УДК 378.1

Kondrashova A. V., Boiko I. V.

CONSEQUENCES OF INFORMATION EXPLOSION. THE INFLUENCE OF NEW CONDITIONS ON THE FOREIGN LANGUAGE TEACHING METHODS

This article deals with the features of teaching foreign languages in modern conditions, study features of modern human thought; considering the following characteristics of thinking as functional illiteracy, digital amnesia and mosaic thinking. Considering their features and determining the advantages that might be used in terms of teaching foreign languages.

Key words: foreign language teaching methods, information technologies, information surfing, mosaic thinking, digital amnesia and functional illiteracy, Google effect, inspirational teaching, creative teaching.

Кондрашова А. В., Бойко І. В. Наслідки інформаційного вибуху, вплив нових умов на методи викладання іноземних мов. – Стаття.

У статті розглянуто особливості викладання іноземних мов у сьогоденні, досліджено особливості мислення сучасної людини, визначено такі характеристики мислення, як функціональна безграмотність, цифрова амнезія та кліпове мислення, розглянуто їх особливості та можливості використання їхніх переваг в аспекті викладання іноземної мови.

Ключові слова: методи навчання іноземної мови, інформаційні технології, інформаційний серфінг, кліпове мислення, цифрова амнезія і функціональна неграмотність, Google ефект, надихальне навчання, творче навчання.

Кондрашова А. В., Бойко И. В. Последствия информационного взрыва, влияние новых условий на методы преподавания иностранных языков. – Статья.

В статье рассмотрены особенности преподавания иностранных языков, исследованы особенности мышления современного человека, определены такие характеристики мышления, как функциональная безграмотность, цифровая амнезия и клиповое мышление, рассмотрены их особенности и возможности использования их преимуществ в аспекте преподавания иностранного языка.

Ключевые слова: методы обучения иностранному языку, информационные технологии, информационный серфинг, клиповое мышление, цифровая амнезия и функциональная неграмотность, эффект Google, вдохновляющее обучение, творческое обучение.

The teaching community gains the feeling of the fact that students are changing extremely quickly and these changes are not obligatory positive. For example, it has been found out that most educational technologies applied earlier no more work now [12, p. 3]. These processes are intuitionally connected with tremendously dynamic century. Everything around is changing quickly, especially the matters connected with information as Bauman called it liquid reality [1, p. 10]. Information technologies fill all the spheres of living today. Meanwhile there is a feeling that these processes are only at the starting point of their way. Where will they get the society and what conditions will there be for education? Claude Levi-Stross said that the XXI century will be the time of humanitarian thought otherwise it will not exist [6, p. 35]. As we know, the XX century was the time of physics and the XXI century is the time of neurobiology. The society got into civilization demolition where devastation in people's mind covers all other problems [11, p. 6]. S.P. Kapitsa said about the necessity to pass from education of knowledge to education of understanding. To prepare the specialists for the nearest future the teachers should understand how to act up in constantly changing conditions today.

In this article an attempt to analyze peculiarities of modern generation thinking and to offer relevant methods for teaching foreign language in technical universities is accomplished. Much research has been conducted about the impact of information technologies on human thinking (namely the Research of Stockholm Kingdom Technological University in

2008 about active and passive brain condition, Nicolas Carr "The Shallows: What the Internet is doing to our brains", cognitive research of Tatiana Chernigovskaya). To find proper methods for teaching there is a need to detect the main structure of change. V.N. Kutrunov in his works [5, p. 4–7] offers the following logical structure of change: information explosion (technical and non-technical changes) – information surfing – mosaic thinking, digital amnesia and functional illiteracy.

Thus, thematic justification of this article is to observe the main positions of this structure from the point of view of foreign language teacher, to discover advantages and disadvantages and to identify the most effective methods of teaching in modern conditions.

Information explosion. The humanity has always tried to create the devices that would make its activity easier. Such devices usually ease the work but simultaneously damage the others. By the end of the twentieth century human could not cope with the receiving of information, his organs of the senses could not deal neither with the speed of information transmission, nor with its processing, and the human brain occurred to be too slow for such kind of information flow. The speed of information flow is exponential and is characterized as information explosion [2, p. 10–13]. It is said that useful information constitutes only 35%, nevertheless such characteristic feature as usefulness does not mean that useless information does need to be processed. We see how data storage devices change, their physical size becomes less and the volume of stored information becomes higher. We observe the fast change of personal information access devices and production of personal information processing devices. But information keeps growing dramatically, thus we understand that such technological way does not change the human and does not improve his thinking. So humanity delegates work with information to the devices and steps aside technical revolution.

