Vol 13, Issue: 01 (S), 2026

ABAAD Journal

ISSN: 2353 – 0030
EISSN: 2602-697X

Blended Learning and Its Impact on Achievement Motivation among University Students

التعليم المدمج وانعكاساته على دافعية الانجاز لدى الطلبة الجامعيين

وسيلة وجدي دمرجي*
Wassila Oudjedi Damerdji
oudjediw@gmail.com

Information and Communication Sciences

Djillali Liabes University of Sidi Bel Abbès, Algeria

Received: 11-10-2025	Accepted: 28-05-2026	Published: 10-06-2026

****

Abstract:

The world today is witnessing significant transformations with the emergence of modern technologies, which have greatly influenced educational systems worldwide. These developments have introduced new approaches that integrate technology to improve learning, such as virtual environments that provide learners with new knowledge and skills while promoting cultural and linguistic exchange. This study examines the significance of blended learning and its impact on achievement motivation among Algerian university students, focusing on its role in increasing engagement, academic success, and cognitive performance.

Keywords: Blended Learning; Motivation; Achievement Motivation; University Students; Cognitive Performance.

ملخص:

يشهد العالم اليوم عدة تطورات مع ظهور التكنولوجيا الحديثة، ولقد انعكس ذلك على المنظومة التعليمية وبمختلف مستوياتها في كثير من بلدان العالم، حيث أدت الى ظهور أساليب جديدة تعتمد على استخدام التكنولوجيا الحديثة لتحسين العملية التعليمية، كبيئات التعلم الافتراضية وأدواتها المتميزة، التي تزود للمتعلم، بمعارف ومهارات جديدة، ولنشر المعارف واللغات والثقافات المختلفة في اطار تعليمي

* Corresponding author: oudjediw@gmail.com

مميز،فالموضوع يستمد في أنه يتماشى مع أحدث النظم الدراسية، وتناولها لمتغيرات مهمة في العصر الحديث مثل التعليم المدمج، والذي يلعب دورا كبيرا في العملية التعليمية، والذي يقوم بتفعيل دور الطلاب وتدريبهم على البحث والتقصي، كذلك دافعية الإنجاز هي من المتغيرات المتعلقة بالتعليم ولابد من الاهتمام بها لكي يستطيع الطالب تحقيق النجاح ويكون مقبلا على التعليم، كما أن الموضوع يهدف إلى تبيان احتياجات توظيف التعليم المدمج في الجامعات الجزائرية وماله من أهمية في الرفع من دافعية الإنجاز لدى الطالب في سبيل تطوير مستواه والرفع من تحصيله المعرفي.

الكلمات المفتاحية: التعليم المدمج؛ الدافعية؛ دافعية الإنجاز؛ الطالب الجامعي؛ التحصيل المعرفي

Introduction

In the contemporary academic landscape, universities are facing increasing challenges brought about by the rapid growth of technology and its applications in education. The rapid advancement of communication and information technologies, combined with the transition to a knowledge-based global economy, has made integrating the use of technology into teaching and learning processes a vital requirement rather than an option. As a result, educational systems are now expected to undergo significant changes in their goals and strategies, as educational technology aims to improve both the efficiency and the quality of learning and instruction.

Traditional teaching methods alone are no longer adequate to meet the complex learning needs of contemporary students. This has created a pressing need for innovative approaches that merge classroom-based teaching with digital environments. The combination of face-to-face and online instruction has given rise to blended learning which is an educational model that unites the benefits of traditional and virtual learning to offer more flexible, engaging, and student-centered experiences.

Within this framework, Algerian universities have begun to increasingly adopt blended learning as part of their efforts to enhance the quality of teaching and learning. University students play a central role in this transformation, as they seek to deepen their academic knowledge, improve their research skills, and actively interact with instructors and peers through technology.

Therefore, this study investigates the function of blended learning in increasing achievement motivation among university students, emphasizing how it might lead to higher academic performance, active involvement, and general intellectual development.

1. Conceptual Definitions

1.1 Blended Learning

1.1.1 Learning

Linguistically, "learning" refers to the process of acquiring knowledge. Educationally, it involves the transfer of information and skills between the teacher and the learner through direct or guided experiences. The teacher assumes a facilitative role, while learners engage in comprehension, practice, and application. Effective learning promotes understanding, reflection, and the practical use of knowledge (Abdulaziz, 1969, p. 59).

According to Mohammed (1983, p. 12), learning comprises four essential components: the teacher, the learner, the content, and the method. Abdel-Majid and Shaaban (2015, pp. 13–14) describe it as the acquisition of knowledge and skills through a combination of experiences, which may be self-directed or guided by instruction. Learning, therefore, represents a dynamic, interactive, and continuous process aimed at intellectual and personal development.

