Professional paper
https://doi.org/10.32903/zs.66.2.7
UDK 37.013.43:004

NEW SCHOOL CULTURE IN THE ATTITUDES TOWARDS INFORMATION AND COMMUNICATION TECHNOLOGY OF THE STUDENTS OF VOCATIONAL SCHOOLS IN OSIJEK-BARANJA COUNTY

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Abstract

The development of technology over the last decade has fundamentally changed our daily lives, and consequently the methodological and didactic approach to the teaching process. The intensive development of information and communication technologies has introduced significant changes in the teaching processes in recent decades and focuses teaching methodology on issues of approaching e-learning and changes in teaching and learning to adapt teaching to the present requirements and opportunities. To satisfy the requirements of the contemporary school, culture can be interpreted as "historical creation (of the people) expressed through material and spiritual achievements, production, styles and ways of working – to put it simply a kind of wisdom of living" (Previšić, 2010, p. 170). This is exactly what the application of modern information and communication technologies offers for teaching and learning the English language as a foreign language. One of the important segments of the culture of the contemporary school is the teaching process, which must first of all be modern and innovative. The research aimed to examine the attitudes of the students of the vocational schools in Osijek-Baranja County towards information and communication technology in learning and teaching. The data were collected through a questionnaire and it was found that respondents are very positive about the use of information and communication technologies in learning and teaching, but they are also aware of some of the pitfalls that technology brings.

Keywords: English language, ICT - information and communication technology, contemporary school culture, attitudes towards information and communication technology

INTRODUCTION

The use of digital technology is experiencing a steady increase in the daily hectic lifestyle of a modern person. With the change of circumstances and tasks at the workplace and at school, there has been a change in behaviour, so the research on attitudes about information and communication technology of the participants in the learning and teaching process has become very purposeful these days. Abunowara (2014) emphasizes that a key factor in the use of information technology in foreign language teaching is not only the equipment that students have but also teachers who know how to plan, design, and implement effective educational activities. The author also claims that significant advances in teaching English as a foreign language occurred in the 1980s and 1990s with improved teaching of communication, i.e. participation in authentic purposeful interactions, which also led to the integration of technology into classrooms.

FEATURES OF LEARNING AND TEACHING THROUGH MODERN INFORMATION AND COMMUNICATION TECHNOLOGIES

Present time, faced with new challenges posed to students and teachers, implies not only changes in attitudes and beliefs, but also in models of teaching where the autonomy and individualization of students is increasingly emphasized. Luaran et al. (2016) believe that the acquisition of knowledge and the way of communication with the help of available advanced technologies has led to the creation of the concept of information and communication technology and the form of the teaching process of closely intertwined relationships between technology and communication and relationship to technology itself. According to the same authors, in today's digital age, information and communication technology is available in the field of education in countless ways; among other things, it is used in classrooms as a means of teaching and learning and a teaching aid in the classroom. According to the author Darling-Hammond (2000), teaching for systematic problem solving, inventions and knowledge application requires teachers who have mastered the knowledge of the subject they teach, but also the knowledge of teaching based on different approaches to education. Janjić, Librenjak and Kocijan (2015) believe that technology enables teachers to shape their teaching process with a little practice and experimentation, and thus teach their students to be responsible for their progress in a particular area.

INFORMATION AND COMMUNICATION TECHNOLOGY IN LEARNING AND TEACHING ENGLISH - PREVIOUS RESEARCH

Marwan (2015) argues that the ways of teaching English are currently undergoing some adjustments to keep pace with advances in information and communication technology and that such a way of teaching and learning was a rare case in the English classroom only two decades ago, and today it is an ordinary and customary way of learning and teaching. The author emphasizes that this way English teachers are constantly obliged to follow the trends in learning and teaching and that they should change their approaches to teaching.

Dudeny and Hockly (2008) argue that technology in the foreign language classroom is nothing new because it has been present there for decades, even centuries, if chalk and blackboard are considered a certain type of technology. They emphasize the presence of language laboratories, video recorders, and cassette players, which have been widely used since the mid-1960s and 1970s and have already been making changes in the approach to teaching English.

