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# THE IMPACT OF TECHNOLOGY INTEGRATION ON STUDENT MOTIVATION IN EFL CLASS

Abstract. The purpose of the article is to explore the potential of using modern technologies to increase motivation among school students in the classroom environment. The main objectives of the research include analyzing approaches and tools that can contribute to enhancing student motivation, as well as identifying the advantages and limitations of technology use in the educational process. The scientific novelty. This research contributes to the existing body of knowledge by providing insights into the specific impact of modern technologies on the motivation of 9th-grade students in the context of English language learning. By employing a combination of qualitative and quantitative research methods, as well as utilizing the SWOT analysis framework, this study offers a comprehensive understanding of the potential benefits and challenges associated with integrating technology into the classroom environment. Furthermore, this research sheds light on the effectiveness of various technological tools and approaches, such as multimedia resources, interactive platforms, and collaborative tools, in enhancing student motivation. By identifying these specific technologies and their impact on student engagement, this study offers practical implications for educators seeking to enhance motivation and improve learning outcomes among 9th-grade students. Conclusions. This study highlights the potential of modern technologies to enhance motivation among secondary school students in the classroom setting, particularly in the context of English language learning. By analyzing the impact of specific technological tools and approaches, such as multimedia resources and interactive platforms, this research demonstrates their effectiveness in stimulating student interest and engagement. Moreover, the findings underscore the importance of integrating technology into educational practices to create dynamic and interactive learning environments that cater to the diverse needs of students.

Key words: modern technologies, intrinsic motivation, SWOT analysis, language acquisition, instructional strategies.

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## ВПЛИВ ІНТЕГРАЦІЇ ТЕХНОЛОГІЙ НА МОТИВАЦІЮ УЧНІВ НА УРОКАХ АНГЛІЙСЬКОЇ ЯК ІНОЗЕМНОЇ МОВИ

**Анотація. Мета статті** — дослідити потенціал використання сучасних технологій для підвищення мотивації школярів у навчальному процесі. Основними завданнями дослідження є аналіз підходів та інструментів, які можуть сприяти підвищенню мотивації учнів, а також визначення переваг та обмежень використання

технологій в освітньому процесі. Наукова новизна. Ця робота робить внесок у дослідження вивчення іноземних мов, розкриваючи специфічний вплив сучасних технологій на мотивацію учнів 9-х класів у контексті вивчення англійської мови. Завдяки поєднанню якісних і кількісних методів дослідження, а також використанню SWOT-аналізу це дослідження пропонує комплексне розуміння потенційних переваг і викликів, пов'язаних з інтеграцією технологій у навчальне середовище. Окрім того, у статті обговорюється ефективність різних технологічних інструментів і підходів, таких як мультимедійні ресурси, інтерактивні платформи та інструменти для спільної роботи, до підвищення мотивації учнів. Визначаючи ці конкретні технології та їхній вплив на залучення учнів, пропонуються практичні висновки для освітян, які прагнуть підвищити мотивацію та покращити результати навчання учнів середньої школи. Висновки. Це дослідження висвітлює потенціал сучасних технологій для підвищення мотивації учнів середньої школи на уроках англійської мови. Аналізуючи вплив конкретних технологічних інструментів і підходів, таких як мультимедійні ресурси та інтерактивні платформи, це дослідження демонструє їхню ефективність у стимулюванні зацікавленості та залученості учнів. Окрім того, результати дослідження підкреслюють важливість інтеграції технологій в освітні практики для створення динамічного та інтерактивного навчального середовища, яке задовольняє різноманітні потреби студентів.

**Ключові слова:** сучасні технології, внутрішня мотивація, SWOT-аналіз, вивчення мови, стратегії навчання.

Statement of the problem. With the pervasive influence of technology in modern society, educators are continually seeking innovative approaches to engage students and enhance their motivation for learning. Teachers have witnessed the challenges of maintaining student engagement and motivation, particularly in the context of EFL instruction for secondary school students. Thus, the research question for this study may be formulated as follows: How can the integration of specific technologies enhance motivation among 9th-grade students? Following the research question, the purpose of the article is to explore the potential of using modern technologies to increase motivation among school students in the English classroom.

Analysis of sources and recent research. Motivation can be understood as the coordinated interplay of three psychological functions: directing, energizing, and regulating goal-oriented activities, including personal aspirations, emotional arousal mechanisms, and beliefs in personal agency [7]. This suggests that motivation acts as the catalyst for achieving successful learning outcomes, as without learning being integral to one's goals or lacking an emotional connection between the learning process and motivation, progress in skill development will be stunted. Enhancing motivation has the potential to activate students' personal, cognitive, emotional, and behavioral resources, thereby contributing to improved learning outcomes [4]. Teaching English as a Foreign Language (EFL) can be challenging, not because of the inherent difficulty of the language itself, but rather due to limited exposure that learners may have to the language.

