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## NON-ATTENDANCE FACTORS – CAN E-LEARNING BE CONSIDERED A DISINCENTIVE?

Abstract. E-learning has become a widely accepted phenomenon that offers plethora of advantages to pupils, students as well as teaching staff. It is successfully utilized in academia and professional environments both in pure and blended forms. A number of studies focus on successful implementations of virtual learning environments and courses as well as investigate the challenges that the teams responsible for carrying out such implementations may come across and handle. E-learning capabilities that have been delivered successfully might potentially have a negative effect on the overall teaching process. It is students' non-attendance in classroom-based activities that is one of the possible issues related to the wide application of e-learning. Within this contribution, authors discuss the issue of non-attendance and support it with preliminary results of a survey carried out within higher education entities. Non-attendance factors that were identified during workshops are subsequently verified in the course of a questionnaire survey. The survey involved 91 students with extensive e-learning experience, recruited from three separate educational entities, two of which represented private sector, and one - public sector. The forms were distributed and the responses were collected electronically via Google Forms service. The contribution sheds some light on the mechanics behind students' non-attendance and its root causes - which include, but are not limited to, other commitments, absentia driven by the intensity of the teaching process as well as logistical and financial challenges. The results of the study prove that e-learning - owing to its confirmed viability as an alternative to the real-life educational activities - has an attendance-threatening potential. It primarily affects theoretical knowledge transfer in this respect, yet it tends to remain neutral regarding the attendance in strictly practiceoriented components of technical courses.

**Keywords:** E-learning; students' non-attendance; universal design for learning; learning difficulties; virtual learning environment.

## **1. INTRODUCTION**

E-learning is considered an established teaching method. Numerous studies investigate the scale of positive impact of e-learning on the performance of various target groups. For instance, Demian & Morrice investigate the impact of Virtual Learning Environments (VLEs) on academic performance based upon a survey involving a total of 157 participants [1]. They conclude that the effect varies from negligible to moderate and that a wider range of resources for the VLE could enhance its potential and aid students in achieving intended learning outcomes better. Beevers & John lay out the lessons learned from deploying SCHOLAR – a wide-scale e-learning program for more than 400 secondary schools and colleges across Scotland in subjects ranging from science and mathematics to business and languages [2]. The SCHOLAR program is considered to be cost-effective online and interactive. Stal & Paliwoda-Pękosz further enhance e-learning added value by developing a framework that enables soft skills acquisition by ICT professionals, as those skills tend to gain in value on labor markets against formal education [3]. Davies & Graff shed some doubt on the widely reported beneficial effects of online participation and interaction [4]. Their research shows that such participated more frequently not being significantly awarded higher grades. However, students who failed in one or more modules did interact online less frequently than students who achieved passing grades. Šprajc et al. acknowledge the potential of digital sources to change students' educational habits', which manifests as the progressive growth of e-tools for learning, e-classrooms and other benefits that faculties may offer students as the form of information and communication technologies through which they can enrich competencies and knowledge [5].

On the other hand, the authors' experience suggests that e-learning capabilities might also have a negative effect that goes beyond typical e-learning implementation barriers, 68 of which were identified and thematically grouped by Ali, Uppal & Gulliver [6]. Availability of e-learning content, for instance, is surmised to be among the factors for non-attendance. Causal factors for non-attendance were investigated by numerous scholars around the world. Bukoye & Shegunshi make a step towards understanding the reasons for students' non-attendance and the impact of an engaging teaching model in improving student attendance [7]. They do not however consider elearning as one of the possible factors for non-attendance. Harper & Quaye widely address students' engagement, again, not addressing the impact of e-learning [8].

**The goal of this paper** is to explore the main factors identified in the international environment as obstacles to participating in physical activities in terms of e-learning as a disincentive. The authors address the goal by conducting mixed methods research. After the Introduction, research background is provided in section 2 and research methods are discussed in section 3. Then, results of the study are introduced and discussed. Subsequently, limitations of the study are outlined along with prospects for future research, and conclusions drawn.

