

EDUCATIONAL SECTOR MANAGEMENT EFFICIENCY THROUGH INFORMATION TECHNOLOGY

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Introduction

Nowadays, in compliance with globalization and digitalization trends, information technologies have penetrated all the spheres of public life, including the educational sector. In accordance with public administration, the educational paradigm has been subjected to changes in terms of organization and management methodology. In particular, the effective implementation of information technology in the educational sector, enabled to ensure a wide range of important factors such as the promotion of learning motivation, the use of various teaching methods, the availability of lifelong learning and the modernization of continuous professional improvement mechanisms, significantly increasing the effectiveness of the educational process. However, with this set of tools, increasing the efficiency of the educational process, information technologies have also arisen a number of challenges [Buckgham, 2003, 4]. In particular, these challenges refer to the competent and effective use of IT by both learners and teachers. It implies the mastery of a set of competencies, which will enable, on the one hand, to provide, and on the other hand, to receive education based on professional skills, the outcome of which will be the continuous maintenance of professional competitiveness in the constantly fluctuating job market. Perhaps, this is possible only due to the effective implementation of modern information technologies in the educational sector.

Methodology

The research has been conducted using theoretical, empirical and statistical methods. First, domestic and foreign literature related to the field has been studied, then the results of experimental training (case study) and statistical data have been analyzed.

Literature Review

Management processes in the education sector have been subjected to study from the viewpoints of informatization of the educational system, continual education and modernization of the content of education. A body of research has figured prominently in the study [Astvatsatryan & Terzyan, 2004; Astvatsatryan & Avagyan, 2015; Bayadyan, 2005; “Draft State Program for the Development of Education of the Republic of Armenia until 2030”].

Besides, the works of a number of foreign authors have also been taken into account [Baranov, 2002; Lau, 2006; Smetanina, 2002; Sysoev, 2010; Fedorov; 2015, Chelischeva, 2009; Chicherina, 2008; Alderson, 2000; Andersen, 2013; Bravender, 2015; Buckingham, 2003; Coiro, 2008; Joosten, 2012; Serafini, 2010; Trebor & Scholz, 2010], UNESCO's fundamental documents, guidelines and manuals related to the field of media education.

Scientific novelty

New principles referring to the management of educational processes through information technology have been elaborated based on theoretical data and case study analysis.

Analysis

The implementation of information technology in the educational sector is interlinked with the efficiency of the educational processes management. The first attempt to incorporate information technologies into the educational process was made in France in 1915, and by the 1960s in most universities in Western Europe and the USA [Fedorov 2015, 271]. Interestingly, information technologies can be effectively incorporated into the context of any field of education and can ensure the achievement of the expected measurable outcomes. As an example, the article illustrates the use of information technologies, specifically the Internet, in teaching foreign language vocabulary. In particular, the features of linguistic and non-linguistic, translational and non-translational methods of vocabulary teaching in the context of innovative education have been considered and the advantages of the digitalization towards the effectiveness of the educational process have been emphasized. These advantages include the increase in learner's motivation, the diversification of the educational process, the consideration of different learning styles, the development of information literacy, and the feedback provision.

In the context of traditional education, working out vocabulary is significantly different from the context of innovative education. The conditions of innovative education imply the implementation of digital technologies into the educational process for didactic purposes. And if in the first case we deal with a bilateral relationship: teacher-learner, then in the second case we deal with a three dimensional relationship: teacher-interface-learner. This mediated educational process greatly contributes to the mastery of any aspect of a foreign language, in particular, due to the increase in the level of visualization of the learning material. Visualization allows to significantly increase the level of perception of the information conveyed in the text by the learner due to the combination of mental and visual analysis of information [Trojan, 2006, 3]. Thus, in case of teaching vocabulary, information technologies can perform the following didactic functions:

1. Increase in motivation.

A key factor of increase in the effectiveness of teaching-learning process is learners' motivation, especially in case of studying foreign languages. In general, the formation of communicative competence requires a lot of effort and time. It includes persistent

dictionary work, memorization of unknown words, repetition, continuous and intensive study. Sometimes, even after making a lot of efforts and allotting time, learners face difficulties and lack of result, that gradually leads to the decline in motivation. Making the educational process diversified and interesting, engaging learners in the educational process becomes more effective through the use of information technologies, which give an opportunity to supplement the educational material with audiovisual tools and to make the teaching-learning process more interactive and alive. In other words, if in the context of traditional education, working out vocabulary implied long and boring dictionary work by the learner, in the context of innovative education, using Internet resources, working with vocabulary can be faster, more efficient and interesting, contributing to the maintenance of learners' stable motivation.

