

People's Democratic Republic of Algeria

Ministry of Higher Education and Scientific Research

Moulay Taher University of Saida

Faculty of Letters and Languages

Department of English Language and Literature



**The Blended Learning in Higher Education: A Pathway to Educational
Reinvention in Digital Post-Pandemic Era**

Algerian Universities as a case of study

A Thesis Submitted in Partial Fulfillment of the Requirements for the Master's Degree of
Language Sciences and Didactics

Submitted by:

KHELIFI Hanane

Board of Examiners:

Chairperson	BOUBEKEUR Sihem	University of Saida
Supervisor	BABOU Meriem	University of Saida
Examiner	HADJI Mohammed	University of Saida

Academic Year: 2023/ 2024

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Declaration of Originality

I hereby declare that this submission is my work and that, it contains no material previously published or written by another person nor material which has been accepted for the qualification of any other degree or diploma of a university or other institution. I also certify that the present work contains no plagiarism and is the result of my investigation, except where otherwise stated.

Date: 10/06/2024

Name: KHELIFI Hanane

Signature:

Dedications

Dearest mom, your unwavering love, boundless support, belief in me, sacrifices, strength, and endless encouragement have inspired me to strive for greatness every day. This achievement is yours before it is mine.

Dearest dad, thank you for giving me wings. Though distance and circumstances separate us now, your presence is felt in every achievement I reach. I dedicate this milestone to you with all my heart.

Dearest Hadjer, you have not only taught me how to recite the Quran but also instilled in me a deep love and reverence for its teachings. You are a beacon of light in my life, guiding me through the darkest of times and illuminating the path to knowledge and wisdom. Thank you for believing in me, helping me discover my potential, and encouraging me to reach the stars.

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Abstract

It has been four years milestone since the adoption of Blended Learning (BL) in Algerian higher education as a result of the COVID-19 health crisis and rigorous attention paid to the digital revolution, in which the language education landscape has undergone a paradigm shift. As the digital revolution continues to reshape educational paradigms, BL stands out as a pivotal approach that combines online learning with traditional face-to-face instruction. This research endeavors to shed light practicality and sustainability of BL in Algerian universities in the post-pandemic era, how it has evolved to meet the challenges, and empowering learners to take greater control of their learning journey while also considering their emotional and motivational aspects. To accomplish the research aim, an exploratory design combining both quantitative and qualitative data was applied. The sample for our study is represented by 15 EFL teachers and 60 master 2 EFL learners from English department of 10 Algerian universities mainly Saida, Biskra, Blida, Laghouat, Sidi Bel Abbas, Ain Timouchent, Ouargla, Setif, Mascara and Ghardaia universities. A triangulation of instruments was employed where a semi-structured questionnaire was administered to students, structured interview (with teachers, supplemented by participant observation to examine BL practices and its effectiveness in post-pandemic era. Findings reveal teachers' and learners' negative attitudes towards BL implementation in the post-pandemic era. There is a misapply of BL models and underutilization of MOODLE activities by teachers. EFL teachers and learners report dissatisfaction with BL implementation due to its limited perceived effectiveness. Teaching and learning experiences were often seen as disjointed and ineffective. There is a discrepancy between BL models and the design of MOODLE activities in meeting the demands of learners. BL limited adoption, absenteeism of interactive activities and underutilization of MOODLE platform yield to negative influence on learners' autonomy and affect. To wrap up, despite the long way that BL has come since its first adoption in Algerian higher education during COVID 19 pandemic, it is still in its infancy stage. As a result, the study comes to important practical recommendations to policy makers and teachers as they should redefine BL implementation within appropriate pedagogical frameworks, invest in infrastructure, set and ensure manageable and realistic workloads and provide continuous professional development for teachers. Educators should embrace diverse BL models, utilize all MOODLE activities, and prioritize meeting affective needs of their students and encouraging student autonomy through embracing diverse BL models and MOODLE activities.

Keywords: Blended Learning, Blended Learning models, digital revolution, learner's affect, learner autonomy, MOODL activities, post-pandemic age.

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List of Abbreviations and Acronyms

BL:	Blended Learning
BLA:	Blended Learning Approach
EFL:	English as a Foreign Language
F2F:	Face to Face
RM:	Rotation Model
SRM:	Station Rotation Model
LRM:	Lab Rotation Model
FCM:	Flipped Classroom Model
IRM:	Individual Rotation Model
FM:	Flex Model
EVM:	Enriched Virtual Model
CAI:	Computer Assisted Instruction
COVID-19:	CO corona VI virus Disease2019
SNSs:	Social Network Services
MALL:	Mobile Assisted Language Learning
CALL:	Computer Assisted Language Learning
MOODLE:	Modular Object-Oriented Dynamic Learning Environment
LTI External Tool:	Learning Tool Interoperability External Tool
H5P:	HTML5 Package

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General Introduction

General Introduction

Recently, the digital revolution has begun receiving rigorous attention from researchers worldwide. This revolution has brought about tremendous change in the world of education. This change is marked by the proliferation of online resources and platforms that facilitate the dissemination of knowledge. One remarkable paradigm that has emerged from the technological revolution is Blended Learning (BL), which blends online learning activities with traditional face-to-face education. The approach has gained more relevance during and after COVID-19 pandemic in Algeria, which transforms education from a teacher-centered to learner-centered. However, there are still obstacles to efficient BL implementation and profitable use of MOODLE platform in cultivating perceived advantages. In the Algerian post-pandemic context, adoption of BL creates a new set of both challenges and opportunities, mainly related to enhancing learner autonomy and affect. The purpose of this research is to examine the practical implementation of BL in Algerian institutions in post-pandemic age and its potential advantages on learner's autonomy and affect. To achieve the research purpose, the following aims were targeted:

- Examine EFL teachers' and learners' attitudes with regarding BL in the digital post-pandemic context and their awareness regarding respective roles, responsibilities and contributions in the BL environment.
- Identify the specific practices and strategies that are being used in BL environments after the COVID-19 pandemic, and capture BL continuity and any changes that have emerged in post-pandemic age.
- Explore how EFL teachers and learners evaluate their experiences with BL, and uncover perceived effectiveness and associated benefits with BL.
- Explore how the integration of different BL models and use of MOODLE activities enhance or diminish learners' autonomy and affective aspects in the BL classroom.

The research questions guiding this study are as follows:

- How have teachers' and learners' attitudes towards BL and their perceived roles evolved in the digital post-pandemic era?
- What are teachers' current practices of BL in the post-pandemic era?
- How do EFL teachers and learners evaluate their teaching and learning experiences within the BL environment in the post-pandemic era?
- To what extent do BL models and MOODLE platform utilization influence learners' autonomy and affect?

Based on the above stated research questions, the following hypotheses are suggested:

General Introduction

- EFL teachers and learners hold positive attitudes towards BL implementation in post-pandemic. It is suggested that the teacher's role is guiding and facilitating learning while learners are supposed to be active, autonomous, and accountable for their learning process.
- EFL teachers continue implementing BL in post-pandemic phase; they integrate different models of BL and include different activities of MOODLE in the instructional process.
- Teachers and students report high levels of satisfaction with BL, they perceive the teaching/learning experience as purposeful, transformational and authentic.
- Integration of different models of BL and utilization of MOODLE activities empower learners' autonomy and affect through increasing their motivation, reducing anxiety, building self-confidence and self-esteem, and catering to the needs of both extrovert and introvert learners.

To answer the research questions, the researcher opts for a triangulation of instruments: semi-structured questionnaire (in-spot and online), structured interview (face-to-face and postal) and participant observation, 60 EFL learners and 15 EFL teachers field of didactics from 10 Algerian universities participated in the study investigation. No research is intended to be out of lacks or flaws. Based on this premise, the researcher admits that the current study underwent various hindrances that hampered its successful implementation and resulted in some drawbacks. During the investigation, the researcher identified various issues that needed to be addressed.

As far as thesis structure and chapters outlining are concerned, the thesis starts with a general introduction that includes: the background of the study, statement of the problem, research focus, research objectives, research questions and hypotheses, overview of the methodology and sample, study limitations, and the structure of the thesis.

The thesis consists of three chapters: literature review, methodology chapter and analysis, interpretation and discussion chapter. The theoretical part of this study delves deeply into the BLA by addressing its various facets. Initially, it focuses on defining BL, exploring its components, and identifying its unique characteristics. The discussion extends to different models of BL, highlighting the specific advantages and disadvantages associated with it. The Algerian context is given particular attention, detailing factors that affect the implementation of BL in Algerian higher education institutions. This includes an examination of the efforts made by the government to promote and support BL initiatives.

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The study also highlights the educational tools available to facilitate BL, with a specific focus on the MOODLE platform, as the sole platform that plays a crucial role in the application of BLA in Algerian universities. In addition to examining the structural aspects of BL, the study delves into the theoretical underpinning of autonomy. It provides a thorough analysis of autonomy, defining the concept and exploring its various levels and measurements. The relationship between autonomy and BL is scrutinized, particularly within the context of English as a Foreign Language (EFL) classroom. This examination reveals how BL can foster greater learner autonomy, encouraging students to take more responsibility for their own learning. The study also explores learners' affective aspects, providing an overview of key emotional and psychological factors that influence language learning. This includes attitudes towards language learning, motivation, anxiety, self-confidence, self-esteem, extroversion, and introversion. Finally, the study addresses BL as a mechanism for empowering learners' affective traits within the learning process, and how the integration of BL can positively impact learners' emotional and psychological well-being.

The second chapter provides a detailed account of research design and approach used in the study. It also provides an account of the sampling, spatial and temporal context. The data collection methods are then outlined, encompassing student's questionnaire, teacher's interview, observation, and other procedures utilized to acquire information from the participants. Finally, it addresses ethical issues and consideration.

The third chapter is devoted to the fieldwork of the current study. The content of this chapter presents data analysis procedures, the results of student's questionnaire, the teacher's interview and classroom observation analysis and interpretation of the findings, and discussion of the general findings. This chapter also deals with study limitations, pedagogical implications and recommendations, and finally suggestions for further research are discussed. Finally, the researchers ended her research with a general conclusion.

Chapter One

Literature Review

Introduction

There is an increasing tendency towards turning education into a process of empowerment, where the goals of personal growth and self-regulation are integrated within educational purposes. This theoretical part deals with the Blended Learning approach by tackling its definitions, components, characteristics, models, advantages, and disadvantages. Then it touches on the Algerian context by detailing factors affecting BL implementation in Algerian higher education, efforts made by the government in addition to educational tools to support BLA application by stressing on MOODLE. Then it deals with theoretical underpinning of autonomy, including its definition, levels and measurements. It gives a thorough examination of autonomy within Blended Learning in EFL classrooms. It also sets out an overview of learner's affective aspects mainly: attitudes towards language learning, motivation, anxiety, self confidence, self-esteem, extroversion and introversion. Finally, it deals with Blended Learning as a mechanism to ensure these affective traits are empowered in the learning process, besides the learner's autonomy-affect dichotomous.

1.1. Definitions of Blended Learning

In the first beginning of Blended Learning (BL) emergence, the term was embracing several interpretations and encompassing wide spectrum as it emphasizes on blending diverse theoretical approaches and marginalizes technology. This is illustrated in Procter's definition (2003) who defines it as "the effective combination of different modes of delivery, models of teaching and styles of learning". Chew, Jones, and Turner defined BL by entailing two areas of focus: education and educational technology. However, critics were raised over this broad, doomed and ill-defined definition of BL by Oliver and Trigwell.

Eventually some common ground emerged namely Graham's proposal of defining the BL considering two modes of course delivery: in-class instruction with computer-mediated instruction as "Blended Learning systems combine face-to-face instruction with computer-mediated instruction". Osguthorpe and Graham (2003) describe BL as a combination of face-to-face (F2F) instruction and computer-mediated instruction. BL combines the direct interaction and engagement of traditional classroom settings with the flexibility and accessibility of online education. By merging these approaches, BL aims to provide a more comprehensive and effective educational experience, leveraging the benefits of both in-person and online learning environments. Conjointly, Staker and Horn define BL as

A formal education program in which a student learns at least in part through online delivery of content and instruction with some element of student control over time, place, path, and/or pace and at least in part at a supervised brick-and-mortar location away from home

This definition insinuates that BL goes beyond a mere incorporation of online resources to real integration of in-person and computer-mediated instructions. Along with it, the F2F element does not adhere to a conventional classroom but any other physical setting.

Similarly, a dilated version of Staker and Horn's definition was offered by Watson and Murin as a structured educational program permitting flexibility in time, place and pace and ensuring engagement in both virtual and physical settings connected to the subject to provide a whole learning experience. In like manner, Garrison and Kanuka (2004) depicted BL as the solicitous incorporation of virtual and physical learning experiences. Another well-defined, and most prelevant definition is the one of Hartman & Moskal (2005) who defined the BL as

Combination of instructional modalities (i.e. onsite, self-paced learning and web-based), delivery media (i.e. internet, lectures, PowerPoint presentations, textbooks); instructional methods (face-to-face or technology-based sessions) and web-based technologies (e.g. wikis, chat rooms, blogs, textbooks, online courses). In what way/s the combination is done depends on such criteria as learning goals, course content, teacher experience and teaching style, learner characteristics etc.

Garrison & Vaughan (2008) emphasized the urge to reevaluate and renovate the traditional learning/teaching approaches and defined BL as the considerate fusion of online and offline learning experiences. Krasnova defines BL as

Method of teaching that combines the most effective face-to-face teaching techniques and online interactive collaboration, both constituting a system that functions in constant correlation and forms a single whole.

Krasnova puts stress on the integration and correlation between two modes of teaching resulting in a unified and cohesive mode of teaching. A plethora of definitions of the term BL were taken into account by Stacey and Gerbic, yet they consider that the core of BL is the dyad combination of online and face to face learning environments. In the same vein, Launer defined it as the incorporation of both face-to-face and technology based settings within the same learning environment.

Other than Oliver and Trigwell's criticism on the broad definition of BL concept, criticism was on the focus of theorists on teaching and marginalizing learning when defining BL concept, which unravel an influential adequate consideration of technology contribution to

the instructional process. Sharma & Barrett (2009) give a concise and well detailed definition of the term technology and what is constituted of, taking into consideration Oliver and Trigwell's criticism and emphasizing technology adequate and thoughtful use.

Ceylen & Kesici (2017) asserted that BL involves a rich array of learning strategies that combine various teaching methods and environments. Harvey and Chris (2001) outline several combinations that a blended learning program may include:

Combining Online and Offline Learning Environments: This approach integrates digital, online resources with traditional, in-person classroom activities.

Combining Collaborative and Individual Learning Environments: BL can mix group activities, where students work together on projects or discussions, with individual tasks that allow students to work at their own pace and focus on personal learning goals.

Combining Structured and Non-Structured Learning Environments: Structured environments follow a set curriculum and schedule, while non-structured environments allow for more flexibility and student choice, catering to different learning preferences and encouraging self-directed learning.

Combining Pedagogical Approaches: BL can incorporate various educational theories and methods such as constructivism (learning through experience and reflection), behaviorism (learning through reinforcement and practice), and cognitivism (learning through understanding and mental processes). This mix aims to create an optimal learning outcome by leveraging the strengths of each approach, with or without the use of instructional technology.

1.2. Components of Blended Learning

Five distinct components of BL were categorized by Alammery and Carbone, this categorization is grounded in the kind of interaction each component supports. The Constructivism, which profoundly influences pedagogy and ergo BL, posits that knowledge and learner are not detached; rather, it is shaped by interaction with content or others (as cited in Alammery, 2019). The five components include:

Face-to-face instructor-led: In a setting where a knowledgeable instructor provides guidance and presents the study material and where might not be pervasive opportunities to interact with the material or instructor. Griffin and Mitchell stated that this delivery method held main

pedagogical advantages: control over their students' learning and select teaching strategy accordingly and efficiency by delivering a profound content to a wide group of students.

Face-to-face collaboration: Communication and collaboration among students is highly encouraged through discussion groups, pair work, peer teaching and problem-based learning. Sarason et al believe that in-class collaboration contributes in a deeper understanding of the content, students' engagement, critical thinking development, and encourages students' autonomy.

Online instructor-led: An instruction retaining the benefits of the face-to-face instructor-led, however eliminating constraints of location; is an instruction where the material is delivered online and the pace is set by the instructor.

Online collaboration: Eliminating the constraints of location and time when compared to F2F collaboration, this approach encourages students to work together online through online learning communities and online peer review.

Online self-paced: This approach allows students to study on their own controlling pace, location, and time, using online resources like reading, watching videos. Griffin & Mitchell indicated four pedagogical benefits of online self-paced: allowing students to choose the optimal time, desired speed; favored location; and suitable learning strategy.

1.3. Characteristics of Blended Learning

Lalima & Dangwal mentioned 13 points that characterize the BL. The first point to address is the two modes' option: students in BL are agent; they take control over which mode to carry out with; be it conventional or virtual, based on the subject matter and the target objectives. Another point to consider is the teacher's competence in both modes: teachers in BL setting are well equipped and trained to maintain knowledge in both spaces; traditional and virtual, by using traditional methods and modern technologies emphasizing adaptability and flexibility. Likewise, students have the chance of in-class and out-of-campus interaction enabling them to overcome geographic barriers and exchange knowledge with diverse and wide range of students and empowering their emotional growth. Another characteristic is that BL ensures that digital age demands are met, and students' digital literacy is fostered, by giving them a new technological adventure. All round student's personality development is targeted by BL; cognitively, emotionally and physically. It is generally known that BL hinders the student's physical development. Yet practically speaking, students do have time for physical activities and it's not a limitation anymore. BL

enriches the learning experience as it bridges the gap between theory and practice allowing exposure to new wide perspectives of the course content. Since it is believed that the teacher presence nurtures the student's emotional and affective development and well-being, BL keeps the human touch. BL provides a multicultural and multifaceted approach to instructional process due to knowledge exchange with students from different countries and cultures. Learner centered: the ultimate focus of the Blended Learning Approach (BLA) is the students, prioritizing their growth, education and perceived benefits. An influential area that was mentioned is teacher's role diversity: unlike traditional role of the teacher; in BL setting, teacher is a motivator, resource person, organizer, content developer, a guide on the side, promoting learners' professional growth. Constructing knowledge: BL incorporates constructivism, as students are encouraged to be autonomous and self-researchers.

1.4. Models of Blended Learning

BL is categorized differently by many authors who based their classification on objective, methods, or purpose. Two typologies are put on view:

1.4.1. Valiathan's Classification

According to Valiathan, BL is divided into three types: skill-driven learning: the focus is on knowledge and skills acquisition, the core of this model is the instructor's feedback and support. Attitude-driven learning: the focus is new attitudes and behaviors' development, the core of this model is collaborative. Competency-driven learning: the focus is tacit knowledge; the core of this model is experts' observation in their fields. However this classification was criticized by Oliver and Trigwell for its mixed basis on learning objectives and pedagogical methods.

1.4.2. Staker and Horn's Classification

Originally there were six models which are: F2F driven model, rotation model, flex model, online lab model, self blend model, and enriched model, yet Staker and Horn worked only with four; by eliminating face to face driven model as it is similar to rotation model and flex model, and merging online lab model with self blend model. Thus only four models remain: rotation, flex, self blend, and enriched models. It was noted four subdivisions of rotation model; depending on the place of rotation, be it within the same classroom (Flipped Classroom Model), another classroom/lab (LAB Rotation Model), or off-campus (Individual Rotation Model).

1.4.2.1. Rotation Model

According to Beaver et al (2015), Rotation Model (RM) is a course or subject in which students rotate between online and face-to-face learning modalities, which means that student stays at the desk but switches between ‘paper and pencil’ instruction and online instruction like a tablet or a laptop.

1.4.2.2. Station Rotation Model

Beaver et al (2015) depict Station Rotation Model (SRM) as a course or subject in which students rotate on a fixed schedule or at the teacher’s discretion between learning modes, which usually include 3 learning stations: online learning, face-to-face instruction, and group projects. Staker and Horn (2012) asserted that other modalities include activities like group projects, and pencil and paper assignments.

1.4.2.3. Lab Rotation Model

Within Lab Rotation Model (LRM), students rotate among locations on the brick-and-mortar campus. At least one of these spaces is a learning lab for predominantly online learning. According to Staker et al (2012) there is a slight difference between SRM and LRM as ‘students rotate among locations on the campus instead of staying in one classroom for the blended course or subject’.

1.4.2.4. Flipped Classroom Model

In Flipped Classroom Model (FCM), activities are versed where students participate in online learning to access the content needed for the course and then attend the brick-and-mortar school for face-to-face teacher-guided practice or projects. Similarly, Acree et al (2017) interpreted “students engage in learning off-site prior to attending class” and classroom time is dedicated to activities and interaction with peers and teacher.

1.4.2.5. Individual Rotation Model

According to Staker et al (2012); in Individual Rotation Model (IRM), students move through a variety of different learning modalities, but rather than the rotation being prescribed by a teacher or schedule, it is customized for each student according to individual needs. This model is adjustable, which frees students from having to move through every modality at every stage in their coursework and instead lets them work in modalities that better meet their

needs at any given point. Teachers are available to clarify or expand on the information learned online and provide support.

1.4.2.6. Flex Model

Within Flex Model (FM), students can move through the online content according to their own needs or understanding and take the course in the school while the teacher supports them individually or in small-groups. Along similar lines, Staker & Horn (2014) stated that some implementations have substantial face-to-face support, whereas others have minimal support.

1.4.2.7. A la Carte Model

Also called self blend model, Staker et al (2014) stated that this type differs from “full-time online learning and the Enriched-Virtual model because it is not a whole-school experience”. Acree et al (2017) added that students take complementary courses; either at school or home, however “the teacher of record is the online teacher rather than the teacher in the brick and-mortar school”.

1.4.2.8. Enriched Virtual Model

Within Enriched Virtual Model (EVM), students seldom attend the brick-and-mortar campus every weekday; unlike FCM. Staker et al (2014) depicted EVM as a whole-school experience, not a course-by-course model that is divergent from self-blend model.

1.5. Advantages of Blended Learning

Team (2023) stated that BL can facilitate self-directed learning. BL models empower students by providing them with self-advocacy skills and the ability to take control of their education. This can assist individuals in acquiring the necessary skills and knowledge to adequately prepare them for their future academic pursuits. Kuman Singh (2023) claimed that BL is characterized by its flexibility and personalization which makes it the most suitable teaching approach to different learning styles and needs. BL ensures relevancy and currency through updating materials. Students benefit from online learning and CAI with keeping the emotional element provided by the teacher’ presence in the traditional teaching ensuring a balanced learning. Consequently, they develop digital literacy skills from excessive exposure to online elements and prepares them for future endeavor. BL provides improved communication as it boosts a dynamic, comprehensive, and interactive exchange between

teacher and students and between peers; which is not achievable with a solely traditional learning which is characterized by one-way interaction. In addition to enhanced engagement through interactive activities and online learning inclusion. Finally, BL nurtures qualities that contribute to student's professional development.

1.6. Disadvantages of Blended Learning

On the flip side, Priscila (2023) sets a range of disadvantages of BL: teachers and students feel workloaded at the first stages of implementing BL and face hardships in switching to new approaches while accustomed to traditional ones. Access to technology is the core element in the BL, yet its unavailability may hinder and harm the instructional process. Although it is cost-effective, it may have undisclosed costs. Amidst a decline in the utilization of school facilities and other administrative costs, the focus of the debate shifts towards the expenses associated with Internet usage. The primary foundation for BL requires the establishment of a technologically advanced infrastructure that enables all participants in the educational process to have equal access. Lack of engagement, direct communication, dialogue, and discussion in the virtual classroom might have a detrimental psychological impact. Students are subjected to a form of isolation. It has the potential to have a detrimental impact on academic performance and students' self-assurance.

1.7. Blended Learning in Algerian Higher Education

Due to the rapid and unforeseen spread of the epidemic, numerous countries; including Algeria were compelled to shut down all educational institutions and enforce quarantine as a preventive measure against the lethal virus. In response to directives from the Algerian Ministry of National Education and the Ministry of Higher Education, platforms and websites have been promptly established to facilitate completing studies. This has forced teachers to seek methods and tools that allow them to communicate with students and develop new ways of delivering information and lessons. As a result, electronic platforms have replaced traditional classrooms and lecture halls, which enabled educational institutions to participate in a significant and unplanned historical experiments. This experiment led to a transformation in the methods of teaching and learning in Algerian universities, as demonstrated by the transition from traditional tools like blackboards, books, and pens to a model that separates teachers from students. Furthermore, incorporating modern technologies and methodologies into the instructional process has changed the responsibilities of the teacher and student in their dynamic connection, both within and outside the classroom.

1.7.1. Factors Affecting Blended Learning Integration in Algerian Higher Education

1.7.1.1. COVID-19 pandemic

Despite technological equipments availability in the Algerian universities, its real applicability started only during the health crisis COVID-19, Hamada (2023) stated that “despite the fact that the Algerian universities had already hosted a network of eLearning platforms during the last three decades, and every institution had its hardware-software equipment and professional staff, the eLearning practices gained importance only recently during the COVID-19 pandemic”. Similarly, Keraghel (2023) affirmed that the covid-19 pandemic is what gave birth to online learning in Algeria “in Algeria, online learning is only adopted in higher education institutions during and after the pandemic”. Brahmi & Nesba described the opportunity that the pandemic offers to the future of education in Algeria “what initially started as a crisis response has now become a transformative force, shaping the future of education beyond the pandemic”.