1.1.2 Blended Learning

Blended learning involves integrating modern technological innovations into the teaching process by combining face-to-face instruction with online learning to enhance interaction between instructors and students (Ismail, 2009, pp. 99–100). It is an instructional strategy that emphasizes the relationship between teacher and student to foster participation, independence, and achievement (Cherul, 2020, p. 24).

Most educators consider blended learning as a combination of in-person and online instruction (Astrid, 2015, p. 11). According to Mufid and Samir (2012, p. 6), blended learning represents a pedagogical approach that integrates technology with classroom teaching to increase student engagement and participation.

1.2 Achievement Motivation

1.2.1 Motivation

Motivation is the internal and external force that directs a person's behavior toward a goal and sustains that behavior until the goal is achieved. It may arise from personal factors such as curiosity, ambition, or confidence, or from environmental influences such as

encouragement and rewards (Firas, 2008, p. 277; Ahmad, 2008, p. 753). In education, motivation determines the intensity, direction, and persistence of students' learning efforts.

1.2.2 Achievement

Achievement, commonly associated with academic success, represents the outcome of one's efforts to learn and apply knowledge. It can also reflect a learner's intellectual, emotional, and behavioral characteristics (Abdel-Latif, 2000, pp. 94–95). In an academic setting, achievement is both a measurable result and a reflection of a student's motivation to excel.

1.2.3 Achievement Motivation

The concept of achievement motivation holds a central position in educational psychology due to its critical role in students' academic success. It involves the psychological drive that stimulates learners to overcome challenges, persist in their efforts, and achieve excellence (Dareen, 2022, p. 96).

Geldenson, as cited by Lewini (2018, p. 196), defined achievement motivation as the individual's need to overcome obstacles, face challenges, and reach high levels of performance through perseverance and sustained effort. Similarly, Cucilia (2017, p. 10) described it as the enthusiasm or inner need that drives individuals toward goal-directed behavior.

1.2.4 The Importance of Achievement Motivation

Motivation plays an essential role in learning as it activates and sustains the effort required to achieve academic goals. Regardless of available resources, without motivation learning remains limited. Motivated students show higher concentration, creativity, and persistence, which result in better academic outcomes (Nadia, 2018, p. 224).

2. Characteristics of Blended Learning

Blended learning combines the advantages of both face-to-face and online education. Its main characteristics include the following:

Interactivity:

Blended learning encourages students to interact with digital information and collaborate with classmates and professors. It encourages research, conversation, and the exchange of knowledge from numerous sources.

Flexibility:

This method of instruction allows students to study at their own pace and using their

personal learning styles. It allows for variances in schedules and personal capacities, making education more inclusive and accessible.

Individualization:

Blended learning mitigates the impact of individual variations by allowing students to study at their own speed and competence. Personalized learning paths allow students to focus on areas that require further attention while still benefiting from collaboration.

Motivation:

By providing interactive and self-directed experiences, blended learning enhances students' motivation. It stimulates curiosity, supports self-learning, and strengthens their desire for academic growth (Salameh, 2014–2015, p. 37).

3. Benefits and Challenges of Blended Learning

Blended learning enables students to access digital information and resources at any time, fostering flexibility and autonomy. It strengthens the relationship between instructors and learners and encourages the use of technological tools such as PowerPoint, virtual classrooms, and educational videos. This hybrid model enhances teaching efficiency and helps students set realistic learning goals, assume responsibility for their progress, and communicate effectively with their instructors and administrators (Kalapriya, 2021, pp. 160–161).

Despite its benefits, blended learning presents challenges in higher education. According to Shomali and Qustandi (Raed, 2016, p. 23), instructors face difficulties transitioning from traditional lectures to technology-based instruction, which demands greater effort, cost, and technical competence.

Additional obstacles include language barriers, since most software is in English limited training programs, inadequate access to computers, high costs, reliance on printed materials, and insufficient evaluation systems (Ali Rassam, 2016, p. 263). Moreover, weak digital skills and psychological resistance to new technologies hinder effective adoption (Salima, 2017, p. 33).

4. Types and Components of Achievement Motivation among University Students

Veerhof and Smith identified two main types of achievement motivation: **autonomous motivation**, which relies on personal standards, and **social motivation**, based on social

comparison (Abdel-Latif, 2000, p. 68).

Oziel (Hanan, 2014, p. 77) proposed three main components of achievement motivation:

1. **Cognitive incentive** which is the desire to satisfy curiosity and acquire knowledge, where learning itself acts as a reward;
2. **Self-direction** which is the drive for academic excellence and self-respect through high performance;
3. **Affiliation** which means the need for social approval and belonging, reinforcing self-confidence and motivation.

5. Strategies for Stimulating Achievement Motivation in Blended Learning

According to Lobna (2018, pp. 206, 209), effective strategies for promoting achievement motivation in blended learning include:

-Designing learning environments that center on student participation and inquiry;

-Addressing students' internal needs and encouraging intrinsic motivation;

-Presenting engaging and relevant content;

-Guiding learners to set personal and meaningful academic goals;

-Encouraging autonomy and responsibility in managing learning tasks.

These strategies emphasize student engagement, curiosity, and self-efficacy, all of which are essential to sustaining motivation in blended environments.

6. Empirical Studies on the Relationship between Blended Learning and Achievement Motivation

6.1. Relationship between Achievement Motivation and Learning

Students who ascribe success to their own work and aptitude are more likely to develop excellent study habits and get higher grades than those who rely on external variables such as chance or instructor influence. Empirical studies show that even when intellect levels are comparable, motivation causes considerable disparities in performance. Morgan's findings support a clear positive relationship between motivation and academic performance: driven individuals sustain attention and tenacity, resulting in increased production and endurance (Afifa, 2014, p. 234).

6.2 Interaction between Blended Learning Models and Motivation

Inas (2021, p. 591) examined the interaction between **self-directed** and **mastery-based** blended learning models and students' motivation levels in developing infographic design skills using "Easelly". The results revealed significant interactions between learning models

and motivation, improving self-efficacy and academic ambition.

Similarly, Tope and Adams (2022, pp. 35–42) investigated blended learning models (face-to-face driver model, rotation model, flex model, online lab model, self blended model, and online driver model) among 120 university students in Nigeria. Their findings indicated significant post-test improvement, confirming that blended learning positively affects academic achievement and retention.

On the same page, Al-Humaidi, H.A.H., Al-Rashidi, K.M.A., et al. (2022) conducted a study "The Effectiveness of Blended Learning in Developing Academic Achievement and Motivation among Students of the College of Basic Education in Kuwait". The purpose of this study was to investigate the efficacy of the blended learning approach in improving educational achievement and learning motivation among female students enrolled in the "Instructional Materials Production Workshop" course at the College of Basic Education in Kuwait.

The research problem was formulated through two principal questions:

1. What is the effectiveness of blended learning in improving academic achievement among students enrolled in the Instructional Materials Production Workshop course?
2. What is the effectiveness of blended learning in enhancing students' motivation to learn in the same course?

The study aimed to explore the degree to which the blended learning model contributes to improving students' academic performance and motivation to learn, to measure the magnitude of this effect, and to examine whether statistically significant differences exist between the mean scores of the experimental and control groups in both achievement and motivation levels.

A quasi-experimental design was adopted, based on two equivalent groups and pre- and post-test measures. The instruments used were a researcher-designed academic achievement test and a learning motivation scale. The sample consisted of 72 purposively selected students divided into two groups: 32 students in the experimental group and 40 in the control group.

The findings revealed a statistically significant improvement in both academic achievement and learning motivation among students who participated in blended learning,

indicating its strong positive impact on students' engagement and academic outcomes.

In addition, Al-Zuhairi, I.A.H. (2020–2021) did an investigation entitled " Attitudes toward Hybrid Learning and Their Relationship with Achievement Motivation and Test Anxiety among University Students in Light of Selected Demographic Variables" Published in The Journal of Education", this study investigated the relationships among university students' attitudes toward hybrid learning, achievement motivation, and test anxiety, while also examining whether these attitudes could be predicted based on achievement motivation and test anxiety. The study further explored differences in attitudes according to gender (male–female) and academic specialization (theoretical–scientific).

The sample included 400 students (200 males and 200 females), aged between 17 and 22 years, drawn from various faculties at Al-Azhar University in Egypt. The study employed a descriptive, correlational-comparative methodology, utilizing three instruments developed by the researcher: a Hybrid Learning Attitude Scale, an Achievement Motivation Scale, and a Test Anxiety Scale.

The results demonstrated a statistically significant positive correlation between direct (face-to-face) learning and the dimensions of achievement motivation, as well as a significant negative correlation between direct learning and test anxiety. Moreover, the findings indicated that students' attitudes toward hybrid learning could be predicted based on achievement motivation and test anxiety. Statistically significant differences were also found in students' attitudes toward hybrid learning according to gender and academic discipline.(Hussein, 2001, p. 59).

Moreover, Zainon, H.H., & Yamat, H. (2020) made a research on "Effects of Blended Learning on Motivating Secondary Students to Learn the English Language: A Pilot Study". This experimental study aimed to assess the extent to which blended learning enhances motivation among secondary school students learning English as a foreign language. The research was guided by two main questions:

1. What are the levels of students' motivation before and after the implementation of blended learning?
2. Does the use of blended learning motivate students to learn English more effectively?