2. Diversification of the educational process.

Diversifying the educational process means enriching it with different teaching aids and making use of a number of methods and techniques. In the case of teaching vocabulary, the overall process refers not only to the translation or explanation of unknown words, but also to listening, watching a video with the use of a given word, preparing flashcards or animations via the Internet. For example, working out unknown words with online dictionaries, enables not only to identify the meaning of a word, but also to hear the pronunciation and to see the semantic map of the unknown word. In this case, those senses of perception are activated, which contribute to the effectiveness of the acquisition of any language point [Minasyan, 2004, 29]. Moreover, it is possible to use both linguistic and non-linguistic methods of teaching vocabulary. In case of non-linguistic methods (revealing the meaning of a word through objects, images, gestures, or actions), the Internet offers a wide range of websites with ready-made images, videos, and animations to explain the meaning of unknown words.

As far as linguistic methods are concerned, the Internet is filled with a number of online dictionaries for the application of the translation method. Working with an online dictionary accelerates the speed of search and is more available for learners if they have a gadget. As for revealing the meaning of a word through non-translational methods (explanation in the target language, enumeration, synonym, antonym, keyword, guessing the meaning, word formation analysis) it can be carried out through websites designed for an immediate obtention of the entire semantic and morphological paradigm of a given word on a single platform.

3. Consideration of learning styles.

The effective implementation of information technologies in the educational process, makes it possible to organize the teaching-learning process in accordance with students' individual learning styles. For some learners, listening is more effective for memorizing

newly assimilated words, while for others, solving online crosswords or communicating with artificial intelligence is far more useful.

4. Formation of information literacy.

The use of information technology in the educational process significantly contributes to the development of learners' cognitive skills. Looking up an unfamiliar word in an online dictionary, learners use hypertexts. Each hyperlink immediately provides new information and meanwhile raises new questions, continuing in an endless chain. Moreover, hyperlinks might contain information not only in a textual format, but also in audio, audiovisual and graphical (hypermedia) format. Thus, the search for word meaning evolves into an interconnected chain of educational and cognitive activity, which gives the learner the skills to figure out and satisfy his own information needs. The latter is the cornerstone of lifelong language learning, which is the imperative of modern educational policy. In fact, nowadays learning foreign languages is considered to be a lifelong task, thus it is extremely important to develop appropriate skills and motivational features and abilities in order to continue language learning beyond the classroom. And today, Internet resources have become an invaluable and inexhaustible source for self-study and continual professional development (CPD) [Sisoev, 2010, 10].

5. Feedback provision.

Feedback is of crucial importance in the organization and management of education. Providing feedback through information technologies is characterized by accessibility, speed and objectivity. In this case, the Internet is filled with websites and applications through which one can independently assimilate foreign language vocabulary, test their knowledge and get an instrumental feedback.

Conclusions

The didactic potential of information technology contributes to the efficiency of language learning to a great extent. It implies new challenges towards developing language skills in a new pedagogical condition. Specifically, a kind of rearrangement of the roles of a teacher and a learner takes place: the teacher acts as a guide, and the learner as an individual who is skilled with the appropriate competences in order to identify his own information needs and to outline his learning path. The modern educational policy underlies this toolbox as a strategic sector of public management and sustainable development.

References

1. Minasyan S. M., Physiology of analyzers. Yerevan: YSU, 2004.- 196 p.
2. Sysoev, P. V., Methodology of Learning a Foreign Language Using Information Technology/ P.V. Sysoev, M. N. Evstigneev.- Moscow: Glossa-Press, 2010.- 177 p.
3. Troyan G. M., Multimedia in Education: Program of Specialized Training Course. Moscow: "Learning-Service", 2006.- 16 p.
- 4: Fedorov A., Media Education. History and Theory. Moscow: Information for All, 2015.- 450 p.
5. Buckingham D. Media Education: Literacy, Learning and Contemporary Culture. Cambridge: Polity Press, 2003, 232 p.

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The integration of information technology in all the spheres of social life is challenging the foundations of education. The key outcome of today's education is becoming the development of an appropriate skill set in order to search, analyze and evaluate the acquired information. The present research takes into focus the development of language skills through the use of information technology. Based on the example of working out foreign language vocabulary a link between the use of information technology and the efficiency of management of the educational sector has been demonstrated. In particular, the effective implementation of information technology in the educational sector, enables to ensure a wide range of important factors such as the promotion of learning motivation, the use of various teaching methods, the availability of lifelong learning and the modernization of continuous professional development mechanisms, significantly increasing the effectiveness of the educational process. However, with this set of tools for increasing the efficiency of the educational process, information technologies have also arisen a number of challenges. In particular, these challenges refer to the competent and effective use of information technology by both learners and teachers. It implies the mastery of a set of competencies, which will enable, on the one hand, to provide, and on the other hand, to receive education based on professional skills, the outcome of which will be the continuous maintenance of professional competitiveness in the constantly fluctuating job market. Perhaps, this is possible only due to the effective implementation of modern information technologies in the educational sector. The relevance of the research underlies the scope and importance of the problem and the lack of prior studies in the field.