

THE SIGNIFICANCE OF DIGITAL PLATFORMS IN AUTONOMOUS LEARNING

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Nigmatova Iroda

UzSWLU, 2nd year student

Scientific advisor: Anarbayev Orzubek

UzSWLU, senior-teacher

Annotation: *In this age of technology, autonomous learning has, no doubt, become a core aspect of education, fostering student independence on gaining knowledge with the usage of web-based resources. Precisely, internet-based learning tools- educational videos distance learning platforms, virtual classes and others- enable individuals to learn shouldering self-responsibility during the courses. The following article sheds light on the usage of the internet and its importance as well as both benefits and challenges of self-directed learning. There is highlighted some recommendations for thorough acquisition of knowledge and boosting digital learning methodologies.*

Key words: *Internet, virtual learning environments, self-regulated learning (SRL), web-based resources.*

INTRODUCTION

In the internet era, outdated way of acquiring knowledge has shifted significantly creating a diverse range of opportunities for individuals to update their qualifications, to gain new knowledge and broaden their horizons, meaning that the traditional classes are no longer perceived as the only way of acquisition of the knowledge. With the innovative dimensions of learning, students are allowed to explore complex concepts and gain theoretical knowledge both collaboratively and efficiently, making education more interactive. Because technology enables students to concentrate freely and collaboratively (Warni, Aziz, and Febriawan, 2018). Furthermore, distant education portals, webinars or MOOCs (Massive Open Online Courses) and gamification facilitated the way people acquire know-how, which are becoming an indispensable part of lives of the students, lifelong learners and even professionals.

Now, let's first delve into the idea of self-education. Having enough information about self-study, such as historical background and importance of it, is vital for us to know actually what self-education is and how to come at it. Self-study is a learning process where individuals take the responsibility to learn new things without depending on their teachers. Aforementioned method allows students their subjects on their own using some important resources, especially web-based ones. It is noteworthy to recognize that in the past, most people resort to self-guided learning owing to the lack of professional and qualified teachers, which means personal exploration or apprenticeships were widespread

before building new schools for beginners. Moreover, self-efficacy can contribute to some essential and beneficial core elements that people should take into consideration. For example, the first one is FLEXIBILITY. If people start to have self-education, then they presumably become more flexible to choose when, where and how to study. With this flexibility, learning will be more convenient which helps improve time management skill. The second advantage is the development of critical thinking. In other words, self-efficacy encourages learners to be independent and to solve and overcome their troubles on their own without asking some help from their tutors, coupled with this they learn how to search necessary information or some websites, which also makes individuals more autonomous.

The main objective of this article is to explore the importance of digital platforms in facilitating autonomous learning.

Benefits of the Internet in self-study. It is clear that the internet affected profoundly the condition of studying independently by providing learners with a diverse range of important resources, opportunities or some tools. Aitokhuehi et al (2014) also discovered that internet savvy students perform better and achieve their triumphs faster than those who are not. Following examples are key advantages of using web-based resources and the internet:

1. Boundless knowledge availability:

With the internet, not only students, but also all learners have a great access to different resources, such as articles, surveys, literary materials or some online webinars and courses which are taken by qualified teachers. Additionally, there are plenty of platforms or websites – Google Scholar, Open Access journals- that provide individuals with scientific or knowledge-based materials.

2. Convenience:

Obviously, many people have internet access on their mobile phones or their laptops and computers, according to Ellore et al (2014). It means that they can engage with educational contents anywhere and anytime they want. Nowadays, the majority of the learners prioritize online courses rather than traditional classes considering some beneficial sides remote educational classes bring. While studying in an online courses or tutorials, they can accommodate their schedules for the time that they are free. Thurmond et al.'s (2002) study of evaluating 120 students' satisfaction in a web-based learning environment also asserted that chatbots, online educational courses or conferences make a great contribution to student satisfaction than does students' characteristics.

