

# Blended E-Learning and E-Teaching in Higher Education

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*Abstract— Over the past few years, the concept of "e-learning and e-teaching" has surfaced as a consequence of the incorporation of Information and Communication Technology (ICT) in the realm of education. With the implementation of this technology in teaching, certain challenges have come to light, prompting the emergence of the "Blended learning and teaching" phenomenon. Nonetheless, the adoption of this innovative approach has been the subject of considerable debate. This paper seeks to explore the benefits of blended learning and teaching in comparison to traditional face-to-face leaning and teaching, drawing insights from a comprehensive review of relevant literature. The findings of the many surveys indicate that blended learning and teaching holds a distinct advantage over pure e-learning and e-teaching, and presents numerous benefits for learners and teachers, such as fostering a sense of community and belonging. The research concludes that blended learning and teaching stands out as an effective approach to distance education, positively impacting students' learning experiences, facilitating meaningful student-student interactions, and enhancing student-instructor engagement. As a result, it is anticipated that blended learning and teaching may become the prevailing educational model in the near future.*

*Keywords — e-learning, e-teaching, blended learning, traditional.*

## I. INTRODUCTION

Over the preceding decades, the landscape of education has undergone significant transformations due to the swift evolution of technologies, leading to the rapid generation and establishment of novel discoveries. This paradigm shift has profoundly impacted the realms of teaching and learning, with a particular emphasis on distance and traditional modes of education. The advent of the World Wide Web (WWW) and technological advancements has fueled a growing interest in concepts such as e-learning and e-teaching.

The integration of online learning and teaching has found substantial application in higher education, prompting extensive studies to unearth both its merits and shortcomings. The accelerated pace at which the educational sphere has embraced digital methodologies underscores the need to critically assess the advantages and drawbacks inherent in this evolving approach to knowledge dissemination.

The rise of e-learning and e-teaching has not been without its drawbacks, notably in impeding the socialization process by diminishing face-to-face communication. In response to these limitations, a novel educational environment has emerged, known as blended learning, hybrid learning, or mixed learning. This innovative approach integrates elements of both digital and traditional learning and teaching environments.

Blended learning seeks to address the shortcomings associated with exclusive online instruction. By combining the strengths of e-learning with the traditional classroom setting, this hybrid model aims to create a more holistic educational experience. The primary objective of blended

instruction is to strike a balance that mitigates the drawbacks of pure online learning while retaining the advantages offered by digital technologies. This adaptive approach signifies a strategic evolution in education, aiming to optimize the learning process by leveraging the strengths of diverse instructional modalities.

## II. BLENDED LEARNING AND TEACHING MODEL

The blended learning environment includes both technology and traditional classroom systems of learning.

Here, the prime focus remains on the computer-based learning model. In a traditional form of classroom teaching an instructor imparts knowledge in familiar methods such as lectures, discussions, lab works, media access, and problem-solving. In a classroom, students learn by social interactions. The new computer-based learning has made this collaborative learning more interactive. Blended form of learning brings various aspects of the class form of learning and technology-based learning together. In this form of learning, a sequential course is adopted including both technology-based and traditional classroom delivery system.

Here, students may be asked to do the following activities for an optimum level of outcome:

- Reference manuals are uploaded in the system that needs to be downloaded along with study chapters.
- Attend the classes just like the traditional forms of classes.
- Modules as available online are to be completed within the specified dates.
- Collaboration with other students is necessary which are possible online.

- Taking part in online quizzes is necessary to prove to the teachers the understanding levels.
- Follow up the processes and activities through email discussion forums.

The modules of a blended solution include the following:

- Mentoring
- Collaboration
- Text-based training
- Web-based training
- CD-ROM or pen drive
- Instruction-based classes
- Content-based classroom training
- Content-based online training

### III. ADVANTAGES OF BLENDED LEARNING AND TEACHING

In tandem with the expanding integration of Information and Communication Technology (ICT) in educational settings, the blended learning approach emerges as a valuable tool to complement face-to-face experiences. This method not only acknowledges the increasing role of ICT but harnesses its potential to enhance the overall educational landscape.

Blended instruction facilitates an active learning environment, offering students the flexibility to utilize resources effectively. This flexibility not only empowers students in their learning journey but also allows faculty members the opportunity to allocate more time to engage with learners in smaller groups or on an individual basis. The personalized interaction that blended learning affords can lead to more tailored and impactful educational experiences.

Moreover, the adoption of blended learning has the potential to reshape students' educational experiences and outcomes. By combining the strengths of traditional and digital methodologies, this approach can create a dynamic and responsive learning environment, catering to diverse learning styles and preferences. The transformative impact of blended learning underscores its significance as an evolving and effective educational paradigm.



Certainly, another notable advantage of blended learning and teaching environments lies in their capacity to provide a rich array of resources for learners. The incorporation of technology within physical classrooms introduces supplementary resources that have the potential to significantly enhance learners' confidence, competence, and the overall quality of their educational experience.

The diverse sources available through technology integration contribute to a deeper understanding of topics, as

students can access web-based materials that complement traditional learning methods. This multifaceted approach encourages active participation in class, fostering a more engaging and immersive learning environment.

Furthermore, the online component of blended learning facilitates interactive communication between teachers and students within the classroom setting. This not only creates a dynamic exchange of ideas but also extends the potential for cooperative activities beyond the confines of traditional classrooms. The interactive nature of online learning engagement underscores its role not just as a supplementary tool but as a catalyst for fostering collaboration and communication among students and educators, enriching the overall educational experience.

### IV. CLASSROOM-BASED LEARNING SYSTEM

The classroom-based learning model one of the most traditional and familiar models that is stills a popular delivery model. However, this model has several weaknesses that also need to be considered. One of the most noteworthy shortcomings of classroom model is that it does not always useful and productive as far as knowledge development and application of that knowledge is concerned. At the same time, in this format of teaching, the reach and flexibility are both limited. Quality of content completely depends on teachers and the way teachers deliver those contents. In the corporate world, if training is arranged through a traditional classroom model, a few questions obviously raise:

- Saving the traveling time, energy, and expense.
- Employees in different places need flexible training process.
- Instructors can be accessed anywhere anytime.
- Faster training for a specific group of staff members.
- Lesser time investment in training especially if it is a regular process.
- Ease of altering the contents with respect to changing demands.

### V. CONCLUSION

In a blended learning and teaching course, characterized by the amalgamation of face-to-face instruction with online platforms, both students and teachers actively employ technology to facilitate and enhance the learning experience. This approach goes beyond traditional methods, encouraging dynamic participation and interaction through digital tools.

Students, under the guidance of their instructors, leverage technology for active learning, engaging with course materials, multimedia resources, and interactive platforms. This active involvement fosters a deeper understanding of the subject matter, promoting a more immersive educational experience.

Moreover, the blended learning and teaching environment creates a space for students and teachers to share their

experiences through a branded platform. This collaborative aspect allows for the exchange of insights, perspectives, and feedback, enriching the learning process. By incorporating technology in this manner, the blended learning model not only enhances the accessibility of educational resources but also promotes a sense of community and shared learning within the course environment.

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