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Zamkova Natalia, Gladjo Svitlana

## NEOTERIC VISTAS AND COMMON ISSUES IN eLEARNING ENVIRONMENT

**Annotation**

The article outlines the key points of online instruction within the framework of an extension and a partial adaptation of conventional teaching. Viewed as a powerful resource to help promote, enhance, and facilitate learning in general, and advance language learning specifically, eLearning has fostered high expectations of effective, relevant, motivating, and viable learning experiences.

Technology-assisted learning has been changing the concept and format of contemporary education. The success of e-learning environment depends on the humanized and personalized approach to the instruction that will stimulate students' cognitive skills and motivate their positive emotions, active engagement as well as appropriate academic and social behavior. The purpose of the article is to investigate available resources for online learning; to examine factors for ensuring successful language performance; to bring to light the challenges both teachers and students might encounter while working online and offer relevant solutions.

Online learning is reported to lag behind other learning modes in terms of student engagement and motivation. Consequently, while perceiving academic challenges and acquiring good study habits, online learners need to improve collaborative learning and faculty interaction. Correspondingly, the role of the instructor focusing on the combination of students' needs, preferences and availability is to link individual performance to the goals of teaching using efficient learning platforms.

**Key words:** eLearning, distant learning, technology-assisted language learning, e-learning environment, learning management systems, video conferencing.

Замкова Наталя, Гладь Світлана

## НОВОЧАСНІ МОЖЛИВОСТІ ТА ПОШИРЕНІ ПРОБЛЕМИ В ЕЛЕКТРОННОМУ ОСВІТНЬОМУ СЕРЕДОВИЩІ

**Анотація**

У статті розглядаються основні проблеми он-лайн навчання у межах розширення традиційного та часткової модифікації традиційного навчання. Розглядаючись як потужний ресурс, який сприяє просуванню, вдосконаленню та полегшенню навчання в цілому, а зокрема вдосконалення вивчення мови, електронне навчання поступово стає базою для ефективного, релевантного, мотивуючого та життєздатного досвіду навчання.

Технологічне навчання змінює концепцію та формат сучасної освіти. Успіх середовища електронного навчання залежить від гуманізованого та індивідуального підходу до подання навчального матеріалу, який за формою та змістом зможе стимулювати пізнавальні навички учнів та мотивувати їх позитивні емоції; активність та вмотивованість при засвоєнні матеріалу; а також добросесну академічну і соціальну поведінку. Метою статті становить вивчення наявних ресурсів для он-лайн навчання; встановлення факторів, що забезпечують успішне володіння мовою; висвітлення проблем, з якими можуть зіткнутися як викладачі, так й учні під час роботи в Інтернеті, та запропонувати відповідні рішення.

Дослідження доводять, що навчання через Інтернет відстає від інших режимів навчання з точки зору залучення та мотивації студентів. Отже, сприймаючи академічні виклики та здобуваючи релевантні звички до навчання, он-лайн учням потрібно вдосконалити спільне навчання та взаємодію з викладачами. Відповідно, роль викладача, орієнтованого на поєднання потреб, вподобань та доступності студентів, полягає у тому, щоб пов'язати індивідуальну ефективність з цілями навчання з використанням ефективних платформ навчання.

**Ключові слова:** електронне навчання, дистанційне навчання, технологічне навчання мови, середовище електронного навчання, системи управління навчанням, відео конференції.

**1. Stating the problem**

With ongoing digitalization conventional education has been undergoing massive changes not only adapting existing methods and approaches, but also exploring breakthrough innovations in teaching. The lockdowns caused by the COVID-19 pandemic stirred a gamut of emotions and built a base for partial or total shift from blended learning (sometimes called hybrid learning) that features both digital and traditional, face-to-face teaching methods to online or eLearning. The latter has been part of our teaching styles for a while without complete understanding of its pros and effective solutions to its cons. In other words, virtual-only learning is becoming more socially essential and noticeably affordable.

E-learning or online learning is defined as instruction delivered by any technological mode aimed at promoting education [2, 11], or a form of distance education in which both instruction and assessment are Internet-based and carried out online [12, 5]. Online learning also means the Internet-supported instructional environments. It embraces a variety of educational software the two core objectives of which are to provide the easy access to instructional materials and facilitate interactive collaboration among teachers and students.