The knowledge of previous research is needed to better understand today's trends. Hofstede, Hofstede, and Minkov (2010) write that the source of mental skills lies in the social environment young people grew up in and their life experiences, and that consequently “programming” begins within the family, continues through neighbourhood relationships, and then in school and groups of young people and finally in the society in general.

According to Hines and Lynch (2019), today’s imperative is that teachers help students develop digital literacy while providing them with a variety of learning opportunities to motivate each student. Their research was conducted in Thailand with seventh-graders in 11 schools working with the English curriculum. It is a common belief that information and communication technology is just a tool that provides support in learning and teaching. Thus, it was concluded that information and communication technology will never be able to replace a good teacher who uses effective teaching methods, as well as learning that depends individually on the academic effectiveness of each student’s learning style.

Astalini and Urip Sulistiyo (2019) researched the motivational e-assessment and out of 168 respondents, 72.6% (122 respondents) considered this type of assessment to be good. The authors conclude that in teaching today, technology is needed to improve the competencies of an increasing number of human resources.

Students have positive attitudes towards technology in teaching, so Tri and Nguyen (2014) in their research study on information and communication technology conducted with 149 English language students in Vietnam found that the majority of students, or 82.6%, have a positive attitude on information and communication technology. Similarly, Yunus, Hashim, Embi, and Lubis (2010) investigated, with quantitative and qualitative methods, a sample of 85 students who actively participated by completing questionnaires and giving semi-structured interviews and came to the same conclusion that students showed a positive attitude toward technology using software for language learning.

THE CONTEMPORARY SCHOOL CULTURE

The Glossary of Education Reform defines school culture (2013) as a term that includes beliefs, perceptions, relationships, attitudes, and written and unspoken rules that shape and influence every aspect of school functioning, but it also encompasses more specific issues such as students' physical and emotional safety, the organization of classrooms and public spaces, and the level to which the school accepts and supports racial, ethnic, linguistic and cultural diversity.

Accordingly, Markić (2014) argues that culture refers to the value system, attitudes, habits, common behaviours, traditions and beliefs of people, and also denotes what people have achieved and accepted as a value, so that today we can talk about the culture of the people, organizations, communication, speaking, behaviour and alike. Culture implies a constant focus on raising quality based on commonly accepted values. Hollins (2009) points out that teaching behaviour becomes a part of one's own experiences, all influenced by one's perception of the relationship between culture and school, one's ideologies, and one's concept of school learning. The author Sekulić-Majurec (1996) emphasizes that the important aim of education is interculturalism, which should contribute to the younger generations becoming aware of their cultural identity, but also bring to consciousness their tolerance for diversity. Mesić (2006) claims that changes in curricula most often relate to educational areas of literature, history, and culture. Furthermore, Bruner (2000) claims that culturalism has the task of uniting knowledge from different sciences such as psychology, anthropology, linguistics, and humanities because the culture is the work of a man. Following all the above, computing as well as the use of information and communication technology in everyday life, as well as in teaching, greatly leads to changes in the opinions and attitudes of the participants in the teaching process, i.e. the mutual providers and recipients of information.

For the culture in a particular school to be contemporary, many criteria need to be met. Different authors write about the contemporary school culture in different ways, but they all agree with the basic concept that students and teachers should cooperate to improve schools, especially improving deep knowledge and competencies needed for the real world (Previšić, 2010). Competences related to the use of information and communication technology are an indispensable factor for the successful and effective involvement of each individual in the real world of today. Matić (2014) claims that the aims of education are achieved by the very development of school culture and continuous research of their own potentials, which focus on the emancipated student and responsible teacher. Accordingly, changes in the school follow with the development of knowledge as a part of lifelong learning as the fundamental framework for the improvement. Following the rapid and inevitable changes brought about by today's society, one of the priorities of present education has become the training of students for independent

work for later lifelong learning. Tot (2010) believes that the emphasis should be on teaching that encourages learning, and that teaching should be focused on motivating and making students independent. The same author claims that the ultimate goal is self-regulated learning through the encouragement of the student's personality, individuality, and originality, as well as raising the awareness of the student's personal responsibilities for the results of their actions.