The study found a substantial increase in students' motivation after the application of blended learning strategies. Moreover, a significant difference was observed between the

pre-test and post-test mean scores in students' academic achievement. The findings indicated that the more effectively blended learning was implemented in instruction, the higher the students' performance levels became in subsequent assessments.(Zainon & Yamat, 2021, p. 23).

Conclusion

The rising popularity of blended learning, fueled by advancements in information and communication technology, has revolutionized teaching methodologies and student involvement. By combining conventional and modern methodologies, it encourages discovery, research, and educational achievement.

As a result, Algerian universities should prioritize the use of blended learning. Understanding its mechanisms may assist overcome challenges with implementation, provide guidance decision-makers, and maximize its impact by providing proper training, technology support, and resources. Subsequently, blended learning increases achievement motivation, fosters academic performance, and positions students for success in today's technological landscape.

References

Abdel-Latif, M. (2000). Achievement motivation (pp. 68, 94–95). Cairo: Dar Gharib for Printing and Publishing.

Abdel-Majid, M., & Shaaban, M. (2015). Interactive e-learning (pp. 13–14). Amman: Academic Book Center.

Ahmad, M. (2008). Modern Arabic language dictionary (p. 753). Cairo: Alam al-Kutub.

Afifa, J. (2014). The importance and role of motivation in learning (p. 234). Maarif Journal, 9(17), University of Bouira, Algeria.

Astrid, H. (2015). Blended learning in English literature (Master's thesis, University of Bergen, Department of Foreign Languages), p. 11.

Cherul, M. (2020). Blended learning integration: Student motivation and autonomy in a blended learning environment (Doctoral dissertation, East Tennessee State University), p. 24.

Dareen, A. (2022). Life skills and their relationship to achievement motivation among students of the Faculty of Education, Hama University (p. 96). Hama University Journal, 5(21), 19–38.

Firas, A. (2008). Learning and teaching strategies: Theoretical and applied perspectives (p. 277). Amman: Modern Books World.

Hanan, K. (2014). Occupational stress and its relationship to achievement motivation among public health doctors (Master's thesis, University of Biskra, Faculty of Humanities and Social Sciences), p. 77.

Ismail, A. (2009). Modern teaching strategies and technology integration (pp. 99–100). Cairo: Dar al-Fikr.

Kalapriya, C. (2021). Blended learning in higher education (pp. 160–161). International Journal of Innovative Research in Education, 9(2).

Lewini, B. (2018). Achievement motivation: Concept and dimensions (p. 196). Journal of Educational Psychology, 6(2).

Lobna, B. (2018). Blended learning: A contemporary vision for improving education and developing achievement motivation among university students (pp. 206, 209). Al-Hikma Journal for Educational and Psychological Studies, 6(14), University of Sétif, Algeria.

Louis, M. (1908). Al-Munjid fi al-Lugha (p. 526). Jordan: Catholic Press.

Mohammed, A. (1983). Guidance in teaching Arabic language (p. 12). Cairo: Dar al-Ma'arif.

Mufid, A., & Samir, S. (2012). Blended learning between traditional and electronic education (p. 6). Amman: Dar al-Akademion.

Nadia, M. (2018). Academic adaptation and its relationship with achievement motivation among female secondary school students in Riyadh (p. 224). Journal of the Faculty of Education, 173.

Raed, M. (2016). Challenges facing blended learning implementation (p. 23). Educational Technology Journal.

Salima, A. (2017). Balancing creativity, productivity, and cultural adaptation in blended education (p. 33). Journal of Pedagogical Innovation.

Tope, G. O., & Adams, S. O. (2022). Effect of blended learning models on students' academic achievement and retention in science education (pp. 35–42). Eurasian Journal of Science and Environmental Education, 2(2).

Salameh, M. A. (2014–2015). The Effectiveness of a Training Program Based on Blended Learning Strategies in Developing Classroom Teacher Students' Skills in Integrating Technology into Education and Their Attitudes Toward It. Master's Thesis, University of

Damascus, Faculty of Education, Department of Curricula and Teaching Methods, p. 37.

Al-Humaidi, H. A. H., Al-Rashidi, K. M. A., et al. (2022). The Effectiveness of Blended Learning in Developing Academic Achievement and Motivation among Students of the College of Basic Education in Kuwait. Reading and Knowledge Journal, Vol. 23, No. 225, Egyptian Society for Reading and Knowledge, Egypt, pp. 15–59.

Zainon, H. H., & Yamat, H. (2021). Effects of Blended Learning on Motivating Secondary Students to Learn the English Language: A Pilot Study. Journal of English Language Teaching and Applied Linguistics, Issue (2), April 2021, pp. 23–29.