1.7.1.2. Digital Age

Since it is the trend, the world is becoming tech-driven and the educational field is not an exception. Bouaricha & Hamzaoui (2021) depicted that “the world has become more dependent than ever on technologies which have transformed many domains including education in general and language teaching in particular”. Technology offers a plethora of profits in terms of soft skills, digital literacy, and holistic development to both students and instructors.

Generation Z, referring to individuals who possess unique learning preferences that have been influenced by their exposure to digital technology. As a result, it is imperative for educators to adjust their teaching approaches to accommodate these preferences. Being digital natives, they have a preference for online and digital learning environments and possess a high level of comfort with smartphones, tablets, and computers. Their decreased ability to focus for long periods of time requires the use of concise, interactive, and visually captivating material, such as films, infographics, and simulations that promote active learning. Gen Z frequently embraces self-directed learning by utilizing online platforms, search engines, and social media, since they highly prioritize autonomy.

They value multi-modal learning, which encompasses various forms of media such as text, photos, videos, and interactive activities. They excel in collaborative environments, utilizing internet resources for group projects and conversations. Timely feedback is crucial for the current generation, as they anticipate immediate evaluation outcomes and tailored suggestions for enhancement. Gen Z has a penchant for mobile learning and prefers resources that can be accessed on smartphones and tablets. This aligns with their busy and mobile lifestyles. Micro learning, characterized by concise and targeted courses, aligns with their requirement for rapid acquisition of precise knowledge. Gen Z places great importance on authenticity and relevance, prioritizing material and experiences that are directly applicable to their lives and professional aspirations.

They are highly receptive to succinct educational content, influenced by popular social media sites such as YouTube, Instagram, and TikTok. Gen Z is characterized by their global interconnectedness and cultural consciousness, actively seeking out diverse viewpoints and actively engaging in the exploration and understanding of many cultures. Driven by a sense of purpose, individuals are more likely to actively interact with content that is in line with their personal values and societal issues they care about. Recognizing the need of ongoing education in a rapidly changing employment environment, Generation Z is dedicated to lifelong learning and acquiring new skills. To effectively engage Gen Z learners, educators should integrate digital, interactive components, offer prompt feedback, and design experiences that accommodate their different learning styles and interests.

While Generation Z readily incorporates technology into their daily life, the elder generation, especially those who did not grow up with digital technology, may face a phenomenon called "techno-stress". According to Çoklar et al (2016) "techno-stress is modern disease resulting from the sense of incompetence while trying to adapt to computer technologies". Techno-stress is the term used to describe the adverse psychological and physical responses that individuals experience when they feel overwhelmed or unable to handle the demands imposed by technology. They may find it difficult to adjust to the swift pace of technological advancements. Individuals may experience a sense of obligation to acquire knowledge about emerging technologies in order to stay abreast of the digital landscape, resulting in emotions such as worry, irritation, and sometimes even terror. In addition, elderly individuals may have concerns over privacy and security matters associated with the utilization of technology.

1.7.2. Efforts Made by Algerian Government to Support Blended Learning in Post-pandemic Era

As reported by Algérie Presse Service; in his speech on Saturday, January 20, 2024 at "Dr Moulay Taher" University of Saida, the minister of higher education and scientific research Mr. Badari Kamel highlighted that the university is preparing to transition to a modern 4th-generation university. Mr. Badari added that "the university has become a platform for creative, integrated, and open education through the results achieved," stating that the higher education sector is working on "digitizing university structures to improve the quality of education and raise the level of performance." During the inspection of the Data and Information Technology Center, the minister praised this structure, which "has no equivalent in university institutions at the national level," adding that the creation of such centers will be generalized in all university institutions as part of the new modernization process. This center has 14 high-speed devices, 17 servers, and two switches, and these equipment contribute to strengthening digital communication within the university.

1.7.3. Educational tools to support Blended Learning Implementation in Algeria

Coping with the Gen Z students, the digital age demands and the COVID-19 pandemic, a large number of educational platforms and softwares were released and offer their services to ensure education continuity in such tough time.

1.7.3.1. Social Network Services (SNSs)

Warschauer (2009) noted that technology should not be regarded as "a magic bullet to solve educational problems, but rather as a powerful tool that can have both positive and negative impact, and that must be carefully exploited". The use of technology, in a broad sense, allows students to develop several different lifelong learning skills and create a rich and deeper learning environment that is social, active, contextual, engaging, and student-owned (Carmean & Haefner, 2002). New technologies could change what, how, and where people learn (Warschauer, 2006). Significant benefits associated with the use of SNS includes: delivering educational outcomes; facilitating supportive relationships; identity formation; and, promoting a sense of belonging and self-esteem (Collin et al., 2011). Most importantly, SNS have been reported to shift the role of educators from the gatekeeper to a facilitator, provide learners with educational information in a non-linear form, support social interaction and

educational communication, provide a platform for expressing ideas, break the time, place, and environmental constraints, support collaborative learning, and support reflective learning (Chen et al., 2011) (as cited in Garmi & Rachid, 2021).

1.7.3.1.1. Facebook

It is common that Facebook is used for social benefits frequently by students as well as for teaching and learning purposes. Espinosa (2015) stated that “teachers have to find out where the students are, and work from there. Well, the students are on Facebook. Learners are eager to learn the language in an informal context more than the formal one”(as cited in Ghounane, 2021). Facebook has recently broadened its collaborative options and facilitated worldwide relationships among learning communities in formal and informal learning contexts. Alm (2015) and Al-Jarrah et al (2019) have identified various cutting-edge approaches to leverage social networking sites (SNSs) for language acquisition. Facebook provides a range of communication options, including comments, responses to comments, real-time chat, direct messages, and collaborative groups.

Additionally, it incorporates non-verbal communication mechanisms such as the "Like" button and emoticons, which serve to express personal emotions and greatly augment conversation. Furthermore, it enables language learners to participate in personal or introspective writing by means of status updates. According to Blattner and Lomicka (2012), writing on Facebook has a positive and constructive impact on language learners' productivity. This is because they feel that their writing becomes more significant when they connect with a genuine audience. Facebook offers a platform where learners may connect informal and academic writing. It functions as a repository of information and linguistic input. Even individuals who do not actively participate in creating content can nonetheless gain advantages by perusing articles and debates from others, subscribing to pages that are relevant to the desired language (such as educational, news, or entertainment pages), and becoming a member of groups that utilize the desired language (Shafie et al., 2016). Lam (2009) states that participating in diverse online networks provides learners with opportunities to practice several languages and modes of communication. These networks assist users in preserving or altering relationships in various communication settings. Additionally, they offer access to a wide range of linguistic, cultural, and social resources that are highly helpful in everyday life. Facebook is often regarded as a conducive platform for language learners to enhance and improve their language skills. Facebook is used by universities and institutions for both

administrative and academic purposes, Ghounane said that Algerian universities and staff restrict the use of Facebook for announcement or posting lectures (ibid).

Figure 1: Sending Assignment via Facebook



1.7.3.1.2. Facebook Messenger

Facebook Messenger serves not only as a messaging platform, but also as a communication tool for academic inquiries. It is highly regarded for its user-friendly interface, effective communication capabilities, and facilitation of collaboration. Pedroso et al (2023), in their study, have determined that Facebook Messenger serves as a platform for enhancing academic skills due to its ability to facilitate collaboration, its user-friendly interface, and its promotion of communication between teachers and learners. In the same study, the participants expressed a preference for it due to its status as an alternative platform, file-sharing capabilities, storage options, up-to-date reminders, and convenient communication tools.

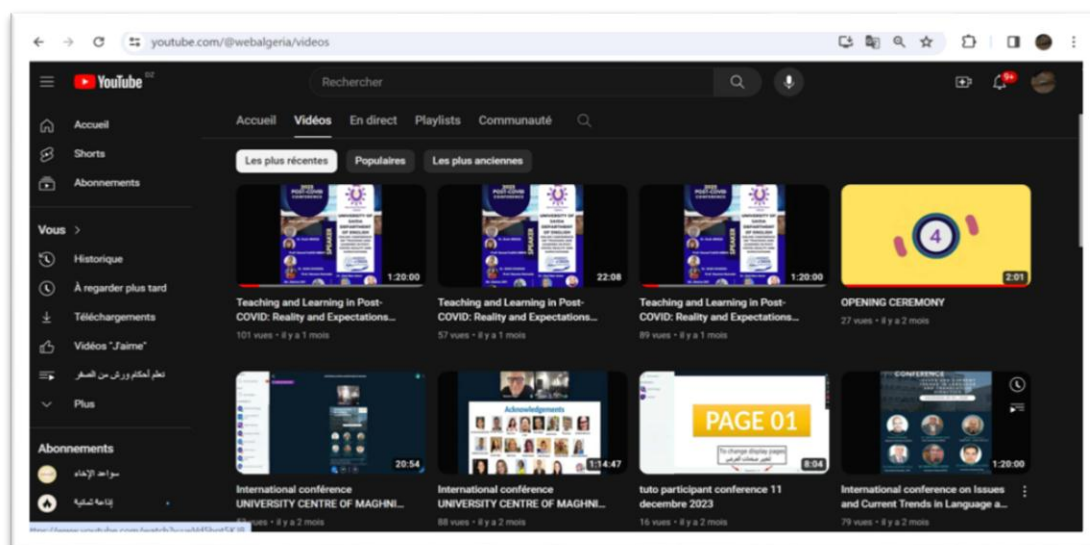
1.7.3.1.3. YouTube

YouTube is a wonderful resource for teaching various foreign language abilities. Watkins et al (2011) asserted that utilizing YouTube in both educational and non-educational settings helps augment one's abilities in engaging in conversations, improving listening comprehension, and refining pronunciation skills. YouTube videos can be used as real-life examples to stimulate cultural education, increase exposure to different varieties of English spoken throughout the world, and facilitate the development of authentic vocabulary. YouTube videos can serve as a framework for organizing reading and writing exercises. The in-class courses and activities will be comprehensive, as will the homework and projects that

involve the utilization of online streaming movies. YouTube is a platform that offers EFL learners the opportunity to engage in lifelong learning by offering them with innovative and unique methods to acquire English as a second or foreign language. Additionally, it provides a chance for students who lack the opportunity to access YouTube are unable to become acquainted with instructional tools, as stated by Burke et al. (2009).

According to Godwin-Jones (2007), the video clips offer a vast multimedia library of authentic language usage by actual individuals, making them a valuable resource for language learners or corpus collections. The video clips on YouTube feature numerous native speakers in authentic language use scenarios, along with a wealth of valuable materials including written and oral texts that can greatly aid language learning. Therefore, we acknowledge that YouTube offers several opportunities and possibilities in terms of accessibility, motivation, and collaboration. It serves as a platform for sharing content and information, which promotes speaking and listening skills and enhances learners' vocabulary (as cited in Derradji, 2016).

Figure 2: University National YouTube Channel for Conferences Streaming



1.7.3.2. Email

Email is the main method of communication in online education, defined as the exchange of private messages between users (Quaresma et al., 2013). It is an affordable and reliable educational tool that can enhance learning by providing timely feedback to students, generating grade reports for exams, and sending important class notifications via broadcasts (as cited in Makrouk et al., 2021).

Figure 3: Collective Email for Academic Inquiries

1.7.3.3. Teleconferencing Tools

Video conferencing is a real-time method for exchanging interactive video, sound, and data between two distinct parties. It enables real-time communication between teachers and students through videos, as well as sharing of content and information. Furthermore, it offers prompt feedback and fosters collaboration among students for projects and tasks. Video conferencing allows learners and teachers to participate in online discussions that are not limited to a particular technology or platform, such as Skype, Zoom, and GoToMeeting. Despite encountering technical challenges, it enables interactive collaborative efforts. Synchronous online instruction has become the prevailing method for teaching (as cited in Garmi & Rachid, 2021).

1.7.3.3.1. Zoom

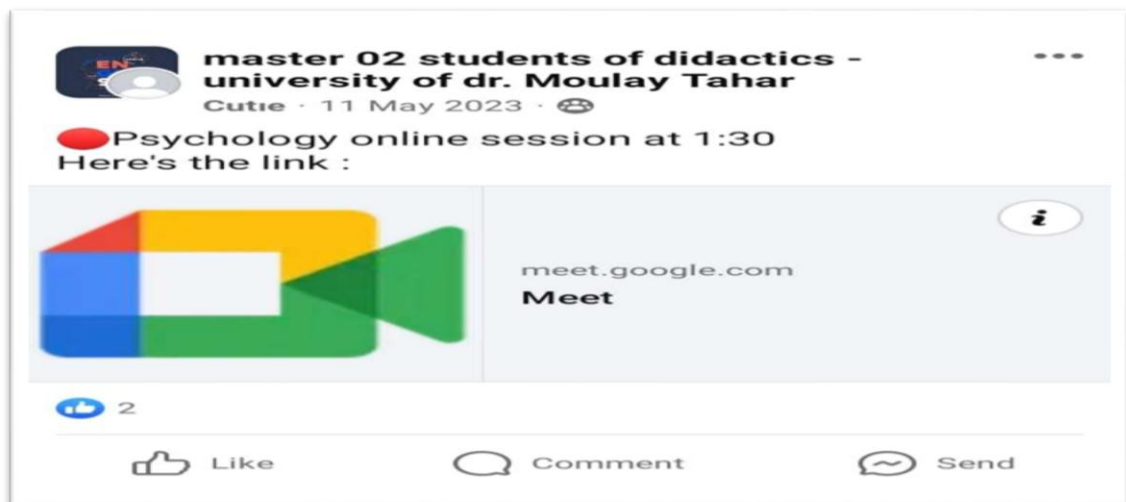
Zoom is a Mobile Assisted and Computer Assisted Language Learning (MALL) and (CALL) software that facilitate communication and connection of people in one setting through video, chat and audio. Volle (2014) stated that in August 2012, Zoom Video Communications, Inc released a beta version of its new service, and in January 2013, the actual product was released. Zoom reached one million users and 400 thousand meeting facilitated only a short time after its launch. The company witnessed a global and sophisticated growth during the pandemic. As a result, it quickly became one of the most widely downloaded programmes globally and a commonly recognized term. As of December 2019, Zoom claimed a daily use rate of about 10 million instances. By December 2020, it had amassed a staggering 350 million daily users. These statistics prove the success of the

platform in connecting people, especially academics, and facilitating communication. In academia, most of researchers agreed on its positive impact on English language learning namely Daiute (1985) who believed that zoom sessions contribute in interaction within the virtual classroom environment and have a role in empowering students' motivation and interests. Conjointly, Liang (2006) said that zoom session serve as a versatile setting for students to engage in productive discussions. Zhao (2009) believes that zoom offers a room for creativity in teaching and learning (as cited in Ayoub et al., 2023).

1.7.3.3.2. Google Meet

Google Meet is an educational platform that supports Blended Learning and operates over the internet. To access the virtual room, a simple click on the provided link and no other software installation is needed. This demonstrates the platform's user-friendly characteristic in facilitating communication and ensuring safety of academic communities. Additionally, Google Meet offers many features such as the ability to have multiple participants in a meeting, record sessions, and live broadcast (as cited in Obina et al., 2023).

Figure 4: Virtual Room Link



1.7.3.3.3. Google Classroom

Google Classroom is a Blended Learning-supporting venue launched by google, which supports educational communities' gathering and communication. Considering this, Northey (2015) demonstrate that Google Classroom provides tools such as Gmail, Drive, and Docs, labeled in 'Google Apps for Education' to help both instructors and students organize their work and save time. Janzen (2014) praises the available services and its accessibility whether

using computers or phones. In reference to statistics, Google Classroom received approximately 30 million assignments from teachers and students within the first six months which proves its efficacy in promoting the blended/E-learning (as cited in Albashtawi et al., 2020).

1.7.3.3.4. Jitsi Meet

Jitsi Meet is a JavaScript application based on open-source technology (Apache) called WebRTC. It offers all the fundamental features of video conferencing software and can be easily embedded and integrated into platforms like Moodle. The free edition of the programme offers several additional capabilities, including the ability to have up to 100 people in a conference, simultaneous screen sharing, meeting recording, and embedding the video meeting. This is a great platform to support the Blended Learning as it guarantees both synchronous and asynchronous learning (Asfar & Asfar, 2021).

1.7.3.4. Learning Management System

Utilizing a learning management system (LMS) that effectively caters to the needs of both educators and learners is essential for a successful BL integration (Loomis, 2015). An LMS will enhance the teacher's productivity by improving the efficiency of grading student assignments and generating student reports. A learning management system facilitates the organization and development of opportunities for interaction among content, peers, educators, and learners (Nortvig et al., 2018). In their study, Hill, Chidambaram, and Summer (2016) found that 62% of students who utilize a Learning Management System (LMS) engage in passive interaction with learning assignments and instructional resources. These students access only the minimum amount required to meet their teacher's expectations, without going above and beyond. Moreover, a study conducted by Acree et al. (2017) found that in 76 percent of classrooms in the 21st century, teachers restrict the use of learning management systems to provide a framework for students to submit assignments and for teachers to evaluate activities. Engaging information and interactions facilitated by online platforms are crucial for student success in a BL environment.

1.7.4. MOODLE as the Official Educational Platform in Algerian Universities

During the second semester of the academic year 2019-2020, the president and minister of higher education and scientific research declared the closure of all universities and convert to online learning. MOODLE then appeared as the preponderant official platform to save the academic year and to promote distance learning in Algeria. Berbar (2020) depicts the Algerian educational system in time of pandemic, as universities started using Moodle platform in 2020 where teachers started to produce internet-based courses and create an interactive learning environment with their students, students also were encouraged to join the courses, get access to the activities and tests uploaded by their teachers, and work collaboratively with their classmates on the different assignments. Saida University's MOODLE platform can be joined via this link: <https://e-learning.univ-saida.dz/>

MOODLE activity is an item that can be used as part of the course that ensures interaction, collaboration and communication between peers and teacher, it is purposively designed to reinforce student's understanding and stimulate knowledge-sharing. University of Massachusetts Amherst distinguished five types of activities on MOODLE and they are as follow: "assignment activities, activities for communication and collaboration, assessment and surveys, tools for student management, and interactive delivery of content". It is worthy to mention that the Algerian local version of MOODLE lacks "tools for student management". The courses on MOODLE are rich, multifaceted and cover different aspects alongside the educational objectives through a branch of activities; as Garmi & Rachid (2022) mentioned "each course in MOODLE can incorporate different activities, such as lessons, quizzes, feedback, journal, glossary, database, wiki, forum, survey, chat, and assignment. Using user registration the activities of each of the learners can be traced, among them results of quizzes, assignments, lessons taken, etc".

MOODLE as defined by many scholars is a multifaceted platform for delivering courses, maintaining and promoting online learning. Benderradji (2021) considerers this open source Learning Management System (LMS) as a pioneer in the field of e-learning and is also considered one of the best e-learning environments. Dharmendra et al (2011) defined it as "a software package designed to help educators to create quality online courses". Garmi (2021) stated that the word MOODLE is originally an acronym for Modular Object-Oriented Dynamic Learning Environment. Lopes (2011) demonstrated that MOODLE 'provides a variety of technological and pedagogical services. Within the same line, Maghraby (2021) asserts that MOODLE is drawn from the socio-constructionist approach that encourages collaboration among learning communities. Boudehane (2021) confirms that this platform

enhances the learning / teaching quality and improves language skills. MOODLE is a globally accessible open educational platform that offers a wide range of learning resources such as learning paths, lessons, lectures, and specialized courses. The most often utilized form of Learning Management System (LMS), it facilitated the dissemination of knowledge among educators and university lecturers. They disseminate their lessons to students worldwide for study and enrichment. It facilitated communication between professors and teachers through various approaches. Additionally, it facilitated the organization of students into smaller groups on different days to ensure their accommodation. The e-learning platform facilitated the sharing of diverse viewpoints, ideas, and objectives among teachers, professors, and students. Education through electronic platforms is accessible without any prerequisites or limitations. This is evident as anyone can enroll in online courses across all fields. Furthermore, it is feasible to engage in all the diverse training programs, and all of these courses and exercises are entirely complimentary without any charges. Students experience significant fatigue due to the necessity of physically attending lectures and courses at a specified location for their education (as cited in Garimi et al., 2021).

1.7.4.1. MOODLE activities of Assignment

1.7.4.1.1. Assignment

Assignment activity enables teachers to effectively convey assignments, gather student work, and deliver grades and feedback. On the other part, learners can upload different types of digital information, or to input content directly.

1.7.4.1.2. File

MOODLE provides an easy way for an instructor to present materials to their students, such as word-processed documents, slideshow presentations, PDF, and more. All types of files can be uploaded and accessed through MOODLE, but the student needs to have the correct software to be able to open them. Files may be added by uploading from an external source, such as computer or USB drive, or by dragging and dropping directly onto the course page.

1.7.4.1.3. Folder

The folder structure enables instructor to present many course files collectively. The files may vary in their formats and can be submitted simultaneously. Unlike individual file resources, folders have the capability to contain several files. However, in order for students

to access and see these files, they will need to download them. It is frequently employed for the purpose of storing associated data, such as Documents or PowerPoint slides, which may be downloaded by learners.

1.7.4.2. MOODLE Activities of Assessment and Survey

1.7.4.2.1. Multiple choices

This activity is highly effective for collecting feedback from learners regarding courses. The choice activity feature enables users to pose a question and designate multiple options as potential answers. Publication of choice results can occur either after students have responded, after a specific date, or not at all. Scores can either published in public or in an anonymous manner. This activity seeks to prompt reflection on a subject in a brief and scholarly manner, to efficiently assess students' comprehension, and to enhance student decision-making is by giving them the opportunity to vote on the direction of the unit.

1.7.4.2.2. Quiz

This module enables instructors to create and administer quiz tests, offering a variety of question formats and reporting choices. MOODLE Quizzes are an invaluable tool for professors. Electronic quizzes offer a range of advantages that paper quizzes lack. It enables a wide range of possibilities that are not feasible with traditional paper-based testing methods. This versatile and robust activity allows you to evaluate learner knowledge using a range of question formats, from a basic multiple-choice question to a comprehensive self-assessment quiz.

1.7.4.2.3. Workshop

A Workshop is a collaborative evaluation exercise that enables participants to evaluate one another's projects, as well as exemplary projects, using various methods. The Workshop revolves around the scoring guide, which consists of precise criteria used to evaluate the quality of a particular piece of work. This provides a structure for both instructor and peer feedback on open-ended assignments, like essays and research papers. This activity involves peers assessing each other. Teachers design the workshop, establishing a grading framework, and learners can subsequently submit their work for assessment by their peers at the end of a designated submission period.

1.7.4.2.4. Survey

The survey activity offers a variety of validated tools for surveying that are effective for evaluating and promoting instruction in online settings. Instructors can utilize these tools to collect information from students, which allow them to gain insights into their class and engage in self-reflection on their teaching methods.

1.7.4.2.5. SCORM

A SCORM package consists of a set of files that are packaged in accordance with a standardized format for educational resources. SCORM activities typically consist of questions, and the grades are recorded in the grade book. They have multiple applications, including the presentation of multimedia content and animation, as well as serving as an assessment tool.

1.7.4.2.6. Feedback

After having any assessment or survey, feedback from the teacher is required. This activity gives participants the option to remain anonymous. The results can be shared with all participants or limited to academic individuals. Feedback activities have multiple purposes. They can be used for unit evaluations, allowing for improvements in content for future participants. Anti-bullying surveys provide a platform for students to report incidents anonymously.

1.7.4.3. MOODLE Activities of Communication and Collaboration

1.7.4.3.1. Chat

The chat activity module allows participants to engage in synchronous discussions. The chat can be a single occurrence regularly, either daily or weekly. Chat sessions can be saved and accessed by all users or limited to those with permission to view chat logs. Chats prove to be particularly valuable in situations where the participants are unable to convene in person, for instance: online student meetings, remote student-teacher conversation, collaborative dialogues, supervised toddler chats, interactive guest speaker sessions or test preparation workshops.

1.7.4.3.2. Forum

This module allows participants to engage in asynchronous discussions. Forums serve various purposes, including: facilitating social interaction among students, extending

conversations from face-to-face sessions to online platforms. Other benefits include providing a private forum for teacher-only discussions. A dedicated space for confidential student-teacher dialogue, allowing for one-to-one support; this can be facilitated through a forum with detached groups, with each group consisting of only one student. Finally, additional activities can be provided to encourage students to think critically and propose alternatives.

1.7.4.3.3. Glossary

This module allows participants to create and manage a list of definitions, similar to a dictionary, or to gather and organize resources or information. Glossaries serve various purposes, including: a comprehensive repository of important terms. A space is provided for new students to introduce themselves and provide their name and personal information. Glossary is a resource which provides best practices in a practical subject, which allows revising and remembering important facts.