3. Budget-friendly learning:

Clearly, online courses are more affordable when compared to traditional classes, which create a great opportunity for all people to participate to them. For instance, Open Educational Resources (OER) or some platforms are also becoming wallet-friendly. According to Akande & Bamise (2017), online resource accessibility is crucial for learners.

4. Learning styles:

Students will expand their intellectual horizons (Akin-Adaramola, 2014; Yebowaah, 2018). Because students can learn with diverse learning methods. To be more precise, today, plenty of educational videos or podcasts are being taken and learners have a free access to them with just turning on the internet. In addition to this, TED Talks, BBC podcasts and even You Tube platforms are catching up in a great popularity and helping people not only learn a language, but also provide them with up-to-date news and vital information.

5. Self-assessment:

Clearly, evaluating the progress is one of the challenges that self-directed learners face during the process. Therefore, nowadays, there are created some platforms or websites which are specialized in testing the learners` understanding and giving them real-time feedback. For example, Duolingo, which is a language-learning platform that is one of the most popular ones, at present, offers free courses in diverse languages, such as Spanish, French, English and others. In this platform, there are a diverse range of interactive exercises that help master or improve aspects of the language – pronunciation, grammar, vocabulary, listening, reading, writing and speaking. Even there is also AI-powered chatbots for improving speaking and pronunciation skills by having conversations. Moreover, a lot of online courses provide students with mock tests or certification tests to prepare for real exams. This is one of the greatest opportunities for those who want to assess their performance.

Challenges of the internet in self-study. The internet has now become a familiar object in most people`s lives. Because, in the era of technology, it is challenging for students to perform their academic duties without using the internet (Ameyaw & Asante, 2016; Shitta, 2002). However, serious addiction leads to negative consequences. According to Singh et al. (2013), the primary danger of using the internet for social networking and emailing is the potential for psychological issues.

1. Distraction:

Social media notifications or unrelated conversations can divert focus from studying. Every new message or comment can break concentration and make it difficult to stay focused. They can result in task-switching or procrastination, increasing the time, which is given to complete the assignments. Therefore, students may have distractions and low quality academic performance. In addition, Singh et al. (2013) noted that some of the learners oftentimes use the internet for gaming or scrolling down videos on social media websites that contribute to a lack of study routines. Many learners oftentimes use Instagram, You Tube platforms to watch only up-to-date news or academic ones but after some minutes, they just get sidetracked by other contents – posts, advertisements, videos- due to endless scrolling. Therefore, it is preferable to minimize abovementioned distractions by turning off notifications, using timers to limit access to sites or allocating breaks for social networking.

2. Reduced face-to-face interaction:

One major demerit of using the internet is limited social interaction, which negatively impacts on personal and academic development. It is obvious that in traditional classes, students interact with their peers, ask questions from one another, exchanging their ideas and opinions that can be helpful for them broaden their horizon. However, in online learning, there is a high possibility for learners to miss these opportunities, which are perceived as crucial in real-world interactions. Furthermore, leadership and teamwork skills are also significant which should be developed in order to have high quality performance and achieve their triumphs. Offline learning environments encourage group discussions and to improve problem-solving skills, whilst in online ones, students will presumably become isolated, making it difficult to develop aforementioned skills. Nevertheless, there are some effective strategies to maintain social interaction, such as participating in virtual discussions, joining study groups or having video meetings to discuss projects and others.

3. Reliance on Technology:

Another major downside of using the internet for self-directed learning is being dependent on cutting-edge technology. AI-powered study aids are useful and beneficial for learners while studying, but when technology is unavailable, they may feel stressed and lost. For example, they may not solve mathematical problems without a calculator or an application, which is designed for solving complex mathematical issues. Additionally, during the examinations or while travelling, they may feel quite stressed owing to unavailable internet access. Therefore, it is important to minimize reliance on digital tools, instead of technology, students ought to read some literary materials/books and do everything practically & on their own. However, that problem also leads to one serious following issue, health issue.