There is another term for technology-assisted teaching strategy – distance learning, which has been widely used as a synonym for self-studying. Its semantic meaning used to imply experience of older people who are unable to get a custom education in its traditional sense. The major differences between online and distance learning are believed

to cover time, place, and interaction. For instance, being engaged in online learning, students work together with a teacher while processing the information and going through assessments. Learning from distance students work online at home and the teacher gives tasks and checks them digitally. However, the difference between the two notions seems of little or no importance nowadays as they both incorporate conventional pen-and-paper teaching methods (lectures, seminars, etc) along with the latest technologies (infographics, videos, vlogs, etc.). They are both based on digital forms of communication such as messaging apps, discussion boards, and other options offered by learning management system (LMS) with or without personal interaction between teachers and students.

## 2. Basic material presentation

The tremendous opportunities offered by digital technologies resulted in the development of flexible and personalized e-learning environment capable of delivering high quality instructions. However, educating in an e-learning environment differs from the traditional classroom and, thus, is bound to present new challenges to both instructors and learners. The designers of online spaces, virtual learning environments (VLE), learning management systems (LMS), eLearning software offer numerous options. The effort “to develop the standards, tools, and learning content for the future learning environment” [15] is known as the Advanced Distributed Learning ADL Initiative. The ADL initiative that “has significant implications for the classroom structures, processes, and activities of K-16 education” [6, 96] helps “hold” human knowledge in instructional objects. These are specified by the SCORM (Sharable Content Object Reference Model), a set of technical standards for eLearning products. It provides the communication method and data models for allowing eLearning content and LMSs to work together. The main criteria set by this eLearning standard are accessibility to all learning systems; interoperability across all technology-based platforms, browsers and learning management systems; durability within evolving versions; reusability in the development of new materials. For the identification and location of instructional objects Content Object Repository, Discovery, Registration/Resolution Architecture (CODRDA) was created [op.cit, 98]. Both SCORM and CODRDA are built on existing standards and help distribute learning techniques. SCORM compliance is important for choosing any e-resource.

There are many options to choose from, with the best LMSs having excellent customer satisfaction ratings. “We’ve got free systems, paid systems, installed, cloud, blended classrooms, flipped classrooms, mobile, “BYOD,” social learning ... it’s enough to make your head spin.” [16]. And indeed, the list comprises about a hundred of products. In 2019 the best learning platforms were Moodle, Blackboard Learn and Sakai [1, 86-87] and in 2020 Moodle and Blackboard Learn rated as third and fourth accordingly, whilst Google classroom and Schoology Learning becoming first and second products with highest trScore (an algorithm that calculates a product’s scores based on a weighted average of reviews and ratings, rather than a simple average) [19]. The systems as educational infrastructure give learners a remote access to courses at their own time, place, and pace, offering tools for content creation and management and helping automate most aspects of the learning process [5, 1185]. They cover many facets of contemporary need base learning and offer diverse benefits (see table 1).

Name	Function	Content	Benefits
Learning Management System (LMS)	to streamline the learning process; to organize and manage educational materials online; to conduct online courses to focus on the learning process; to store and track individual/ aggregate progress.	access and a possibility to upload course material such as calendars, syllabi, assignments, and grades.	minimize the use of paper materials; supports remote learning.
ELearning content software	to provide the user with a large content library for self-guided learning or integration with an LMS platform.	access to a curated digital library that can include videos, ebooks, and online courses/lessons.	provides content-based learning.
Virtual Learning Environments (VLE)	a larger focus on the collaborative aspect of learning.	access to stronger discussion, forum, or student collaboration features.	strong virtual classroom aspects.

However, many teachers feel unprepared or uncomfortable when it comes to using LMS as an only option on a daily basis. Being able to do e-teaching means to be LMS literate, namely knowledgeable about the key concepts of on-line education: setting and meeting instructional objectives; providing information for administrative decisions; giving proper assessment and most important motivating students to learn.

Researchers of online learning efficiency claim that delivering instruction in online, blended, and face-to-face formats is nearly analogous in terms of academic progress and cognitive gains. However, the results in emotional and behavioral engagement considerably differ [4, 557]. Besides, the quality of interactions in e-learning environment was under the focus as well as and its link with academic performance in online courses [7, 280]. The results show that efficiency of online learning depends to a great extent on choosing the right online environment as the compensation of teacher's physical presence, face-to-face interaction, and tech support. Students' success should also be supported by effective instructional practices, the level of metacognition awareness, time management skills, self-directed learning and student engagement [13, 108]. The e-instructor should know how to create a welcoming learning atmosphere as well as boost student engagement, and thus promote students' motivation.