## 2. THE THEORETICAL BACKGROUNDS

E-learning has no single inclusive definition [9]. Ellis, Ginns, & Piggott define elearning as information and communication technologies used to support students to improve their learning [10]. On the other hand, Jereb & Šmitek put more focus on the overall process, considering e-learning in terms of educational processes that utilize information and communications technology to mediate synchronous as well as asynchronous learning and teaching activities [11]. In practice, e-learning is often utilized as a content that is alternative/supplementary to traditional (classroom-based) lectures and laboratory/seminars materials. Yurzhenko's research leads to a conclusion that the combination of a real educational environment with a virtual educational space based on electronic educational courses helps not only to revive the ,,dry" presentation of the material during college practice, but also to be productive and effective [12].

In the UK, the use and value of appropriate learning technologies [13] constitutes a condition for those who want their practice to be recognized as well-aligned with the UK Professional Standards Framework (UKPSF) by the Advance Higher Education (Advance HE; previously known as the Higher Education Academy, HEA). Many universities nowadays require their staff to be graded at least Associate Fellow (has some of the competencies – engages with some of the "dimensions of practice" defined by UKPSF) but it is strongly expected to get to Fellow (committee to all of the dimensions) within first years

into HE [14], [15]. The grades are awarded based on the portfolio (evidence) or completion of an accredited course that aligned with UKPSF [16], [17]. There is no similar expectation from the university teachers in Poland although some institutions run their internal courses for doctoral students and young academics (REF).

The Advance HE does not specify that by the technology they mean solutions as refined as Virtual Learning Environments (VLEs, or web-based learning platforms). The concept of technology-enhanced learning is established: (1) to provide students with the opportunity to revisit a given session and/or content presented in their own time; (2) to fulfill the requirement of making learning flexible; and (3) to engage the audience inside/outside of the classroom. Not all of these objectives need to be met. Introducing various technologies (e.g. feedback, discussion boards or voting systems like Menti, Answer Garden or Padlet) [18] makes it possible to turn a rather passive teacher-led session into a more active or even student-led one. To maximize the utilization of the available time, some tasks may be required to be completed online prior to face-to-face meetings. The academic community opens to such approaches as flipped classrooms (where the content acquainted before a session is thoroughly explored in the classroom) and blended learning (where contact time is used somehow alongside online activities) [19]. The latter was implemented e.g. by the University of Northampton.

It should be emphasized that the intensity of e-learning content offering in each of the educational entities within the study is similar and, to a large extent, its application might be scaled up or down by individual lecturers given modest instructional constraints are satisfied. Such flexibility should not be taken for granted in case of British educational entities, where the content needs to fulfil certain requirements in order to satisfy e.g. UDL (Universal Design for Learning) framework [20] or other guidelines that support inclusive education [19]. Inclusive education is based on the principle that schools should provide for all children regardless of any perceived difference, disability or other social, cultural and linguistic difference [21]. Bassford & Snape state that whatever is good for students with a diversity of learning needs is good for all [22].

UDL introduces three major principles [23]:

- a) Flexible study resources:
  - using modifiable handouts so that students can edit the font or background to their own preference;
  - recording lectures in audio format for students to access before (or after) their lecture and to support them with any demanded revision opportunities and/or assessments.
- b) Flexible ways to learn:
  - taught sessions that get students participating in inventive and innovative ways;
  - using imaginative teaching aids.
- c) Flexible ways to show learning:
  - providing students with different methods of assessment to challenge them in different ways;
  - offering a wide range of ways for participants to demonstrate their learning and understanding of the subject, for example through presentations or video content.

Lecturers are encouraged to submit their materials 48h in advance, use a variety of resources including YouTube, TED, BoB or any other content being relevant to the subject area, and record their sessions so students can revise the content whenever they like.

Online content – which allows students to revisit their material and complete their activities in their own time, pace and as many times as they need – can be helpful for all students. Randell argues that it can particularly assist the students with special educational needs, since (1) it gives a more relaxed atmosphere for them to complete their work; (2) in a traditional classroom, a teacher will usually give a demonstration or explanation to the group only once and then let them go

ahead with the task; (3) aforementioned sites do not come with such a restriction and enable the users to watch the demonstration multiple times until they are ready to accomplish the task; (4) such approach is important for overcoming learning difficulties, as numerous students struggle to pay attention and take in all the information on the first attempt; (5) ultimately, audience can fully understand the task before undergoing it [24]. These conclusions are drawn based on the results from Randell's research on the ICT opportunities for a disability, and feature such online content as MyMaths and Match Watch. Also, university students find this form very helpful – as evidenced by an excerpt from the module level feedback:

- The videos were very informative and helped a lot... It is the best way to learn the software by watching videos from the lecturer.
- The teacher does his best to support the students by posting screencast which have been very useful, as it allowed me to go back and view previous videos.

At the university like DMU where (1) there are 2700 international students from 130 countries; (2) the UCAS (The Universities and Colleges Admissions Service in the UK) entry level is one of the lowest in the East Midland region; (3) 54% of students are from BAME (Black, Asian and minority ethnic) background compared to 21% throughout the sector; (4) 31% (21% in the sector) of students are 21 years old and above; (5) 20% of students (12% in the sector) declared disabilities, the required minimum is to be compliant with UDL. Unfortunately, similar statistic data is not normally collected in Poland. Yet, it is worth mentioning that Poland since World War II has been a monoethnic and monocultural country. The average age at full-time study is typically lower than among students who have a regular job Mon-Fri and study Sat-Sun (part-time).

## **3. RESEARCH METHODS**

Mixed methods approach was used to fuel the study. First, we held workshops that helped us identify the most important factors regarding non-attendance in the United Kingdom and Poland. We critically analyzed the outcomes and cross-checked them with the feedback provided by a questionnaire-based survey conducted at private and public universities and academies.

E-learning solutions with varying degrees of universality and clarity are examined, including: (1) a commercial networking-oriented e-learning platform, featuring media-rich e-learning content, practical labs as well as diverse assessments (www.netacad.com); (2) the Blackboard virtual learning environment and course management system (https://vle.dmu.ac.uk); (3) an academy-specific blended-learning solution, including – but not limited to – e-learning content comprising mainly presentations and exemplification of uploaded images and project repository (https://edux.pjwstk.edu.pl).

The following science propositions were put forward regarding the overall research process:

- P1: Teaching content in e-learning form currently widely used at universities is not researched in terms of its adequacy as a substitute for traditional activities and thus is not assessed as a factor discouraging participation in traditional classes.
- P2: At engineering faculties, the negative impact of e-learning on the didactic process is smaller compared to the social and economic sciences.
- P3: Factor trends are convergent across countries.

The content of the current manuscript focuses on the partial feedback regarding nonattendance gathered in the Pomeranian region, Poland. Students of three separate educational entities took part in the survey – two of the entities represented private sector, while the third one represented public sector. About 2/3 of the results came from part-time studies, and 1/3 from fulltime studies. Only students with extensive experience in e-learning were approached to express their opinions. For this reason, neither first-year students nor those who did not have a chance to work with at least two e-learning solutions took part in the survey. Each time, a complete group of students was asked for feedback, yet participation in the survey was not obligatory. The responses were collected electronically using Google Forms. Ultimately, 92 Polish students were recruited to express their feedback, and 91 datasets were found valid upon verification process.

# 4. THE RESULTS AND DISCUSSION

Sample structure in terms of the educational entity and gender is provided in Table 1. As the preliminary results address the feedback of the students representing technical specializations, the tendency for the men to be over-represented in such cases is definitely confirmed by the research. In fact, as many as 81.6% of the overall participants of the study who did not choose an option to skip the option for providing their gender turned out to be men. No significant differences between the educational entities were revealed. As far as attendance statistics are concerned, the percentage of people attending lectures in a highly regular manner proved to be the smallest in case of the Polish-Japanese Academy of IT. 23 of the people representing this institution made such a declaration, which constitutes 56.1% of all the respondents originating from this entity. A relatively low ratio is particularly surprising in this particular case, since Polish-Japanese Academy of IT is the only one among educational entities surveyed that specifically includes the lectures in the obligatory activities list within its internal regulations: participation in theoretical and practical activities organized by the academy, in accordance with the current study plan and curriculum, in particular: lectures, exercises, laboratory classes, seminars, project classes, is compulsory. It should be noted though that the University of Gdansk was also considering introducing such a policy when performing this study.

Table 1

Educational entity	Gender			Regular attendance			
				Lectures		Labs/ tutorials	
	Male	Female	Prefer not to say	Yes	No	Yes	No
Polish-Japanese Academy of IT	31	7	3	23	18	39	2
University of Gdansk	16	4	1	15	6	15	6
WSB University in Gdansk	24	5	0	20	9	26	3
Total	71	16	4	58	33	80	11

Sample structure

The value of e-learning as a complementary source of knowledge was also raised by the stakeholders themselves in the form of the results of usability evaluation (see Figure 1). Given that the possible ranks were in the 1-5 range (with 1 accompanying the total lack of utility, and 5 – very high utility), a total of 74 people – i.e. 81.3% of the sample– rated the value of this tool as above average. Regardless of the educational entity, the dominant evaluation translated to the high utility. The most skeptical students (albeit still showing a positive attitude) turned out to be representing the University of Gdansk. Although in their case the share of top evaluations was slightly higher than in the case of Polish-Japanese Academy of IT, the percentage of "high utility" grades was the lowest among the three educational entities. In addition, the percentage of average ratings was similar to that recorded within WSB University in Gdansk (14.3% vs. 17.2%), and the percentage of "questionable utility" responses grades turned out to be undeniably higher than in the other entities. Having said that, there were no cases of e-learning content evaluated as having no utility at all recorded within the study.



Figure 1. Assessment of e-learning content usefulness by students taking part in the survey

The respondents that were given a chance to express their opinions regarding the utility of e-learning and its possible role as a non-attendance factor did not raise alternative access in the form of e-learning as a key phenomenon that contributed to non-attendance (see Figure 2). This phenomenon was ranked by Polish students only in the fifth place, at a very similar level to random factors, e.g. illnesses. However, over 1/5 of students used e-learning as a direct alternative to the real-life educational activities and admitted explicitly that the availability of such content reduces their motivation to participate in classes. Interestingly, this sub-group coincided to a very small extent with the collective of people declaring travel difficulties as a non-attendance factor, which would indicate that e-learning does not constitute a second choice for highly-constrained students; the urge to make it a primary educational source seems universal in nature. The prevailing cause of non-attendance turned out to be fatigue, which might be justified to some extent, as most of the surveys were collected during parttime studies, participants of which usually reconcile learning with regular work. In turn, Polish students did not prioritize financial hindrances as a non-attendance factor, due to the fact that a complete set of courses were covered by the tuition and no additional fees were introduced, with tuition levels being modest compared to the UK and travel costs kept moderate. In particular, classes for full-time public institutions are free of charge, which is reflected in the results obtained at the state University of Gdansk.



Figure 2. Identified factors of non-attendance

## **5. LIMITATIONS OF THE STUDY**

As far as limitations of the study and prospects for future research are concerned, the study was carried out in two European countries, the United Kingdom and Poland – and the current manuscript covered partial results only. In order to shed the light on the unique determinants of the non-participation in classes considering the intensive use of e-learning in other countries, the research should be expanded. On top of that, Poland – despite its membership in the European Union – may still be considered a transition economy [25]. Therefore, some considerations related to such a research setting [26] ought to be taken into account when replicating the study in highly developed economies. Finally, the contents of this contribution exclusively cover the first stage of the on-going research, i.e. exploration of the main factors identified in the international environment as obstacles to participating in physical activities in terms of e-learning as a disincentive. Completing the second stage of the research process, i.e. verifying and complementing the success factors of an e-learning product, requires further research activities.

## 6. CONCLUSIONS

The paper sheds some light on the mechanics behind students' non-attendance based on a survey launched in Poland and UK. Preliminary results involving three non-related entities engaged in higher education are discussed. 91 complete datasets were gathered from people experienced in e-learning from a customer perspective. Research completed to-date provided some data to back up the P1 science proposition, stating that the teaching content in e-learning form currently widely used at universities is not researched in terms of its adequacy as a substitute for traditional activities and thus is not assessed as a factor discouraging participation in traditional classes. In fact, students taking part in the survey confirmed that e-learning is generally accepted as a helpful feature that, at the same time, constitutes a phenomenon contributing to non-attendance – but of secondary importance. While e-learning, particularly applied to theoretical knowledge transfer, is found to be a viable (and attendance-threatening) alternative to the real-life

educational activities by a significant share of respondents, it virtually does not affect the attendance in strictly practice-oriented components of technical courses.

## **REFERENCES (TRANSLATED AND TRANSLITERATED)**

- [1] P. Demian, J. Morrice, 'The Use of Virtual Learning Environments and Their Impact on Academic Performance', *Engineering Education*, vil. 7, no. 1, pp. 11-19, 2012. doi:10.11120/ened.2012.07010011
- [2] C. E. Beevers, P. John, 'A Case Study: How Scotland Has Leveraged e-Learning to Improve Student Outcomes', 2011. [Online]. Available: http://scholar.hw.ac.uk/export/sites/scholar/Information\_About/Publication\_Documents/SCHOLAR\_A\_C ase\_Study\_for\_Gates\_Foundation.pdf. Accessed on: Sep. 20, 2019.
- [3] J. Stal, G. Paliwoda-Pękosz, 'Fostering Development of Soft Skills in ICT Curricula: A Case of a Transition Economy', *Information Technology for Development*, vol. 25, no. 2, pp. 250-274, 2019. doi:10.1080/02681102.2018.1454879
- [4] J. Davies, M. Graff, 'Performance in e-Learning: Online Participation and Student Grades', *British Journal of Educational Technology*, vol. 36, no. 4, pp. 657-663, 2005. doi:10.1111/j.1467-8535.2005.00542.x
- [5] P. Šprajc, M. Urh, K. Jerebic, D. Trivan, 'Reasons for Plagiarism in Higher Education', *Organizacija*, vol. 50, no. 1, pp. 33-46, 2017. doi:10.1515/orga-2017-0002
- [6] S. Ali, M. A. Uppal, S. R. Gulliver, 'A Conceptual Framework Highlighting e-Learning Implementation Barriers', *Information Technology & People*, vol. 31, no. 1, pp. 156-180, 2018. doi:10.1108/itp-10-2016-0246
- [7] O. T. Bukoye, A. Shegunshi, 'Impact of Engaging Teaching Model (ETM) on Students' Attendance', *Cogent Education*, vol. 3, no. 1, p. 1221191, 2016. doi:10.1080/2331186X.2016.1221191
- [8] S. R. Harper, S. J. Quaye, 'Making Engagement Equitable for Students in US Higher Education', in Student Engagement in Higher Education: Theoretical Perspectives and Practical Approaches for Diverse Populations, 2nd ed., Abingdon: Routledge, 2015.
- [9] A. Sangrà, D. Vlachopoulos, N. Cabrera, 'Building an Inclusive Definition of E-learning: An Approach to the Conceptual Framework', *The International Review of Research in Open and Distributed Learning*, vol. 13, no. 2, pp. 145-159, 2012.
- [10] R. A. Ellis, P. Ginns, L. Piggott, 'E-learning in Higher Education: Some Key Aspects and their Relationship to Approaches to Study', *Higher Education Research & Development*, vol. 28, no. 3, pp. 303-318, 2009. doi:10.1080/07294360902839909
- [11] E. Jereb, B. Šmitek, 'Applying Multimedia Instruction in E-learning', *Innovations in Education & Teaching International*, vol. 43, no. 1, pp. 15-27, 2006. doi:10.1080/14703290500467335
- [12] A. Yu. Yurzhenko, 'An E-Course Based on the LMS Moodle to Teach "Maritime English for Professional Purpose", *Information Technologies and Learning Tools*, vol. 71, no. 3, pp. 92-101, 2019. doi:10.33407/itlt.v71i3.2512
- [13] The Higher Education Academy, 'UKPSF Dimensions of the Framework', 2015. [Online]. Available: https://www.heacademy.ac.uk/system/files/downloads/ukpsf\_dimensions\_of\_the\_framework.pdf. Accessed on: Sep. 20, 2019.
- [14] R. Shaw, 'Professionalising Teaching in HE: The Impact of an Institutional Fellowship Scheme in the UK', *Higher Education Research & Development*, vol. 37, no. 1, pp. 145-157, 2018. doi:10.1080/07294360.2017.1336750
- [15] H. Smith, F. Deepwell, L. Shrives, 'Measuring the Impact of the UK Professional Standards Framework for Teaching and Supporting Learning', 2013. [Online]. Available: https://www.heacademy.ac.uk/system/files/resources/ukpsf\_impact\_study\_report.pdf. Accessed on: Sep. 20, 2019.
- [16] J. Ransome, P. M. Newton, 'Are We Educating Educators About Academic Integrity? A Study of UK Higher Education Textbooks', Assessment & Evaluation in Higher Education, vol. 43, no. 1, pp. 126-137, 2018. doi:10.1080/02602938.2017.1300636
- [17] K. Sambell, S. Brown, L. Graham, 'Engaging Staff in Their Own Professional Development', in *Professionalism in Practice*, Basingstoke: Palgrave Macmillan, 2017. doi:10.1007/978-3-319-54552-3\_8
- [18] A. Harrington, A. G. Libby, 'Chasing the White "WHALE": A Case Study in Using iPads to Promote Active Learning', *Internet Reference Services Quarterly*, vol. 21, no. 3-4, pp. 53-61, 2016. doi:10.1080/10875301.2016.1252454
- [19] UK Universities, 'Flexible Learning: The Current State of Play in UK Higher Education', 2018. [Online]. Available: https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2018/flexiblelearning-the-current-state-of-play-in-higher-education.pdf. Accessed on: Sep. 20, 2019.

- [20] CAST, 'Universal Design for Learning Guidelines Version 2.2', 2018. [Online]. Available: http://udlguidelines.cast.org. Accessed on: Sep. 20, 2019.
- [21] Z. M. Jelas, 'Learner Diversity and Inclusive Education: A New Paradigm for Teacher Education in Malaysia', *Procedia – Social and Behavioral Sciences*, vol. 7, pp. 201-204, 2010. doi:10.1016/j.sbspro.2010.10.028
- [22] M. L. Bassford, J. Snape, 'Evaluating the Performance of Physics Students on the Autistic Spectrum within HE', in *National Association of Disability Practitioners Annual Conference 2017*, Kingswood: National Association of Disability Practitioners, 2017.
- [23] De Montfort University, 'Universal Design for Learning', 2016. [Online]. Available:
- http://www.dmu.ac.uk/dmu-students/udl/universal-design-for-learning.aspx. Accessed on: Sep. 20, 2019. [24] P. Randell, 'The ICT Opportunities for a Disability', De Montfort University, 2018.
- [25] P. T. da Cunha, P. Soja, M. Themistocleous, M. M. da Silva, 'Enterprise System Lifecycles in Transition and Less Developed Economies within the European Union', *Information Technology for Development*, vol. 23, no. 2, pp. 336-366, 2017. doi:10.1080/02681102.2016.1233857
- [26] B. Marcinkowski, B. Gawin, 'A Study on the Adaptive Approach to Technology-Driven Enhancement of Multi-Scenario Business Processes', *Information Technology & People*, vol. 32, no. 1, pp. 118-146, 2019. doi:10.1108/ITP-03-2018-0142.

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# ВІДСУТНІСТЬ НА ЗАНЯТТЯХ – ЧИ МОЖЕ ЕЛЕКТРОННЕ НАВЧАННЯ БУТИ СТРИМУЮЧИМ ФАКТОРОМ?