METHODOLOGY

Research related to modern communication and information technologies in English language teaching brings conflicting views, which in particular depend on age, culture, demographic and social factors, religion, and even the culture of the educational institution.

The aim of the research was to examine the attitudes of students of vocational schools in Osijek-Baranja County towards information and communication technology in learning and teaching. A questionnaire was used to determine the attitudes and views of students towards the use of information and communication technology in everyday life and during their educational activities. We developed and adapted the questionnaire based on two different questionnaires conducted by Hines and Lynch (2019) and Semerci and Aydin (2018). Data were collected through a questionnaire which, in addition to questions related to age, gender, and curriculum, also contained 30 statements according to the Likert scale (for each statement respondents had to choose - I do not agree at all; I partly disagree; I neither agree nor disagree; I partly agree; I completely agree). 10 statements related to the use of computers and 20 statements to the use of the Internet.

The research was conducted in January 2020 on a sample of 80 male and female students majoring in Administrative Officer or Economist at the School of Economics and Administration in Osijek aged 16-18. More precisely by curriculum and gender: administrative officer - 44 female and 16 male students; economist - 13 female and 7 male students.

The following hypotheses were set for this research:

H1: Students have a positive attitude about the computer as a learning tool.

H2: Students believe that computers contribute to the quality of teaching.

H3: Students consider the internet a source of knowledge.

H4: Students find that the Internet improves the quality of life.

Results

Table 1. Results of attitudes for the economists expressed in percentages

	DATA EXPRESSED IN PERCENTAGES (%)				
GENDER	MALE AND FEMALE				
PROGRAMME	ECONOMISTS				
1= I do not agree at all 2= I partly disagree 3= I neither agree nor disagree 4= I partly agree 5= I completely agree	1	2	3	4	5
COMPUTER					
1. I like the idea of a computer as a learning tool.	5	10	15	15	55
2. Using computers in learning causes me stress.	70	5	10	15	0
3. I have a feeling that something will go wrong when I do assignments online.	40	20	15	15	10
4. I really like using a computer as a learning tool.	5	15	15	20	45
5. Using computers in learning scares me.	70	0	15	5	10
6. The computer will change the way I learn.	0	10	20	25	45
7. I can study just as well without a computer.	0	10	45	5	40
8. The computer helps me understand topics in a more efficient way.	0	15	35	10	40
9. The computer helps students learn because it allows them to express their thinking in a better and different way.	10	10	30	15	35
10. The computer helps teachers to teach more efficiently.	5	0	5	30	60
INTERNET					
1. makes life easier.	5	0	0	25	70
2. helps me learn.	0	5	5	25	65
3. makes me lazy.	30	10	45	5	10
4. allows easier access to information.	0	0	0	5	95
5. causes alienation from real life.	10	15	25	20	30
6. creates problems.	15	35	30	5	15
7. takes away time that could be used for learning.	15	10	15	20	40
8. relaxes me.	0	10	35	15	40
9. stimulates curiosity.	5	0	0	40	55
10. helps me to reach the world from home and school.	0	5	25	0	70
11. makes it easy to find friends.	5	0	0	25	70
12. helps me get away from bad habits.	0	5	5	25	65
13. helps me to be better because I am learning new things.	30	10	45	5	10
14. helps me get rid of boredom because it offers different activities.	0	0	0	5	95
15. irritates me due to wrong / incorrect information.	10	15	25	20	30
16. leads to addiction.	15	35	30	5	15
17. offers new opportunities such as distance learning	15	10	15	20	40
18. helps me get to know different cultures.	0	10	35	15	40
19. enables equality in education.	5	0	0	40	55
20. causes alienation from our values.	0	5	25	0	70

The results show that there is no statistically significant correlation between gender and the computer questionnaire. Male/female equally value the computer as a good/bad tool for learning and everyday needs. The results show that there is no statistically significant correlation between gender and the Internet questionnaire. Men/women equally value the Internet as a good/bad tool.