4. Health issue:

First of all, extended screen use can contribute to vision problems, such as eyestrain, headaches, dry eyes, neck and shoulder pain or even shortsightedness. Secondly, exposure to blue light from screens before bedtime can suppress melatonin production, which leads to shorter sleep duration or even insomnia. Thirdly, digital dependency correlates with limited physical activity; contributing to sedentary lifestyle, back pain and poor posture. Certainly, taking breaks in every 20 minutes, encouraging physical activities and limiting screen time can be considered as mitigation strategies.

5. Difficulty in self-discipline:

Self-discipline is crucial in self-efficacy, as students must manage their own time, set SMART goals and keep staying motivated without teacher supervision. However, some problems like procrastination, poor time management can be challenges in this area. From this perspective, most learners get sidetracked by the social media websites or just watching television, which result in delayed study sessions. Besides, struggling to allocate time appropriately for studying can also be one of the great problems students face. Therefore, in this area, Pomodoro technique is one of the helpful methods to improve

poor time management. It involves studying for 25-minute intervals followed by short breaks.

METHODOLOGY

Research design. This study employed a correlational research design to investigate the relationship between studying in an online course and self-directed learning. This approach is appropriate for examining how differences in students' self-regulated learning strategies related to their academic performance due to remote educational course. The study observes naturally occurring behaviors without manipulating variables, which means the findings are highly likely to generalize to real-world settings.

Participants. The study involved 200 undergraduate students who are enrolled in an online psychology course at a public university. 60% of the participants were females and 40% of them were males, also, they were ranged in age from 18 to 45.

Procedure. At the beginning of the semester, participants evaluated their use of self-regulated (SRL) learning strategies by completing a baseline survey. It was conducted by using special questionnaire called Motivated Strategies for Learning Questionnaire (MSLQ). Throughout the 16-week course, students had access to online courses that covered key psychological concepts.

Instruments. As it is mentioned above, there was conducted Motivated Strategies for Learning Questionnaire (MSLQ). This self-report instrument evaluates students' goal orientations, task value, self-directed learning skill, their learning beliefs and anxiety & stress during the exams. Secondly, there were carried out some practice quizzes in order to gauge student engagement. Thirdly, Students maintained weekly journals documenting their goals, strategies, troubles and their success. These descriptions provided qualitative data on the application of self-directed learning strategies.

Data Analysis Procedure. Descriptive statistics were computed for all variables. The relationships between self-regulated learning strategies, engagement metrics and academic achievement are examined during the study. Many regression analyses assessed the predictive power of SRL strategies and engagement on final course grades, controlling for demographic variables.

RESULTS

The study investigated the relationship between academic performance of the students in an online psychology course and their self-regulated strategies (SRL), which is crucial in autonomous learning. In this study, the overall number of participants was 200, who were students studying in Bachelor's degree. They participated in this study voluntarily and they were taken special agreements.

1. Descriptive statistics:

Self-regulated Learning (SRL) strategies:

The Motivated Strategies for Learning Questionnaire (MSLQ) scores ranged from 3.2 to 6.8 with a mean of 5.1 (SD=0.9 SD- standard deviation), indicating from a moderate to high use of SRL strategies amongst participants.

Academic achievement:

Final course grades varied from 58% to 95%, with a mean score of 78%.

2. Engagement metrics:

Time spent on modules: Overall 24 hours over the semester.

Practice Quiz Completion: On average, students completed 80% (SD=10%) of the available quizzes.

3. Multiple regression analysis:

A multiple regression analysis was carried out to determine engagement metrics on academic achievement and the predictive power of SRL strategies, with controlling for demographic variables that contain age and gender. The overall model indicated that the predictors could explain approximately 48% of the variance in academic performance.

