The formation of learning-strategic competence in self-studying of foreign languages of technical students in monologue utterance

I. Kornyeyeva

Kyiv national university of technologies and design, Ukraine
Corresponding author. E-mail: connector0014@gmail.com

Abstract. This paper proved the importance of self-studying in educational process of modern future specialists in present conditions (Covid-19 reality). The results of our research are based on the critical analysis of Ukrainian and foreign linguistic, pedagogical, psychological and methodological literature resources. The conducted analysis of resources allows us to make the conclusion about the fundamental role of the learning-strategic competence in foreign languages training at Higher Schools. If the student has to make self-studying, he has to be learned how to organize his study, activate his knowledge, gain skills to work creative and systematically, motivate himself and promote the expected results. This is the sphere of the learning strategies. To study successfully the student has to gain the learning-strategic competence. In our research we proposed the definition, content, functions of learning-strategic competence as the base of self-studying of higher technical students and their subsequent training through their lives.

Keywords: self-studying, the English language of Professional Direction, learning-strategic competence, learning-strategic components, technical students, higher educational institutions.

1. Introduction.
It is futile to deny the fact of the world quick changing. In modern conditions of world globalization and integration the demand to Higher Education have been changing too. Especially it is followed with the world pandemic – Covid 19. Under this threaten the higher education institutions are needed to work in unusual regime: full on-line studying, distance work and self-studying (Hamaniuk, V. 2020, Konkin, A. 2021). Two years ago the ratio of classroom hours work at higher educational institutions in Ukraine was 2/3 to 1/3. Nowadays, it is 3/1. These changed conditions in Higher Education have their own positive characteristics: the applied self-studying develops the subject attention of the students; self-studying raises the creative activities of the students; it prevents formalization in knowledge accession; self-studying in modern conditions formulates the student's autonomy, self-definition and responsibility of a person.

Self-studying of future specialists on different directions of their profession preparation in higher educational institutions is **the less elaborated research** and at the same time it is the most interesting one at pedagogical, psychological sides and methods of foreign languages teaching all over the world. In this paper we investigate self-studying as modern educational process, the role of the learning-strategic competence as the base of such self-studying. We studied the proposals of strategies after E. G. Azimov and A. N. Schukin (2009) and learning-strategic competence after I. P. Zadorozhnaya (2012) and grounded them on the base of professional-oriented English-language competence formation of future technical students in monologue utterance. We expended the framework of previous researchers and gave the definitions, content, functions of self-studying, the learning-strategic competence and strategies, which are actual in pedagogical, psychological and methodological aspects nowadays.

2. Methods and Material.
2.1. Methods. In our research we had fulfilled the critical analysis of Ukrainian and foreign linguistic, pedagogical, psychological and methodological literature resources on the learning-strategic competence in the self-studying of technical students in monologue utterance. We had used the methods of system-structural analysis and synthesis, which helped us to determine and ground the self-studying of technical students and the learning-strategic competence as the foundation of such learning work.

2.2. Analysis of last researches. The didactics majority is persuaded that self-studying is the immense of the activities (individual and collective work) of those, who are studying at classes or at home in conditions of non-ruling of the tutor.

The researchers of self-studying at higher educational institutions (S. I. Arhangelskiy, V. K. Buryak, M. G. Garunov, E. U. Golant, B. G. Yoganzen, S. I. Zinovyev, O. G. Molybog, R. A. Nizamov, M. D. Nikandrov, P. I. Pidklassistiy etc) put the different contest into the definition of self-studying.

Thus, the first point of such view is seen that self-studying is the self-research of necessary information, accession of knowledge and using all these activities in solving of studying, scientific and professional problems (S. I. Arhangelskiy, 1980);

The second point of view is connected with self-studying vision as the majority of activity elements: creative accession and thinking of studying material at the lecture; preparation of home-work, exams, credits; using of the diploma and course work (R. A. Nizamov, 1975);

The third point of view demonstrates the link of self-studying with individual, group knowledge activities of the students at classes or at home without ruling of the tutor (O. G. Molybog, 1975);

The fourth point is thought as a system of upbringing of activity and self-work of a person; accession of skills of rational information using (B. G. Yoganzen, 1973);

The definite range of authors (V. Graf, I. I. Ilyasov, V. Y. Lyaudis) insists on self-studying as an organizing system of pedagogic conditions, which provides the tutor's ruling of educational activity (1981).

Some points of view mean the self-studying as a self-education work (S. I. Zinoviev, 1975).

As it is seen from researches of E. G. Azimov and A. N. Schukin (2009), I. P. Zadorozhnaya (2012) the self-studying is the kind of activity for stimulation of the activ-

ity interest, the base of self-education, impulses for the following qualification development from one side. And from another side it is the system of pedagogical conditions, which provides the tutor's ruling role in the students' self-studying.

The self-studying fulfills the knowledge creativity, studying and upbringing functions. As a method of studying, it does the control function.

It expands and deeps the accessed knowledge at classes; grows the formation skills in literature studying; up-brings the self-awareness, creativity and self-control.

Thus, in our research we prove that self-studying is the most important discussed problem in modern higher educational institutions from the positions of modern pedagogical science demand and the whole society needs in general.

3. Results and discussion.

3. 1. Actuality, the subject, the object of research. The problem of self-studying organization in foreign languages teaching was researched by many scientists. (I. A. Rapoport and G. A. Turiy 1979, U. I. Passov 1982, I. O. Zimnya 1989, N. F. Koryakovzeva 2002, A. V. Konusheva 2005, E. G. Azimov and A. N. Schukin 2009, I. P. Zadorozhnaya 2012, L. Dickinson 1987, H. Holec 1981, D. Allwright 1990, D. Little 1996, E. Esch 1996, Z. Rao2006, L. Murphy 2008, R. