International Journal of Language and Education Research

Volume 7, Issue 2, August 2025 p. 128-150

İstanbul / Türkiye

Article Information

Article Type: *Research Article*

This article has been checked for similarity.

Article History:
Received
24/02/2025
Received in revised form
07/05/2025
Accepted
31/08/2025

EXPLORING ALGERIAN TEACHERS' PERCEPTIONS OF DEVELOPING AUTONOMOUS LEARNING USING BLENDED LEARNING

Asma Rahmani[1], Ferit Kılıçkaya[2], Nadia Ghounane [3]

Abstract

The current research attempts to explore autonomous learners' patterns based on an in-depth analysis of both autonomy and blended learning concepts. Therefore, it is based on a descriptive approach. The research hypothesizes that implementing blended learning among undergraduate learners boosts their autonomous learning. An online questionnaire was used as the main data-gathering tool to gain empirical data. The questionnaire was administered to the sample of this study, which comprises 129 teachers randomly selected from the Department of English at Oran, Batna 2, Setif 2Universities, Algeria. The collected data were coded, treated, and analysed using the Social Package of Social Sciences (SPSS). Ultimately, the results of this investigation prove that blended learning positively affects learners' autonomous learning. Additionally, learners who adopted blended learning from the early stages were highly motivated to be autonomous learners than those who used to learn just in traditional classes. Teachers recommend that adopting blended learning in high schools will positively impact future university learners.

Keywords: Autonomy, autonomous learning, blended learning, boosting, higher education.

[1]Assoc. Prof. Dr., Batna University, Algeria. E-mail: asma.rahmani@univ-batna.dz. ORCID: 0000-0002-3784-5125

[2] Prof. Dr., Burdur Mehmet Akif Ersoy University, Türkiye. E-mail: ferit.kilickaya@gmail.com. ORCID: 0000-0002-3534-0924

[3]Prof. Dr., University of Saida, Algeria. E-mail: nadoushben@ymail.com. ORCID: 0000-0002-9491-7981

Introduction

In the recent years, higher education faces challenges in maintaining the traditional standards while adapting to evolving student needs, particularly in the post-pandemic era. In Algeria, the higher educational paradigms were affected by the adopted modifications namely the use of online learning during the COVID-19 pandemic era. This technology-supported environment paved the way to the integration of the blended learning environments that prioritize a learner-cantered approach. This technology-based paradigm enables students to access materials anytime, based on their requirements and restrictions, such as work schedules. Additionally, teachers can track students' engagement and provide additional support as needed.

Indeed, blended learning, which blends conventional face-to-face education with online learning, has the potential to help students gain autonomy. Autonomous learning has gained recognition as critical aspects of modern educational practice at all levels, including the higher educational context. Learners autonomy is considered as a core objective of today's education within technology-enhanced learning environments. It aims at enabling learners to learn new skills and knowledge through flexible educational environment and active participation.

In this vein, the present research tries to shed lights on teachers' perceptions on the development of learners' autonomy depending on blended learning in Algerian universities. Also, this research attempts to depict students' autonomy within the Algerian higher education context to provide body of knowledge that has not been investigated before.

Statement of the Problem

In the wake of the COVID-19 pandemic, higher education systems have undergone a global paradigm shift. In Algeria, universities were prompted to transition rapidly toward technology-mediated instruction, notably through the adoption of online, and then blended learning environments. This transition was not merely a response to crisis but also a gateway to adoptive educational practices that prioritize learner-centeredness, flexibility, and digital inclusion.

Autonomous learning, one of the pedagogical imperatives brought to the fore in this transition, is a critical skill in the 21st-century learning

paradigm that encourages students to take responsibility for their academic progress, engage actively with course content, and develop learning skills. In technology-enhanced environments such as blended learning, where learners are required to navigate both online and offline modalities, autonomy becomes a prerequisite for academic success and engagement.

While blended learning is extensively used in higher education, more research is needed to understand its impact on the development of independent learning among undergraduate students. Previous studies have shown the possible impacts of blended learning, but there is a gap in research specifically focusing on how blended learning contributes to learners' autonomy.

Moreover, teachers' perceptions and experiences assist in shaping blended learning environments that foster or even hinder autonomy. Yet, few studies in the Algerian context have systematically analyzed educators' insights regarding the impact of blended learning on students' self-directed learning capabilities. The effectiveness of blended learning in promoting autonomy may vary depending on several contextual factors, including institutional support, technological accessibility, pedagogical design, and teacher involvement.

Therefore, the problem addressed in this research is to determine the impact of blended learning on the development of autonomous learning in higher education, focusing on undergraduate learners in the Department of English at Oran, Batna 2, Setif 2 Universies, Algeria.

In this context, the in-hand research question tries to answer the following research question:

To what extent can blended learning improve learners' learning autonomy in higher education?

Hypothesis

To answer this question, the following hypothesis was formulated:

The implementation of blended learning in higher education boosts learners' autonomy.

The research problem revolves around how multilingualism in young adult immigrant literature acts as a medium for identity construction and leads to an impactful influence on the characters' behaviors and how they categorize themselves within their settings, with particular emphasis on migration. It is in this light that this paper tries to bridge the gap in analyzing how language, culture, and social categorization intersect in such narratives, drawing on experiences of challenges and resilience among the youth, to contribute to broader discussions of identity and belonging and the role of storytelling in shaping cultural and personal narratives. This paper aims to explore how identity is constructed in young adult immigrant literature, focusing on how the protagonists relate to their personal and social identities through language and cultural adaptation. This research will try to explain the role of code-switching a linguistic behavior where speakers switch between languages, dialects, or linguistic repertoires, and how language acts as a tool for identity construction, self-expression, and belonging in these works. The motivation for this research arises from both academic and personal interests as well. In the field of literature and sociolinguistics, there is a growing need to explore how multilingual narratives reflect identity construction, especially in immigrant contexts.

The key objectives of the study are made to highlight:

1. How hybrid cultural affiliations influence individuals' behaviors and linguistics choices

2. To examine specifically self-expression and belonging through code-switching in young adult immigrant literature.

3. How does Social Identity Theory enhance the analysis of language and identity in young adult immigrant literature?

Literature Review

The literature review emphasizes blended learning's influence and impact on the development of autonomous learning in a higher education context, specifically within EFL settings.

Although the concept of blended learning became popular in the late 1990s (EPIC Learning 2013), interest in it among scholars and practitioners continues to remain high. This can be related to the fact that

in the absence of a paradigm or an alternative for a paradigm, all data concerning the evolution of a particular science are likely to appear equally meaningful (Kuhn, 1962). However, there is a need for clear and explicit definitions, models, and conceptualizations to comprehend the practice and impacts of blended learning.

Two definitions of blended learning are often used and constantly cited in the literature. These have been proposed by Graham (2006), and Garrison and Kanuka (2004), and have been cited 4686 and 6387 times, respectively (Google Scholar, July 10, 2023).

Graham (2006) defines blended learning as "systems combine face-to-face instruction with computer-mediated instruction" (p. 5). Garrison and Kanuka (2004), noted that blended learning, which combines face-to-face instruction with online learning activities, has gained popularity in educational settings. The same researchers refer to blended learning as "the thoughtful integration of classroom face-to-face learning experiences with online learning experiences" (p. 96). Consequently, it may be inferred that the fundamental components of blended learning are face-to-face and online teaching and learning.

The Community of Inquiry (CoI) model suggested by Garrisson, Anderson, and Archer (2000), would serve as a valuable theoretical framework to critically frame the discussion. This design highlight three interdependent elements: cognitive presence, social presence and teaching presence. Therefore, these three elements uphold substantial learning experience in blended learning environment. The incorporation of this model paves the way for teachers to effectively assess how each element contribute to learners' autonomy.

The blended learning approach allows learners to engage in self-directed learning, collaborate with peers, and access materials outside the traditional classroom (Graham, Woodfield, & Harrison, 2013). In the same vein, Jones (1995) asserts that "most successful learning takes place outside the classroom" (p. 228). This makes blended learning an excellent context that encourages excellence and boosts learners' learning.

Autonomous learning denotes learners' ability to control their learning process, make decisions, and self-regulate (Benson, 2011). Autonomous learning is progressively becoming a modern method of English

language instruction that teachers attempt to instill in their students. Generally, learner autonomy provides students with more responsibility for their learning and, if successful, can help learners in their future professions.

Autonomy in learning involves learners' control over their learning, in and out of their classroom's walls. According to Benson (2006), autonomy in the language learning domain is the concept of learners exercising more control over the goals for which they learn languages and the methods by which they acquire them.

Learners' autonomy has been defined by many researchers. Brockett and Hiemstra (1991) hold that learners' autonomy can be called self-efficacy, self-learning, self-directed learning, self-planned learning, self-teaching, independent study, or distance education. Also, Holec (1979) identified learners' autonomy as the ability to take charge of one's own learning. The same definition can be found in Benson's (2001) research, where learners' autonomy is referred to as "the capacity to take charge of, or responsibility for, one's own learning" (p. 54).

According to Little (1991), autonomy in learning is the learner's capacity and desire to select autonomously. The same definition was proposed by Dam et al. (1990), who assert that learner autonomy refers to the ability and willingness to act independently and in collaboration with others as a socially responsible person.

The Self-Determination Theory (SDT), introduced by Deci and Ryan (1985), is considered a psychological framework to understand learner autonomy. SDT posits that autonomy, competence, and relatedness are essential psychological needs that foster intrinsic motivation. Consequently, within blended learning environments, the flexibility and learner control align with the need for autonomy, thereby potentially increasing motivation and deeper engagement. By integrating SDT, this present study acknowledges the motivational dynamics underlying autonomous behaviors.

Thomas and Reinders (2012) pinpoint that interactive pedagogy is associated with transitioning from linear to hypermedia learning, construction, and discovery instruction, moving from teacher-cantered to learner-cantered education, and absorbing material to understand how to navigate and learn. Blended learning succeeds in being an

illustration of what interactive pedagogy can be.

In this context, blended learning offers a conducive environment for fostering autonomy, empowering learners to navigate their learning journey independently and take responsibility for their progress (Sharples et al., 2019).

A previous study found a link between blended learning and the development of independent learning skills. The study, which was conducted on undergraduate students prove that blended learning settings increase learners' self-directed learning and autonomy (Tabassum, Bushra Moin, Muhammad & Abbas, Qaisar & Kumbhar, Muhammad & Khan, Muhammad Hamid, 2024).

On this spectrum, Rovai (2007) found that blended learning methods increased learners' sense of control, motivation, and ownership of the learning process. Blended learning's flexibility, including the option for self-paced learning, encouraged learners' autonomy and fostered a deeper comprehension of the subject matter. Also, blended learning fosters the concept of flexible learning. This latter target boosting learners' autonomy and reshaping the traditional learning environment (Lockee & Clark-Stallkamp, 2022)

There are various strategies that can be implemented to ensure the enhancement of autonomous learning in blended learning. According to Huang, Liaw, and Chen (2018), providing explicit learning objectives, providing choices in learning activities, and stimulating cooperation and communication among learners is critical. Furthermore, instructors' roles in guiding and encouraging learners' autonomy are critical (University of Adelaide, 2024). Teachers can serve as mentors by offering timely feedback and assistance while also scaffolding students' self-regulation abilities (Gikandi, Morrow, & Davis, 2011). Creating a supportive learning community, both online and offline, where learners may share experiences, engage in peer evaluation, and cooperate on projects, improves learners' autonomy even more (Vaughan, 2014).

The application of blended learning assists in the improvement of learners' autonomous learning. This improvement can be achieved by raising learners' interest in learning and promoting some autonomous behaviours, particularly in the online context (Zhang & Zou, 2020; Zou

et al., 2018). Improving learners' autonomous learning can be attained through encouraging peer interaction, and teacher's interaction, completing tasks and problems (Shadiev &Yang, 2020).

However, most existing studies emphasize general educational contexts or focus on learner satisfaction and engagement without providing in-depth exploration of how blended learning fosters measurable aspects of autonomy, particularly in EFL settings within Algerian context. Therefore, a critical research gap exists in examining the practical impact of blended learning frameworks, such as the CoI model, on fostering learner autonomy in specific local contexts. This study addresses this gap by focusing on EFL learners in Algerian universities, offering empirical evidence that connects theoretical models to real-world outcomes.

Taylor et al. (2016) argue that the teaching process encompasses three main stages: teaching preparation, teaching implementation, and teaching evaluation. These stages are categorized according to the objectives of teaching management. Therefore, blended learning entails three distinctive phases: autonomous learning before class, face-to-face communication in class, and knowledge expansion after class (Wang, & Zhang, 2022).

Autonomous learning before class is the first phase where learners explicitly reflect on their learning. This reflection affects the teaching process and has significant effects on the learners' autonomy, as the learners have an integral role in the teaching and learning activities, ability level, knowledge preparation, and motivation. Also, learners at this level should enhance their time autonomy, place autonomy, and learning process autonomy in an online learning context (Wang, & Zhang, 2022).

The second phase, Face-to-face communication in class, is where the realization of implicit learning can occur among learners. A myriad of activities can be used by teachers such as role-playing, situational communication activities, discussion, debates, real-life scenario simulations, group projects, and problem-solving activities (Wang, & Zhang, 2022).

Ultimately, knowledge extension after the class phase better tests autonomous learning behaviours among learners. At this level, learners are invited to work collaboratively and individually. They have to have

further readings about a discussed topic, enlarge their knowledge, and have more practice. The use of emails, and other tools of communication in both settings would promote learners' motivation and their behaviour of autonomous learning (Wang, & Zhang, 2022).

Theoretical Framework

The in-hand study is framed within the Self-Determination Theory (Deci & Ryan, 1985) and Constructivist Learning Theories. First, Self-Determination Theory posits that learners are more motivated when their psychological needs for autonomy, competence, and relatedness are met. In the context of blended learning, this theory helps explain how interactive components and teacher engagement foster learners' self-directed learning and motivation.

In this spectrum, particular blended learning elements align with the three main needs pinpointed by Self-Determined Theory. First, online discussion forums support both autonomy and relatedness as learners can interact with peers and express their thought and ideas freely in this environment. Second, interactive modules boost learners' competence to apply knowledge, solve problems, and receive instant feedback on their performances. Third, video lectures accompanied by interactive and reflective activities and tasks boost autonomous learning. Simultaneously, teachers' engagement through personalized guidance and support improves relatedness.

Complementarily, Constructivist Learning Theories (Vygotsky, 1978; Piaget, 1952; Bruner, 1966) emphasize the active role of students in constructing knowledge through exploration, reflection, and interaction. Blended learning environments provide opportunities for learners to engage with content, peers, and instructors in meaningful ways, promoting autonomy and deeper understanding. In this spectrum, these frameworks offer a lens to interpret how blended learning and teacher involvement influence the development of autonomous learning behaviors among university students.

Various studies such as Graham et al. (2013); Zhang & Zou (2020) have explored the impacts of blended learning. These prior studies focused on analyzing learners' engagement, motivation, and learning outcomes from their learners' viewpoints. However, the number of researches

conducted to unveil teachers' perceptions and contributions to promote autonomous learning in blended learning is limited. In this spectrum, the current research differs from the existing research as it offers a teacher-centered analysis as it focalizes on teachers' perceptions thereby addressing unexpected dimension of blended learning. Consequently, the findings of this research contribute extensively in providing the needed knowledge about how instructors perceive their contributions in shaping students' autonomy with a particular focus on the context of Algerian higher educational level.

Methodology

This current research adopts a descriptive quantitative research design to explore teachers' perceptions of the impact of blended learning on learners' autonomous learning. The study aims to gather empirical data through an online structured questionnaire administered to EFL teachers at three Algerian universities: Oran, Batna 2, Setif 2 Universities, Algeria.

In this respect, a simple random sampling technique was employed to ensure unbiased representation. A total of 129 teachers were contacted via institutional emails and professional networks.

Instrumentations

The main instrument used in this study was a self-constructed online questionnaire designed after a comprehensive review of relevant literature on blended learning and learner autonomy (e.g., Benson, 2011; Graham et al., 2013). The teachers' questionnaire consisted of two main sections:

Section One: considers teachers' perceptions about the possible impacts of blended learning on learners' autonomous learning. It encompasses five Likert-scale questions.

Second Two: focused on teacher involvement and its impact on learners' autonomous learning in blended learning environments. It consists of four Likert-scale questions.

To ensure content validity of the questionnaire, it was reviewed by five experts in the fields of educational technology and TEFL. Their feedback helped refine the clarity, coherence, and relevance of the items. Additionally, the questionnaire underwent pilot testing with a group of 15

EFL teachers who were excluded from the final sample, leading to minor adjustments in wording and format.

The internal consistency and reliability of the questionnaire were examined by calculating the Cronbach Alpha psychometric test. The coefficient reveals how well the questionnaire items assess the same concept. Consequently, the questions of low reliability were revised or removed to ensure a reliable questionnaire. The Cronbach alpha values at the end were higher than .7 (Section One: α = .82, Section Two: α = .79) These measures ensure the strong reliability, confirming that each section consistently measure their intended constructs.

Ethical Considerations

Ethical standards were rigorously observed throughout the research process. Ethical approval was obtained from the institutional research committee of the lead university. All selected teachers received an informed consent form explaining the purpose of the study, the confidentiality of their responses, and their right to withdraw at any stage without penalty. Therefore, no personal or identifiable data were collected, ensuring the anonymity and privacy of all respondents.

Data Analysis Tool

The data obtained from the questionnaire were collected, coded, and treated depending on the Statistical Package of Social Sciences (SPSS). The obtained analysis included Descriptive statistics (percentages and frequency distributions). The scores were used to classify the categories of response as very high, high, neutral, poor, or very poor (Five Likert scale). Furthermore, Pearson correlation analysis was conducted to examine relationships between: Teachers' perceptions of blended learning, Student autonomy development, Levels of teacher involvement.

It is worth mentioning that correlation analysis does not establish causality. In this respect, the findings reveal only associative trends rather than definitive causal relationships. The study acknowledges this limitation and suggests that future research could incorporate qualitative methods such as teacher interviews, or classroom observations for deeper exploration and validation of the quantitative findings.

Results and Findings

The study of data obtained from 129 EFL teachers yielded convincing evidence on the impact of blended learning on boosting autonomous learning among university students. The results confirm the suggested hypothesis that states that the implementation of blended learning in higher education boosts learners' autonomy.

Section 1: Perceptions about the Impact of Blended Learning on Learners' Autonomous Learning. The answers to the first section of the questionnaire, which entails five questions, revealed the following:

Item one: How would you rate the motivation levels of learners in your classes towards autonomous learning, based on your observations?

As Table one shows, teachers believe that learners who were exposed to blended learning from the beginning, namely first-year students, had better levels of motivation than those who only received traditional classroom teaching, especially third-year students. The mode of this question with first-year learners was equal to two (mode = 2), indicating that teachers note that a great proportion of learners (81%) have high motivation towards autonomous learning. The mode of this question with second-year learners equals three (mode = 3), which denotes that teachers indicate that a considerable number of learners (45%) have a moderate level of motivation towards autonomous learning. Also, the mode of this question with third-year learners was four (mode = 4). This denotes that teachers believe that an important number of students (39%) have a low level of motivation regarding autonomous learning.

Table 1. Teachers' perceptions of learners' level of autonomous learning' motivation

Learner Level of Motivation	Very High	High	Moderate	Low	Very Low	Mode
First-year BA	8%	81%	10%	1%	0%	2
Second-year BA	4%	39%	45%	12%	0%	3
Third-year BA	0%	1%	25%	39%	35%	4

Item 2: How effective do you find online discussion forums in promoting students' critical thinking and self-directed exploration?

Item 3: In your experience, what role do interactive modules play in fostering independent learning among students?

Item 4: From your perspective, how do video lectures contribute to students' ability to learn at their own pace and access course materials flexibly?

Item 5: How important do you think self-assessment tools are in helping students monitor their progress and reflect on their learning?

To gain empirical data, correlations were calculated using the obtained results from items two, three, four, and five. The data analysis shown in Table 2 indicates a significant positive correlation between the different components of blended learning and learners' motivation to engage in autonomous learning.

The analysis of the data presented in Table two below reveals the existence of a high correlation between online discussion forums and autonomous learning behaviors (.76). This denotes that regular engagement and participation in online discussion forums significantly enhance learners' ability to self-regulate and critically analyse course materials. This strong correlation suggest that asynchronous peer interaction stimulate two vital components of autonomy: critical thinking and reflection. The forum serves as an interactive platform where students express their thought and opinions, receive constructive feedback, and engage in self-directed exploration. As a result, the students will reinforce their abilities to regulate their own learning.

Also, there is a high positive correlation between interactive modules and autonomous learning behaviours (.75). These results indicate that interactive learning modules positively influence learners' autonomous learning behaviours. These modules promote the application of the acquired and learned knowledge that fosters learners' independent exploration and engagement. Also, the high noted correlation (.75) reveal that interactive modules boost the development of active learners rather than passive learners who simply consume content. These two first correlations were significant at the level of.001.

The results indicate a moderate correlation between video lectures and autonomous learning behaviours (.56, $p < .01$). These results indicate that the video lectures promote flexible access to the courses' content and encourage self-paced learning. However, video lectures may not fully stimulate autonomous learning if they are not combined with interactive elements or even reflective tasks. The moderate strength of this relationship denotes the significance of using different engaging activities such as interactive quizzes imbedded in these videos to foster autonomy.

A low positive correlation between self-assessment tools (.49) and autonomous learning behaviours is noted. This low correlation may be related to the fact that the absence of both the needed guidance or feedback during assessment negatively impacts students' autonomous learning as learners' might not use the assessment tools to reflect on their progress. Moreover, the self-assessment tools encourage autonomous learning by assisting students to monitor their learning and progress and identify their weaknesses.

Table 2. Correlation analysis results between blended learning components and autonomous learning behaviours

Blended Learning Components	Pearson's Correlation Coefficient (r)
Online Discussion Forums	.76***
Video Lectures	.56**
Interactive Modules	.75***
Self-assessment Tools	.49*

*** correlation is significant at the 0.001 level (2-tailed)
**Correlation is significant at the 0.01 level (2-tailed)
*Correlation is significant at the .05 level (2-tailed)

Section Two: Teacher involvement and its impact on learners' autonomous learning in blended learning environments.

This section includes the following four items:

Item 6: To what extent do you believe your role as a teacher impacts students' ability to become autonomous learners in a blended learning environment?

Item 7: To what extent do you believe that teacher engagement and support positively influence students' motivation toward autonomous learning behaviours?

Item 8: How effective do you find clear expectations and timely feedback in enhancing students' ability to self-regulate their learning process?

Item 9: In your opinion, how important is the adaptation of teaching methods to meet the individual needs of students in fostering their autonomy in learning?

The obtained results from item six showed that the lion's share of teachers (67%) selected strongly agree that the role of a teacher impacts students' ability to become autonomous learners in a blended learning environment. In item seven, 61% of teachers strongly agree on the fact that teacher engagement and support positively influence students' motivation towards autonomous learning behaviours. Also, 55% of them in item eight selected strongly effective, as they consider that setting clear expectations and providing constant feedback enables students to learn better, and highly promotes autonomous learning behaviours. The majority of teachers (62%) selected very important adapting teaching methods to meet the individual needs of students and foster their autonomy in learning.

To gain further insights, a correlation was calculated between the correlation between teacher involvement and learners' autonomous learning. Table three below shows a clear positive moderate correlation between teacher involvement and learners' autonomous learning. The results in Table three indicate that a moderate positive correlation (.68) is noted in the engagement and support factors. This correlation is significant at the level of 0.001. This pinpoints the positive impact of teachers' engagement with students on their autonomous learning. The correlation between engagement and support and learners' autonomy in learning is a positive moderate correlation (.54), significant at the level of 0.01. This result confirms that providing the needed feedback and setting clear expectations boosts students' regulation of learning and self-assessment. The results indicated in Table three show a positive, moderate correlation. This correlation is significant at the level of 0.001. This reflects the importance of adapting and changing the teaching according to learners' educational needs and even preferences.

Table 3. Correlation between teacher involvement and learners' autonomous learning

Teacher Involvement	Pearson's Correlation Coefficient (r)
Engagement and Support	0.68***
Clear Expectations and Feedback	0.54**
Adaptation to Learners' Needs	0.62***

*** correlation is significant at the 0.001 level (2-tailed)

**Correlation is significant at the 0.01 level (2-tailed)

It is worth mentioning that in this study, the Pearson's correlation coefficients denote the strength and direction of relationships between the selected variable; however, they do not set causality. In this spectrum, a strong correlation between certain blended learning criteria and autonomous learning behaviors exists but this study cannot prove direct cause-effect relationship.

Discussion

The finding suggests that early exposure to blended learning formats may cultivate a stronger sense of autonomy, as learners adapt more readily to self-regulated practices when introduced early in their academic trajectory. Incorporating online learning activities and resources into a blended learning strategy boosts learners' motivation, engagement, and self-regulation, eventually developing independent learning abilities. Blended learning gives students flexibility by allowing them to access a wide range of resources, collaborate with classmates, and participate in interactive activities outside of traditional classrooms. According to the findings, implementing blended learning approaches in educational settings can enhance student autonomy, attain learning outcomes, and improve their academic achievements in formal and informal exams.

The findings of this current study regarding the significance of online discussion forums and interactive courses in boosting learners' independence and autonomy in learning confirm Zhang and Zou's (2020) and Thomas and Reinders (2012) findings about the efficacy of interactive

courses as educational platforms in promoting critical thinking among learners and reinforcing their engagement and the importance of interactive pedagogy in the blended learning environment. This could be attributed to their interactive, dialogic nature, which stimulates peer collaboration, critical reflection, and learner agency. Moreover, these forums provide learners with an opportunity to express ideas, receive peer feedback, and revisit discussions asynchronously. These elements highly assist learners to develop their critical thinking and self-direction. Additionally, interactive modules demonstrated a high correlation, indicating that task-based engagement fosters active knowledge construction and self-driven exploration. These modules often involve decision-making, problem-solving, and content navigation, enabling learners to take charge of their learning paths. The may encompass gamified quizzes, scenario-based tasks.

Video lectures, while still positively correlated, had a weaker influence. Though these videos support flexible, self-paced learning, their passive format may not inherently support autonomy unless paired with reflective or application-based activities. This finding aligns with Lockee and Clark-Stallkamp (2022), who noted that the effectiveness of video content depends on how actively it engages learners beyond viewing.

Also, the significant correlations between teacher engagement, clear expectations, and adaptation to learners' needs stress the importance of teachers' role in blended learning to boost learners' autonomy as guides and mentors (Gikandi et al., 2011). This role can be summarized as providing instant, continuous, and constructive feedback, emotional support, and ensuring the needed academic guidance in both learning contexts; this aligns with Vaughan's (2014) findings. Also, without proper scaffolding or teacher guidance, self-assessment may remain underutilized as students may lack prior training or confidence in self-evaluation techniques.

The findings prove that teachers should encourage learners to promote the needed skills to be autonomous learners and create personalized learning instructions in blended learning (Sharples et al., 2019). Furthermore, teachers should provide the students with scoring rubrics, guiding questions, or peer evaluation frameworks to improve the effectiveness of their self-assessment.

Furthermore, in addition to the observations gathered by the researchers, the teachers' responses in the questionnaire highlight that the progressive adoption of online learning during hybrid learning is more helpful. Learners should be exposed to the concepts and practices employed in these new educational environments. This aligns with Vaughan's (2014) findings about the possible diminishing positive impacts without continuous adaptation of blended learning.

The findings of this study regarding the teachers' perceptions of the level of learners' motivation to engage in autonomous learning when using blended learning aligns with Graham, Woodfield, and Harrison (2013). Teachers perceive a positive impact of using blended learning on students as it provides flexibility and interactive learning opportunities.

Ultimately, the findings of this research unveil that not all components of blended learning contribute equally to learners' autonomy. Elements such as online discussion forums and interactive modules, which emphasize and boost engagement, exploration, and collaboration, have the most substantial influence. In contrast, passive or unstructured elements such as video lectures and self-assessment tools, though beneficial, require additional scaffolding to maximize their impact.

Moreover, the weaker correlation for self-assessment tools suggests the need for explicit training in metacognitive strategies. Teachers need to model reflective practices, provide scoring rubrics, and gradually shift responsibility to learners for these tools to be effective.

Importantly, the strong correlation between teacher support and learner autonomy acknowledge the pivotal role of teachers in fostering learners' autonomy as autonomy is not the absence of teaching but a transformation of the teacher's role. Teachers in blended learning settings act as facilitators, guiders, or mentors designing environments where students can develop autonomy while still receiving structured academic support.

This research findings can be interpreted in the lens of Self-Determined Theory as the following. The interactive and collaborative nature of the online discussion forums fulfill learners' needs for relatedness and autonomy besides it boosts their engagement. Also, the challenges presented to learners by the interactive modules stress on the importance of developing autonomous learning. These components associate with

psychological needs clarify their strong correlation with autonomous learning behaviors found in this investigation.

Also, the findings focus on the consequences of these results for educational institutions. In this spectrum, the respondents' answers acknowledge the necessity of implementing blended learning in high schools as it helps prepare students to be autonomous learners and well-prepared for future university education, where autonomy is becoming increasingly vital. Furthermore, considering the benefits of blended learning, educational institutions may design environments that allow learners to become active participants in their educational journey, encouraging an environment of autonomy and lifelong learning.

Recommendations

The findings of current study have led to some pedagogical and policy-oriented recommendations that can empower the implementation of blended learning to enhance autonomous learning in higher education context.

1. Professional Development for Educators

Universities should prioritize teachers sustained professional development initiatives that enable them to exchange and learn innovative pedagogical, technical, and evaluative skills necessary for designing and delivering effective blended learning experiences. Such training programs should emphasize strategies for promoting learner autonomy, including the use of digital tools to facilitate self-directed learning, formative assessment, and personalized instruction

2. Curriculum Integration and Design Alignment

Universities should embed blended learning components intentionally within curriculum design frameworks to align with autonomous learning outcomes. This includes incorporating interactive modules, asynchronous video content, collaborative tasks, and self-assessment mechanisms that empower learners to take control of their learning process. Moreover, course syllabi should explicitly state autonomous learning goals and the digital competencies expected of learners in higher educational level in addition to providing continual support and direction to learners in

blended learning settings, such as goal-setting, progress tracking, and timely feedback.

3. Institutional Infrastructure and Digital Accessibility

Successful implementation of blended learning requires investment in robust digital infrastructure. Higher education institutions must ensure reliable internet connectivity, appropriate devices, and user-friendly learning platforms. Technical support should be consistently available to both learners and instructors to reduce digital barriers.

Finally, it is recommended to conduct future studies on the evaluation of blended learning projects across disciplines and educational environments to develop and refine approaches that promote autonomous learning continually.

Conlusion

One of the primary goals of contemporary educational approaches at all levels, particularly at the college level, is obviously to develop autonomous learners. Learner autonomy is an important feature influencing students' learning during distance learning and, hence, blended learning. In light of the empirical findings and analysis, the objectives of this study have been successfully achieved. The investigation provided clear evidence of the positive impact of blended learning on the development of learner autonomy in higher education, as perceived by 129 university teachers. Furthermore, it identified specific components such as online discussion forums and interactive modules as particularly influential, thereby fulfilling the study's aim of understanding which blended learning elements most effectively foster autonomous learning behaviors. Furthermore, it has been revealed that blended learning, particularly online learning, helps learners acquire soft skills such as interpersonal, communication, listening, time management, and empathy. These talents are required not only in education but also in the workplace in this digital age.

This study is intended to motivate educators and policymakers to embrace blended learning techniques and capitalize on their potential to promote autonomous learning and educational results in higher education.

References

Benson, P. (2006a). Autonomy and its role in learning. In J. Cummins & C. Davison (Eds.), The international handbook of English language teaching (Vol. 2, pp. 733–745). Springer. https://www.pucsp.br/inpla/benson_artigo.pdf

Benson, P. (2011). Teaching and researching autonomy in language learning (2nd ed.). Routledge. https://doi.org/10.4324/9781315833767

Brockett, R. G., & Hiemstra, R. (1991). Self-direction in adult learning: Perspectives on theory, research and practice (1st ed.). Routledge. https://doi.org/10.4324/9780429457319

Dam, L., Eriksson, R., Little, D., Miliander, J., & Trebbi, T. (1990). Towards a definition of autonomy. In T. Trebbi (Ed.), Third Nordic Workshop on Developing Autonomous Learning in the FL Classroom (pp. 96–103). University of Bergen. http://www.warwick.ac.uk/go/dahla/archive/trebbi_1990

EPIC-Learning. (2013). Interactive Learning Centers announces name change to EPIC Learning. The Free Library. https://www.thefreelibrary.com/Interactive+Learning+Centers+Announces+Name+Change+to+EPIC+Learning.-a054024665 (Accessed October 19, 2017)

Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. The Internet and Higher Education, 7(2), 95–105. https://doi.org/10.1016/j.iheduc.2004.02.001

Garrison, D. R., & Vaughan, N. D. (2008). Blended learning in higher education: Framework, principles, and guidelines. Wiley. https://doi.org/10.1002/9781118269558

Gikandi, J. W., Morrow, D., & Davis, N. E. (2011). Online formative assessment in higher education: A review of the literature. Computers & Education, 57(4), 2333–2351. https://doi.org/10.1016/j.compedu.2011.06.004

Graham, C. R. (2006). Blended learning systems: Definition, current trends, and future directions. In C. J. Bonk & C. R. Graham (Eds.), The handbook of blended learning: Global perspectives, local designs (pp. 3–21). Pfeiffer.

https://www.researchgate.net/publication/258834966_Blended_learning_systems_Definition_current_trends_and_future_directions

Graham, C. R. (2019). Current research in blended learning. In M. G. Moore & W. C. Diehl (Eds.), Handbook of distance education (4th ed., pp. 173–188). Routledge.

Graham, C. R., Woodfield, W., & Harrison, J. B. (2013). A framework for institutional adoption and implementation of blended learning in higher education. Internet and Higher Education, 18, 4–14. https://doi.org/10.1016/j.iheduc.2012.09.003

Holec, H. (1979). Autonomie et apprentissages des langues étrangères. Strasbourg: Conseil de l'Europe. https://books.google.dz/books/about/Autonomie_et_apprentissage_des_langues.html?id=tvyrGwAACAAJ&redir_esc=y

Huang, H. M., Liaw, S. S., & Chen, G. D. (2018). An activity-theoretical approach to investigate learners' factors affecting e-learning systems acceptance. Educational Technology & Society, 21(3), 267–281. https://doi.org/10.1016/j.chb.2006.02.002

Jones, J. F. (1995). Self-access and culture: Retreating from autonomy. ELT Journal, 49(3), 228–234. https://doi.org/10.1093/elt/49.3.228

Kuhn, T. (1962). The structure of scientific revolutions. University of Chicago Press. https://doi.org/10.7208/chicago/9780226458144.001.0001

Little, D. (1991). Learner autonomy 1: Definitions, issues and problems. Authentic.

Lockee, B. B., & Clark-Stallkamp, R. (2022). Pressure on the system: Increasing flexible learning through distance education. Distance Education, 43(2), 342–348. https://doi.org/10.1080/01587919.2022.2064829

Rovai, A. P. (2007). Facilitating online discussions effectively. The Internet and Higher Education, 10(1), 77–88. https://doi.org/10.1016/j.iheduc.2006.10.001

Sharples, M., Adams, A., Alozie, N., Ferguson, R., FitzGerald, E., Gaved, M., McAndrew, P., Means, B., Remold, J., Rienties, B., Roschelle, J., Vogt, K., Whitelock, D., & Yarnall, L. (2019). Intelligent context-aware support for learning on the move. AI & Society, 34(4), 871–882. https://doi.org/10.1007/s00146-018-0838-0

Tabassum, B., Moin, M., Abbas, Q., Kumbhar, M., & Khan, M. H. (2024). The impact of blended learning on student performance. Journal of

Education and Social Studies, 5, 360–371. https://doi.org/10.52223/jess.2024.5217

University of Adelaide. (2024). Adelaide University ditches face-to-face lectures. Adelaide Now. https://www.adelaidenow.com.au (Accessed April 26, 2025)

Vaughan, N. D. (2014). Teaching in blended learning environments: Creating and sustaining communities of inquiry. https://doi.org/10.15215/aupress/9781927356470.01

Wang, X., & Zhang, W. (2022). Improvement of students' autonomous learning behavior by optimizing foreign language blended learning mode. SAGE Open, 12(1), 1–13. https://doi.org/10.1177/21582440211071108

Zhang, R., & Zou, D. (2020). Types, purposes, and effectiveness of state-of-the-art technologies for second and foreign language learning. Computer Assisted Language Learning, 33(1–2), 1–47. https://doi.org/10.1080/09588221.2020.1744666

Zou, D., Xie, H. R., & Wang, F. L. (2018). Future trends and research issues of technology-enhanced language learning: A technological perspective. Knowledge Management & E-Learning, 10(4), 426–440. https://doi.org/10.34105/j.kmel.2018.10.027