The key elements of student engagement are active learning, peer collaboration, and interaction reflected in such outcomes as critical thinking, problem solving, moral reasoning, inclination to inquire, and intercultural effectiveness [10, 307]. The close examination of student engagement showed a system of engagement styles rather than a contrast between online learners and face-to-face learners [3, 122; 8, 271]. E-learning and the classroom are different in many ways, however, some of the same principles apply to both learning environments, suggesting that it is "critical for online instructors and course designers to create a learning environment that is supportive and builds confidence", especially as seeking and obtaining help [20, 13]. Successful e-learning environments can be designed to elicit subjective experiences of presence through which e-learners "feel individually placed within a true, humanized, education environment", in which they feel that they are taking part "in a true teaching – learning process, interact with their lecturers and peer students [14, 1008]. Consequently, it would be incorrect to claim that student motivation depends on the learning format considering learning strategies, quality of interactions, and/or time spent preparing for class [11, 18]. The numerous researches suggested that online learning was associated with both beneficial outcomes and downsides. Positive features of eLearning compared to face-to-face instruction include accessibility, affordability, flexibility confirmed by many studies [9, 12]. E-learning is believed to be flexible as it gives time and place unlimited access to learning resources and academic information; available and info-friendly with the access to video content, forums, and grade reporting; less stressful for the learner chooses not only the time and location, but also the pace and volume of studying. The beneficial results are interwoven with a range of methodological problems, cheating and procrastination being the major ones. Among other challenges there should be mentioned an available access to modernized gadgets and devices on a regular basis; consideration of health issues connected with enlarged screen time and sedentary lifestyle; poor time management skills and lack of motivation (it is hardly possible to check whether your students are actually working).

The possible solutions to the problems could be of both pedagogical and psychological character. A learner with no zeal to learn can be stimulated by virtual rewards, tokens, or bonus grades. To improve time management students can be offered to learn the material in small portions following a schedule and meeting deadlines. Poor academic performance as a result of lack of interest can be helped by the revision of course format and content, a regular update of the materials, redesign and renovation of the materials in use on par with utilizing emerging technology trends – messaging apps, etc. Clear expectations and positive work environment are bound to work too.

As it can be obviously seen one-size-fits-all approach to classroom education has been replaced by an opportunity to create digital classroom space, which is a balanced combination of blended and flipped education (see table 2).

<b>Conventional classroom</b>	<b>Online learning</b>	<b>Digital classroom space</b>
textbooks	eTextbooks	textbooks/etextbooks
handouts	file sharing	file sharing
grading	rating	polling
blackboard/whiteboard	forums	whiteboarding capability
real teacher	-	Video / audio calling
recording	recording	recording option
peer learning	peer editing	screen share
real life discussion	text chat	text chat
-	document sharing	document sharing
timetable	-	scheduling
oral presentation	-	in-built slideshows
-	Internet-dependant	speed Internet-dependant
time limit	-	time (session) limit
controlled student engagement	uncontrolled student engagement	partially controlled student engagement
meant to be productive	can be monotonous	needs additional patience and motivation
immediate feedback	questionnaires	a system of individualized rewards

Well-known consumer products Apple's Facetime, WhatsApp Video, Zoom and Skype services have to compete with other video conferencing software, which were rated in 2020 as most usable: GoToMeeting, Google Meet,

Cisco Webex Meetings, Microsoft Teams, Google Hangouts Meet, TeamViewer, Uber Conference, Jabber, join.me, BlueJeans [17; 18].

Open space learning platforms filled with content-based materials give access to appropriate courseware. Combined with video conferencing products they provide the educator with powerful functionalities and allow to communicate “face-to-face” online, thus, enabling to monitor students’ performance. This technology seems to be setting a new standard for exposing learners to communicative interaction, motivation, and collaboration in the comfortable workplace. This has become especially important during the current pandemic or unexpected school closures. Video conferencing software allows teachers and students to work remotely and increase student engagement through screen and file sharing.

