantitative data with qualitative information may shed light on the perceptions students have of how their interaction with the LMS changes the behaviors they exhibit.

All in all, language learner autonomy is nowadays more important than ever. With the advent of online education and the increasing number of programs adopting this modality, understanding its nuances as well as how students can grow to be autonomous learners should be one of the main tasks researchers in the education field should undertake considering the clear positive relationship between increasing autonomous behavior and improving academic performance [35].

Conflict of Interest

The authors declare no conflict of interest.

Author Contribution

BC designed and conducted the research and analyzed the data. CP supervised the research and helped communicate the information. Both authors collaboratively wrote the article.

References

[1] P. Benson, *Teaching and Researching Autonomy in Language Learning*, 2nd ed. Harlow, U.K.: Pearson, 2011.
[2] I. Egel, "Learner autonomy in the language classroom: From teacher dependency to learner independency," *Procedia*, vol. 1, pp. 2023-2026, 2009.
[3] C. Everhard, "The assessment-autonomy relationship," in *Assessment and Autonomy in Language Learning*, C. Everhard and L. Murphy, Eds. New York: Palgrave Macmillan, 2019, ch 1, pp. 33-63.

[4] J. E. Lozano-Jiménez, E. Huéscar, and J. A. Moreno-Murcia, "Effects of an autonomy support intervention on the involvement of higher education students," *Sustainability*, vol. 13, p. 5006, April 2021.
[5] J. Wong, M. Baars, D. Davis, T. Zee, G.-J. Houben, and F. Paas, "Supporting self-regulated learning in online learning environments and MOOCs: A systematic review," *International Journal of Human-Computer Interaction*, vol. 35, no. 4-5, pp. 356-373, 2019.
[6] M. Esfandiari and M. Wais, "Is technology paving the way for autonomous learning?" *World Journal of English Language*, vol. 9, no. 2, pp. 64-73, 2019.
[7] J. A. Muñoz-Cristóbal, J. M. Rodríguez-Triana, V. Gallego-Lema, H. F. Arribas-Cubero, J. I. Asensio-Pérez, and A. Martínez-Monés, "Monitoring for awareness and reflection in ubiquitous learning environments," *International Journal of Human–Computer Interaction*, vol. 34, no. 2, pp. 146-165, 2017.
[8] J. B. Wandler and W. J. Imbriale, "Promoting undergraduate student self-regulation in online learning environments," *Online Learning*, vol. 21, no. 2, pp. 1-16, 2017.
[9] H. Holec, *Autonomy and Foreign Language Learning*, Oxford, U.K.: Pergamon, 1981.
[10] P. Benson, "Autonomy in language teaching and learning," *Language Teaching*, vol. 40, no. 1, pp. 21-40, January 2007.
[11] M. Hamilton, *Autonomy and Foreign Language Learning in a Virtual Learning Environment*, London, UK: Bloomsbury, 2013.
[12] D. Little, *Learner Autonomy 1: Definitions, Issues and Problems*, Authentik, 1991.
[13] F. Murase, "Measuring language learner autonomy: Problems and possibilities," in *Assessment and Autonomy in Language Learning*, C. Everhard and L. Murphy, Eds. New York: Palgrave Macmillan, 2015, ch 2, pp. 35-63.
[14] M. Tassinari, "Assessing learner autonomy: A dynamic model," in *Assessment and Autonomy in Language Learning*, C. Everhard and L. Murphy, Eds. New York: Palgrave Macmillan, 2015, ch 3, pp. 64-88.
[15] A. Merc, "The effect of a learner autonomy training on the study habits of the first-year ELT students," *Educational Research and Reviews*, vol. 10, no. 4, pp. 378-387, February 2015.
[16] B. Xhaferi and G. Xhaferi, "Developing learner autonomy in higher education in Macedonia," *Procedia - Social and Behavioral Sciences*, vol. 11, pp. 150-154, December 2011.