Table 2. Results of attitudes for the administrative officers expressed in percentages

	DATA EXPRESSED IN PERCENTAGES (%)				
GENDER	MALE AND FEMALE				
PROGRAMME	ADMINISTRATIVE OFFICER				
1= I do not agree at all 2= I partly disagree 3= I neither agree nor disagree 4= I partly agree 5= I completely agree	1	2	3	4	5
COMPUTER					
1. I like the idea of a computer as a learning tool.	5	3	12	27	53
2. Using computers in learning causes me stress.	46	22	17	8	7
3. I have a feeling that something will go wrong when I do assignments online.	34	22	28	8	8
4. I really like using a computer as a learning tool.	7	7	18	26	42
5. Using computers in learning scares me.	70	8	15	5	2
6. The computer will change the way I learn.	5	10	35	32	18
7. I can study just as well without a computer.	2	8	24	28	38
8. Computer helps me understand topics in a more efficient way.	7	10	28	33	22
9. Computer helps students learn because it allows them to express their thinking in a better and different way.	10	7	28	32	23
10. Computer helps teachers to teach more efficiently.	7	8	20	27	38
INTERNET					
1. makes life easier.	3	3	8	18	68
2. helps me learn.	3	5	5	33	54
3. makes me lazy.	3	7	27	23	40
4. allows easier access to information.	2	0	3	13	82
5. causes alienation from real life.	8	7	30	28	27
6. creates problems.	13	13	46	20	8
7. takes away time that could be used for learning.	12	10	22	28	28
8. relaxes me.	5	7	17	25	46
9. stimulates curiosity.	8	2	8	34	48
10. helps me to reach the world from home and school.	7	3	17	20	53
11. makes it easy to find friends.	3	3	8	18	68
12. helps me get away from bad habits.	3	5	5	34	53
13. helps me to be better because I am learning new things.	3	7	27	23	40
14. helps me get rid of boredom because it offers different activities.	2	0	3	13	82
15. irritates me due to wrong / incorrect information.	8	7	30	28	27
16. leads to addiction.	13	13	46	20	8
17. offers new opportunities such as distance learning	12	10	22	28	28
18. helps me get to know different cultures.	5	7	17	25	46
19. enables equality in education.	8	2	8	34	48
20. causes alienation from our values.	7	3	17	20	53

Table 3. Correlation matrix of measured variables

Variable	1	2	3	4	5
1.Gender	-				
2. Age	-.25*	-			
3. Programme	-.06	.22*	-		
4. Quest. on computer	-.06	.03	.11	-	
5. Quest. on Internet	.13	.08	.09	.51**	-

*p<.*p<.05 **p<.01

The results show that there is no statistically significant correlation between the school programme attended by the participants and the computer questionnaire. Participating economists and administrative officers equally evaluate computer as a good/bad learning tool.

The results show that there is no statistically significant correlation between the school programme and the Internet questionnaire. Participating economists and administrative officers equally evaluate the Internet as a good/bad tool.

The results show that there are statistically significant correlations between attitudes about the computer and attitudes about the Internet. The higher (more positive) attitudes about the computer, the higher (more positive) attitudes about the Internet among the participants.

Table 4. Descriptive data for variables measured in the study (*N*=80)

Variable	M	SD	T*min*	T*max*	P*min*	P*max*
Quest. on computer	32.69	3.71	10	50	22	40
Quest. on Internet	76.24	8.54	20	100	55	92

Note. M-arithmetic mean; *SD*-standard deviation; *Tmin*-theoretical minimum; *Tmax*-theoretical maximum; *Pmin*-achieved minimum; *Pmax*-reached maximum

The data in Table 4 show that participants consider the computer and the Internet to be a useful tool in education and everyday life. Comparing the relationship between the theoretical and the achieved range of results on the computer scale, it is evident that some participants show a moderately low level of computer satisfaction, while some participants expressed elevated values. As for the Internet questionnaire, participants do not show a low level of satisfaction with the Internet, but elevated values are represented.

The obtained coefficient of internal consistency for the Scale of Attitudes about the computer is α=.86

The obtained coefficient of internal consistency for the Scale of Attitudes about the Internet is α=.70

Discussion

Hines and Lynch (2019) developed an information and communication questionnaire based on the OECD PISA questionnaire for evaluating the work of international students and they examined 559 students in 20 seventh grades included in the English language learning programme. They found that there is a strong and positive link between the use of information and communication technology for learning purposes and the attitudes about information and communication technology used for learning purposes. However, they also found a moderately

strong and negative relationship between the use of information and communication technology for learning purposes and its self-efficacy.