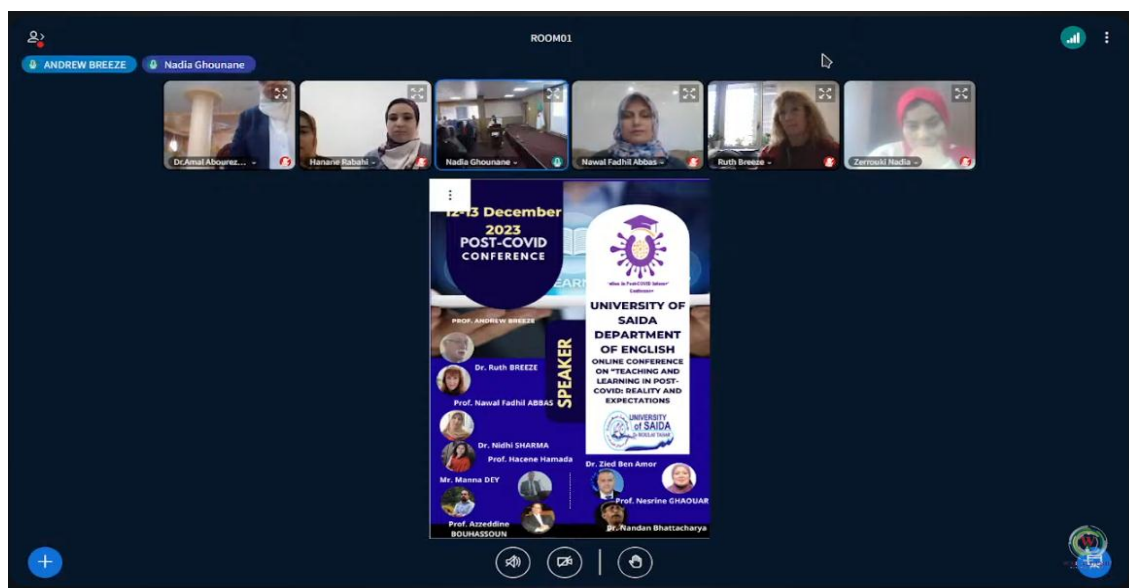
1.7.4.3.4. Wiki

This activity allows users to contribute to and modify a set of web pages. Wikis serve a multitude of purposes, namely: group notes of instruction or study guides. Students have the opportunity to work together in creating an online book, where they will generate content based on a topic assigned by their instructor.

1.7.4.3.5. BigBlue Button

BigBlue Button is an open source web conferencing system specifically designed for distance education, which can easily generate links within MOODLE to access real-time online classrooms. Users have the option to provide conference times, which will be included in the calendar. Additionally, if permitted, sessions can be recorded for future viewing. Upon entering the room, a prompt will appear, giving you the option to utilize your microphone or simply listen. Ensure that your settings are properly configured if you opt for using a microphone. The moderator has the option to permit or restrict the use of webcams and microphones by participants. The central area provides various options for displaying presentations, polls, screen sharing, or an interactive whiteboard. Additionally, users can engage in both public and private chat conversations.

Figure 5: Saida University Hosting an International Conference via BigBlue Button



1.7.4.4. MOODLE Activities of Interactive Delivery of Content

1.7.4.4.1. Lesson

This module allows educators to deliver content and practice activities in engaging and adaptable ways. An educator has the option to utilize the lesson in order to develop a sequential series of content parts or educational tasks that provide multiple paths or choices for the student. Regardless of the situation, educators have the option to enhance student involvement and promote comprehension by incorporating a range of question types, including multiple choices, matching, and short answer. Lessons can be utilized for self-directed learning of a fresh subject or for scenarios, simulations, and decision-making exercises. For a more focused approach to revision, teachers consider using sets of tailored questions based on the answers given to initial questions.

1.7.4.4.2. Database

The database activity allows users to create, manage, and search a collection of entries, also known as records. The entries are structured according to a set of fields, as defined by the academic. Database activities serve various purposes, including: creating a collaborative collection of web links, books, book reviews, journal references, and more. In addition to

facilitating the display of student-created photos, posters, websites, or poems for peer comment and review.

1.7.4.4.3. H5P

The user-friendly tool allows you to create interactive content for your learners that's ideal whether you're looking to freshen up your course materials using the 'Impressive Presentation' or 'Timeline' content types, or you want to inject some fun and engaging activities into your courses using H5P examples such as 'Flashcards', 'Find the Hotspot' or 'Branching Scenarios'. Once made, all H5P content is fully responsive and mobile-friendly, allowing learners to access interactive resources on any type of device at any time. There are also no technical skills required and all content can be reused, shared and adapted.

1.7.4.4.4. LTI External Tool

When instructional materials are stored on a platform other than MOODLE, an LTI (Learning Tools Interoperability) external utility enables instructors to integrate them into MOODLE without requiring learners to access a separate system or platform.

1.7.5. Benefits of MOODLE Activities and Resources

Figure 6: Benefits of MOODLE Activities and Resources

Learning Activity	Description	Suggested Moodle Activities
Major assessments	Some activities are better suited for major assessments than others, as they have a higher level of integration with Gradebook, and higher standards of security and privacy.	Assignments assignment Quiz Workshop
Student Communication	These activities provide ways for you to communicate with students, as well as online spaces for your students to communicate with each other.	Chat Forum
Peer learning	Students can collectively build on an activity over a period of time and engage in peer learning.	Database Glossary Wiki Workshop
Self-directed learning	Self-directed learning activities are small self-contained activities that can be useful to deliver dense content in small	Lesson

Learning Activity	Description	Suggested Moodle Activities
	packages. These activities can be helpful for pre-class learning.	H5P interactive content SCORM package External tool

The provided table outlines various learning activities categorized by their purpose and the corresponding suggested MOODLE activities. Educators using MOODLE have access to a wide range of evaluation methods to assess their students and the instructional process. According to Kotzer et al, MOODLE offers a variety of assessment methods that instructors can utilize to gauge student learning outcomes and encourage peer evaluation. Thus, activities like assignments, quizzes, and workshops are recommended due to their strong integration with MOODLE's Gradebook and high standards of security and privacy.

MOODLE, according to Kotzer et al is a socio-constructivist platform which promotes communication and self discovery of knowledge. MOODLE offers useful tools for instructors to add various formats of social networking and collaboration to their teaching. For student communication, chat and forum activities are suggested to facilitate both real-time and asynchronous interactions between students and instructors. Peer learning is encouraged through activities such as databases, glossaries, wikis, and workshops, which promote collaborative content creation and peer assessments. Self-directed learning is supported by activities like lessons, H5P interactive content, SCORM packages, and external tools, delivering content in small, manageable packages ideal for pre-class preparation. These categorizations help instructors choose appropriate tools to enhance student engagement, communication, and support both collaborative and self-directed learning in a blended learning environment.

Autonomy has taken numerous forms and is associated with different aspects mainly education. It has demonstrated its usefulness in the classroom, particularly for language acquisition in 21st modern classrooms. The theoretical underpinning of autonomy, including its definition, levels and measurement, is largely examined in this portion. It also provides a thorough examination of autonomy within Blended Learning in EFL classroom.

2.1. Definitions of Learner Autonomy

In the 1990s, many psychologists and researchers stressed the importance of autonomy in general and particularly in language learning. Little (1991) stated that

Over the past twenty years or so, the concept of autonomy ... has become increasingly important in the educational literature, where it has been viewed as both a desirable goal of education and a constituent element of good teaching and learning.

Similarly, Benson (2007) added that autonomy has gained significance in foreign language learning, thus more than a twentieth of books were released tackling that new influential concept. Boud (1988) said that learner autonomy (LA) is a multifaceted concept as it is not restricted to a specific field and needs extensive discussion. Holec 'the father of learner autonomy' (1981) contributed with the most detailed definition which serves as the groundwork for other scholars. He defines LA as "the ability to take charge of one's own learning"; that is to say that autonomy is the learner's responsibility over own learning. However, Holec's definition was criticized for not considering the psychological nature and characteristics of the learner; which is a key term in definition LA. Little (1991) then considers the point that was missed by Holec and asserts that:

Autonomy is a capacity—for detachment, critical reflection, decision-making, and independent action. It presupposes, but also entails, that the learner will develop a particular kind of psychological relation to the process and content of his learning. The capacity for autonomy will be displayed both in the way the learner learns and in the way he or she transfers what has been learned to wider contexts.

This definition; unlike others, is based on psychology as a new dimension; as the emphasis is put on learners' psychological characteristics namely critical thinking and decision-making in learning contexts. Dickinson (1987) believes that LA is a method of learning where the learners are accountable for their own learning by taking learning-related decisions and executing them. Equally, Deci and Ryan (1987) define it as the learners' action, choice and control over their learning. Conjointly, Cotterall (1995) revealed that LA is about learner's ability to choose and use different strategies in order to control their learning path. Benson and Voller (1997) outlined five important definitions to the concept of LA that summarize all precedent definitions:

Situations in which learners study entirely on their own, a set of skills which can be learned and applied in self-directed learning, an inborn capacity which is suppressed by institutional education, the exercise of learners' responsibility for their own learning, the right of learners to determine the direction of their own learning.

By this definition, Benson and Voller presented a detailed description of LA notion. This definition encompasses: scenarios in which self learning is encouraged, learning and application of necessary skills, natural ability that is often stifled by formal schooling, ultimate responsibility towards own's learning, learners' freedom, ownership and agency regarding learning path. Hedge (2000) points out that LA is referred to taking charge of one are learning by planning, regulating and controlling learning habits away from the teacher's involvement. (as cited in Fedj, 2019)

2.2. Measurement and Levels of Learner Autonomy

Nuan (1997) mentioned that LA is a step-by-step skill including five that are compartmentalized as follow: awareness: in this stage, learners determine the lesson's goals and learning materials used by the teacher; or simply said the curricula. The second level is involvement. In this stage, students are integrated and participatory element in the instructional process, where he set goals and takes decision of his own. The following degree is intervention, in this stage learners are agent learners who have a say and control over their learning process. The next level is the creation, within this stage, learners take the lead and set goals promoting student- led learning. The conclusive stage is transcendence, in this stage; learners are finally autonomous who can control their learning inside classroom and most importantly beyond the classroom, giving the learner the chance to real world experience without any support (as cited in Sergma, 2021).

Littlewood (1999) states that the concept of LA in education refers to the student's ability to engage independently in the learning process without any reliance on the teacher. Littlewood explores that LA is "not all or nothing" yet it exists on a spectrum; simply saying it is a matter of levels. He provided a compilation of behaviors that learners should accomplish to exhibit autonomy. Littlewood distinguished seven levels; which are not rigid, and each level demonstrates what choices a learner can make. In the first level, learners are autonomous in terms of selecting their own grammar and terminology, namely in role-plays. The second level encompasses their choice of meaning and the employed communication tactics to convey those meanings. In the third level, learners have the choice over their goals, meanings and techniques. The fourth level emphasizes the project-based approach, where learners construct and shape their own learning environments. In the fifth level, learners develop and assume responsibility over learning materials and tasks that were handled by the

teacher. In the sixth stage, learners participate in syllabus design and oversee their own learning progression. In the seventh and last stage, learners are competent and able to communicate independently beyond the classroom confines.

Scharle and Szabo (2000) proposed a model of LA consisting of three stages subsuming: raising awareness, changing attitudes and transferring roles as the final stage. The first stage emphasizes on the learners' cognitive state, as they are cognizant and reflects on their own learning process. Changing attitudes pertains altering to positive behaviors going from traditional to modern and more efficient methods. The consequential and final stage is transferring roles, in which learners are completely accountable for their own performance and progression. Consecutively, Scharle and Szabo's proposed stages align with Nuan's stages of awareness, intervention and transcendence. (as cited in Fedj, 2019)

Little (2003) contends that LA is not a static state, Benson (2007) solidifies that saying and pointed out that LA is not a personal trait. Maibli (2013) stated that it is rather a skill that can be developed and stimulated by surrounding, time and efforts made by the learner and fostered by the teacher, another controlling factor was added by Sergma (2021) is the past experience or the prior knowledge.

2.3. Blended Learning Redefining Roles in Autonomous Classroom and Beyond

BL empowers the capacity of sharing responsibility between the teacher and learners in autonomous learning settings. It enables teachers to step back and learners to take initiative to hold responsibilities, give a new dimension and value to learning. According to Kaur (2012), BL eliminates the teacher-centeredness of conventional education and empowers students to make their own decisions, use their imaginations, and investigate and solve issues related to learning. Within the same line, Sergma (2020) conducted a study to investigate EFL teachers' and learners' readiness for autonomous learning and their views and perceptions towards the impact of E-learning on EFL learners' autonomy. The findings from the questionnaires administered to both students and teachers indicate that there is a favourable perception of online learning and its influence on the enhancement of students' individual learning abilities, as well as their self-reliance. Furthermore, both educators and learners value the incorporation of online learning, which fosters increased student participation and involvement, heightened motivation, and the chance for students to assume responsibility and

independently guide their own learning. Teachers play a limited role as observers and mentors to students.

2.3.1. Learner's Role in Autonomous Classroom

The term LA focuses on learning rather than teaching; Gavou (2022) denotes that is why it is important to give the learner the lead of own learning process. In an autonomous classroom, learners are no more passive recipients or consumer of knowledge. Scharle & Szabo (2004) point out that if students seek success in learning then an attitude of responsibility is crucial and must be maintained. Loyens et al (2008) perceive learning as an active process that must be accomplished and held by learners themselves. Thus, learners should rather be producers of that knowledge and contributors in the instructional process.

Being responsible towards own learning means that the learner is involved in all learning aspects and makes significant learning-related decisions namely planning learning content, selecting materials, determining objectives, executing the course through monitoring learning methods and styles and finally assessing progress. It is noteworthy to mention that the learner doesn't take but makes such decisions, this means that the learner get advantage of "self-regulated learner" quality, he no longer needs his teacher's assistance while making decisions; as he is pedagogically matured. Related to this claim, Dickinson (1987) stresses the learner strength and full acceptance of responsibility towards learning away from any external interference or help. Tumposky (1982) demonstrates that when giving the learner a chance to make decisions, he gets interested, motivated, confident and much involved in learning (as cited in Souilem, 2017).

Autonomous learners are supposed to be reflective and evaluate their very own cognizance and think continuously about their learning and progression. Being aware of own's strength and weakness areas and making decisions to figure them out, gives a room for creativity. Taking into account learners lacks and preferences, the learner adopts a creative thinking that allows him to fulfill those needs and takes the classroom from a traditional boring atmosphere to another level of creative captivating and full of fun classroom where peers start seeking autonomy themselves.

2.3.2. Teacher's Role in Autonomous Classroom

Indeed BLA reduces the teacher's role with the domination of machines. In the flip hand, learners are encouraged to make learning-related decisions without teacher's help, yet

the instructional process would never stand without teacher's contribution. On this basis, Xhaffferri et al (2015) stated that "autonomous learning is by no means teacherless learning" stressing the influential role of the teacher in non-autonomous classroom in general and autonomous classroom in particular. Souilem (2017) asserts that there is misinterpretation of LA that learners study by themselves without teachers assistance, and that teaching is by no means teacherless. Little (1994) asserts that "learner autonomy does not rise as spontaneously from within the learner but develops out of learner's dialogue with the world to which he or she belongs". This means that teacher and learners should negotiate and work together in autonomous setting and the teacher role can never be neglected.

Boud (1995) intends to identify teacher's role in autonomous classroom and suggests four stages: entry, reactive, proactive, and interactive stages. Souilem depicts the four stages; in the first stage: which is the process departure point, learners enter an ambiguous situation and teachers are supposed to provide a supportive, direct and constructive learning atmosphere. As for the second stage: a learner learns and acts independently and freely or with the very emotional hindrances, the teacher's role here is to support the learner expressing own's feelings and thoughts. Then in the proactive stage, the learner has a sense of belonging and a high level of confidence which leads to social acceptance and involvement. The teacher's role in this stage is to support collaboration and cooperation and foster positive behaviors. The integrative stage as the conclusive stage, teachers incite their learners to communicate emotions and thoughts and let internal drive personal behavior.

The teacher must perform a range of functions, in an attempt to create autonomous classroom. Souilem (2017) contends that a list of functions was built by many researchers; namely, Richards and Rodgers (1986) Voller (1997) and others who were united in opinion. Managing the classroom and organizing teaching procedures is the foremost function to be displayed by the teacher in autonomous classroom. The teacher sets relevant objectives, designs effective activities, selects appropriate materials, provides clear directions and executes the process by ensuring classroom and time management to finally meet learner's needs, interests and expectations. Teacher's role shifts from an informer, knowledge keeper to a facilitator. In autonomous learning system, the teacher should facilitate the learning process for his learners. This facilitation; according to Volker, encompass two kinds of support: psycho-social support and technical support. In an attempt to provide psychological support, the teacher should raise his learner's awareness of their responsibilities and duties, in addition to motivating them accomplish learning aims and social growth. While for technical support,

the teacher helps the learner set up and carry out his learning for short and long terms. Another responsibility that is on teacher's shoulder is ensuring learner's acquisition of knowledge and skills and then evaluation. Teacher's appreciation and motivation of his learners is of an utmost importance while adopting self sustenance and autonomy, to support learners attain most preeminent potential. The teacher; in autonomous classroom, is the knowledge provider to some extent. To what extent should the teacher provide, depends on the degree of each learner's autonomy; there are learners who face difficulties in learning and need more support and motivation than others. Other points to be considered by the teacher are learning styles, sufficient input and appropriate methods. The evaluation is a crucial part within autonomy; this is why teachers stress on its importance in establishing a successful and constructive learning setting. Thus, teachers build rapport with their learners and provide a communicative healthy atmosphere besides preparing learners to receive criticism and constructive feedback as part of cognitive and social development. Teacher in autonomous classroom plays a role of an adviser and a reference to his learners. This role can be achieved if the teacher helps his learners decide learning-related matters and gives room for learning experiments and guide them indirectly to act purposively and wisely.

With LA being a desirable goal of education within Blended Learning setting, learner's affect should be given attention too. Affect is regarded to be at least as influential, if not more so, than cognitive factors in language learning. Thus understanding the importance of affective factors is not a temporary fad, and integrating these and other aspects into the language classroom is crucial. The following part deals with learner's affective aspects mainly language attitudes, self confidence and self esteem, motivation, anxiety, extroversion and introversion. It also incorporates some related studies to affect and Blended Learning.

3.1. Affect in Learning

The term affect refers to the emotions and feelings. According to Damasio (1994), emotion is characterized as alterations in bodily condition as reaction to a positive or bad experience. Damasio defines feeling as the perception of changes (as cited in Ghembaza, 2022). According to Stevick (1980), there is a connection between affect and the language classroom. He argues that the most important factor for success in learning a language is not the study materials, teaching methods, or linguistic analysis, but rather the relationships and interactions between individuals in the classroom.

According to Ghembaza (2022), the affective filter hypothesis which is proposed by Dulay et al (1982), posits that language information must first pass through a filter in students' minds before it can be processed and become part of their language intake. This filter comprises a collection of affective elements that impact students' learning behaviour. Positive criteria would decide the activation of an 'open filter', allowing the input to pass through. In contrast, according to Johnson (2001), negative influences would establish a "closed filter" that would prevent input from reaching the language acquisition device. The emotional filter is the initial obstacle that must be overcome by the stimulus. Students who are more comfortable are less active in using the filter, resulting in an optimal acquisition of competence. Arnold (2017) asserts that many scholars in the field of language learning and teaching have focused on the significance of students' affective domains. Since Gardner & Lambert's study in 1972 to Dörnyei's research in 2005, the concept of affect continues to be a dependable factor in determining the success or failure of language learning. In his 1983 publication, Stern underscores the importance of affect in the learning process. He contends that the emotional component plays a pivotal part in the process of acquiring language, possibly even surpassing cognitive capacity in its impact. Therefore, it is crucial to develop tactics that can establish and foster a positive and nurturing environment. Affect encompasses the intrinsic aspects of a learner, attitudes, motivations, values, beliefs, personality factors (such as self-confidence, self-esteem, and anxiety/fear). It also includes the external relational aspects that arise among students, between teachers and students, and between learners and the target language and culture.

3.1.1. Language attitudes

Language attitudes, as defined in the Longman Dictionary of Language Teaching and Applied Linguistics (2002), refer to the positive or negative feelings towards a language that can be influenced by perceptions of linguistic complexity, ease or difficulty of learning, importance, elegance, social status, and other factors. Attitude is a crucial factor in the process of acquiring linguistic skills. An individual's disposition towards language acquisition will have an influence on their experiences beyond the educational setting. According to Burden's (2004) study, a positive attitude has been found to be a motivating factor for learners in achieving their learning objectives. Having a strong desire to learn a second language can greatly benefit a student in their English learning journey. Conversely, if he perceives English as an exceedingly challenging language and views the process of learning it as unproductive, this pessimistic mindset will surely impede his progress in acquiring English. The research

conducted by Bahous et al (2011) highlights that fostering favourable student attitudes towards language learning can serve as a catalyst for student motivation and proficiency in the desired language.

3.1.2. Self confidence and Self-esteem

Self-image refers to the learners' assessment of their own abilities in dealing with a specific learning environment. Some have contended that a favourable assessment would enhance one's self-esteem. Regarding performance, Arnold (1999) discovered that teachers can enhance learners' self-efficacy by providing them with "meaningful" classroom activities that they can successfully accomplish. Consequently, kids who have a "sense of effectiveness" and self-confidence will develop a strong interest in learning. Teachers can cultivate students' self-image by presenting the learning of the second language as appealing and achievable. By conveying the message that success in acquiring the L2 is attainable via effort and dedication, teachers can motivate their students.

3.1.3. Motivation

Motivation plays a crucial role in ensuring students' persistence, retention, and achievement in learning, especially in an online learning setting. This is because the cognitive and behavioral processes necessary for learning are voluntary and within the control of students. According to Brown (1987), motivation is defined as an internal force, impulse, emotion, or desire that prompts a specific action. According to Zoltán (2005), individuals cannot attain their goals, even if they have outstanding ability, if they lack sufficient drive. Simmon (2014) identifies key attributes of motivated students: they are inclined to engage in demanding tasks, actively involve themselves, derive pleasure from and embrace a profound approach to learning, and attain exceptional levels of learning, accomplishment, and creativity. Similarly, Groccia (1992) asserts that motivation stimulates pupils to acquire, assimilate, and utilize their acquired knowledge. Turner (1995) equates motivation with cognitive engagement, which refers to a learner's deliberate utilization of self-regulated learning processes such as attention, planning, application, and monitoring. According to Schunk et al (2008), motivation is the process that initiates and maintains goal-directed activity. It is demonstrated through the choices made, the persistence shown, and the effort exerted. Having motivation increases the likelihood of engaging in activities that promote learning and boost performance. According to Afip (2014), comprehending learners' self-perception in education and the challenges they encounter necessitates an examination of

motivation and its role in pedagogy. Learners may find themselves as passive participants in the teaching and learning process, without a clear understanding of why or how they become enrolled in a particular educational programme.

3.1.4. Anxiety

Anxiety, as described in Nascente's (2001) work, refers to a state of heightened tension, unease, and worry that arises when one is faced with the task of acquiring a new language. Empirical evidence and logical reasoning substantiate the notion that students typically acquire knowledge most effectively when they are situated in a setting that is simultaneously engaging and devoid of intimidation. The consideration of group dynamics is crucial in language acquisition, as language lessons inherently require interaction. Supporting this assertion, Saint Augustine, in his writings from the late fourth century, recounted his traumatic ordeal of being compelled to learn Greek as a second language by severe discipline. He stated that unrestricted inquisitiveness is evidently more conducive to successful acquisition of knowledge compared to the influence of coercion and apprehension. Damasio (1994) states that for the brain to function at its best, it needs to be actively involved in the learning process and free from any form of threat or stress.

3.1.5. Extroversion and introversion

Extroversion and introversion dichotomy pertains to individuals' preferred methods of obtaining energy and directing their attention. According to Eysenck & Chan (1982), extroverts derive their energy from external sources or the outside world, while introverts prefer solitary pursuits and draw their energy from the inner world of thoughts. Jensen and Ditiberio (1984) argue that extroverts primarily direct their energy towards external stimuli and engage in social interactions with people and objects. For them, outer experience, like as talking and acting, holds great significance. They generally initiate projects without much planning and instead depend on trial and error to accomplish them. Due to their focus on external experiences rather than internal experiences, such as introspection and observation, individuals tend to think more effectively and generate a greater number of ideas when engaged in activity or discussion. Additionally, it is asserted that introverts primarily direct their energy into their inner thoughts and reflections. They approach the external environment with caution, carefully considering and contemplating before taking action in order to prevent mistakes. When in solitude and free from distractions, individuals are able to engage in optimal cognitive processing and generate a greater number of innovative concepts.

3.2. Blended Learning Cultivating Learner Autonomy

In an attempt to investigate the influence of Blended Learning on students' intrinsic and extrinsic motivation of third year English students at Mohamed Lamine Debaghine University, Setif 2. Ghoul and Soufi (2022) create an online questionnaire to track the impact of blended learning on students' intrinsic and extrinsic motivation in EFL classes. The results indicated that the use of technology serves as a source of motivation for students, aids them in fulfilling their obligations, and enhances their academic achievement. The data indicate that BL is a valuable, efficient, engaging, and influential strategy that offers advantages such as enhancing motivation and facilitating the learning process. In addition, students' intrinsic motivation can be observed through their strong enthusiasm for incorporating technology into the learning process. Furthermore, learners can attain their learning goals, objectives, and demands by utilizing BL, which is an additional internal component that impacts their motivation. Students who encounter a favorable classroom atmosphere and high-quality facilities are more likely to exert their utmost effort in enhancing their learning. Given that BL incorporates both in-person and online learning, numerous students have asserted that their motivation is enhanced when technology is utilized during sessions. Consequently, BL significantly influences their extrinsic motivation.

Conclusion

This chapter is a presentation of the theoretical literature regarding Blended Learning, its definitions, components, characteristics, models, advantages and disadvantages. Then it touches on the Algerian context by detailing factors affecting BL implementation in Algerian higher education, efforts made by the government in addition to educational tools to support BLA application by stressing on MOODLE. It also discusses learner-centeredness, its definitions, levels and measurements of autonomy, Blended Learning impact on learner autonomy in classroom and beyond by stressing both learners and teacher's roles in autonomous Blended Learning setting. It also sets out an overview of learner's affective aspects mainly: attitudes towards language learning, motivation, anxiety, self confidence, self-esteem, extroversion and introversion. Finally, it deals with Blended Learning as a mechanism to ensure these affective traits empowerment in the learning process.

Chapter Two

Research Methodology

Introduction

Tackling the theoretical background related to BLA, learner's autonomy and learner's affective aspects cannot be adequate and sufficient to solve the current problem. Therefore, it needs to be followed by a practical framework entitled "Research Methodology". This chapter is the setting ground of the present study which explores the application of BL in digital post-pandemic era and its effect on learner's autonomy and affective aspects. Methodology is about how the researcher designs a study to ensure valid and reliable results that address the research aims. Hence, this chapter includes the following key elements: the research design, approach, setting, population, sample, instrumentation, data collection procedures, data analysis procedures, and ethical issues considerations.

1. Research Design

Trochim and William (2006) define research design as a general strategy that ensures coherent and logical integration of different study components. In fact, the choice of the design depends highly on the nature of the subject being investigated. According to Dudovskiy (2011), exploratory research, as the name implies, merely aims at exploring research questions and does not seek offering final and conclusive solutions to existing problems. Therefore, the intended study is exploratory.

2. Research approach

The researcher adopts a mixed-method approach, this latter as defined by Creswell (2008) as investigation which combines quantitative data which is concerned with understanding human behaviors and attitudes from the informant's perspective and qualitative data which is concerned with facts about social phenomena and examining relationships among variables so that a set of data can be analyzed using statistical procedures. Mixed-method approach allows the researcher to gain a more complete picture than a standalone qualitative or quantitative data, as it integrates benefits of both methods.

3. Research Setting

The research setting or locale is the environment in which the research was conducted; it consists of spatial and temporal contexts. The current study was carried out at department of English in the Faculty of Letters and Languages of 10 universities including Moulay Taher University of Saida, Mohammed Khider University of Biskra, Lounici Ali University of

Blida, Ammar Theliji University of Laghouat, Djilali Liabes University of Sidi Bel Abbas, Kasdi Merbah University of Ouargla, Mohammed Lamine Debaghine University of Setif 2, Mustapha Stambouli University of Mascara, Ain Timouchent University and El Oued University, during the academic year of 2023-2024.

4. Research Population

Research population; according to Barker et al (2002), is group from whom the participants will be chosen and research findings can be generalized. The target population of this study is 294 second year EFL master students field of didactics from 10 Algerian universities. The population is purposively chosen for the following reasons: the research expects that they had prior experience in BL for 4 years (2019-2023) during and after COVID-19 pandemic. Another reason to select this population is that they are about to graduate thus BL would help them manage their time and fulfill their academic purposes (studying and thesis writing). The population also involves 145 EFL teachers from field of didactics from 10 Algerian universities.

5. Research Sample

Research sample is the representative group or part of the research population. The researcher opts for the number of 60 students to participate. The sample consists of 25 EFL teachers field of didactics from 10 Algerian universities, however only 15 interviews remain due to data loss.

6. Data Collection Procedures

In an attempt to answer the research questions, the researcher opts for a triangulation of instruments: teacher's interview, student's questionnaire and participant observation. Therefore, it is essential to describe how data were collected, what and how research tools were administered.

For the first instrument, the researcher designs the interview questions and sends them to the supervisor to be revised and approved. The supervisor had positive comment on the structure and content, yet she had negative comment on the interview length and also advised the researcher to be more deferent. Supervisor's comments were taken into consideration and needed changes were made. A pilot test of the interview was conducted with two teachers from field of Didactics at the level of department of English in the Faculty of Letters and

Languages Moulay Taher University of Saida on December 17th, 2023. The researcher then conducted a face-to-face interview and online interview via Google Meet with teachers from field of Didactics at department of English from 9 remaining universities.

Concerning the second instrument, the researcher designs student's questionnaire first using Microsoft word and an online draft was sent via email, revised and approved by the supervisor. The researcher conducted a pilot test of the questionnaire on six learners from Saida University who give comments on the questionnaire, and needed changes were made. The researcher then disseminated hard copies to students at University of Saida. An online version of the same questionnaire was generated using Google forms and sent via collective emails of master 2 students from the other 9 universities.

With regard to observation, a participant observation was held during the first semester within three sessions: research methodology, ethics and deontology, and ESP sessions with master 2 EFL learners field of didactics at Moulay Taher Saida University. The researcher took the needed notes that would help in answering the research questions and meeting research aims.

7. Research Instruments

Data collection is a vital stage when conducting a research; this is why the researcher should select convenient instruments to gather accurate data. This latter preserves research validity, reliability and integrity. In an attempt to answer the research questions, the researcher opts for a triangulation of instruments: semi-structured questionnaire (in-spot and online), structured interview (face-to-face and postal) and participant observation. The former instrument allows varied and sufficient information, the second tool allows rich and contextualized data, and the latter instrument allows direct and vivid insight on the witnessed phenomenon.

7.1. Students' Questionnaire

7.1.1. Administration

The researcher disseminated hard copies of the questionnaire to 30 second year EFL master students at University of Saida during the exams of the first semester, the sheets were all answered. Then electronic questionnaire was sent via collective emails of master 2 students from 9 universities, only 30 students responded. (See appendix A)

7.1.2. Pilot Test

A pilot test is a small study of the research instrument before launching it to the target sample. The purpose that lies behind conducting a pilot test is to ensure the instrument feasibility in addition to fixing mistakes or clarifying ambiguities in the questionnaire to be delivered to the target sample then. The questionnaire was handed to six learners who started answering immediately and faced no problem. Participants have positive feedback about the form, selection of words and clarity of language. However, some items (related to types of Blended Learning) seemed ambiguous and have comment on the questionnaire length. But above all, participants affirmed that the time was sufficient to address all the questions.

7.1.3. Description

The real application of Blended Learning in post-pandemic era and its effect on cultivating autonomy and nurturing learner's affective aspects were triggered by the questionnaire. It is noteworthy to mention that participant's feedback were taken into consideration and necessary changes were made. The research is of an exploratory nature; as previously mentioned, the researcher incorporates mixed method approach combining qualitative and quantitative data. Thus, the questionnaire consists of close ended questions namely multiple choice questions, dichotomous questions, and open ended questions.

The researcher started the questionnaire by greeting the participants in addition to introducing the thesis title and the goal behind conducting the questionnaire. The questionnaire combines four sections: the first section is designed to obtain general information about the participants. The second section aims at exploring learner's mastery of ICT's, while the third section is set to explore the Blended Learning Approach (BLA) implementation. The final section deals with the Blended Learning role in cultivating autonomy and empowering learner's affective aspects.

The first section entitled "Learner's Profile" consists of five questions; varying between dichotomous and multiple choice questions. The first question (Q1) within the first section is naming the university each participant belongs to, it was asked to explore how the Blended Learning is implemented in that university. Then learner gender (Q2), choice of studying English (Q3), level of English (Q4) and learning traits were discussed. The fifth question (Q5) consists of two parts: yes/no question about their attendance, and multiple choice question to identify the reasons behind their absence.

The second section entitled “Digital Age Demands” comprises of 3 questions ranging from dichotomous to multiple choice questions. The first question aims at exploring ICT’s availability. Mastery of using ICT’s for academic purposes (Q2) and solving technical issues (Q3) were tackled.

The third section labeled as “Blended Learning Conducts” aims to explore the real and proper application of Blended Learning approach. By real application; the researcher means if there is any consideration to the used tools and types of Blended Learning approach and to what extent do teachers integrate ICT’s in physical classroom in addition to providing interactive lesson delivery in both physical and virtual settings using MOODLE activities. The section is compartmentalized into two questions: the first one is a multiple choice question about the tools that are used to support Blended Learning implementation, the second part contains 21 statements and each statement serves a purpose. The first eight statements (8 Ss) represent eight types of the Blended Learning and are ordered as follow: Rotation Model (S1), Station Rotation Model (S2), Flipped Classroom Model (S3), Lab Rotation Model (S4), Individual Rotation Model (S5), Flex Model (S6), Ala Carte Model (S7) and Enriched Virtual Model (S8). The seven following statements (S9, S10, S11, S12, S13, S14 and S15) strengthen the first question concerned with used tools in Blended Learning setting; each statement represent a tool mainly: Facebook, Facebook Messenger, Youtube, email, educational teleconferencing applications, and finally LMS MOODLE. The next seven statements (S15, S16, S17, S18, S19, S20, and S21) represent different activities that are available on MOODLE including: lesson, assignment, feedback, workshop, quiz, multiple choice, survey, glossary, Big Blue Button, chat and forum.

The fourth section entitled “Nurturing Learner’s Autonomy and Affective Aspects” is dedicated to investigate the Blended Learning effect on learner’s autonomy and affective aspects. To start with, this section consists of two dichotomous questions to explore learner’s perceptions about the efficiency of Blended Learning during and post COVID-19 pandemic. Questions 3 and 4 are multiple choice questions aims at exploring learner’s role and teacher’s role within Blended Learning setting. The fifth question consists of 13 statements: (S1, S2, S3, and S4) tend to give a brief definition of the Blended Learning approach. The remaining nine statements tend to explore the effect of Blended learning on learner autonomy (S5), motivation (S6), self-confidence and self esteem (S7), anxiety (S8), attitude (S9), introversion (S10 and S11), and extroversion (S12 and S13). The last two questions are open-ended

questions which aim at exploring the effect of Blended Learning on learner's autonomy (Q6), and learner's affective aspects and general well-being (Q7).

7.2. Teacher's Interview

7.2.1. Administration

The researcher conducted a face-to-face interview (see appendix B) with 15 teachers from field of Didactics at the level of department of English in the Faculty of Letters and Languages Moulay Taher University of Saida during the second semester. An online interview was conducted to reach teachers from other universities via Google Meet. However, some teachers didn't accept to participate in the first place, others prefer written reply on the interview, few teachers wanted to be interviewed while cameras are shut, and some others promised the researcher then didn't participate. The online interview then was conducted with 10 EFL teachers.

7.2.2. Description

The researcher started the interview by greeting the interviewee and introducing the study title and aims. The interview consists of twelve questions: the first two were general encompassing participant's age and teaching method; exploring the application of the Blended Learning Approach by the participant when teaching. The third question intends to explore the institutional system of applying the Blended Learning Approach. The fourth question aims to explore the types of Blended Learning the teacher adopts when teaching. The tools that participants use to support the Blended Learning, official platform (Q5), MOODLE activities (Q6) and its effectiveness of integrating such activities in upgrading teaching and learning (Q7) were discussed. Teacher's perceptions of their roles and their learner's roles in Blended Learning setting (Q8) and their perspectives on the effect of Blended Learning in boosting learner's autonomy (Q9) were explored. Teacher's opinions concerning the effect of Blended Learning on learner's motivation, self-esteem and self-confidence (Q10), extroversion, introversion and anxiety (Q11) and attitudes towards language learning (Q12) were all parts of the discussion.

7.2.3. Pilot Test

The interview was conducted with 2 teachers at department of English on December 17th, 2023. The researcher informed the participants that it is a pilot test of the interview, took permission to record using the phone and started asking the questions. The researcher

provided interviewees with two additional tables containing Blended Learning types and activities available on MOODLE (see appendix C and D) to get insight on the topic and choose from. Both teachers have positive feedback on timing “although there were eleven questions but I answered in a short time and enjoyed that” and when asking the last question “that’s all!”. As long as the form and understanding are concerned, they asserted that it is well-structured and the language is accessible. They have also commented on the content and said that they got information about BL they didn’t know before and were excited to read more about the topic. However, one of them suggested replacing the first question about age with question about teaching experience. It is noteworthy to mention that the pilot test participants didn’t participate in the interview.

7.3. Observation

7.3.1. Description

The researcher conducted a participant observation. With regard to observation, a participant observation was held during the first semester within three sessions: psychopedagogy, ethics and deontology, and ESP sessions with master 2 EFL learners field of didactics at Moulay Taher Saida University. The researcher developed observational protocol and took notes regarding the following points: classroom layout and physical setting, material availability, teaching approach implementation, learner’s behaviors and interaction with the course content, and considering mental and affective component. By immersing in the group and observing these interactions firsthand, the researcher gains a much more nuanced understanding of how these interactions flow.

8. Ethical Considerations

In accordance with a predetermined code of ethics, researchers are expected to adhere to specific protocols at all times over the course of an investigation. While conducting the present study, the researcher tried her best to ensure the research is conducted ethically and participants are secured in terms of:

Participant’s approval: Individuals voluntarily participated in the study and could leave at any point without feeling bounden to continue.

Anonymity and confidentiality of data: The researcher collected participants’ email addresses; for responses clarification seeking if needed, however their identity was kept

anonymous and confidential. As well as their answers were reported truthfully without any changes.

Objectivity: The researcher kept her personal decisions, emotions, and self-deception aside while conducting this study to avoid bias and subjectivity.

Plagiarism and AIgiarism: In order to ensure the legitimacy of the institution and the integrity of the research, all sources are acknowledged in the list of references, the researcher verified the current work for any signs of plagiarism or AI content.

Conclusion

This chapter provides a detailed account of the research methods used in the study. The methodology chapter commences with an examination of the research design, encompassing the comprehensive strategy and justification for the selected methodology and approach. It also provides an account of the sampling, elucidating the process of participant selection and the rationale behind it, taking into account aspects such as representativeness, accessibility, and relevance to the research objectives. It offers a full review of the spatial and temporal contexts related to the conducted study. A detailed description of the data-gathering methods employed is provided. The data collection methods are then outlined, encompassing the student's questionnaire, teacher's interview, observation, and other procedures utilized to acquire information from the participants. The chapter explores the implementation of these methodologies, and the encountered problems in data gathering. The chapter elucidates the process of analyzing the obtained data. This encompasses all statistical and qualitative analytic techniques utilized, together with the software applied for data management and analysis within data analysis procedures. Finally, it addresses ethical issues consideration. Eventually, this methodology stage establishes the foundation to approach the subsequent chapter, which will concentrate on the analysis, interpretation, and discussion of the data.

Chapter Three

Data Analysis, Interpretation, and Discussion

This chapter is devoted to the fieldwork of the current study. The content of this chapter presents data analysis procedures, the results of student's questionnaire, teacher's interview and classroom observation analysis and interpretation of the findings, and discussion of the general findings. This chapter also deals with study limitations, pedagogical implications and recommendations, and finally suggestions for further research are discussed.

1. Data Analysis Procedures

Data analysis; according to Marshall and Rossman, is a creative, intriguing, and clumsy process that takes a long time to provide order, structure, and meaning to a mountain of acquired data. In the current study, the data obtained from student's questionnaire were analyzed quantitatively and qualitatively using Microsoft Excel. And for teacher's interview and observation, obtained data were analyzed qualitatively.

2. Data Analysis

This section presents the analysis of students' questionnaire, teacher's interview and participant observation. It also provides a discussion of results and findings obtained from the analysis of the collected data. The data is presented in form of tables and graphs in order to give a clear image of each question and help in the interpretation of the data in terms of its relation to the research aims and objectives.

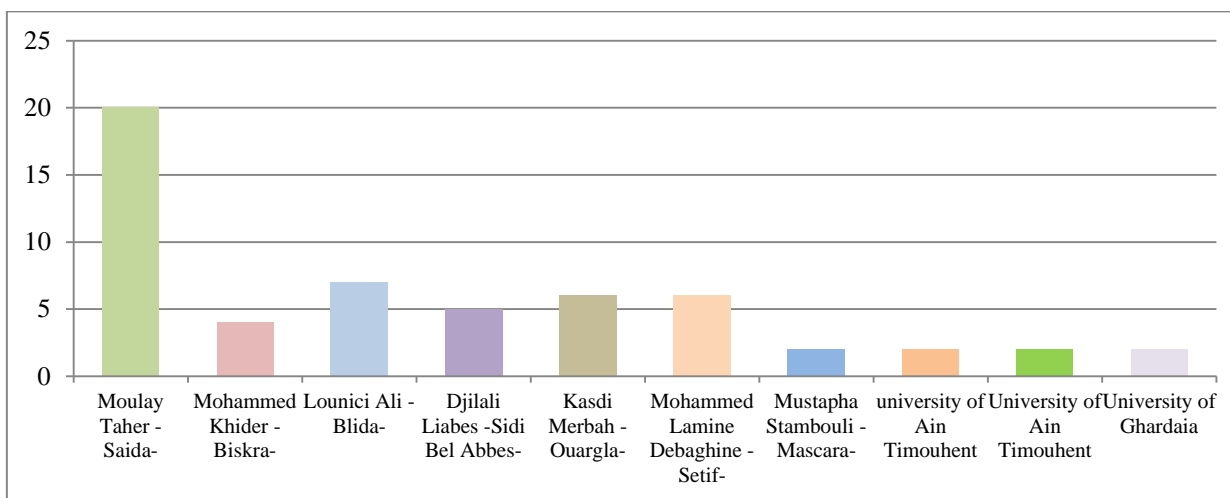
2.1. Student's Questionnaire

As previously mentioned, the questionnaire used in the study includes three sections:

Section One: Learner's Profile

Question one: University of

Figure1: Institutional Belonging



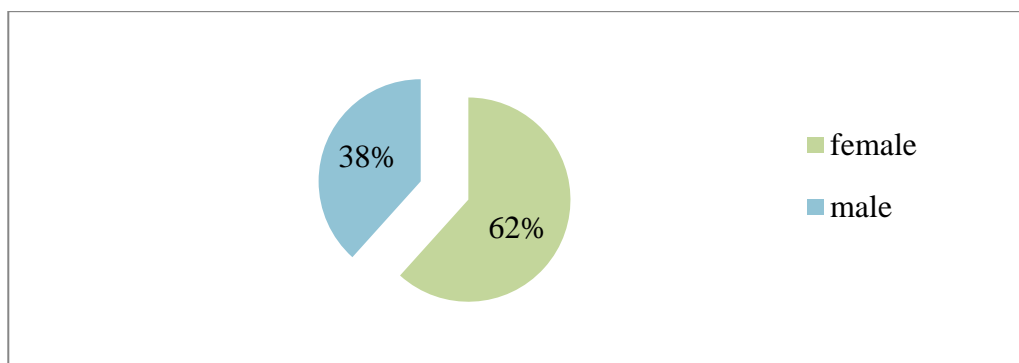
This question is addressed to students in an attempt to know where they are from. Data reveal that students are from the following cities: Saida, Biskra, Blida, Laghouat, Sidi Bel Abbas, Ain Timouchent, Ouargla, Setif, Mascara and Ghardaia. This diversity allows more generalized findings and can have implications for educational policies and practices.

Question two: Specify your gender

Table 1: Gender

Gender	Frequency	Percentage
Male	37	61,7
Female	23	38,3
Total	60	100

Figure 2: Gender



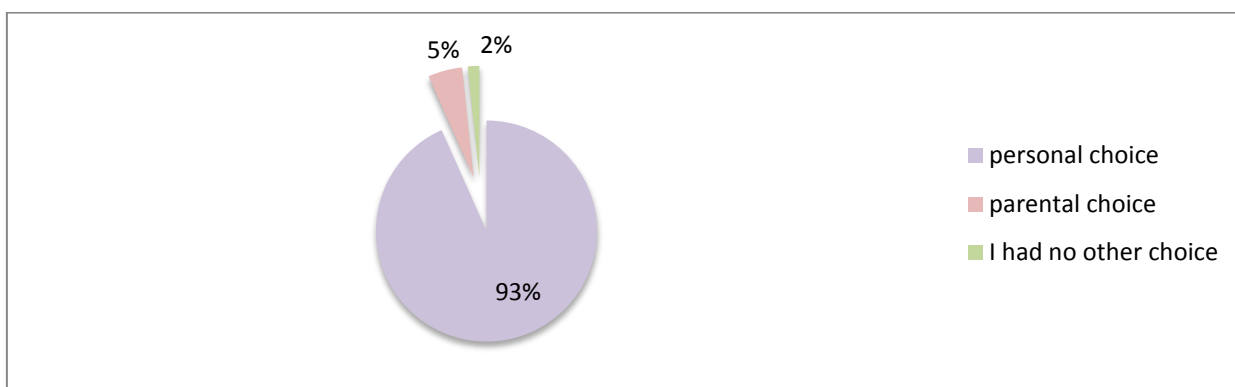
An examination of the table above reveals that 61,7% of participants are females, and 38,3% are males. Accordingly, gender is under the sole category of females.

Question three: Studying English was:

Table 2: Choice of studying English

Choice	Frequency	Percentage
Personal choice	56	93,3
Parental choice	3	5
I had no other choice	1	1,7
Total	60	100

Figure 3: Choice of Studying English



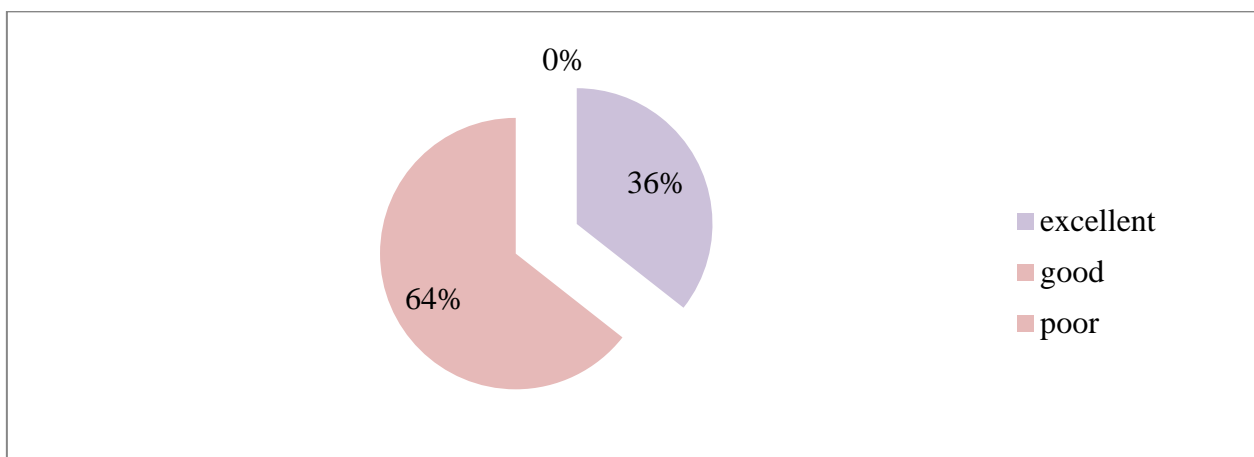
The numbers above display the learner's choice to study English. A large proportion chooses to study English personally. This clearly demonstrates learner's eagerness, motivation and passion towards learning the English language.

Question four: How is your level in English?

Table 3: Level in English

Level	Frequency	Percentage
Excellent	21	35,61
Good	38	64,4
Poor	1	1,7
Total	60	100

Figure 4: Level in English



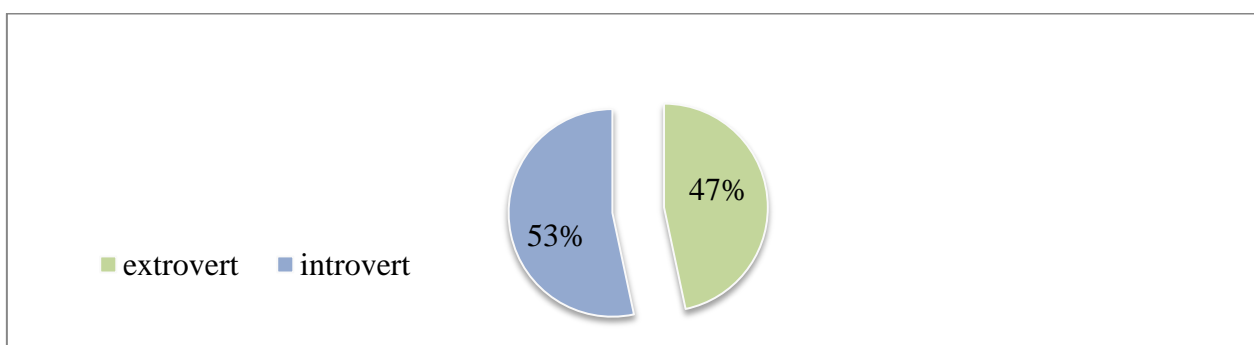
As observed in table, learners' level ranges from excellent to good with estimation of (35,61% to 64,4%). This reflects that learners work hard and are expected to be autonomous.

Question five: Your trait?

Table 4: Learner's Trait

Trait	Frequency	Percentage
Introvert	32	53,3
Extrovert	28	46,7
Total	60	100

Figure 5: Learner's Trait



This question aims at revealing learner's traits. The findings presented in the table above show that most learners are introvert 53,3% whereas 46,7% are extrovert. This demonstrates sample's distinct learning traits and preferences.

Question six: Do you attend all your classes?

Table 5: Learner’s Attendance of Courses

Attendance	Frequency	Percentage
Yes	18	30
No	42	70
Total	60	100

Figure 6: Learner’s Attendance of Courses

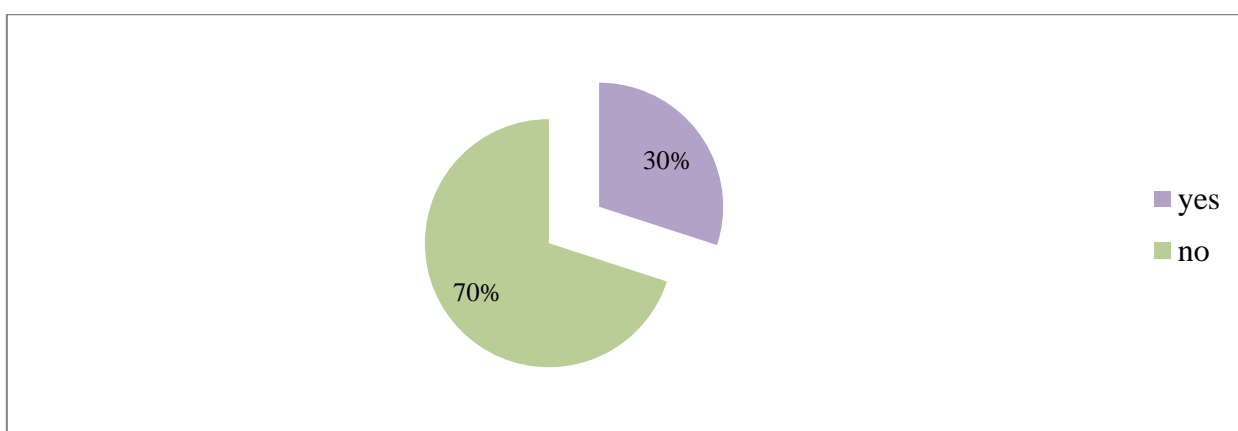
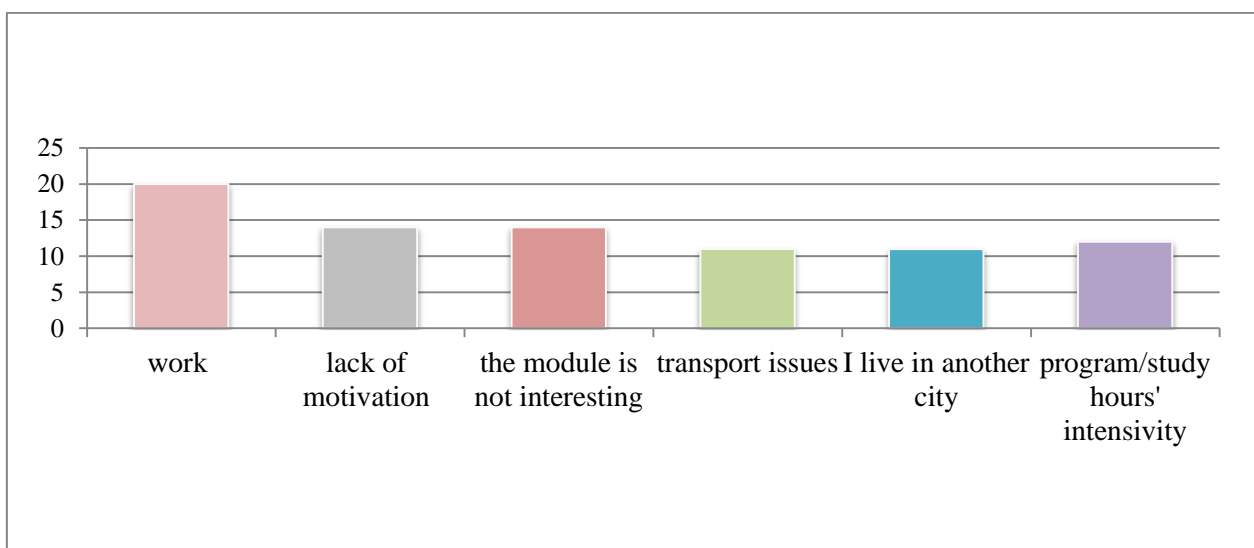


Figure 7: Reasons for not Attending Courses



The table above demonstrates that only 30% of learners attend all their classes, while the majority 70% do not. With reference to the figure, this can be explained as follows: 20 participants do work, 14 of them stated that the reason lying behind not attending was study

hours' intensity or the fact that the module is not interesting, 12 of them stated that they lack motivation, and 11 of them either face transport or rural living issues. The learner absences would lead to being left behind and not progressing in learning.

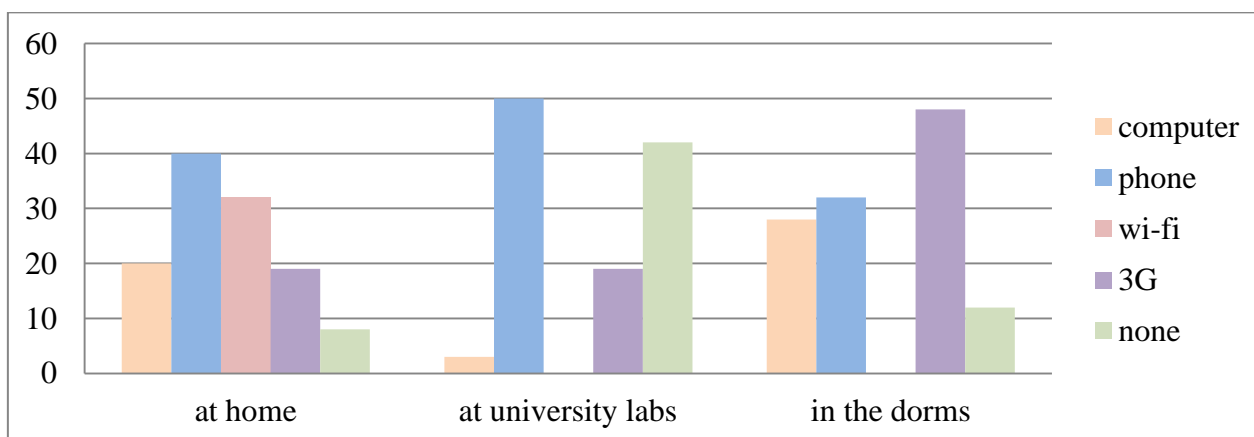
Section two: Digital Age Demands

Question one: What ICT tool and internet connection are available to you?

Table 6: ICT Tool and Connection Availability

ICT tool and connection availability	Frequency	Percentage
Yes	18	30
No	42	70
Total	60	100

Figure 8: ICT Tool and Connection Availability



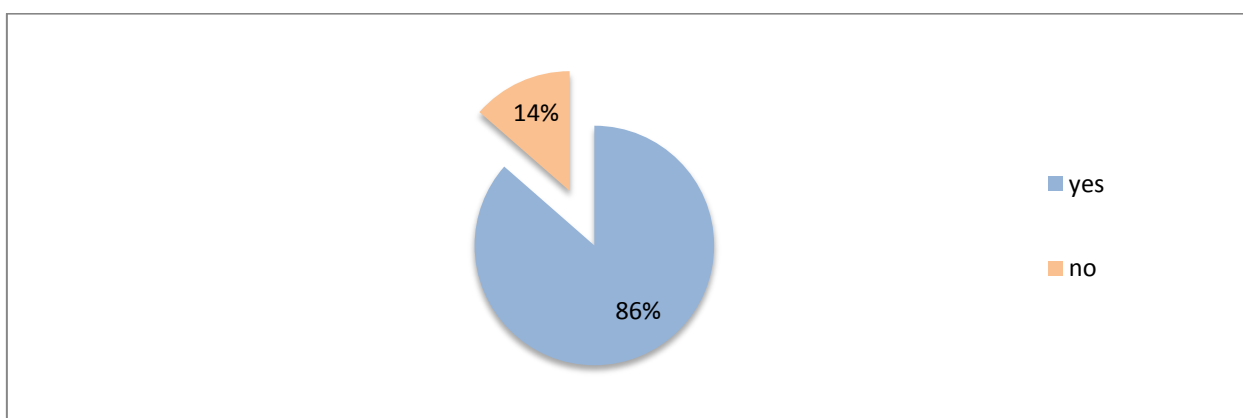
As clearly noticed in figure, most learners do own personal computers (56 at home, 3 at university labs, and 28 in the dorms), and cell phones (40 at home, 56 at university labs, 32 in the dorms). Concerning internet connection availability, most learners are connecting either using Wi-Fi (at home) or 3G.

Question two: Do you master using ICT tools for academic purposes?

Table 7: ICT Tools Mastery

ICT tools mastery	Frequency	Percentage
Yes	51	86,4
No	8	13,6
Total	59	100

Figure 9: ICT Tools Mastery



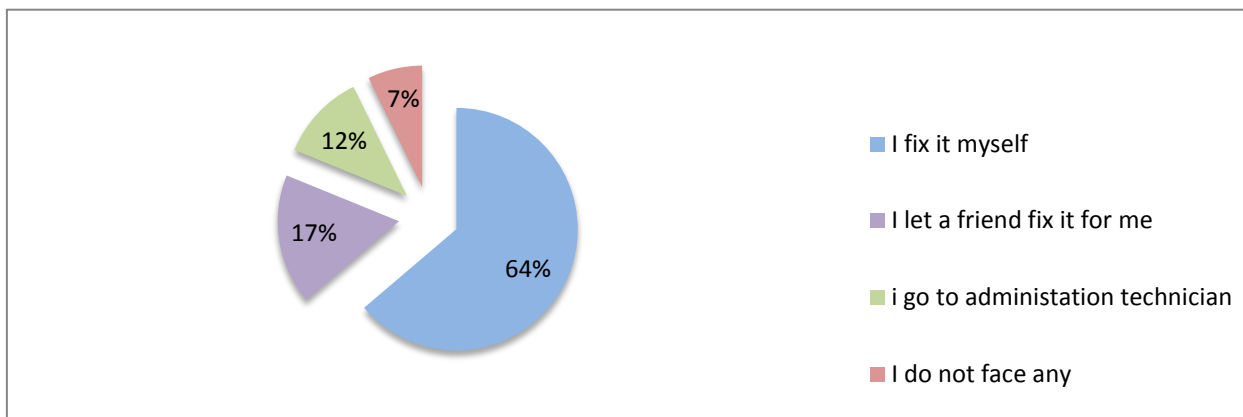
This question is addressed to learners in an attempt to know their ICT tools mastery levels in post-pandemic era. The majority (86,4%) do master using ICT tools while 13,6% of participants do not. This illustrates learner's adaptation with new innovations and methods of learning.

Question three: When encountering any technical issue:

Table 8: Technical Issues Solving Figure

	Frequency	Percentage
I fix it myself	44	74,6
I let a friend fix it for me	12	20,3
I go to administration technician	8	13,6
I do not face any	5	8,5
Total	59	100

Figure 10: Technical Issues Solving



The table highlights that 74,6% of learners fix technical issues themselves or by peers help 20,3% . This obviously exemplifies learner’s technical competence development.

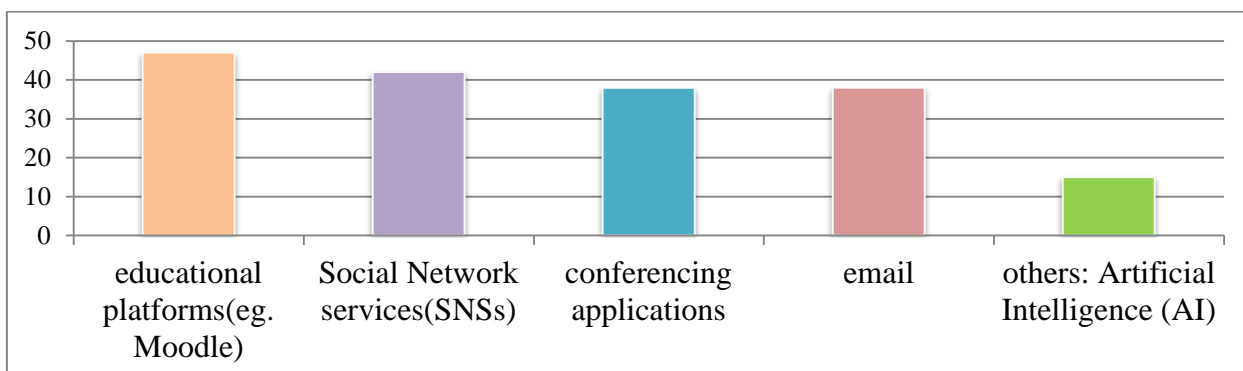
Section Three: Blended Learning Conducts

Question one: During your academic journey, what of these online tools have you used or have been suggested by your teacher?

Table 9: Tools to Support Blended Learning Implementation

	Frequency	Percentage
Educational platform (eg. MOODLE)	47	79,7
Social Network Services (SNSs)	39	66,1
Conferencing applications	42	71,2
Emails	38	64,4
Others: Artificial Intelligence (AI)	2	3,4

Figure 11: Tools to Support Blended Learning Implementation



This question is to explore which tool learners use to support BL in the post-pandemic era. Findings demonstrate the use of educational platform (79,7%), Social Network Services (66,1%), conferencing applications (71,2%), emails (64,4%) and Artificial Intelligence (3,4%). It is obvious that there is a variety of tools used to pursuit Blended Learning.

Question two: Which of these pedagogical operations have you been introduced to?

Table 10: Blended Learning Conducts

Items	Frequency		Percentage	
	Yes	No	Yes	No
You rotate between online and face-to-face learning modalities, which means that you stay at the desk but you switch between paper and pencil' instruction and online instruction like a tablet or a laptop.	33	24	55	40
You rotate on a fixed schedule among various modalities, which usually include 3 learning stations: 1) online learning; 2) face-to-face instruction; 3) group projects.	24	30	40	50
You can complete software lessons outside of class time and then do homework/project during class time, where the teacher is available for assistance. In other words, the process is versed: you attend an online course from home first then do the homework in class.	50	10	83,3	16,6
You spend one part of the day in a computer lab working through the online curriculum at your own pace. Another part of the day you work in class with the teacher to reinforce what you have learned in the lab.	32	28	53,3	16,6
Students move through a variety of different learning modalities, but rather than the rotation being prescribed by a teacher or schedule, it is customized for each student	1	58	1,6	96,6

according to individual needs. Teachers are available to clarify or expand on the information learned online and provide support.				
You can move through the online content according to your own needs and understanding (ambiguities), and take the course in school while the teacher supports you individually or in small-groups.	2	58	3,3	96,6
Instructors create a resource hub to share additional training resources with motivated learners and those who want to dig deeper in course materials; promoting self regulated learning.	27	30	45	50
Students attend the required face to-face sessions, and then continue the remainder of the coursework online, at their own pace.	52	8	86,6	13,3
A teacher posting documents, e-books and external links on Facebook group to enrich their students' understanding.	43	17	71,6	28,3
A student posting a beneficial videos /notes on facebook group for his/her classmates.	49	10	81,6	16,6
Students chatting and exchanging information/ courses/related articles and sources on Facebook Messenger.	45	13	75	21,6
Watching educational YouTube videos/courses /tutorials.	41	10	68,3	16,6
Sending an email to the teacher for academic inquiries.	45	9	75	15
Having online sessions through teleconferencing applications.	56	4	93,3	6,6
Receiving learning content on MOODLE.	60	0	100	0
Submitting an assignment on MOODLE.	41	19	68,3	31,6
Getting feedback from your teacher on	24	36	40	60

MOODLE.

Peer-assessing on MOODLE.	5	54	8,3	90
Completing MOODLE's quizzes/multiple choice or surveys.	21	39	35	65
Building and displaying glossaries (dictionary-like activity) on MOODLE.	2	57	3,3	95
Having synchronous discussions (Big Blue Button learning meeting and chats).	7	51	11,6	58
Having asynchronous discussions (forums) on MOODLE.	1	58	1,6	96,6

Figure 12: Types of Blended Learning

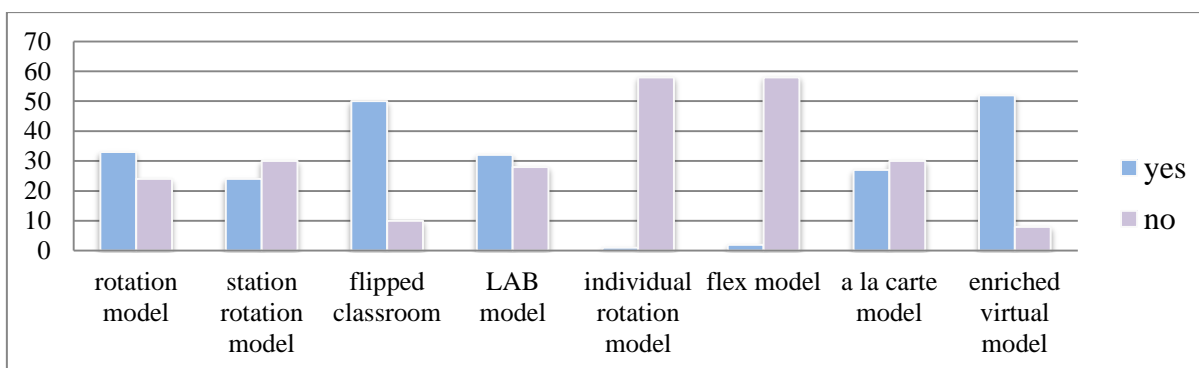


Figure 13: Tools to Support Blended Learning

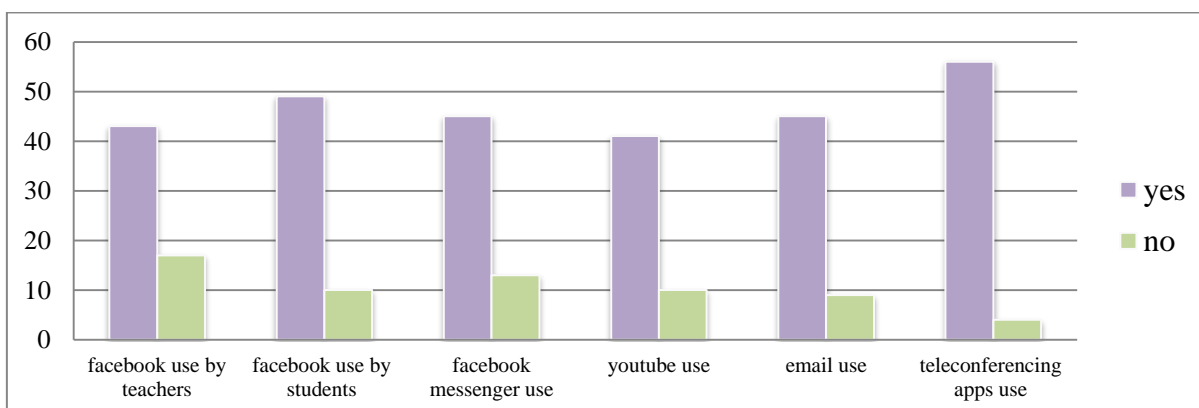
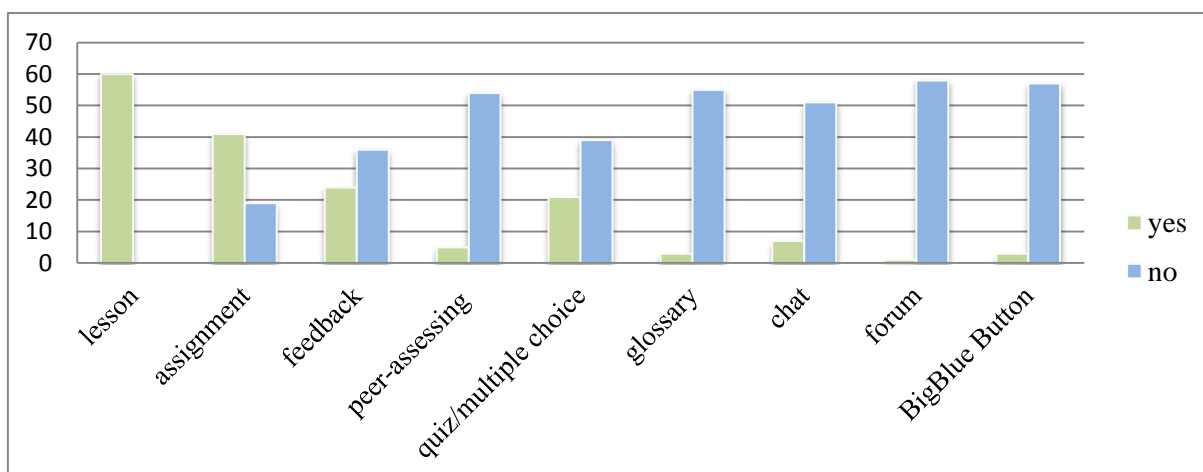


Figure 14: MOODLE Activities



The table and figures summarize the findings of the following statements. Concerning types, the majority of learners learn through rotation model (S1), flipped classroom model (S3), lab rotation model (S4), enriched virtual model (S8) with estimated percentages of 55%, 83,3%, 53,3% and 86,6%. These types of BL are most popular and used by teachers and learners. The majority of learners are not familiar with some other types as they voted no for: station rotation model (50%), flex model (96,6%), a la carte model (50%), individual model (96,6%). Concerning tools, largest proportions are in favor of Facebook use by both teachers (71,6%) and learners (81,6%), Facebook Messenger (75%), youtube platform (68,3%), teleconferencing applications (93,3%), MOODLE (100%), emails (75%). Concerning MOODLE activities, highest ratios are ranked for lesson (100%) and assignment (68,3%) only. This indicated that teacher do not include other activities in the instructional process.

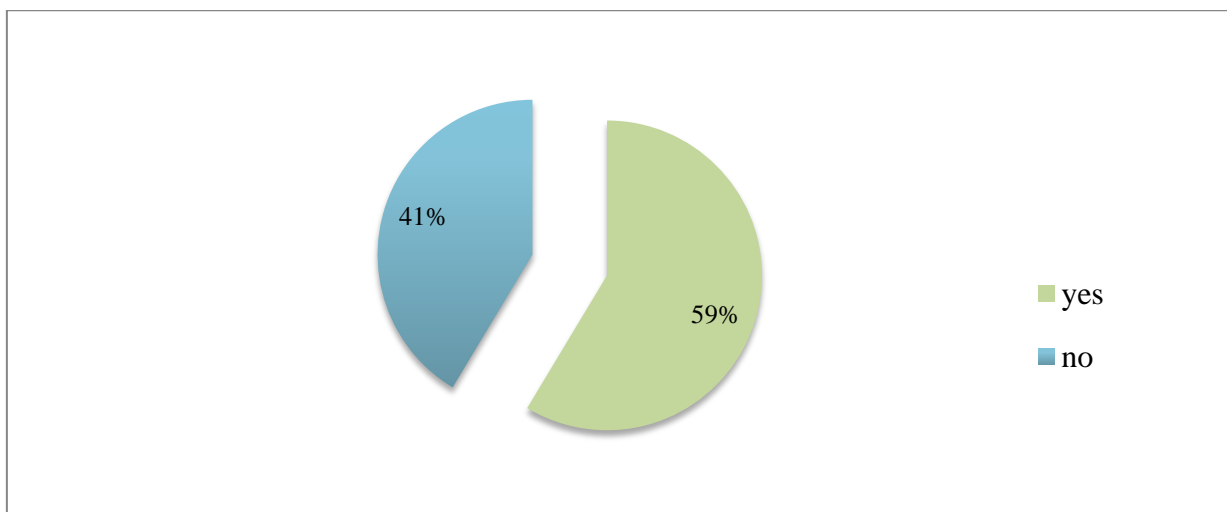
Section Four: Nurturing Learner's Autonomy and Affective Aspects

Question one: The Blended Learning in higher education during the COVID-19 pandemic was a beneficial learning approach to fulfill academic objectives.

