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Are Online Classes as Effective as Traditional Classes?

Abstract

This article examines whether online classes are as effective as traditional face-to-face instruction in higher education. It argues that the effectiveness of learning cannot be evaluated solely based on the mode of delivery, but rather depends on several interacting factors such as subject type, student motivation, learning styles, and technological conditions. By reviewing recent academic studies, the paper highlights that theoretical subjects are generally well suited to online environments, while practical and skill-based disciplines require in-person instruction for effective learning. The study also discusses how self-discipline and learner autonomy play a crucial role in online education success, whereas traditional classrooms provide stronger social interaction, immediate feedback, and structured learning conditions. Furthermore, technological limitations and digital inequality are identified as major challenges affecting online learning outcomes. The findings suggest that neither online nor traditional education is universally superior; instead, a blended learning approach that integrates digital tools with face-to-face teaching may offer the most effective and inclusive model for modern universities.

Keywords: *online education, traditional education, learning effectiveness, higher education, blended learning, student motivation, subject type, educational technology*

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Onlayn dərslər ənənəvi dərslər qədər effektivdirmi?

Xülasə

Bu məqalə ali təhsildə onlayn dərslərin ənənəvi üz-üzə tədris qədər effektiv olub-olmadığını araşdırır. Məqalədə qeyd olunur ki, təhsilin effektivliyi yalnız tədris formasına əsasən qiymətləndirilə bilməz, əksinə fənnin növü, tələbə motivasiyası, öyrənmə üsulları və texnoloji şərait kimi bir neçə qarşılıqlı təsir edən amildən asılıdır. Son akademik tədqiqatların icmalına əsaslanaraq göstərilir ki, nəzəri fənlər ümumiyyətlə onlayn mühit üçün daha uyğundur, lakin praktik və bacarıq yönümlü sahələrdə effektiv öyrənmə üçün üz-üzə tədris zəruridir. Tədqiqat həmçinin özünəməzarət və öyrənmə müstəqilliyinin onlayn təhsildə uğur üçün mühüm rol oynadığını, ənənəvi sinif mühitinin isə daha güclü sosial qarşılıqlı əlaqə, dərhal geribildirim və strukturlaşdırılmış öyrənmə şəraiti yaratdığını vurğulayır. Bundan əlavə, texnoloji məhdudiyyətlər və rəqəmsal bərabərsizlik onlayn təhsilin nəticələrinə təsir edən əsas problemlər kimi müəyyən edilir. Nəticələr göstərir ki, nə onlayn, nə də ənənəvi təhsil universal şəkildə üstün hesab edilə bilməz; əksinə, rəqəmsal alətləri üz-üzə tədrislə birləşdirən qarışıq (blended) təhsil modeli müasir universitetlər üçün ən effektiv və inklüziv yanaşma ola bilər.

Açar sözlər: *onlayn təhsil, ənənəvi təhsil, öyrənmənin effektivliyi, ali təhsil, qarışıq təhsil (blended learning), tələbə motivasiyası, fənnin növü, təhsil texnologiyaları*

Introduction

In the last decade, higher education has undergone significant changes due to rapid technological development. Digital platforms, learning management systems, and virtual communication tools have transformed how knowledge is delivered and accessed. This transformation became even more visible during the COVID-19 pandemic, when universities across the world were forced to shift from traditional classroom instruction to fully online learning environments (eSchool News, 2024). As a result, millions of students experienced a new form of education that relied heavily on technology rather than physical presence.

Online education offers several advantages such as flexible schedules, access to digital learning materials, and the possibility of studying from any location. These features have made online education attractive to many students, especially working adults and those living far from university campuses (University of the Potomac, n.d.). At the same time, traditional classroom education has long been valued for its direct interaction, immediate feedback, and social learning opportunities, which are considered essential for academic and personal development.

Due to these differences, researchers and educators continue to debate whether online education can truly replace or equal traditional face-to-face instruction. Some studies report that students can achieve similar learning outcomes in online environments when courses are well designed and supported by effective digital tools (U.S. Department of Education, n.d.; ScienceDirect, 2023). However, other studies emphasize that learning is not only about receiving information but also about social engagement, classroom discussion, and emotional support, which are more easily achieved in traditional settings (Kumari, 2021).

Therefore, this article argues that the effectiveness of online and traditional classes cannot be judged in general terms. Instead, learning outcomes depend largely on individual student characteristics and the nature of academic subjects. By examining recent academic research, this study explores how subject type, student motivation, learning style, and technological conditions influence the effectiveness of both learning modes in higher education.