The study of Semerci and Aydina (2018) examined the teachers' attitudes about the use of information and communication technology in teaching. A survey was used for the research, and 353 teachers participated. The researchers were interested in whether there was a difference in attitudes regarding gender, age, teaching experience, experience with information and communication technologies, information and communication skills, and training in the use of information and communication technologies. The research showed that teachers have very positive attitudes about the use of information and communication technology in teaching, but that there is no significant difference if we take the above variables into account. However, there are significant differences in the negative attitude (anxiety) in the use of the information and communication technologies related to the experience of using the information and communication technologies, the skills of using the information and communication technologies, and their professional training in the use of information and communication technologies.

Yunus, Hashim, Embi, and Lubis (2010) conducted the research on 85 first-year students using a Likert scale (from 1-4) with 38 statements to reveal students' attitudes about the Tell me more English language programme. Students have shown positive attitudes about the use, usefulness, and suitability of the programme, and consider it an effective tool for learning a foreign language.

Our research showed similar attitudes about the use of information and communication technology for teaching and learning purposes. The following attitudes were stated regarding the use of computers. Students like the idea of the computer as a learning tool, and this coincides with the claim that they like the use of computers in the classroom. Using computers in learning does not cause stress and most of them have no fear that something will go wrong when doing tasks on the computer because using the computer does not scare them at all. Most of them agree that computers change the way they learn, but many of them do not have an attitude about it. However, half of the students agree with the statement that learning is just as good without a computer. Half of them believe that the computer helps them understand what they are learning and also helps them express themselves differently. Most students find that the computer helps teachers teach in a more interesting way. All of these claims speak in favour of the use of computers in teaching because students view it positively. The use of computers in teaching is not something new. Computers have been used in teaching for several decades and their application is in accordance with the development of computer technology. We can conclude that computer technology has already made changes in our school culture, and that this trend will continue.

Students presented the following attitudes on the usefulness of the Internet for expanding knowledge during education. Most students believe that the Internet makes their life easier, that it helps with learning, that it provides easier access to information, that it is relaxing, stimulates curiosity, makes it easier to find friends, removes bad habits, and cures boredom. Divided opinions were related to the claim that the Internet makes people lazy, that it alienates them from real life, that it creates problems, and leads to addiction. Still, students are willing to admit that the Internet takes up time they could use for studying. Respondents are mostly positive or very positive about the opportunity of distance learning and are aware of the role of the Internet for the equality in education. From the attitudes of students, it is clear that they are willing to accept distance learning and the use of the Internet in their education, not only formal education but also non-formal and informal. Their attitudes greatly support the introduction of modern technologies in our schools.

Conclusion

We can conclude that respondents have a very positive attitude toward the use of computers and the Internet in teaching, but still do not think that without modern technologies learning and teaching opportunities are much worse, because they are aware that it is a matter of each individual and his work habits. They admitted that modern technology takes their time that they could dedicate to school, but that it still helps them with broader horizons and provides much broader insights. Interestingly, they have expressed an awareness of the danger to the stability and permanence of their values even though they are aware of the good sides provided by the Internet.

We gained insight into the use of modern information technologies in English language teaching and the notion of culture, which, according to Katunarić (1996), in Hall, is the culture that represents the world of everyday habits and customs that occur automatically. Furthermore, Katunarić emphasizes that culture is a fundamental pattern of behaviour, from language to custom, and supports belonging to a group or as a signifier of identity.

The school as an institution is a secondary form of socialization, but especially in its basis, it is a much higher form that is inevitably needed by every participant of a modern society to be able to successfully and constructively act as an adult in the community. Therefore, the primary goal of the school should be to encourage the growth and development of each student. The values are abstract, and are firmly woven into a person's consciousness, and are more difficult to be detected in the daily behaviour of an individual (Peko, Varga, Mlinarević, Lukaš and Munjiza, 2014).

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