Table 11: Learner's Perceptions towards Blended Learning Efficacy during COVID-19 Pandemic

	Frequency	Percentage
Yes	34	58,6
No	24	41,4
Total	58	100

Figure 15: Learner's Perceptions towards Blended Learning Efficacy during COVID-19 Pandemic



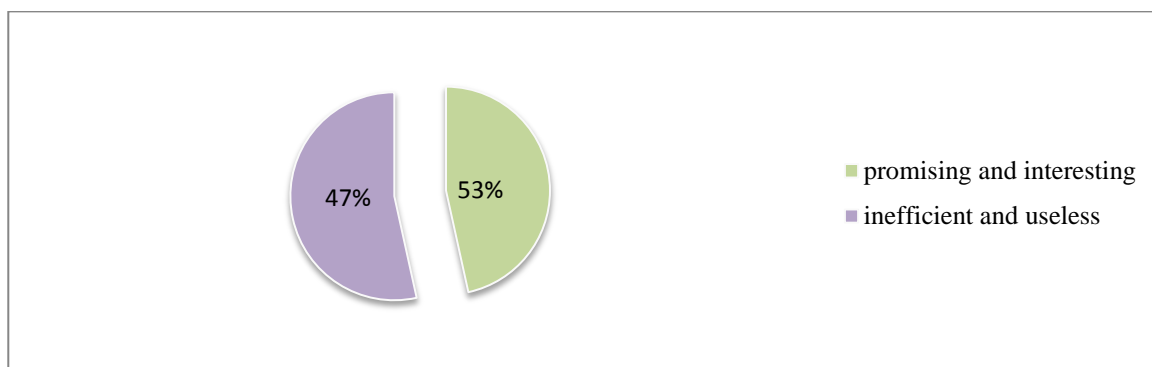
This question aims at exploring learner's attitudes towards BL efficiency during COVID-19 pandemic. The largest percentage (58,6%) was in favor of BL, for the fact that it ensured the continuity of learning in such severe circumstances.

Question two: What do you think of Blended Learning implementation in the Post-Pandemic era?

Table 12: Learner's Perceptions towards Blended Learning in Post-pandemic Era

	Frequency	Percentage
Promising and interesting	27	46,6
Inefficient and useless	31	53,4
Total	58	100

Figure 16: Learner's Perceptions towards Blended Learning in Post-pandemic Era



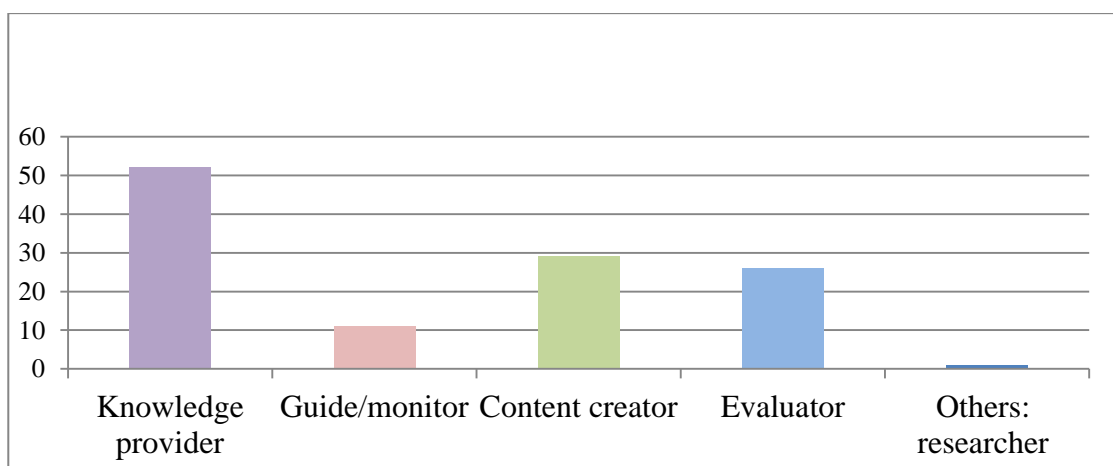
This question seeks to explore learner's perceptions towards the implementation of BL in Post-Pandemic era. The results remark that the majority (53,4%) perceive BL as inefficient and useless approach.

Question three: Within Blended Learning setting, the teacher should play the role of:

Table 13: Learner's perceptions of their roles in Blended Learning setting

	Frequency	Percentage
Knowledge provider	52	86,6
Guide/monitor	11	18,33
Content creator	29	48,3
Evaluator	26	43,3
Others: researcher	1	1,7

Figure 17: Learner's Perceptions of their Roles in Blended Learning Setting



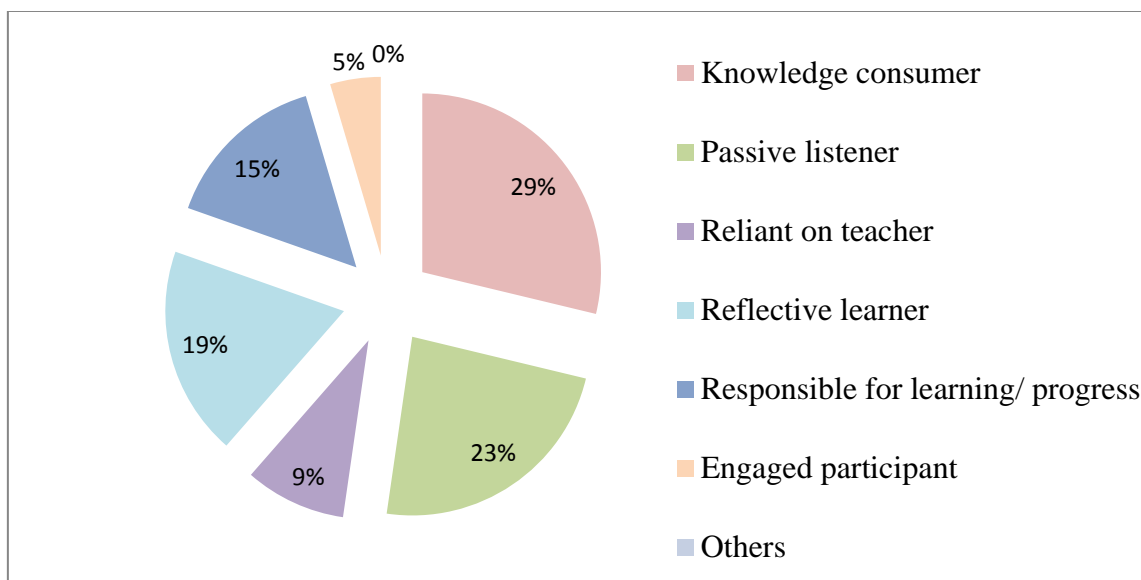
The majority of learners (86,6%) believe that teachers should play role knowledge provider, (18,33%) role of a guide, (48,3%) of content creator, (43,3%) of evaluator and (1,7%) of a researcher. The close proportions indicate learner's awareness of teacher's diverse roles in Blended Learning classroom.

Question four: Within Blended Learning setting, the student should be:

Table 14: Learner's perceptions of Teacher's Roles in Blended Learning Classroom

	Frequency	Percentage
Knowledge consumer	44	75,9
Passive listener	36	62,1
Reliant on teacher	14	24,1
Reflective learner	29	50
Responsible for learning/ progress	23	39,7
Engaged participant	7	12,1
Others	0	0

Figure 18: Learner's Perceptions of Teacher's Roles in Blended Learning Classroom



This question is to explore how learners perceive their roles in BL settings. Table examination shows the following proportions: 75,9% for “knowledge consumer”, 62,1% for “passive learner”, 24,1% for “reliant on teacher”, 50% for “reflective learner”, 39,7% for “responsible for learning”, 12,1% for “engaged participants”.

Question five:

Table 15: Blended Learning Effect on Learner's Autonomy and Affective Aspects

Statements	Frequency		Percentage	
	Yes	no	yes	No
Blended Learning combines the best of both online and traditional learning styles.	31	29	51,6	48,3
Within the Blended Learning, the online mode eliminates the traditional mode.	35	23	58,3	38,3
Within the Blended Learning, the online learning serves as an extension to the traditional mode of learning.	23	37	38,3	61,6
The Blended Learning gives students the chance to study whenever and wherever they want.	43	14	71,6	23,3
At home, I make further research and read e-books related to the topic studied in class to extend and reinforce my understanding.	40	17	66,6	28,3
I get motivated when learning at my own pace	30	17	50	28,3
Learning from home is comfortable and I feel more confident when interacting with the teacher online.	35	22	58,3	36,6
I feel less anxious and less socially pressured when having an online session.	39	24	65	40
I feel satisfied about learning English within the blended learning and my progress. The whole experience is positive.	38	22	63,3	36,6
Introverted students are likely to engage more when going online than offline (in class) as they have time to reflect and feel at ease.	43	15	71,6	25

Introverted students prefer written communication, thus discussion in MOODLE forums and chats can help them communicate and engage effectively.	46	14	76,6	23,3
Extroverted students have extra chance to learn online what was incomplete in class due to time constraint.	45	11	80	18,3
Extroverted students socialize and participate in class, as they can continue and increase their engagement when going online.	53	7	88,3	11,6

Figure 19: Blended Learning Conceptualization

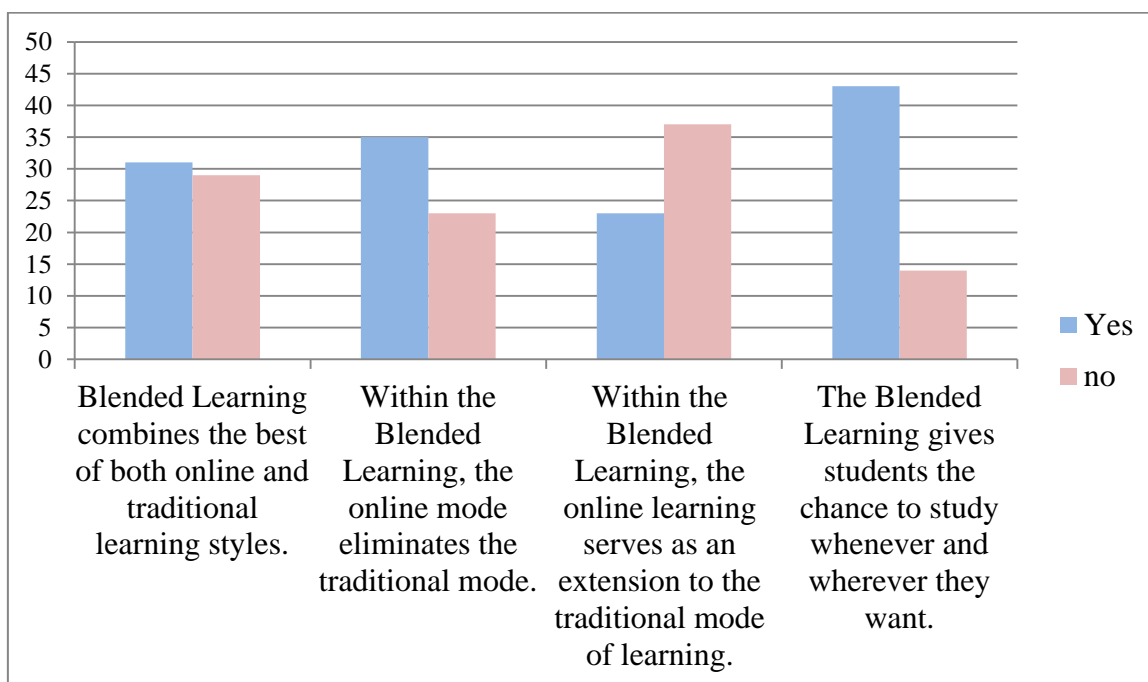
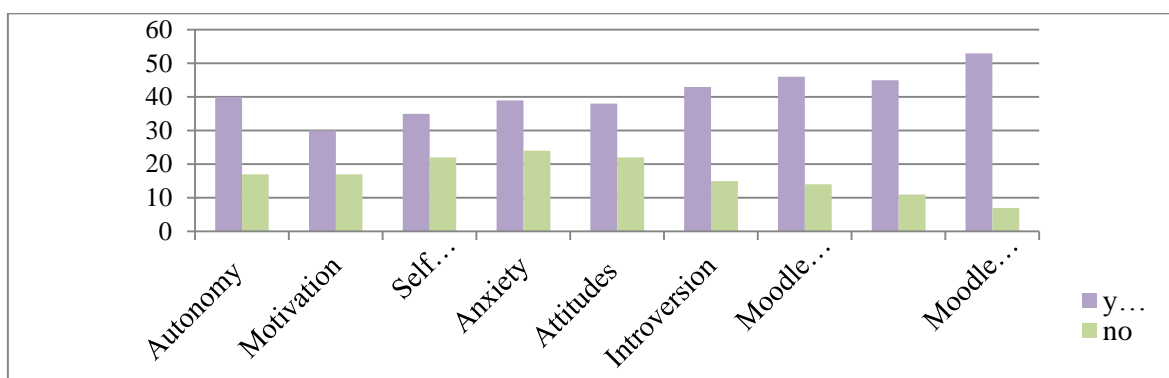


Figure 20: Blended Learning Effect on Learner's Autonomy and Affective Aspects

According to table and figure, it is noticed that most learners (51,6%) get the idea of BLA heedlessly as a common knowledge and (71,6%) of them are aware of its perceived flexibility. Yet, most of them (58,3%) believe that online mode; within BL, eliminates the traditional mode. While just minority (38,3%) think that online learning serves as an extension to the traditional mode of learning; within BL. These contradictions indicate a misinterpretation and misconceive of BL concept amongst learners.

With reference to table and figure, results indicate positive reactions from most learners towards BL in empowering learner's autonomy (66,6%), motivation (50%), self concept (58,3%), attitudes (63,3%), and reducing anxiety among learners (65%). Learners were also in favor of BL effect on introversion (71,6%) and extroversion (80%), highest proportions were for MOODLE effect on introversion (76,6%) and extroversion (88,3%). This clearly elucidates BL effectiveness and appropriateness to all learners' traits and aspects.

Question six: Do you think Blended Learning approach encourage student's autonomy? How?

Results reveal learners' positive perceptions in regard to BL cultivating learner's autonomy. Most learners are aware of BL effect on their autonomy as they believe it offers a key factor in generating a favorable attitude among students. Learners are enlightened with perceived advantages of BL.

- Indeed, blended learning approach influence students autonomy in a positive way.
- Yes, it did influence his/her autonomy in a positive way.
- Absolutely yes.
- Yes I think it impacts the learning process positively.

Learners believe it gives them control over learning aspects, permit learners to take charge and bear responsibility of their learning:

- Blended Learning, which combines traditional face to face instruction with online learning components, mostly offers students more control over their learning achievements.
- It assists and supports a learner to enhance and enrich his / her knowledge by multiple resources leading to make a learner more independent and relying on himself/ herself to get knowledgeable.
- Yes, the Blended Learning approach encourages student autonomy by allowing them to take charge of their learning process through online resources and activities.
- Yes it may give him more opportunities to get knowledge and do an extra research.

Not only that, but also the fact that it fosters a sense of independence amongst learners and promotes a self-regulated learning:

- Blended learning lets you study at your own pace with your own methods of learning.
- They become independent and self regulated learners.
- Yes. It does. Students rely on themselves in order to understand what was missing during the in class sessions.

Learners have also praised Blended Learning for perceived flexibility as they are not restricted to specific time or place:

- Yes, it influences student's autonomy by providing flexibility and opportunity for self-directed learning.
- Yes I think it impacts the learning process positively since you can study whenever and wherever you are.

Learners cognize that Blended Learning stimulates social interaction and growth:

- With blended learning, students can access online resources, collaborate with peers, and engage in self-paced learning activities.
- Yes, by encourage them to interact and being active learners.

And above all its contribution to learner's achievements and cognitive skills:

- Yes, it does influence our autonomy as it drives us to make further research to strengthen the knowledge received from the teacher in the classroom.
- Blended Learning, which combines traditional face to face instruction with online learning components, mostly offers students more control over their learning achievements
- In addition to improving performance and achievement.
- It can authorize students to take charge of their executive functions (decision - making, problem-solving).

However, the minority does not believe in Blended Learning to stimulate learner's autonomy and evidently refuse it:

- Absolutely not.
- No, it may not impact the learner's autonomy.
- Not really.

Question seven: Do you think that Blended Learning modalities empower student's affective aspects and their well-being?

Most responses were in favor of positive Blended Learning effect on learner's affective aspects.

- Yes.
- Yes, Blended Learning modalities can positively impact students' affective aspects and well-being by providing flexibility, personalized learning experiences, and opportunities for engagement and interaction, both with peers and instructors.
- Blended learning modalities exhibit students' affective aspects and their well-being by providing a personalized and supportive learning experience. It helps students feel connected, reduces stress, and promotes a positive emotional state.
- Yes, blended learning can affect student's emotions and their well being by offering flexibility which increases students' motivation.
- It does at a certain level.
- Yes, because this kind of learning offer a combination of face to face interactions and online learning experiences.

- Yes, for sure. It involves their affective side whether they are anxious, motivated, confident, filtering...and so on through the different types of assessments, instructions, and assignments implemented by the teacher.
- Yes, it really does. Due to the integration of technology within studying that lead to make a learner more comfortable to interact and participate freely.
- Yes, for sure. Blended learning offers flexibility as it fosters learner's engagement and collaboration and provides access to diverse resources.
- Yes, it is comfortable way for both extroverted and introverted, and studying wherever and whenever they want.
- Yes. Students feel at ease studying on their own pace. It boosts their confidence and motivation.
- It provides a more comfortable environment with opportunities for flexible interactions and therefore more efficient learning.
- Yes, maybe through private chat, students declare that, we like this strategy, it is good, I felt at ease being alone, being at home...etc

However, the minority think that BL does consider neither teacher-learner relationship nor learner's emotional stability:

- I don't think that blended learning considers the emotional side of the student. Specially, when it comes to live online sessions, interaction is huge problem because it gets reduced, and if the learning mode is asynchronous, then students are much more detached and isolated because they have to read whatever teacher supplies them with, so there's always lack of engagements and emotional detachment.
- No, because some students might feel more anxious when attending online courses.
- Nope, lacks interaction and direct observation as well as evaluation.
- Not necessarily, but it does at a certain level.

Among this minority there are respondents who have different viewpoints and resolutely reject BL implementation at first place:

- Face to face learning is the best.
- E-learning is not efficient, traditional learning is better.
- No, traditional learning is interesting, and we can communicate with teacher face to face not behind screen and get motivated.
- Blended learning is bullshit, I do not believe in.

- We should go back to traditional learning; it is efficient and keeps social interaction and communication between peers and teacher.

2.2. Teacher's Interview

Question 1: May I ask you about your age?

Respondents' ages range from 25 to 60. The large age range can offer a varied viewpoint on the utilization of ICT in teaching methods, taking into account the differing experiences, attitudes, and levels of comfort with technology that may be present within this range.

Question 2: Would you please tell me if you apply the blended teaching? If not, what stands against you blending?

Most teachers, if not all of them declared that they use Blended teaching. Some teachers think that BL adoption is based on the module nature itself; if it needs to be carried out online or not. Whereas others believe it depends on ICT tools availability in campus and time constraints. The minority declared that they go back to traditional schooling after the pandemic was over, in addition to their learners' preferences of learning methods to carry out learning with.

Question 3: In the institution you belong to, is online sessions' scheduling regular or occasional?

Most teachers declared that online sessions' scheduling is occasional, by the teacher's discretion and administrative supervision. Some teachers stated that the university pattern of learning consists of 3 weeks for transversal online classes and one week for in-class presential sessions regularly. While other teachers felt obliged by administration to carry with this method of teaching.

Question 4: Based on your experience, what type of blended learning do you usually depend on in your classroom? Why not others? (See appendix C)

All teachers were not aware of BL types. After getting introduced to; some teachers declared they do not depend on any. While some of them selected flipped classroom model, station rotation model, and a la carte model. Some teachers denounce that the reason lying behind their selection of certain types at the expense of others or none, is the Algerian higher

education policy; which restrict flipped classroom model as they are urged to use MOODLE platform. Another controlling factor is the taught module if it necessitates virtual meetings.

Question 5: What tools do you use to maintain the blended learning in your classroom? And what is the official platform in your institution?

All teachers agreed on MOODLE as the sole educational platform in Algeria. They claimed that they use ICTs inside classroom and encourage learners to use it as well in group-projects and presentation. Most of them use teleconferencing applications mainly Google Meet and Gitsy Meet to support asynchronous learning. They also state that their emails are published at the level of department and learners can reach them out for any inquiries. Concerning SNSs, some teachers use Facebook just to announce tests, homeworks, deadlines or other news while others do share documents and e-books on facebook groups. As for YouTube, some teachers declare that they advise their learners to watch videos or subscribe some YouTube educational channels to improve their understanding and language skills.

Question 6: Do you get advantage of MOODLE activities when using the platform? Which one (s)? If no, are you intending to use them in the future? (See appendix)

All teachers agreed on “lesson” and “file” activities; as stated before Algerian higher policy necessitates delivering lessons on MOODLE from corona time, and teachers subject to command till nowadays. Some teachers give “assignment”, “quiz”, “multiple choice” and provide “feedback” within MOODLE. Few teachers engage their learners in synchronous discussions on MOODLE “chat”. For “glossary”, teachers do no build any and stated that definitions are incorporated within the lesson; not separately as stand-alone activity. Teachers asserted that “BigBlue Button” is only used for international conferences or professional development. Teachers definitely have never used or even have insight on these available activities: folder, SCORM, database, workshop, forum, wiki, survey, H5P, and LTI external activities. However, they claimed that they would reconsider and use them in the future.

Question 7: Do you think that the mentioned activities help in enriching your course content and teaching?

Most teachers depict MOODLE as methodic, easy, safe, reliable and useful platform.

- Yes, because it facilitates the task of learning and keeps the student-teacher relationship ongoing.

- Although I do not use them all, I think they would level up learning experience and permit more interaction and communication.
- Yes for sure they will be useful and makes the course easy and well organized
- It is easy to manipulate, safe to share information (knowing that only students with get ahold of your work) and a fast/reliable method to assess the student's knowledge.
- Definitely, their implementation is useful.

However they believe time constraints and ICT shortage are the most influential factor to stand against MOODLE proper usage.

Question 8: I would like to hear your perspective on the effect of real application of the BL on student's autonomy and interaction?

This question aims to explore if there is any improvement on part of the learner in Blended Learning setting in terms of engagement, self reliance, self discovery and construction of knowledge. In brief, discover BL effect on learner's autonomy. Most respondents believe that Blended Learning make students lazier, more reluctant and over reliant on teachers. Some teachers noted that learners stop attending classes because they are sure that lectures will be uploaded anyway on MOODLE.

- It makes the mind a bit lazy because of the digital technology.
- Based on my experiences the interaction in online session is lesser than face to face.
- There is a limited engagement and autonomy.
- It needs to be well executed.
- If used appropriately, it would positively impact student's academic achievements.

However, others think that BL positively affect their learner's autonomy.

- Students get accustomed by the use of ICT and enhance their skills when it comes to learning how to surf online and get their lectures. It also encourages them for further high educational research and studies.

Question 9: How do you perceive your role and your student's role in BL setting?

Most teachers assume that they roles are more of a guide, facilitators and their students are expected to be real knowledge providers and autonomous.

- I am supposed to be the guide and they are the real knowledge providers.
- I give a little and my learners do the rest.

- There should be cooperation between teacher and learners; otherwise it would be a failed experience.

However, they asserted they are knowledge providers and their learners are passive consumers.

- The teacher deliver the lesson, students rarely get engaged.
- My learners are passive in class and out of it, they rely on me to post lectures on MOODLE.
- They become reluctant and more dependent on me and on what I provide; they do not do extra research.

Question 10: Based on your experience with the BL, do you think it serves introvert /extrovert and anxious learners? How?

Some teachers believe that Blended Learning may serve those types of learners and let them perform and excel in learning.

- Yes, I believe it serves since there is no stress that is found in face to face contact.
- Yes, sure, it is good for introvert because they feel shy when it comes to classroom interactions, but when it comes to study online or blending the learning process gives a chance may be for those introverts.
- Yes, especially for the actions learner, because some of them they cannot express themselves enough at the level of classroom. So sometimes they are shy, they are anxious, they don't like classroom atmosphere, so when they go home they take their time, they relax and they can participate better. I believe that this can help them, especially this type of learners.

Some of them added that stimulating those learners depend on the type of BL that teachers adopt in class. They have also admitted that MOODLE has an effect in that matter.

- It depends on the type one uses.
- Yes I think so, there are those options of chats and forums on MOODLE where students can chat or can speak individually with their teachers or peers and I think this can be helpful and motivating.

- Why not, yes. Particularly for students who have this anxiety speaking in a class. So they can do things through an online, particularly through the all the options that MOODLE offers.

While others think that BL makes matters worse, which lead them to not adopt it in class and just maintain traditional classroom interaction.

- I don't think so, since I taught a class online and face to face, the same groups work with me in real are the same who used to participate in online.

Question 11: Do you think that BL modalities affect your student's motivation, self confidence, and self-esteem. How?

Some teachers give credence to positive effect of BL on motivation, self concept, and learner's personality empowerment in general.