4. Reflective Journal analysis:

Qualitative analysis of the weekly reflective journals indicated that participants who obeyed all the rules and regularly set specific and SMART goals, monitored their progress reported higher satisfaction with their study and demonstrated higher academic results, achieving their success.

DISCUSSION

The present study examined the relationship between self-regulated learning (SRL) strategies and academic achievement among undergraduate students in an online psychology course. The findings underscore the pivotal role of SRL in enhancing student performance within digital learning environments.

Interpretation of Key Findings:

The significant positive correlation ($r = 0.62$, $p < 0.001$) indicates that students employing effective SRL strategies tend to achieve higher academic outcomes. This aligns with existing literature emphasizing the importance of self-regulation in online learning contexts. Furthermore, the observed correlations between SRL strategies and engagement metrics—such as time spent on modules, forum participation, and practice quiz completion suggest that these behaviors reflect active self-regulation. Notably, practice quiz completion emerged as a significant predictor of academic success, highlighting its value in reinforcing learning.

Qualitative analyses of reflective journals revealed that students who consistently set specific goals, monitored progress, and adapted strategies reported higher satisfaction and better academic performance. This finding emphasizes the importance of metacognitive components of SRL in fostering effective learning behaviors.

Implications for Online Education!

Instructional Design: Educators should integrate opportunities for students to develop and apply SRL strategies. This includes designing activities that promote goal setting, self-monitoring, and strategic planning.

Student Support Services: Providing resources and training focused on enhancing

SRL skills can empower students to take control of their learning processes, potentially leading to improved academic outcomes.

CONCLUSION

In conclusion, the internet era has transformed the way individuals acquire knowledge, making education more accessible, interactive, and personalized. According to Gallagher, J. (2024, November 11), the advent of digital platforms, online courses, and interactive tools has democratized learning, allowing individuals from diverse backgrounds to pursue self-education and continuous personal development.

One of the most significant advantages of digital learning platforms is their ability to enhance student engagement through interactive elements (FUTURELEARN.COM). As highlighted in a study on digital learning platforms, features such as quizzes, discussion boards, and multimedia resources significantly boost student engagement by facilitating active learning and collaboration among peers. This interactivity not only captures students' attention but also helps them develop critical thinking and problem-solving skills, essential for their academic and professional futures. Moreover, the flexibility offered by online learning platforms allows learners to study at their own pace and convenience (FUTURELEARN.COM). A report by Future Learn emphasizes that online learning provides physically and financially accessible education, enabling individuals to develop skills to meet personal and professional goals. This adaptability is particularly beneficial for those balancing education with other commitments, such as work or family responsibilities. The integration of Artificial Intelligence (AI) in education has further personalized the learning experience, Financial Times. (2024, September 5). AI-powered tutors and adaptive learning technologies analyze student performance and adjust content accordingly, ensuring that learners are challenged at appropriate levels. This individualized approach fosters a deeper connection to the material, leading to increased motivation and engagement. Additionally, the "protégé effect," where teaching others enhances one's own learning, has been recognized as a powerful educational tool, The Guardian. (2024, September 9). Implementing this effect through methods such as peer teaching or creating educational content can lead to a deeper and more lasting understanding of subjects. Furthermore, the rise of gamified learning platforms, such as Duolingo, has made education more engaging by incorporating game-like elements into the learning process, The Verge. (2024, October 15). These platforms aim to make learning addictive and enjoyable, thereby increasing user engagement and retention.

In conclusion, the digital age has ushered in a new era of self-education, characterized by flexibility, personalization, and interactivity. Digital learning platforms have not only made education more accessible but also more engaging, catering to the diverse needs and preferences of learners worldwide. As technology continues to evolve, it is imperative to harness these advancements to foster a culture of continuous learning and personal growth.