Research

1. Subject Type and Learning Requirements

One of the most important factors influencing the effectiveness of online or traditional education is the type of subject being taught. Theoretical and lecture-based subjects such as history, literature, economics, and language studies are often suitable for online delivery. In such courses, students primarily need access to lectures, readings, and assignments, which can be easily provided through digital platforms. Recorded lectures also allow students to pause, replay, and review difficult concepts, which can improve understanding and retention (Pacific College, n.d.).

Meta-analytical studies confirm that online and blended learning environments can produce learning outcomes that are comparable to, or sometimes better than, traditional classrooms when appropriate instructional strategies are used (ScienceDirect, 2023). Interactive tools such as quizzes, discussion forums, and multimedia content further support active learning in online courses.

However, practical and skill-based subjects such as medicine, engineering, laboratory sciences, and performing arts require hands-on experience, physical equipment, and direct supervision. In such cases, traditional classrooms provide opportunities for demonstrations, immediate correction of mistakes, and guided practice. Research conducted among university students shows that many learners prefer face-to-face instruction for practical subjects because it allows clearer explanations and better skill development (SHS Conferences, 2021; ERIC, n.d.).

This suggests that subject type plays a crucial role in determining which learning mode is more effective. While online learning may work well for theoretical knowledge, traditional education remains essential for developing practical competencies.

2. Student Motivation and Learning Style

Another key factor affecting learning outcomes is individual student motivation and learning preferences. Online learning requires a high level of self-discipline, time management, and independent study skills. Students who are highly motivated and organized can benefit from the

flexibility of online education, as they can adjust their learning schedule to fit personal responsibilities (World Reader, n.d.).

For many students, especially working adults, online education provides access to higher education that would otherwise be difficult to obtain. These students often appreciate the ability to study asynchronously and manage academic tasks according to their own pace (University of the Potomac, n.d.).

In contrast, students who depend on external structure and teacher supervision may experience difficulties in online environments. Studies indicate that lack of routine, limited monitoring, and home distractions can reduce concentration and academic engagement (Kumari, 2021). Without regular classroom attendance, some students may struggle to maintain consistent study habits, which negatively affects performance.

Traditional classrooms, on the other hand, provide fixed schedules, direct communication with instructors, and peer interaction. These elements support motivation and accountability, especially for students who benefit from social learning environments. Group discussions, classroom debates, and collaborative projects also contribute to critical thinking and communication skills, which are harder to develop in purely online settings (eLearning Industry, 2023).

3. Social Interaction and Academic Development

Education is not only about academic content but also about social development and professional preparation. University life offers opportunities to build friendships, participate in group work, and develop teamwork skills. Traditional classrooms naturally support these social interactions, helping students improve communication and cooperation abilities.

Research shows that social engagement contributes positively to learning motivation and emotional well-being. Students who feel connected to their peers and instructors are more likely to participate actively and persist in their studies (SHS Conferences, 2021). In contrast, online learning environments may create feelings of isolation, especially when courses lack interactive elements.

Although modern online platforms offer discussion boards and video conferencing, these tools may not fully replace spontaneous classroom interaction. Students often report lower levels of engagement and weaker social connections in online courses compared to traditional settings (Kumari, 2021).

4. Technological and Infrastructure Challenges

The effectiveness of online education is also influenced by technological conditions. Reliable internet access, suitable devices, and digital literacy are necessary for successful participation in online courses. In regions with limited infrastructure, students may experience frequent interruptions, platform failures, and difficulty accessing learning materials (Bhange & Gai, 2025).

Technical problems not only disrupt lessons but also increase frustration and reduce motivation. In contrast, traditional classrooms are less dependent on technology and provide a more stable learning environment. While digital tools can enhance classroom teaching, they are not essential for basic instruction, making traditional education more resilient to technical failures.

Conclusion

In conclusion, the comparison between online and traditional education shows that neither learning mode can be considered universally superior. Online learning offers flexibility, accessibility, and opportunities for independent study, making it highly suitable for motivated students and theoretical subjects. Traditional classrooms, however, remain essential for practical training, social interaction, and structured learning environments.

Academic research clearly indicates that learning effectiveness is influenced by multiple factors, including subject requirements, student motivation, learning styles, and technological access (ScienceDirect, 2023; ERIC, n.d.). Therefore, evaluating educational quality based solely on delivery mode provides an incomplete picture of learning success.

A blended learning approach that combines online resources with face-to-face instruction may offer the most effective solution for modern universities. Such an approach allows institutions to

benefit from technological innovation while maintaining the educational and social advantages of traditional classrooms (U.S. Department of Education, n.d.).

Future educational strategies should focus on flexibility and personalization, allowing students to choose learning formats that best suit their academic needs and personal circumstances. By adopting diverse instructional methods, universities can create more inclusive and effective learning environments for a wide range of learners.

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