Teachers and students should exist in such informational abundance. Among the advantages we can outline:

- 1. Multifaceted number of resources for learning foreign language (teaching web-sites, audio and video resources, teaching platforms, Coursera, video conferences, films etc.).
 - 2. Space globalization.
- 3. Freedom of choice (possibility to study at foreign universities).
 - 4. Continuity and spacing of education.
 - 5. Perfect opportunities for career growth.

Among the disadvantages there are:

- 1. It is easy to lose the way in such informational flow and hard to find your own way and vocation for the reason of not knowing yourself.
- 2. The state of constant search and orientation for easiness and fast receive of happiness and success.
- 3. Psychological problems and emotional disorder as a consequence lack of privacy.

So, the teachers have to work with the students who lack motivation as the majority of them do not understand the reason for their studies. The passiveness of students during the classes, lack of desire to take part in discussions makes new challenges for the foreign language teachers.

Information surfing. Extraordinary event took place before us. The students have been immersed into informational environment and were left there one on one with tremendous flow of information. In the consumer society students keep silence, they watch, listen, they hardly communicate. The way of their development is not directly identified as humanity does not have experience of work in the conditions of information explosion. Cognitive habitual reflex works inside of a student. It makes him try to cover all informational flow otherwise he will be backward the reality. There is only one way – to surf the information, not stopping, not thinking, without any plan and doubt that he can go back anytime. The students cannot interact with information otherwise except for the surfing method. For this reason they keep holding the mobile information access devices and therefore information surfing leads to thinking change. The brand new different generation came up [4]. Cognitive shift took place in their minds.

Let us analyze the consequences of information surfing which the parents and teaching community encountered.

Mosaic thinking. Ignoring of long and hard parts of information is neglected in surfing which leads to the habit to look through small pieces quickly. Extra quick information surfing without correspondent plan cultivates the technology of switching between informational blocks by means of occasional associations. People who are used to this technology since childhood gain the phenomenon called mosaic thinking very quickly. Mosaic thinking is the reflection of objects' features in mind without taking into account the connections between them, tendency to fragmentariness, high speech of watching through information flow and switching between the fragments, illogicalness and diversity of information perceived, absence of complete picture of world perception [8, p. 159–162]. A student who works with information on condition of surfing inevitably reconstitutes himself as a person with mosaic thinking. The problem is that this type of thinking becomes the only one possible and independent from the particular person's will. The only solution remains is to see advantages and positive moments of mosaic thinking and start using it in education.

Among the advantages of mosaic thinking we can outline the following: the possibility to cover a lot of different topics at the same time; the skill to remember separate grammar structures not connected with each other.

The main disadvantages of mosaic thinking are: inabilities of logical thinking and lexical units' analysis (inability to identify cause-and-effect relations), students find creative tasks very difficult.

It is offered to use the methods that do not require analytical thinking, practice of speaking and listening; to divide the lesson into 5 and more blocks (lexical, grammatical, speaking, audio-block, creative block etc.), to prepare material on cards and divide the students into groups.

Digital amnesia. As information surfing is characterized by ultrafast surfing through data without breaks for thinking it is obvious that only short-term memory works in this process, and the long-term memory is out of use. As a result long-term memory is atrophied ("the Google effect"), so digital amnesia is formed. Digital amnesia is partly or full inability to remember information as a consequence of the contact with digitized information and ignoring the stage of its premeditation that leads to long-term memory atrophy [11, p. 110]. Mosaic thinking and digital amnesia are formed and become learned reflex for information in the early childhood. This is an inevitable evolutional requirement of information explosion.

So if the majority of students have bad long-term memory the teachers of foreign language are offered to use natural method of foreign language teaching (method of Stephen Krashen) as the basic one [15]. It presupposes that students do not learn students' books, do not remember the lists of words and con-

jugations, do not learn grammar rules thus when we were children we learn our native language without knowing about their existence. Natural method has the major effort on imitation by means of using the living language in the context of different situations.