### 3. Conclusions

The advantages of eLearning are indisputable as they increase student engagement; provide blended learning environment for all kinds of learners (auditory, visual, hands-on); offer online communication with other students in a structured educational environment, like a forum; make it easier to differentiate instruction; save time with planning and grading; students work at their own pace and review work as needed. There are diverse definitions of what non-traditional technology-based education is, which totally leads to the conclusion that this educational approach is vital for meeting the demands of contemporary digitalized generation. Despite the pitfalls and potential issues mentioned in the article, eLearning enhanced by updated hardware and software can be literary effortlessly turned into a collaborative and successful experience.

The issues of student engagement, proper behavior and emotional stability along with the proper developed and designed courses should be addressed in accordance with worldwide standards and norms.

### References

- [1] Belous I. A., Chupalov A. Ya. Comparative analysis of modern distance learning systems. *Informatics and Informatization of Education. Vestnik of Moscow State Pedagogical University*. 2019. 85-95.
- [2] Clark R., Mayer R. E. *E-learning and the science of instruction: proven guidelines for consumers and designers of multimedia learning*. San Francisco, Calif. 2011.
- [3] Coates H. A model of online and general campus-based student engagement. *Assessment & Evaluation in Higher Education*, 2007, 32(2). 121–141.
- [4] Cosgrove S. B., Olitsky N. H. Knowledge retention, student learning, and blended course work: Evidence from principles of economics courses. *Southern Economic Journal*. 2015. 82(2). 556–579.
- [5] Ivanytska N., Chugu S., Gladio S. Cognitive and Pragmatic Features of Text Interpretation in the TWT Dimension. *Educational Researcher*. 2018, 9(2) December, 1183–1193.
- [6] Fletcher J. D., Tobias S., Wisner R. Learning Anytime, Anywhere: Advanced Distributed Learning and the Changing Face of Education. *Educational Researcher*. 2007. 36. 96-102.
- [7] Garratt-Reed D., Roberts L. D., Heritage, B. Grades, student satisfaction and retention in online and face-to-face introductory psychology units: A test of equivalency theory. *Frontiers in Psychology*, 2016.7. Article 673.
- [8] Jaggars S. S., Xu D. How do online course design features influence student performance? *Computers & Education*. 2016.95. 270–284.
- [9] Martin J. Developing course material for online adult instruction. *Merlot Journal of Online Learning*. 2009. 5(2). Retrieved from [http://jolt.merlot.org/vol5no2/martin\\_0609.htm](http://jolt.merlot.org/vol5no2/martin_0609.htm)
- [10] McCormick A. C., McClenney K. Will these trees ever bear fruit? A response to the special issue on student engagement. *The Review of Higher Education*. 2012.35(2). 307–333.
- [11] Pascarella E. T., Seifert T. A., Blaich C. How effective are the NSSE benchmarks in predicting important educational outcomes? *Change: The Magazine of Higher Learning*. 2010. 42(1). 16–22.
- [12] Picciano A., Seaman J. *K-12 online learning: A 2008 Follow up of the Survey of U.S. School District Administrators*. Needham, MA: The Sloan Consortium. 2009.
- [13] Robinson C. C., Hullinger H. New benchmarks in higher education: Student engagement in online learning. *Journal of Education for Business*. 2008. 84(2). 101–109.
- [14] Rodríguez-Ardura I., Meseguer-Artola A. Presence in Personalised Elearning—the impact of cognitive and emotional factors and the moderating role of Gender. *Behaviour and Information Technology*. 2016. 35(11): 1008–1018. Retrieved from <https://doi.org/10.1080/0144929X.2016.1212093>
- [15] URL: <https://adlnet.gov/>
- [16] URL: <https://blog.capterra.com/corporate-lms-vs-academic-lms-whats-the-difference/>
- [17] URL: <https://www.g2.com/categories/video-conferencing>
- [18] URL: <https://www.techradar.com/best/best-video-conferencing-software>
- [19] URL: <https://www.trustradius.com/static/about-trustradius-scoring#question1>
- [20] Yang Y., Taylor J., Cao L. The 3 × 2 Achievement Goal Model in Predicting Online Student Test Anxiety and Help-Seeking. *International Journal of E-learning and Distance Education*. 2016. 32(1). 1–15.

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**ОСНОВНІ НАПРЯМИ РОБОТИ АКАДЕМІЧНОГО  
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and his acquaintance with him for a wide circle of people.*



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