REFERENCES:

1. Aitokhuehi, Oseghale, J. & Ojogho, J. (2014). The impact of computer literacy on students' academic performance in senior secondary schools in Esan West local government area. *Journal of Education and Human Development*, 3(3), 265-270. DOI-10.15640/jehd v3n3a21.
2. Akin-Adaramola, O. S. (2014). The internet usage among secondary school students: A case study on Secondary School. Retrieved April 20, 2021 from <https://air.ashesi.edu.gh/handle/20.500.11988/154>
3. Ameyaw, S. & Asante, E. (2016). Internet usage by distance students in private university libraries in GHANA. *International Journal of Computer Science and Network*, 5(3), 513-522.
4. Ellore, S. B., Niranjana, S., & Brown, U. J. (2014). The influence of internet usage on academic performance and face-to-face communication. *Journal of Psychology and Behavioral Science*. 2(2), 163-186.
5. Financial Times. (2024, September 5). The future of the AI-enhanced classroom. *Financial Times*.
6. FutureLearn. (n.d.). 5 benefits of using technology in the classroom. FutureLearn.
7. FutureLearn. (n.d.). Online learning in a post-pandemic world. FutureLearn.
8. Gallagher, J. (2024, November 11). The new Adelaide University: an equaliser of opportunity and a catalyst for change. *The Guardian*.
9. Singh, B., Gupta, R., & Garg, R. (2013). Study of medical students and internet usage. *International Journal of Scientific and Research Publications*, 3(5). Retrieved June 28, 2020, from www.ijsrp.org.
10. Thurmond, V. A., Wambach, K., Connors, H. R. & Frey, B. B. (2002). Evaluation of Student Satisfaction: Determining the Impact of a Web-Based Environment by Controlling for Student Characteristics. *The American Journal of Distance Education*, 16(3), 169-189.
11. The Guardian. (2024, September 9). The big idea: How the protégé effect can help, you learn almost anything. *The Guardian*.
12. The Verge. (2024, October 15). Duolingo CEO Luis von Ahn wants you addicted to learning. *The Verge*.
13. Warni, S., Aziz, T., & Febriawan, D. (2018). The use of technology in English as a foreign language learning outside the classroom: an insight into learner autonomy.
14. Yebowaah, F. A. (2018). Internet use and its effect on senior high school students in Wa Municipality of Ghana. Retrieved June 2, 2021 from <https://digitalcommons.unl.edu/libphilprac>
15. Zimmerman, B.J. (2008). Investigating Self-Regulation and Motivation: Historical Background, Methodological Developments, and Future Prospects. *American Educational Research Journal*, 45(1), 166-183.

16. Anarbaev O.R. Methods And Problems Of Translating English Newspaper Texts Into Uzbek, Finland International Scientific Journal of Education, Social Science & Humanities, 2023/2/20.

https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=XdwAZK0AAAAJ&citation_for_view=XdwAZK0AAAAJ:UeHWp8X0CEIC

17. Anarbayev O.R. Special Features of Translating English Newspaper Texts, IMRAS, 2023/11/1.

https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=XdwAZK0AAAAJ&citation_for_view=XdwAZK0AAAAJ:4DMP91E08xMC

18. Anarbayev O.R. Translation Methods Of Newspaper And Journalistic Texts, Innovation in the modern education system, 2023/12/22.

https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=XdwAZK0AAAAJ&citation_for_view=XdwAZK0AAAAJ:Wp0glr-vW9MC

19. Anarbaev O.R. Translation Transformations for Translating Newspaper Texts. So'nggi ilmiy tadqiqotlar nazariyasi. 2024/1/13. 7/1.

https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=XdwAZK0AAAAJ&citation_for_view=XdwAZK0AAAAJ:mVmsd5A6BfQC

20. Anarbayev O. R. Pragmatic Translation in Translating English Compound Words into Uzbek. International Journal of Education, Social Science & Humanities. 2024/12/14. 12/12.

https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=XdwAZK0AAAAJ&citation_for_view=XdwAZK0AAAAJ:9ZIFYXVOiuMC