Technology offers opportunities to enhance motivation in education, especially in EFL instruction. It

provides context for authentic learning experiences, engages students in real-world tasks, and supports vocabulary acquisition. Technology enables teachers to provide rich context for communicative activities, thereby engaging students in real and authentic experiences that enhance motivation and facilitate the learning process [5, p. 131]. Using web tools, teachers can creatively design activities to effectively motivate students and actively involve them in the process of learning a new language. Ahmadi's [3, p. 1] research emphasizes the growing importance of technology as a tool for teachers to facilitate language learning for their students. Technology has always been integral to the teaching and learning environment, enabling teachers to enhance learners' educational experiences.

The relationship between the use of technological means and motivation in language learning has been extensively studied, encompassing various approaches and applications [6]. This suggests a plethora of activities, programs, and tools available to teachers for creating more creative and enriching classes through technology.

Presentation of the main material. The integration of technology into education offers promising avenues for enhancing student motivation and engagement, particularly in the realm of EFL instruction for 9th-grade students. Using the power of technology, teachers can create interactive learning experiences that foster intrinsic motivation and facilitate language acquisition.

*Methodology.* The study employs classroom action research, involving a structured cycle of planning, implementation, observation, and reflection. Both qualitative and quantitative methods are used to gather and analyze data.

This classroom action research followed a structured cycle, which included stages of plan-

ning, implementation, observation, and reflection. This research methodology is characterized by a commitment to ongoing improvement. With its cyclical process of planning, acting, and reflecting, it encourages educators to embark on a continuous journey of self-improvement. Furthermore, it emphasizes the importance of data and evidence in guiding instructional decisions, promoting informed choices in teaching strategies.

Ultimately, the central aim of action research in pedagogy is to enhance student learning. Moreover, it fosters professional growth and often encourages collaboration among teachers, fostering a culture of knowledge sharing and collective problem-solving.

Data Collection. Data collection includes administering pre– and post-questionnaires to students, classroom observations, and an interview with the English teacher. The SWOT analysis method is used to assess strengths, weaknesses, opportunities, and threats associated with integrating technology into teaching.

The planning phase of the research involved several key steps:

- 1. Planning classroom action research.
- 2. Developing assignments to be used by the teachers while employing technologies in the classroom.
- 3. Crafting questionnaires to gather feedback from students regarding their experiences with ICT.
- 4. Creating questionnaires to solicit insights from the teacher regarding their perspectives on integrating technologies into teaching.
- 5. Designing an observation format to effectively monitor and evaluate classroom activities involving ICT.
- 6. Conducting a SWOT analysis to assess the strengths, weaknesses, opportunities, and threats associated with incorporating technologies into the teaching process.

This action research employs a mixed-method approach, combining both qualitative and quantitative research methods. Qualitative research is used as an exploratory and unstructured method aimed at providing insights into complex phenomena that may be challenging to elucidate through quantitative means. Although qualitative research does not rely on numerical data, it can generate ideas or hypotheses for subsequent quantitative studies. This approach aims to achieve a deep understanding of human behavior, experiences, attitudes,

intentions, and motivations through observation and interpretation, delving into how individuals think and feel.

On the other hand, quantitative research relies on the principles of natural sciences, aiming to generate numerical data and concrete facts. It seeks to establish cause-and-effect relationships between variables through the application of mathematical, computational, and statistical methods. Also known as empirical research, quantitative research is characterized by its capacity for accurate and precise measurement.

Result and discussion. Quantitative data from student surveys are tabulated and analyzed using Microsoft Excel. Qualitative data from observations and interviews provide deeper insights into the impact of technology on student motivation.

In this study, the participants were secondary-level students who learn English as a foreign language. Furthermore, their English language teacher was selected to participate in the interview. Subsequently, based on the survey findings, an in-depth interview was conducted with the English teacher to obtain valuable information.

The researcher developed two online questionnaires administered before and after three lessons employing technologies. The online survey was conducted through Google Forms. The pre-questionnaire is an 8-item online survey to gather students' opinions on their motivation to study English. The questionnaire employed a 5-point Likert scale, where responses ranged from "strongly disagree" (1) to "strongly agree" (5).

In addition, the questionnaires included a multiple-choice item where the students could choose the technologies, they are familiar with. The post-survey comprised identical 8 statements to the pre-survey. However, it also included an additional question aimed at eliciting the students' opinion as to the most beneficial technology that influenced the development of their language skills.

Having obtained and analyzed the results from the students' surveys and the teacher's interviews, SWOT analysis was conducted. The acronym SWOT, representing the words strengths, weaknesses, opportunities, and threats, was initially introduced by American professor Kenneth Andrews at a Harvard conference on business policy in 1963. Initially, SWOT analysis focused on gathering and structuring information about the current situation and trends, but over time, its application expanded to include strategy design and management decisions. Consequently, SWOT analysis became an invaluable tool for strategic analysis and decision-making. It helps to establish correlations between institutional strengths and weaknesses, external threats, and inherent opportunities. The increasing use and development of SWOT analysis in strategic management can be attributed to the data-intensive nature of the field, which necessitates effective methods for managing substantial amounts of information [1; 2].