[17] S. Moussaoui, "An investigation of the effects of peer evaluation in enhancing Algerian students writing autonomy and positive affect," *Procedia – Social and Behavioral Sciences*, vol. 69, pp. 1775-1784, December 2012.
[18] V. I. Chirkov, "Culture, personal autonomy and individualism: Their relationships and implications for personal growth and well-being," in *Perspectives and Progress in Contemporary Cross-cultural Psychology*, G. Zheng, K. Leung, and J. G. Adair, Eds. Beijing, China: China Light Industry Press, 2007, pp. 247-263.
[19] L. Han, "Teacher's role in developing learner autonomy: A literature review," *International Journal of English Language Teaching*, vol. 1, no. 2, pp. 21-27, April 2014.
[20] S. Yan, "Teacher's roles in autonomous learning," *Journal of Sociological Research*, vol. 3, no. 2, pp. 557-562, July 2012.
[21] Q. M. Zhong, "The evolution of learner autonomy in online environments: A case study in a New Zealand context," *Studies in Self-Access Learning Journal*, vol. 9, no. 1, pp. 71-85, March 2018.
[22] J. L. Moore, C. Dickson-Deane, and K. Galyen, "E-Learning, online learning, and distance learning environments: Are they the same?" *The Internet and Higher Education*, vol. 14, no. 2, pp. 129–135, March 2011.
[23] X. Liu, Y. Liu, and J-F. Tu, "Multimedia technology and learner autonomy: An experimental study for asymmetric effects," *Symmetry*, vol. 12, no. 462, March 2020.
[24] N. Martin, N. Kelly, N., and P. Terry, "A framework for self-determination in massive open online courses: Design for autonomy, competence, and relatedness," *Australasian Journal of Educational Technology*, vol. 34, no. 2, pp. 35-55, April 2018.
[25] Y. Levy, "Comparing dropouts and persistence in e-learning courses," *Computers* & Education, vol. 48, pp. 185–204, February 2007.
[26] J. Cohen, "A power primer," *Psychological Bulletin*, vol. 112, no. 1, pp. 155-159, July 1992.
[27] C. B. McCormick, Metacognition and learning, in *Handbook of Psychology* (vol. 7), I. Weiner, W. Reynolds, & G. Miller, Eds. Hoboken, NJ: John Wiley & Sons, pp. 79-102, 2003.
[28] N. Dabbagh and A. Kitsantas, "Using web-based pedagogical tools as scaffolds for self-regulated learning," *Instructional Science*, vol. 33, pp. 513–540, November 2005.
[29] B. J. Zimmerman and M. Campillo, Motivating self-regulated problem solvers, in *The Psychology of Problem Solving*, J.E. Davidson & R.J. Sternberg, Eds. New York, NY: Cambridge University Press, 2003, pp. 233-262.
[30] E. A. Locket, K. N. Shaw, L. M. Saari, and G. P. Latham, "Goal setting and task performance: 1969–1980," *Psychological Bulletin*, vol. 90, no. 1, pp. 125–152, July 1981.
[31] G. Richter, D. Raban, and S. Rafaeli, "Studying gamification: The effects of rewards and incentives on motivation," in *Gamification in Education and Business*, T. Reineers & L.C. Wood, Eds. Springer International, 2015, pp. 21-46.
[32] H. Fournier, R. Kop, and G. Durand, "Challenges to research in MOOCs," *Journal of Online Learning and Teaching*," vol. 10, no. 1, 1-15, March 2014.
[33] K. F. Hew and W. S. Cheung, "Students' and instructors' use of massive open online courses (MOOCs): Motivations and challenges." *Educational Research Review*, vol. 12, pp. 45–58, June 2014.
[34] Y. Lee and J. Choi, "A review of online course dropout research: Implications for practice and future research," *Educational Technology Research and Development*," vol. 59, pp. 593–618, 2011.
[35] L. Barnard-Brak, V. O. Paton, and W. Y. Lan, "Self-regulation across time of first-generation online learners," *Research in Learning Technology*, vol. 18, no. 1, pp. 61–70, March 2010.

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