- Possibly why not! Particularly students who have anxiety when speaking in front of classmates, they can do things through MOODLE or online sessions. Also when you are in the classroom and you get used to your mates, personal contact, and teacher's appreciation and praise can increase your self esteem and get motivated to learn. Yes, I think both modes can increase learner's motivation and self concept.
- I think yes, because we are in the time that we call digital natives, this technology knowledge help in building confidence and reassurance within the learner.
- Yes, if the class follows a student-oriented approach.
- Yes, it actually does. When having online session they have higher levels of confidence, as they are in their comfort zone; home. However, the opposite is true: when they come to class they would face the same problem in front of their mates.

Question 12: Do you think that your student's attitudes towards learning English within the BL have changed? Explain.

Most teachers denounce that BL negatively changed learner's attitudes toward learning English.

- Learners lose interest in learning English especially these three previous years (since corona pandemic).
- Learners used to be more autonomous and search things by their own; that is the core of learning English.

- In my case student's attitudes changed to the worst and the case not only with me it is will all teachers who are teaching online.

Whereas others think that implementing BL gives an interesting and fruitful opportunity for English language learners.

- Yes, they found that learning is more interesting.
- Yes, it becomes more diverse including different tools.
- With all the provided platforms and social media, learners enjoy learning.

2.3. Observation

Class physical appearance and ICTs availability

The classroom observation reveals that there is equipments' shortage. There is a limited number of data show (one or two), damaged power plugs and sockets, and all computers at the level of labs are inoperative. Learners rely solely on their phones and 3G connections, and reported difficulties to access their MOODLE accounts and lessons.

Pedagogical conducts

The researcher noticed the use of flipped classroom model; teachers upload the lesson on MOODLE and allocate class time for exercises and collaborative activities. Lessons were also uploaded on class Facebook group to address students' access issues. When arriving to class, learners continue to encounter challenges in comprehending the content that was previously disseminated. The teacher provides clear explanations and resolves any uncertainties before commencing the practical assignment.

For synchronous discussions, teachers peak productivity times and considers learners having other commitments. Thus, they schedule online sessions according to learners' preferred time. This is illustration for BL flexibility and accessibility features. As it was noticed the use of different video teleconference applications, namely: Jitsy Meet, Google Meet, Zoom, and Google Classroom. It was noticed that the teacher lectures the lesson or share slideshares on screen while learners listen.

As for lab rotation model, the classroom is large and has five-table configurations, but unfortunately, none of the computers operate. This shortage and malfunctions of computers hampers the teacher's ability to integrate technology and forces learners depend on personal

devices. The teacher uses his personal computer and data show to deliver content and engages students in discussion.

With regard to enriched virtual model, teachers primarily replicate the identical course information presented in class through written means on MOODLE. The materials are commonly presented as lecture notes, PowerPoint slides, or readings. Online contents have a restricted utilization of interactive components. Thus MOODLE is restricted to uploading lessons only while other assignment activities, activities for communication and collaboration, assessment and surveys, and interactive delivery of content were not used.

Classroom dynamics

The researcher observes how interaction flows between peers, teachers and course content. When having online sessions, female teachers turn off their cameras as it is the case of both male and female learners. The teacher lectures the lesson or share slideshares on screen while learners listen and rarely participate, which means a one-way interaction. Teachers do not actively interact with students using MOODLE beyond simply uploading lessons. It appears that students are working together to complete the tasks assigned during the lab rotation model using their phones and artificial intelligence apps.

The researcher considers teachers' and learners roles to spot learner's autonomy within BL course. It was revealed that the teacher plays a central role in delivering information and structuring the learning experience. The focus is on the teacher as the primary source of knowledge, with students in a more passive role as recipients of information. Despite the potential for autonomy in BL, students appear to have limited autonomy in this classroom.

The researcher scrutinizes learner's emotional state when having BL course. It appears that learners were neither motivated nor interested in the course due to equipment restrictions. The BLA seems to have a positive impact on anxious learners, who are participating and feel less pressured when having online sessions. The online component provides them with opportunities to express themselves and interact with their classmates more freely than in a traditional classroom. Interestingly, extrovert learners appear to be more engaged in the online sessions, possibly due to the interactive nature of online platforms, which can cater to their need for social interaction and discussion. While a minimal participation and engagement was noticed from introvert learners.

3. Interpretation and Discussion of Results

The examination of data obtained from students' questionnaires, teachers' interviews and classroom observation have furnished the researcher with significant insights on the primary focus of this study. The researcher has been able to derive significant results about the research questions: How have teachers' and learners' attitudes towards BL and their perceived roles evolved in digital post-pandemic era? What are teachers' current practices of BL in post-pandemic era? How do EFL teachers and learners evaluate their teaching and learning experiences within BL environment in post-pandemic era? To what extent does BL models and MOODLE platform utilization influence learners' autonomy and affect? In addition, the research findings either validate or refute the results of the literature review.

Data obtained from students' questionnaire revealed that BL embrace all learners' differences (gender, learning choices and preferences, proficiency levels, personal traits, and motivation levels), this is in favor of Team (2023) attribution "it can assist individuals in acquiring the necessary skills and knowledge to adequately prepare for their future academic pursuits and professional endeavors". BL addresses learners challenges related to work, transport and living issues, slow learners etc; this supports Team Singh (2023) claim of "BL is characterized by its flexibility and personalization which makes it the most suitable teaching approach to different learning styles and needs". These conclusions underscore that BL provides inclusive and accessible learning environments for all learners.

BL as defined by krasnova is "method of teaching that combines the most effective face-to-face teaching techniques and online interactive collaboration, both constituting a system that functions in constant correlation and forms a single whole". Students' questionnaire results demonstrate that most learners (51,6%) get the idea of BLA heedlessly as a common knowledge and (71,6%) of them are aware of its perceived flexibility. Yet, most of them (58,3%) believe that online mode; within BL, eliminates the traditional mode. While just minority (38,3%) think that online learning serves as an extension to the traditional mode of learning; within BL. These contradictions indicate a misinterpretation and misconception of BL concept amongst learners. The largest percentage (58,6%) was in favor of BLA during pandemic, for the fact that it ensured the continuity of learning in such severe circumstances. However, in post-pandemic era, they have developed negative attitudes towards BL and have inclination towards traditional schooling. The majority (53,4%) perceive BL as inefficient and useless approach in post-pandemic era.

If taking Garrison & Vaughan description of BL as “the thoughtful fusion of face-to-face and online learning experiences” into consideration, teachers are thoughtlessly incorporating online learning within traditional mode. BL for teachers, is a mere integration of online element in the instructional process without finding the balance between both modes, which means using the online component at the expense of the f-2-f component. These conducts oppose Procter’s definition (2003) “Blended Learning is the effective combination of different modes of delivery”. The researcher speculates that challenges in BL adoption lead to creating frustration and negative attitudes amongst teachers towards implementing BLA in instructional process in post-pandemic era. This in turn, affects their learners’ attitudes with regard to BL and shapes their future decisions and preferences of traditional learning.

Students’ questionnaire results reveal that learners have self-access to ICTs, the Internet and smartphones, this is the illustration for “digital natives”. 86,4% of students do master using ICT tools, there is no gender disparity; as females are inclined to use ICTs in learning as much as males. Learners have developed digital literacy skills and are able to address any technical issues; as 74,6% of learners fix technical issues themselves. This aligns with Dangwal et al (2017) attribution “... students’ digital literacy is fostered, by giving them a new technological adventure”. Teachers on the other part; regardless of their age, remarkably have adjusted to new technology, this reinforces Lalima et al (2017) claiming “BL ensures that the digital age demands are met”. However, classroom observation and students’ questionnaire results uncover lack of infrastructures, learners’ dependence on their phones; instead of computers, and learners’ inability to access MOODLE platform which hampers proper adoption and success of BLA.

With respect to BL models, teacher’s interviews and classroom observation unveil that only few are incorporated in learning, yet their execution is not optimal; namely rotation model, flipped classroom model, lab rotation model, and enriched virtual model. Teachers’ unawareness of perceived efficiency and lack of experience with BL best practices are what affect teacher’s adoption of other BL models. It is noteworthy to mention that scarce resources may provide substantial obstacles to the effective execution of BL, impeding schools and educators from completely actualizing the potential advantages of this instructional method. Teachers are comfortable with their current practices within traditional learning and its efficiency. Data gathered from teacher’s interviews disclose teachers’ lack of complete understanding of the advantages of BL. Which result in lacklustre efforts to execute or a hesitancy to fully adopt other models.

Results of students' questionnaire expose the use of different tools including MOODLE platform, SNSs, teleconferencing applications and emails, which significantly enhance learning and teaching. Findings demonstrate the use of educational platform (79,7%), Social Network Services (66,1%), conferencing applications (71,2%), emails (64,4%). Results support Collin et al (2011) attribution "significant benefits associated with the use of SNS includes: delivering educational outcomes; facilitating supportive relationships; identity formation; and, promoting a sense of belonging and self-esteem" and "video conferencing enables real-time communication between teachers and students through videos, as well as sharing of content and information".

Teacher's interview results exhibit that MOODLE platform is a valuable resource to support BL and to alleviate learning in Algerian university, this aligns Boudehane's claim (2021) "this platform enhances the learning / teaching quality and improves language skills". Yet, it is not properly used and exploited by teachers who consider it as an open-source for downloading courses only. Results demonstrate highest ratios are ranked for lesson (100%) and assignment (68,3%) only. All MOODLE "assignment activities, activities for communication and collaboration, assessment and surveys, and interactive delivery of content" are not exploited except for lesson and assignment. This underutilization of MOODLE platform encapsulates teachers' unawareness of MOODLE perceived advantages and hinders intended goals of collaboration, communication, critical thinking and social interaction which contradicts Kotzer et al (2012) claim "MOODLE is a socio-constructivist platform that promotes communication and self discovery of knowledge". Thus, the denial of Benderradji (2021) consideration of MOODLE as "one of the best e-learning environments".

Classroom observation manifests that inappropriate application of ideal methods leads to negative consequences. To illustrate: by MOODLE platform misapplication and ineffective BL models' adoption, teachers are encouraging learner's dependence on teacher; instead of autonomy. This disproves the claiming of "BL enables teachers to step back and learners to take initiative to hold responsibilities and give a new dimension and value to learning". Teachers get used to traditional method and dominated the instructional process; they are the sole knowledge providers, which stand against Voller (1997) attribution "teacher's role shifts from an informer, knowledge keeper to a facilitator". Teachers; when using MOODLE, rely solely on lesson activity and assignment at the expense of other activities that contribute in shifting attention from teacher to learner. These misconducts attribute in learner's disengagement, disinterest, reluctance and passivity, opposing Ghoul et al (2022) claim

“learners can attain their learning goals, objectives, and demands by utilizing BL”, and Kaur (2012) “BL eliminates the teacher-centeredness of conventional education and empowers students to make their own decisions, use their imaginations, and investigate and solve issues related to learning”.

Students’ questionnaire results display positive reactions from most learners towards BL in empowering learner’s autonomy (66,6%), motivation (50%), self concept (58,3%), attitudes (63,3%), and reducing anxiety among learners (65%). Learners were also in favor of BL effect on introversion (71,6%) and extroversion (80%), highest proportions were for MOODLE effect on introversion (76,6%) and extroversion (88,3%). This clearly elucidates BL effectiveness and appropriateness to all learners’ traits and aspects. However, teacher’s interview and classroom observation revealed negative outcomes of BL on learner’s affect. Unprofitable adoption of BL models yield in bad affective implications. The researcher speculates that positive influence of BL on learners’ affect hinges on its proper use. This mismatches Lalima et al (2017) claiming “BL keeps the human touch since it is believed that the teacher presence nurtures the student’s emotional and affective development and well-being”. BL negative impact encompasses self confidence, self-esteem, attitudes, introversion and motivation, this latter opposes Ghoul et al (2022) “the use of technology serves as a source of motivation for students, aids them in fulfilling their obligations, and enhances their academic achievement”. Contrariwise, anxiety and extroversion were the sole affective traits to be positively influenced by BL, which relates to Soufi et al (2022) “given that BL incorporates both in-person and online learning, students who encounter a favorable classroom atmosphere and high-quality facilities are more likely to exert their utmost effort in enhancing their learning”. In spite of MOODLE activities for communication and collaboration, and interactive delivery of content contribution in empowering learners’ affective traits, its absenteeism from instructional process is translated to negative influence on learners’ affect. Thus there is a discrepancy between the BL models and the design of MOODLE activities in meeting the demands of learners.

4. Pedagogical Implications and Recommendations

4.1. For Policy Makers

Indeed, implementing Blended Learning was the sole means of ensuring the uninterrupted pursuit of academic education during COVID-19 pandemic. Nevertheless, there was a lack of prior preparation or training for this transition, as both students and professors

were accustomed to the traditional method of in-person learning and teaching. However in post pandemic era; in order to enhance education quality and take Blended Learning from an option to a powerful catalyst for change and revolution in higher education, policy makers should

- Redefine and reconsider the BLA implementation and pedagogical practices in Algerian universities so that integration is done within the framework of proper pedagogy.
- Promote work-life equilibrium through establishing clear expectations of teachers' duties and ensuring manageable and realistic workloads.
- Universities should be equipped with skilled technicians to support lecturers and provide a successful online course for our students.
- Invest in infrastructure and resources to ensure that classrooms are equipped with functional ICT tools and that learners have reliable access to the internet.
- Organizing workshops, seminars, or training sessions for teachers to raise awareness about Blended Learning, its benefits and best practices.
- Providing resources and case studies that demonstrate successful implementations to illustrate the value of Blended Learning to teachers.
- Tailor targeted professional development opportunities to introduce teachers to a variety of Blended Learning models and help them understand the benefits of incorporating these models into their teaching practice.
- Provide ongoing support and resources to promote effective implementation of Blended Learning, instructional design and technology integration.

4.2. For Teachers

A great deal of responsibility to enhance BL adoption in Algerian universities and exhibit its advantages on learner autonomy and affect, also guarantee its continuity and success in post COVID 19 is on teachers' shoulder. As they should

- Be open to experiencing different types of BLA and change learning routines to cultivate its potential advantages.
- Create Blended Learning experiences that accommodate the requirements and preferences of their learners in order to optimize beneficial outcomes.
- Expand the use of all MOODLE activities into teaching practices to create dynamic and engaging environment that caters all learners' needs and preferences.

- Maintain quality in BL course design, delivery, assessment and continuous development to meet learning objectives and learners' satisfaction.
- Establish consistent BL practices that effectively blend face-to-face and online elements to ensure they complement each other.
- Ongoing monitoring and evaluation of course delivery and student performance.
- Promote teacher-learner communication and enhance learners' engagement and interaction by proper adoption of BLA and profitable utilization of MOODLE.
- Cultivate learner' autonomy and involve them in all learning aspects.
- Set clear expectations of learners' duties and responsibilities inside classroom and beyond and support them through the process.
- Pay great attention to learners' affect by fostering positive ones and addressing negative ones to create a supportive learning environment.
- Add to the corpus of knowledge on Blended Learning through researches and scholarships.

5. Limitations of the Study

Along with the attempt to explore Blended Learning application in post COVID-19 pandemic and its effect on learner's autonomy and affective aspects and fulfill the study objectives, the present study faced many hardships.

- The review of literature is somewhat constrained due to scarcity of genuine resources. No available previous studies related to the impact of BL implementation on learner's affect, made it hard for the researcher to link between BL implementation and learner's affect in post-pandemic era.
- Teachers' and students' unwillingness to respond to the online questionnaire and interview.
- Compared to the large population of students and teachers, only 60 students and 25 teachers responded to the questionnaire. Most of students skipped open-ended questions. Furthermore, there are certain inquiries to which they do not provide truthful responses and instead opt for random answers.
- The researcher experienced data loss issue; 10 audio recordings of teacher's interview have been lost. The researcher could not reconduct other interviews due to time constraints and teachers' busy schedules due to test preparations.

6. Suggestions for Further Research

Future research should investigate the role of digital literacy in the adoption of BL, examining how varying levels of digital proficiency among students and teachers impact the effectiveness of BL implementation. Additionally, studies should assess the effectiveness of different BL models across diverse educational contexts to identify which approaches yield the best outcomes in varying settings. Furthermore, research on strategies to enhance engagement for both teachers and learners within BL environment is recommended.

Conclusion

This chapter includes analytical and suggestive part of the current study. The content of this chapter reproduces the data analysis procedure, analyzing qualitative data from teachers' interviews and classroom observations, as well as analyzing quantitative data from the students' questionnaire. Qualitative data were analyzed using thematic analysis, while quantitative data were analyzed using descriptive and inferential statistics. The researcher then discusses the general findings of obtained data and relates results to literature review and previous studies. The researcher provides some pedagogical implications as well as some recommendations that pertain to a group of stakeholders including policy makers and teachers. Study limitations and suggestions for further research were listed and furnished at the end of the chapter. The aim of practical implications and recommendations is to inform and influence practice and policy in the field of education.

General Conclusion

General Conclusion

Blended Learning was introduced in Algerian higher education four years ago, driven by the COVID-19 health crisis and the digital revolution. This period has seen a significant transformation in the language education landscape, representing a major paradigm shift. As the digital revolution continues to reshape education, BL stands out as a key approach that effectively combines online learning with traditional face-to-face instruction, providing a balanced and adaptable educational experience with consideration and priority to learner's empowerment. After four years of implementing BL in Algerian universities, it is time to assess the learning/teaching experience, discover achieved outcomes, and explore associated challenges and areas for improvement.

The significance of this study lies in examining the practical implementation of BL in Algerian universities in the post-pandemic age and identifying its potential advantages on learner's autonomy and affect. After taking a full glimpse into the different perspectives of scholars in the related review of the literature concerning the aforementioned matter it was crystal clear that despite the several studies that tackled BL during and after the COVID-19 pandemic and its influence on learner's autonomy, there was a remaining significant research gap in integrating different types of BL and using varied activities that are available in MOODLE. While some studies have explored the effect of BL on learner's autonomy and psychological factors as a response to implementing BL during COVID-19, there was a need for an investigation into BL effect on master 2 EFL learner's autonomy and affect related to language learning after pandemic. This research adds to the growing body of knowledge the long-term viability and effectiveness of BL in tertiary education. It bridges the gap between current pedagogical practices within BL, and learner's autonomy and affect as requirements of modern education.

During this process, an exploratory research design was used to deduce plausible conclusions from the gathered findings of both qualitative and quantitative approaches, laying the groundwork for providing related recommendations and further suggestions regarding other forthcoming research on the aftermaths of BLA on different learning aspects and facets. This study succeeded to show that BL current practices in post-pandemic era are not well-crafted and planned to cater to different learner needs and cultivate perceived advantages. The research hypotheses posited positive outcomes for BL implementation among EFL teachers and learners in the post-pandemic era. However, the study revealed several negative findings.

Despite the research hypotheses forecasting EFL teachers' and learners' positive attitudes, the actual implementation of BL in post-pandemic revealed several negative findings. Both teachers and learners have misconception of BL which shapes their preference

General Conclusion

for traditional education. Thus they hold negative attitudes towards BL implementation in post-pandemic era. As for teachers' and learners' perceived roles in BL setting, the study found that teachers often remained the primary knowledge providers and dominate the instructional process. This resulted in learners being passive recipients rather than having active role in the learning process. This reflects a gap of current practices of BL in cultivating learner's autonomy.

While some teachers continued to implement BL in post-pandemic, the integration of BL different models and use of interactive MOODLE activities were limited. Teachers misapply BL models, and use MOODLE primarily for uploading course materials, neglecting its interactive features. Unlike hypothesized, there is a misapply of BL models and underutilization of MOODLE activities by teachers. EFL teachers and learners report dissatisfaction with BL implementation due to its limited perceived effectiveness. This dissatisfaction is primarily attributed to challenges such as infrastructure scarcity, teachers' reluctance to fully adopt BL practices, and insufficient training and support for effective BL practices. The perceived teaching and learning experiences were often seen as disjointed and ineffective rather than purposeful, transformational, and authentic as hypothesized.

The anticipated empowerment of learners' autonomy and affect through increased utilization of MOODLE activities and diverse BL models was not realized. Instead, the study found negative impacts on learners' affective traits, with BL contributing to decreased self-esteem, self-confidence, and motivation. The reduction in anxiety and introversion was not as significant as hypothesized. These findings underscore the challenges and shortcomings in the current implementation of BL in Algerian universities, highlighting the need for more effective strategies and support to realize its potential benefits.

Undoubtedly, this work has faced some obstacles that needed to be addressed: most importantly, the review of literature is somewhat constrained due to the scarcity of genuine resources, and locating references proved to be a hardship. No available previous studies related to the impact of BL implementation on learner's affect, made it hard for the researcher to link between BL implementation and learner's affect in the post-pandemic era. Teachers' and students' unwillingness to respond to the questionnaire and interview. Compared to the large population of students and teachers, only 60 students and 25 teachers responded to the questionnaire. Furthermore, there are certain inquiries to which they do not provide truthful responses and instead opt for random answers. The researcher experienced a data loss issue; 10 audio recordings of the teacher's interview have been lost. The researcher could not

General Conclusion

conduct other interviews due to time constraints and teachers' busy schedules due to test preparations.

Based on the findings and limitations of the existing research, it is worthwhile to propose some suggestions about the field of study: for policy makers to redefine and reconsider the BLA implementation and pedagogical practices in Algerian universities so that integration is done within the framework of proper pedagogy. Investing in infrastructure and resources are crucial elements to consider. Tailor targeted professional development opportunities, and provide ongoing support and resources to promote effective implementation of BL. As far as teachers are concerned, they should be open to experiencing different types of BLA and change learning routines to cultivate its potential advantages. Create BL experiences that accommodate the requirements and preferences of their learners. Expand the use of all MOODLE activities in teaching practices and establish consistent BL practices. Most importantly, maintain quality in BL course design, delivery, assessment and continuous development to meet learning objectives and learners' satisfaction. Finally, add to the corpus of knowledge on BL through researches and scholarships.