The data collection process for this study adhered to a structured procedure:

- 1. Questionnaire survey: administering the pre-questionnaire. They responded to a series of questions comprising 8 questions.
- 2. Classroom observations: to gain practical insights into the implications of technology integration in the classroom, three classes were observed. A checklist was employed during these observations to systematically document various aspects related to the incorporation of technology in the learning environment.
- 3. Questionnaire survey: administering the post-questionnaire survey among the students. They responded to a series of questions comprising 9 questions.
- 4. Teacher interviews: subsequent to the survey, a face-to-face interview was conducted with the English language teacher from the school.

For the qualitative data analysis, insights were derived from the notes taken during the research process. These notes provided valuable information regarding the qualitative aspects of the study, allowing for a thorough examination of the data.

The research started with the observation of three lessons where the teacher was asked to use various digital tools to enhance different language skills. In the first lesson, Padlet served as a platform for writing activities. They were offered to work with relative clauses and write their own continuations after practicing the sentences on the Padlet board. Students revealed high engagement levels and collaborated effectively. They demonstrated creativity by following the models of multimedia elements in their written responses. Feedback and reflection were facilitated through teacher-student interactions, when the teacher helped in identifying areas for improvement in the students' writing work.

In the second lesson, Jamboard was utilized to develop students' speaking skills. The students

were offered to make up Luigi's story based on the pictures. They worked in pairs. It should be noted that active participation was observed as students engaged in discussions. Thus, the platform fostered confidence among students, encouraging even the more hesitant children to contribute. Peer interaction was evident in this collaborative task. Visual aids integrated into Jamboard enhanced this speaking activity, aiding in expressing students' thoughts more clearly. The teacher was observed effectively facilitating discussions and managed tasks, using Jamboard features to structure activities efficiently. We should note that despite students' increased motivation to work in class, some of them struggled with pronunciation and grammatical accuracy, which requires further practice.

In the third lesson, Quizlet was employed to expand students' vocabulary knowledge. Students demonstrated high engagement and motivation, driven by the gamified nature of the platform. Vocabulary acquisition was effective through interactive exercises and games, with repetition-based learning aiding retention. The teacher utilized Quizlet's assessment features to monitor progress and identify areas for improvement.

The next stage included the analysis of the students' surveys. The first question aimed at eliciting the students' answers as to their familiarity with various platforms and apps and whether they use them in learning English.

According to the data, prior to the lessons using technologies, most students were familiar and used only Quizlet since the teacher made use of this platform at some of their lessons. Two students admitted employing Duolingo and I student used other platforms. However, after the teacher's employing technologies at lessons, the students indicate that they use Padlet, Jamboard and Quizlet to study English.

There was a decrease in the number of students who were unsure about their enjoyment of the English classes, dropping from six to three. The responses reveal a significant increase in the number of students who agreed or strongly agreed that they enjoy their English classes after experiencing technology-based lessons.

Conclusion. The research started with an exploration of technology integration in English language classrooms through the observation of three distinct lessons. In these sessions, the use of digital tools such as Padlet, Jamboard, and Quizlet aimed to increase students' motivation and develop various

language skills. Padlet facilitated writing activities, Jamboard fostered speaking skills development, and Quizlet expanded vocabulary knowledge.

The mean of the pre- and post-surveys are presented in Table 1.

Table 1. The means of the pre- and post- surveys

Statements	Pre-Survey Mean	Post-Survey Mean
I enjoy my English classes	3,2	3,5
<ol><li>The teacher uses enough technologies at English lessons</li></ol>	1,9	3,9
4. I am motivated to learn English	2,3	4,2
<ol><li>I look forward to my English classes</li></ol>	3,4	4,2
6. Without using technologies, our English classes are boring	3,1	4
7. The teacher should use more modern technologies to make classes engaging	4,4	4,5
The use of technology in English language classes motivates me	3,8	4,4

The analysis of pre- and post-survey mean scores for various statements reveals trends regarding students' attitudes and perceptions towards technology integration in English language classes. Across most statements, there is a consistent pattern of improvement in students' responses following the implementation of technology-based lessons. Statements related to enjoyment of English classes (Statement 2), motivation to learn English (Statement 4), anticipation of English classes (Statement 5), and perception of English classes without technologies as boring (Statement 6) all witnessed an increase in mean scores in the post-survey compared to the pre-survey. These trends suggest that the integration of technologies has had a positive impact on students' engagement in English language learning,

leading to increased motivation, and anticipation for classes.

Furthermore, the data also indicates a significant change in students' perceptions regarding the adequacy of technology usage by the teacher (Statement 3) and the motivating effect of technology integration (Statement 8). Both statements represent substantial increases in mean scores from the pre-survey to the post-survey, indicating a marked improvement in students' confidence in the teacher's use of technology and the motivational impact of technology in English language classes. These findings point to the transformative potential of technology integration in promoting a more engaging and effective learning environment, as perceived by the students. In general, the analysis suggests a positive correlation between technology integration and students' attitudes and motivation towards English language learning, highlighting the importance of incorporating digital tools to enhance the educational experience and outcomes.

In **conclusion**, we may state that the conducted study has confirmed the research hypothesis, demonstrating that the implementation of specific technologies in the educational process for 9th-grade students indeed increases motivation to learn, which may result in improved academic achievements and greater engagement in learning activities.

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