Functional illiteracy. Informational environment where new generation finds itself tends to minimize text information. The preparation process and the process of information perception through texts occur to be too slow. The volume of texts become less, it is filled with pictures, comics, slides that supplement the text itself. The methods of information exchange and processing became respectively faster. Thanks to information surfing we have functional illiteracy. This phenomenon became so obvious that corresponding definition came up in Wikipedia: "Functional illiteracy is inability of human to read and write on the level required to fulfill the easiest tasks of the society, namely it is reflected in inability to read instructions, manuals, inability to find necessary information for the activity". Information environment imposes laconism beyond the rational. Living in such an environment for long period of time leads to the fact that a human is not capable of putting ideas into words, answers of one syllable, dropping the required information, fragments of thoughts pronounced without logical sequence [9].

It should be emphasized that such consequence does not have so sad affect in the aspect of foreign language learning is continuous and it mostly does not require the ability to read and remember large texts from the students. But meanwhile the student should learn how to write and outline the main information from the text. Inability to put ideas into words became the peculiar feature of modern students, and it concerns not only foreign language but their mother tongue as well. There are recommendations to avoid bulky texts, to divide texts into parts and give them out to the groups of students with the following abstracting if it is possible, to emphasize on narration (advisable using synonyms).

Emerging of the groups. Today there are some groups not influenced by information surfing. Among all the students we see those who do not have mosaic thinking, they have good memory and no digital amnesia. They can read, write and speak, so they are functionally literal. Their number is too small and it deteriorates from year to year. This group covers about 10–20% of all students [7]. So the logic of information explosion consequences leads us to division of students into two groups:

1. The first group is the most numerous; it cannot be taught with the technology of the twentieth century as it is subject to mosaic thinking, digital amnesia and functional illiteracy. In other words the members of this group are not able to plan coherent personal activity, they can memorize nothing, they cannot understand texts, write and pronounce an accomplished idea.

2. The second group is the less numerous; it has not undergone the influence of information surfing for some reasons. They can be taught with the technology of the twentieth century.

Such division means colossal society fractionation due to intellectual characteristic. Consciously or not but such division is realized in the society. The analysis of information explosion consequences made us change our mind. Dividing the students into different educational groups is obligatory, namely in the universities. Their education is impossible within the framework of the only one educational program and in such case it would lead to intellectual abilities abolishment. Meanwhile to avoid discrimination the possibility of individual interexchange within the groups should be worked out. Compatibility is important here as well and it should encourage the rise of general development level. The programs for each group should differ greatly.

Existing in the conditions of information explosion is gradually new reality that requires new approaches [10, p. 122]. The most effective teaching methods of the first group students are:

- 1. Listening comprehension, taking into account mosaic thinking audio information is preferred, namely the tasks of individual listening of texts or blocks with the following discussion.
- 2. Group tasks, namely group projects with different topics.
- 3. Different creative tasks, from presentations to the blog creation (using popular blog platforms like blog.com, blogger, weebly, tumble etc.).
- 4. Inspirational teaching may help with absorption of information and catalyze a constructive response insight and personal growth. The result of inspirational teaching will lead to transformation. As Jack Mezirow [14, p. 87] noticed: "Transformative learning is the essence of adult education to help the individual become more autonomous thinker by learning to negotiate his or her own values meanings and purposes rather than uncritically act on those of others".
- 5. Challenge for teachers: to nurture curiosity and confidence, unlock hidden potential in individuals. For students, curiosity is the muscle power needed to push boundaries. One of the most empowering things a teacher can do for students is encourage their curiosity and increase their confidence [16]. This very literally gives them wings they need to soar. Curiosity and the confidence foster powerful tools for any individuals to have. Teachers are in the perfect position to act as the whetstone on which students can sharpen their natural tools.

The second group is able to study with the technology of the twentieth century but it should be taught in a different way. They are the children of new reality, the era of information explosion and they have undergone its action. They know the technology of surfing and are able to surf informa-

tion as the first group does. But they have different peculiarities and this cannot be ignored. They are people able of individual thinking, so they should be developed in this sphere. They are future scientists, directors, creative workers able to work either individually or in a group on condition of group thinking. This entire group is exclusive and requires new approaches in studies. They should face difficulties but possible to come over. Individual obstacles and their negotiation is the key way of their development.