References

References

- Achouri, W., Belghoul, R. (2021). *Exploring Students' Perceptions towards the Impact of E-learning System during Covid_19 Protocol on their Pronunciation Case of Second Year Students of English in the Department of English at Mohamed Lamine Debaghine University_Setif 2*. [Unpublished master thesis]. Mohamed Lamine Debaghine University_Setif 2
- Acree, L., Gibson, T., Mangum, N., Wolf, M. A., Kellogg, S., & Branon, S. (2017, August 1). *Supporting School Leaders in Blended Learning with Blended Learning*. *Learning & Technology Library* (LearnTechLib). <https://www.learntechlib.org/primary/p/171355/>
- Activities - MoodleDocs. (2018, November 27). <https://docs.moodle.org/35/en/Activities>
- Activities and resources. (2024, February 1). Learning and Teaching: Teach HQ. <https://www.monash.edu/learning-teaching/teachhq/moodle/activities-and-resources>
- Activities in Moodle.(n.d.).<https://www.hubkengroup.com/resources/activities-in-moodle>
- Activity types in Moodle | UMASS Amherst Information Technology | UMASS Amherst.(n.d.).<https://www.umass.edu/it/support/moodle/activity-types-moodle>
- Alammary, A. (2019, September 5). Blended learning models for introductory programming courses: A systematic review. *PloS One*, 14(9), e0221765. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0221765>
- Albashtawi, A., & Al Bataineh, K. (2020). The effectiveness of google classroom among EFL students in Jordan: An innovative teaching and learning online platform. *International Journal of Emerging Technologies in Learning (iJET)*, 15(11), 78-88.
- Alnujaidi, S. (2017). Social network sites as ESL/EFL Learning and Teaching Tools: A Critical review. *International Journal of Applied Linguistics and English Literature*, 6(3), 34. <https://journals.aiac.org.au/index.php/IJALEL/article/view/3012>
- Arnold, J. (2011). Attention to Affect in Language Learning. *Online Submission*, 22(1), 11-22 <https://files.eric.ed.gov/fulltext/ED532410.pdf>

- Asfar, A. M. I. T., Asfar, A. M. I. A. (2021). The effectiveness of distance learning through Edmodo and Video Conferencing Jitsi Meet. *Journal of Physics. Conference Series*, 1760(1), 012040. <https://doi.org/10.1088/1742-6596/1760/1/012040>
- Ayoub, J., & Maalouf, A. (2023). Effective Use of Zoom Sessions (a Synchronous Learning Strategy) to Foster Success and Motivation of Lebanese University Students in Bekaa: A Case Study . *ResearchGate*.
https://www.researchgate.net/publication/368982658_Effective_Use_of_Zoom_Sessions_a_Synchronous_Learning_Strategy_to_Foster_Success_and_Motivation_of_Lebanese_University_Students_in_Bekaa_A_Case_Study
- Beaver, J. K., Hallar, B., Westmaas, L., & Englander, K. (n.d.). Blended Learning: Lessons from Best Practice Sites and the Philadelphia Context. PERC Research Brief. <https://eric.ed.gov/?id=ED570360>
- Belbah, N., Belhouari, D. (2020). Teachers Learners Roles within an Autonomous Learning Process [Master thesis, University Ibn Khaldoun-Tiaret] <http://dspace.univ-tiaret.dz/bitstream/123456789/1285/1/TH.M.ENG.2020.123.pdf>
- Benderradji, B. (2021). The Challenges Facing Students in the Online Learning through Moodle during Covid-19 Epidemic Case of Students of English at Mohamed Lamine Debaghine Sétif 2 University. [Unpublished master thesis]. Mohamed Lamine Debaghine University_Setif 2
- Benson, P. (2010, June 7). 5. Measuring autonomy: Should we put our ability to the test? De Gruyter. <https://www.degruyter.com/document/doi/10.21832/9781847692672-007/html>
- Bouaricha, A. A., & Hamzaoui, H. (2021, July 31). Algerian Teachers' Attitudes towards the Use of Information Communication Technologies in English for Academic Purposes Teaching. ASJP.13(6) <https://www.asjp.cerist.dz/en/article/161015>
- Boudehane, R., Zouraghi, C. (2021). *Moodle and Google-Meet Delivered Distance-Learning Lessons: Teachers' and Students' Estimates of their Pedagogical Effectiveness on the Writing Skill A Case Study of 3rd Year FLs Students in the Department of Foreign Languages, Abdelhafid Boussouf University Center-Mila*. [Master thesis, University Center Of Abdelhafid Bousouf Mila] <https://dspace.centre-univ-mila.dz/jspui/handle/123456789/1194?mode=simple>

- Brahmi, M., Nesba, A. (2003, December 12-13). *The Future of Online Teaching in Higher Education: Post-Pandemic Transformations and Beyond*. Proceedings of International conference of Teaching and Learning in Post-COVID: Reality and Expectations. Department of English University of Saida, Algeria
- Bryan, A., & Volchenkova, K. (2016). *BLENDED LEARNING: DEFINITION, MODELS, IMPLICATIONS FOR HIGHER EDUCATION*. Vestnik Ūžno-Ural'skogo Gosudarstvennogo Universiteta. Seriâ Obrazovanie, Pedagogičeskie Nauki/Vestnik Ūžno-Ural'skogo Gosudarstvennogo Universiteta. Seriâ: Obrazovanie, Pedagogičeskie Nauki, 8(2), 24–30. https://www.researchgate.net/publication/303815166_BLENDED_LEARNING_DEFINITION_MODELS_IMPLICATIONS_FOR_HIGHER_EDUCATION
- Case Study: Second Year Students of English at Mohammed Seddik Ben Yahia University, Jijel. [Master thesis, Mohammed Seddik Ben Yahia University of Jijel]
- Ceylan, V. K., & Kesici, A. E. (2017). Effect of blended learning to academic achievement. *Journal of Human Sciences*, 14(1), 308-320. <https://www.j-humansciences.com/ojs/index.php/IJHS/article/view/4141>
- Çoklar, A. N., Efiltili, E., & Levent, Y. (2017). *Defining teachers' technostress levels: a scale development*. ResearchGate. https://www.researchgate.net/publication/329240087_Defining_Teachers'_Technostress_Levels_A_Scale_Development
- Davou, M. (2022, January 6). Why and How Should we Focus on Learning Instead of Teaching? Medium. <https://mariadavou.medium.com/why-and-how-should-we-focus-on-learning-instead-of-teaching-24745d3e0754>
- Derradji, H. (2016). *The Importance of YouTube Videos in Enhancing EFL Learners' Vocabulary A Case Study of Second Year Students of English at Biskra University*. [Master thesis, Mohammed Kheider University of Biskra]
- FEDJ, S. (2019). *Towards Enhancing EFL Learner Autonomy in the Algerian Secondary School (The Case of First and Second Year)*. [Doctoral dissertation, University of Mostaganem] <http://e-biblio.univ-mosta.dz/bitstream/handle/123456789/15447/memoire%20finale.pdf?sequence=1&isAllowed=y>

- Garmi, S., Rachid, M. (2021). Exploring Perceptions on the Use of E-learning Platform Strategies by EFL Students during the Covid 19 Pandemic: Case of Third Year Students of English at Mohamed Lamine Debaghine University Setif 2. [Unpublished master thesis]. Mohamed Lamine Debaghine University_Setif 2
- Gharboudje, C., Zouaghi, M. (2022). Enhancing Learners' Autonomy Through Literary Text : A Case Study of Third Year EFL Students at the University Center of Mila [Master thesis, university center of abdalhafid boussouf-Mila] <http://dspace.centre-univ-mila.dz/jspui/bitstream/123456789/2279/1/Enhancing%20Learners%E2%80%99%20Autonomy%20Through%20Literary%20Text%20%20A%20Case%20Study%20of%20Third%20Year%20EFL%20Students%20at%20the%20University%20Center%20of%20Mila.pdf>
- Gharnouz, S. A. (2021). Exploring Students' Perceptions of Online Learning The Case of Master One English Students at Mohamed Lamine Debaghine, Setif 02 University. [Unpublished master thesis]. Mohamed Lamine Debaghine University_Setif 2
- Ghembaza, A. (2024). Students Affective and Cognitive Dimensions and the Teaching Practice. Retrieved from <https://e-learning.univ-saida.dz/course/view.php?id=>
- Ghoul, D., Soufi, A. (2022). The Effects of Hybrid Learning on Students' Intrinsic and Extrinsic Motivation In EFL Classes The Case of Third Year English Students at Mohammed Lamine Debaghine, Setif 2 University. [Unpublished master thesis]. Mohamed Lamine Debaghine University_Setif 2
- Ghounane, N. (2020). Moodle or Social Networks: What Alternative Refuge is Appropriate to Algerian EFL Students to Learn during Covid-19 Pandemic – *Arab World English Journal*, 11 (3) 21-41 . DOI: <https://dx.doi.org/10.24093/awej/vol11no3.2>. <https://awej.org/moodle-or-social-networks-what-alternative-refuge-is-appropriate-to-algerian-efl-students-to-learn-during-covid-19-pandemic/>
- Gomri, A., Maameche, F. (2021). Exploring Teachers' and Students' Perceptions of Online Learning Using Moodle Platform during COVID-19 Pandemic Case of First Year Master Students at the Department of English Language and Literature at - Sétif 2- University. . [Unpublished master thesis]. Mohamed Lamine Debaghine University_Setif 2

- Hamada, H. (2003, December 12-13). The Positive and Negative Aspects of the aftermath of COVID-19: Looking back on Deficiencies and Exploring Sustainable Development Opportunities. *Proceedings of International conference of Teaching and Learning in Post-COVID: Reality and Expectations*. Department of English University of Saida, Algeria
- How to use and create H5P content in Moodle and Totara Learn.(n.d.).
- Keraghel, L. (2003, December 12-13). Students' Perceptions of Post-covid Online Learning in Algerian Higher Education: A Case of English MA Students at Setif-2 University. *Proceedings of International conference of Teaching and Learning in Post-COVID: Reality and Expectations*. Department of English University of Saida, Algeria
- Lalima, Dangwal, K. L. (2017). Blended learning: an innovative approach. *Universal Journal of Educational Research*, 5(1), 129–136. <https://doi.org/10.13189/ujer.2017.050116>
- Mahrouk, K. Kerroum, C. (2021). Investigating Students' Attitudes Towards Online Learning
- Maibli, F. (2013). Empowering Learners' Autonomy through the Use of Internet Case Study of Third Year LMD Students of Biskra University [Master thesis, Mohamed Kheider University of Biskra] <http://archives.univ-biskra.dz/bitstream/123456789/4755/1/m%C3%A9moire.pdf>
- Nassima, D. (2024, January 20). 2024 sera l'année de l'orientation vers l'université moderne de 4e génération. Algérie Presse Service. <https://www.aps.dz/sante-science-technologie/165566-2024-sera-l-annee-de-l-orientation-vers-l-universite-moderne-de-4e-generation>
- Obinna-Akakuru, A. U., Ordua, V. N., Akakuru, O. C., & Nelson-Okata, E. (2021, August 28). *Effect of Google Meet e-learning technology on building students knowledge*. DOI:10.9734/AJESS/2021/v20i330487.
- Olatunde-Aiyedun, T. G., & Adams, S. O. (2022). Effect of blended learning models on students' academic achievement and retention in science education. ResearchGate. <https://doi.org/10.26480/ess.02.2022.74.80>
- Pedroso, J. E., Tubola, L. F. A., & Aquidado, E. J. (2023). Facebook Messenger: as means of communication for academic inquiries. *Journal of Digital Learning and Distance Education*, 2(2), 491–505. <https://doi.org/10.56778/jdlde.v2i2.116>

- Priscila. (2023, November 13). Blended learning — the best of both worlds? Advantages and disadvantages. <https://www.easy-lms.com/knowledge-center/e-learning/blended-learning-advantages/item10386>
- Sergma, Y. (2021). Fostering EFL Learners' Autonomy Through E-learning (Master thesis, Ahmed Draia University–Adrar) <https://dspace.univ-adrar.edu.dz/jspui/bitstream/123456789/5922/1/Fostering%20EFL%20Learners%E2%80%99%20Autonomy.pdf>
- Singh, A. K. (2023, September 7). Blended Learning vs. Traditional Learning: A detailed overview of the two approaches. eLearning Industry. <https://elearningindustry.com/blended-learning-vs-traditional-learning-a-detailed-overview-of-the-two-approaches>
- Souilem, A. (2018). Autonomy in Language Learning: A Case Study of Third Year Licence Students of English at Adrar University [Master thesis, Ahmed Draria University of Adrar] <https://dspace.univ-adrar.edu.dz/jspui/bitstream/123456789/172/1/autonomy%20in%20language%20learning%20.pdf>
- Team, M. (2023, October 30). What are the advantages of blended learning? Blended learning <https://www.manaarah.com/blended-learning-advantages/>
- Vijaisimha, N. (2023). *Gen Z and their learning preferences* / *LinkedIn*. <https://www.linkedin.com/pulse/gen-z-learning-preferences-nandini-vijaisimha/>
- Watkins, J., Wilkins, M. (2011). Using YouTube in the EFL classroom. *Language Education in Asia*, 2(1), 113–119. https://doi.org/10.5746/leia/11/v2/i1/a09/watkins_wilkins
- Yusoff, Z. S., Farhan. R.N. (2019, December 23). Integration of Facebook Messenger in the English Literature Classroom: Learners' Attitudes and Perceptions. https://www.academia.edu/72975555/Integration_of_Facebook_Messenger_in_the_English_Literature_Classroom_Learners_Attitudes_and_Perceptions

Appendices

Appendix A

Student's Questionnaire

Dear students, this questionnaire is part of the research work entitled « The Blended Learning in Higher Education: A Pathway to Educational Reinvention in Digital Post-Pandemic Era Algerian Universities as a case of study » to obtain information needed for the accomplishment of Master dissertation. You are kindly requested to select appropriate answer(s) and provide honest and thoughtful responses/ justifications when needed. Your responses will be treated anonymously and confidentially. Thank you very much for your time and assistance.

Section One: Learner's Profile

1- University of:

2- Gender: male female

3- Studying English was :

Personal choice

Parental choice

I had no other choice

4- Your level in English language: excellent good poor

5- Your trait: extrovert introvert

6- Do you attend all your classes? yes no

a- If not, Why?

Work Transport issues I live in another city

Program/study hours' intensity The module is not interesting

Even though I attend, I can't focus/be attentive Lack of motivation

b- Others, please specify.....

Section Two: Digital Age Demands

1- What ICT tool and internet connection is available to you?

You spend one part of the day in a computer lab working through the online curriculum at your own pace. Another part of the day you work in class with the teacher to reinforce what you have learned in the lab.		
Students move through a variety of different learning modalities, but rather than the rotation being prescribed by a teacher or schedule, it is customized for each student according to individual needs. Teachers are available to clarify or expand on the information learned online and provide support.		
You can move through the online content according to your own needs and understanding (ambiguities), and take the course in school while the teacher supports you individually or in small-groups.		
Instructors create a resource hub to share additional training resources with motivated learners and those who want to dig deeper in course materials; promoting self regulated learning.		
Students attend the required face to-face sessions, then continue the ‘remainder of the coursework online, at their own pace’ (Acree et al .2017).		
A teacher posting documents, e-books and external links on a Facebook group to enrich their students’ understanding.		
A student posting a beneficial videos /notes on Facebook group for his/her classmates.		
Students chatting and exchanging information/ courses/related articles and sources on Facebook Messenger.		
Watching educational YouTube videos/courses /tutorials.		
Sending an email to the teacher for academic inquiries		
Having online sessions through teleconferencing applications.		
Receiving learning content on MOODLE.		
Submitting an assignment on MOODLE.		
Getting feedback from your teacher on MOODLE.		
Peer-assessing on MOODLE.		
Completing MOODLE’s quizzes/multiple choice or surveys.		
Building and displaying glossaries (dictionary-like activity) on MOODLE		
Having synchronous discussions (Big Blue Button learning meeting and chats) and asynchronous discussions (forums) on MOODLE.		

Section Four: Nurturing Learner's Autonomy and Affective Aspects

1- The Blended Learning in higher education during COVID-19 was a beneficial learning approach to fulfill academic objectives. Yes No

2- What do you think of the Blended Learning implementation in Post-Pandemic era?

Promising and interesting Inefficient and useless

3- Within the blended learning setting, the teacher should play the role of :

Knowledge provider Content creator

Guide /monitor Evaluator

Others, please mention them

4- Within the Blended Learning setting, the student should be :

Knowledge consumer Passive listener

Reflective learner Engaged participant

Responsible for learning progress Reliant on teacher

Others, please mention them.....

5-

Statements	Yes	no
Blended Learning combines the best of both online and traditional learning styles.		
Within the Blended Learning, the online mode eliminates the traditional mode.		
Within the Blended Learning, the online learning serves as an extension to the traditional mode of learning.		
The Blended Learning gives students the chance to study whenever and wherever they want.		
At home, I make further research and read e-books related to the topic studied in class to extend and reinforce my understanding.		
I get motivated when learning at my own pace		
Learning from home is comfortable and I feel more confident when interacting with the teacher online.		

I feel less anxious and less socially pressured when having an online session.		
I feel satisfied about learning English within the blended learning and my progress. The whole experience is positive.		
Introverted students are likely to engage more when going online than offline (in class) as they have time to reflect and feel at ease.		
Introverted students prefer written communication, thus discussion in Moodle forums and chats can help them communicate and engage effectively.		
Extroverted students have extra chance to learn online what was incomplete in class due to time constraint.		
Extroverted students socialize and participate in class, as they can continue and increase their engagement when going online.		

6- Do you think that Blended Learning modalities influence students' autonomy and affect? How?

.....

.....

7- Do you think that MOODLE activities impact learners' autonomy and affect? How?

.....

.....

Appendix B

Teacher's Interview

Dear teacher, your contribution is highly appreciated and your answers are of utmost importance to obtain information needed for the accomplishment of Master thesis entitled « The Blended Learning in Higher Education: A Pathway to Educational Reinvention in Digital Post-Pandemic Era Algerian Universities as a case of study ».

- 1- May I ask you about your age?
- 2- Would you please tell me if you apply the blended teaching? If not, what stands against you blending?
- 3- In the institution you belong to, is online sessions' scheduling regular or occasional? Is it by the teacher's discretion or the by the administration's?
- 4- Based on your experience, what type of BL do you usually depend on in your classroom? Why not others?
- 5- What tools do you use to maintain BL in your classroom? What is the official platform in your institution?
- 6- Do you get advantage of MOODLE activities when using the platform? Which one (s)? e
- 7- Do you think that the mentioned activities help in enriching your course content and teaching? Are you intending to use them in the future?
- 8- I would like to hear your perspective on the effect of BL application (different types of BL, ICT tools to support the BL implementation and MOODLE proposed activities) in boosting student's autonomy, interaction and well-being?
- 9- How do you perceive your role and your students' role in BL setting?
- 10- Based on your experience with BL, do you think it serves introvert /extrovert and anxious learners? How?
- 11- Do you think that the BL modalities affect your student's motivation, self confidence, and self-esteem, how?
- 12- Do you think that your student's attitudes towards learning English within BL have changed? Explain.

Thank you so much for sharing your time and expertise!

Appendix C

Types of the Blended Learning

Rotation Model (RM): A course or subject in which students rotate between online and face-to-face learning modalities, which means that student stays at the desk but switches between ‘paper and pencil’ instruction and online instruction like a tablet or a laptop.

Station Rotation Model (SRM): A course or subject in which students rotate on a fixed schedule or at the teacher’s discretion between learning modalities, which usually include 3 learning stations: 1) online learning; 2) face-to-face instruction; 3) group projects.

Lab Rotation Model (LRM): Learners spend one part of their day in a computer lab working through the online curriculum at their own pace. Another part of the day they work in a class with a teacher to reinforce what they learned in the lab.

Flipped Classroom Model (FCM): The activities are versed where students participate in online learning to access the content needed for the course and then attend the brick-and-mortar school for face-to-face teacher-guided practice or projects.

Individual Rotation Model (IRM): In individual rotation, students move through a variety of different learning modalities, but rather than the rotation being prescribed by a teacher or schedule, it is customized for each student according to individual needs. This model is adjustable, which frees students from having to move through every modality at every stage in their coursework and instead lets them work in modalities that better meet their needs at any given point. Teachers are available to clarify or expand on the information learned online and provide support.

Enriched Virtual Model (EVM): Within the enriched virtual model, students attend the required face to-face sessions, and then continue the ‘remainder of the coursework online, at their own pace’ (Acree et al, 2017).

Flex Model: Students can move through the online content according to their own needs and understanding and taking the course in the school while the teacher supports them individually or in small-groups. Some implementations have substantial face-to-face support, whereas others have minimal support.

A la Carte Model : Also called the Self Blend Model, Instructors can create a resource hub to share additional training resources with motivated learners and those who want to dig deeper in course materials; promoting self regulated learning.

Appendix D

Activities available on MOODLE

Assignment: This activity allows you to communicate tasks, collect work and provide grades and feedback.

File: MOODLE provides an easy way for an instructor to present materials to their students, such as word-processed documents, slideshow presentations, PDF, and more.

Folder: The folder allows a teacher to display several course files together. The files may be of different types and they may be uploaded in one go, as a zipped folder which is then unzipped, or they may be added one at a time to an empty folder on the course page.

SCORM: A SCORM package is a collection of files which are packaged according to an agreed standard for learning objects.

Lesson: This activity module enables a teacher to deliver content and/or practice activities in interesting and flexible ways.

Database: This activity enables participants to create, maintain and search a bank of record entries.

H5P activity: This activity is a free content authoring plug-in which enables you to create interactive learning content in the form of quizzes, videos, games and much more.

LTI external tool activity: In case of having a learning content held outside of MOODLE, this tool allows the academic to link it into MOODLE rather than students having to log into another system or platform.

Wiki: This module allows students to create a collaborative document by building pages together, similar to Wikipedia. Unlike other collaborative editing programs (such as Google docs) the Wiki is a standard MOODLE activity and so no extra permissions or logins are needed.

Workshop: A powerful peer assessment activity. Students add submissions which are then distributed amongst their peers for assessment based on a grading scale specified by the teacher.

Glossary: This activity enables participants to create and maintain a list of definitions, like a Dictionary.

Forum: This module allows participants to have asynchronous discussions.

Chat: This activity allows participants to have real-time synchronous discussions.

BigBlue button: This module allows running live video conferencing sessions within MOODLE.

Choice: An activity where the teacher asks a question and specifies a choice of multiple responses.

Survey: This activity allows data gathering from students to help teachers learn about their class and reflect on their own teaching.

Quiz: This module allows the lecturer to design and set quiz tests, and includes a range of question types and reporting options.

Feedback: This module is for creating and conducting surveys.

مستخلص

لقد مرت أربع سنوات على اعتماد التعليم المختلط في التعليم العالي الجزائري نتيجة لجائحة كوفيد 19 الصحية والاهتمام المتزايد بالثورة الرقمية، حيث شهدت منظومة التعليم نقلة نوعية. مع استمرار الثورة الرقمية في إعادة تشكيل النماذج التعليمية، برز التعليم المدمج كنهج محوري يجمع بين التعلم عبر الإنترنت والتعليم التقليدي وجهاً لوجه. من خلال فحص التفاعل بين التكنولوجيا وعلم التربية، يسعى هذا البحث إلى تسليط الضوء على التطبيق العملي واستدامة التعلم المختلط في الجامعة الجزائرية في عصر ما بعد الوباء، كيفية تحويله للتجربة التعليمية، وكيف تطور لمواجهة تحديات حقبة ما بعد الوباء، مما يمكن المتعلمين من التحكم بشكل أكبر في رحلة التعلم الخاصة بهم مع الأخذ بعين الاعتبار الجانب النفسي و استقلالية المتعلم. لتحقيق هدف البحث، تم تطبيق تصميم استكشافي يجمع بين البيانات الكمية والنوعية. تمثلت عينة الدراسة في 10 معلمين من قسم اللغة الانجليزية و 60 طالبا من طلاب السنة الثانية ماستر في تخصص تعليمية اللغة الإنجليزية من 10 جامعات جزائرية و هي: سعيدة، بسكرة، البليدة، الأغواط، سيدي بلعباس، عين تيموشنت، ورقلة، سطيف، معسكر، و غرداية. واستخدمت مجموعة متنوعة من الأدوات البحثية حيث أُجري استبيان مع الطلاب، وأجريت مع المعلمين، واستكملت بمراقبة الفصول الدراسية لدراسة ممارسات التعليم المدمج وفعاليتها في مرحلة ما بعد الوباء. كشفت النتائج عن مفاهيم خاطئة و مواقف سلبية للمعلمين والمتعلمين تجاه تنفيذ التعلم المختلط في حقبة ما بعد الوباء. كما كشفت النتائج عن سوء تطبيق لنماذج التعلم المدمج وعدم الاستفادة من الأنشطة المتاحة على منصة مودل. . أبدى معلمو وطلاب اللغة الإنجليزية كلغة أجنبية عدم رضاهم عن تطبيق التعلم المدمج حيث تم وصف تجربة التعلم والتعلم على أنها غير فعالة إذ أن هنالك فجوة بين نماذج التعلم المدمج وتصميم أنشطة مودل في حقبة ما بعد الوباء بسبب قلة فعاليته المتصورة في تلبية حاجيات المتعلمين التربوية . كما تبين أن التبنى المحدود للتعلم المدمج، غياب الأنشطة التفاعلية، وعدم استخدام منصة مودل أدى إلى تأثير سلبي على استقلالية المتعلمين وجانبهم النفسي. في الختام ، رغم الشوط الطويل الذي قطعه التعلم المدمج منذ اعتماده الأول في التعليم العالي الجزائري خلال جائحة كوفيد-19، إلا انه لا يزال في مراحل الأولى . نتيجة لذلك، توصلت الدراسة إلى توصيات عملية هامة لصانعي السياسات والمعلمين: يجب على صانعي السياسات إعادة تعريف و تطبيق التعلم المدمج ضمن أطر بيداغوجية مناسبة وتقديم تطوير مهني مستمر للمعلمين. كما ينبغي للمعلمين تبني نماذج متنوعة للتعلم المدمج و حسن استغلال الأنشطة التفاعلية المتاحة على منصة مودل ما يضمن تلبية حاجيات المتعلمين النفسية و تشجيع استقلاليتهم في العملية التربوية.

Résumé

Il y a quatre ans, l'adoption de l'apprentissage mixte dans l'enseignement supérieur Algérien est devenue une étape majeure à la suite de la crise sanitaire du COVID-19 et de révolution numérique. Alors que la révolution numérique continue de remodeler les paradigmes éducatifs, l'apprentissage mixte se distingue comme une approche cruciale. Cette recherche vise à éclairer la praticité et la durabilité de l'apprentissage mixte dans les universités algériennes à l'ère post-pandémique, permettant l'autonomie des apprenants tout en tenant compte de leurs aspects affectifs. Pour atteindre l'objectif de la recherche, un plan exploratoire combinant des données quantitatives et qualitatives a été appliqué. L'échantillon de cette étude est 15 enseignants et 60 apprenants en deuxième année de Master didactique anglais de 10 universités algériennes principalement : université de Saïda, Biskra, Blida, Laghouat, Sidi Bel Abbès, Aïn Témouchent, Ouargla, Sétif, Mascara et Ghardaïa. Une triangulation d'instruments a été employée où un questionnaire semi-structuré a été administré aux étudiants, une interview structurée a été menée avec les enseignants, complétée par une observation de classe. Les résultats révèlent des idées fausses et des attitudes négatives des enseignants et des apprenants à l'égard de la mise en œuvre de l'apprentissage mixte à l'ère post-pandémique. L'adoption limitée de l'apprentissage mixte, l'absence d'activités interactives et le mésusage de la plateforme MOODLE ont une influence négative sur l'autonomie et l'affect des apprenants. En conclusion, malgré les progrès réalisés par l'apprentissage mixte depuis son adoption initiale pendant la pandémie, il en est encore à ses débuts. Par conséquent, l'étude formule des recommandations pratiques importantes pour les décideurs et les enseignants : pour redéfinir la mise en œuvre de l'apprentissage mixte dans des cadres pédagogiques appropriés. Les éducateurs devraient donner la priorité aux besoins affectifs de leurs étudiants et encourager l'autonomie des étudiants en adoptant divers modèles d'apprentissage mixte et des activités interactives sur MOODLE.