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Анотація. Електронне навчання стало загальновизнаним явищем, яке надає безліч переваг учням, студентам, а також викладачам. Воно успішно використовується в академічних та професійних середовищах як саме по собі, так і в змішаних формах навчання. Ряд досліджень фокусується на успішному впровадженні віртуальних навчальних середовищ і курсів, а також досліджує проблеми, з якими стикаються і вирішують команди, відповідальні за їх реалізацію. Можливості електронного навчання, які успішно використовуються, теоретично можуть негативно впливати на загальний навчальний процес. Відсутність студентів на заняттях, які засновані на навчальній діяльності в аудиторії, є однією з можливих проблем, пов'язаної з широким застосуванням електронного навчання. У межах цього дослідження автори обговорюють питання відсутності студентів і підтверджують його висновки попередніми результатами опитування, проведеного в закладах вищої освіти. Фактори відсутності студентів під час проведення семінарів згодом перевірялись у ході анкетування. В опитуванні взяв участь 91 студент з трьох різних навчальних закладів (два - приватних і один - державний) з великим досвідом електронного навчання. Відповіді на поширені форми опитувальників були зібрані в електронному вигляді через сервіс Google Forms. Це дослідження дещо прояснює механізм відсутності студентів і його першопричини, до яких належать інтенсивність навчального процесу, матеріально-технічні та фінансові проблеми тощо. Результати дослідження показують, що

електронне навчання – завдяки своїй підтвердженій життєздатності як альтернативі навчальної діяльності в реальному житті – несе загрозу для відвідуваності. Першочергово це впливає на засвоєння теоретичних знань, проте в той же час воно залишається нейтральним щодо строгості відвідування практико-орієнтованих технічних курсів.

Ключові слова: електронне навчання; відсутність студентів; універсальний дизайн для навчання; труднощі з навчанням; віртуальне навчальне середовище.

# ОТСУТСТВИЕ НА ЗАНЯТИЯХ – МОЖЕТ ЛИ ЭЛЕКТРОННОЕ ОБУЧЕНИЕ БЫТЬ СДЕРЖИВАЮЩИМ ФАКТОРОМ?

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Аннотация. Электронное обучение стало общепризнанным явлением, которое предоставляет множество преимуществ ученикам, студентам, а также преподавателям. Оно успешно используется в академических и профессиональных средах как само по себе, так и в смешанных формах обучения. Ряд исследований фокусируется на успешном внедрении виртуальных учебных сред и курсов, а также исследует проблемы, с которыми сталкиваются и решают команды, ответственные за их реализацию. Успешно используемые возможности электронного обучения могут, теоретически, негативно влиять на общий учебный процесс. Отсутствие студентов на занятиях, которые основаны на учебной деятельности в аудитории, является одной из возможных проблем, связанной с широким применением электронного обучения. В рамках этого исследования авторы обсуждают вопрос отсутствия студентов и подтверждают его выводы предварительными результатами опроса, проведенного в высших учебных заведениях. Факторы отсутствия во время проведения семинаров впоследствии проверялись в ходе анкетирования. В опросе принял участие 91 студент из трех разных учебных заведений (два – частных и одно – государственное) с большим опытом прохождения электронного обучения. Ответы на распространенные формы опросников были собраны в электронном виде через сервис Google Forms. Это исследование несколько проясняет механизм отсутствия студентов и его первопричины, которые включают, но не ограничиваются условиями, обусловленными интенсивностью учебного процесса, а также материально-техническими и финансовыми проблемами. Результаты исследования показывают, что электронное обучение – благодаря своей подтвержденной жизнеспособности как альтернативе учебной деятельности в реальной жизни – несет угрозу для посещаемости. В первую очередь это влияет на передачу теоретических знаний, однако в то же время оно остается нейтральным относительно строгости посещения практико-ориентированных технических курсов.

Ключевые слова: электронное обучение; отсутствие студентов; универсальный дизайн для обучения; трудности с обучением; виртуальная обучающая среда.

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