So as Zigmund Bauman wrote in his book "Liquid modernity" [1, p. 108] informational era infected the humanity with "social autism", which means people avoid social obligations, hardly help each other in the world of over-information they hide from the society and from themselves in order not to feel pain for see-

ing and hearing the never-ending flow of information and news.

Let's ensure the scenario described by Umberto Eco [13, p. 59] to remain on paper: knowledge is for chosen, that is, only selected ones get access to serious knowledge due to various criteria. Let's hope that the new Lomonosov and Newton will all appear among us.

Teachers can make a connection with students using only one method – using inspirational teaching combined with creative approach and to nurture curiosity and confidence in students. It would be advantageous not to put emphasis on online education, but on traditional approach because only in communication face-to-face the teacher can inspire students. And the main task for the teacher is to find all human that is hidden under information and technological envelope.

References

- 1. Бауман 3. Текучая реальность / 3. Бауман. пер. с нем. Асочков ; СПб. : Питер, 2008. 240 с.
- 2. Вербицкий А.А. «Цифровое поколение»: проблемы образования / А.А. Вербицкий // Профессиональное образование. Столица. -2016 № 7. C. 10–13.
- 3. Дегтярьова Ю.В. Методика навчання студентів у немовних навчальних закладах : дис. ... канд. пед. наук : спец. 13.00.02 «Теорія і методика навчання» / Ю.В. Дегтярьова ; Запорізький нац. ун-т. К., 2006. 325 с.
- 4. Ершов А.П. Программирование вторая грамотность / А.П. Ершов [Электронный ресурс]. Режим доступа: http://oberon2005.oberoncore.ru/classics/ae1981.pdf.
- 5. Кутрунов В.Н. Логика эволюционных последствий информационного взрыва. Как учить в новых условиях? / В.Н. Кутрунов // Интеграция в преподавании предметов естественно-математического цикла и информатики: механизмы и средства : матер. Межрегион. науч.-практ. конф. пед. служащих. (6. декабря 2016 г.). Тюмень : ТОГИРРО, 2016. С. 4–7.
 - 6. Леви-Стросс К. Печальные тропики / К. Леви-Стросс ; пер. В. Елісеева, М. Щукина. М. : АСТ, 2010. 464 с.
- 7. Рукшин С.Е. Ломоносовых больше не будет / С.Е. Рукшин [Электронный ресурс]. Режим доступа: http://www.gazeta.ru/social/2013/11/22/5764921.shtml.
- 8. Спиркина Т.С. Исследование динамики интернет-зависимости / Т.С. Спиркина // Вестник Томского государственного университета. 2008. № 311. С. 159–162.
- 9. Сокологорская Д. Функциональная неграмотность / Д. Сокологорская [Электронный ресурс]. Режим доступа: http://syg.ma/@daria-sokologhorskaya/funktsionalnaia-nieghramotnost.
- 10. Тарнопольський О.Б. Методика навчання іншомовної мовленнєвої діяльності у вищому мовному закладі освіти : [навчальний посібник] / О.Б. Тарнопольський. К. : Інкос, 2006. 248 с.
 - 11. Черниговская Т.В. Чеширская улыбка кота Шредингера / Т.В. Черниговская. М. : Язык и сознание, 2013. 458 с.
- 12. Фильштейн Д.И. Характер и степень изменений современного детства и проблемы организации образования на исторически новом уровне развития общества [Электронный ресурс]. Режим доступа: http://letidor.ru/article/70585/.
 - 13. Eco U. Kant and the Platypus: Essays on Language and Cognition; trans. A. McEwen. Toronto: Harcourt Brace, 1999. 480 p.
- 14. Mezirow J. Transformative Learning in Practice: Insights from Community, Workplace, and Higher Education / J. Mezirow. USA: Jossey Bass, 2009. 336 p.
- 15. Krashen's S. Theory of Second Language Acquisition / S. Krashen's [Electronic resource]. Access mode: http://www.sk.com. br/sk-krash.html.
- 16. Teaching It's about Inspiration, Not Information [Electronic resource]. Access mode: https://medium.com/@tseelig/teaching-its-about-inspiration-not-information-1f64ddf019e7#.w9qbqzy6v.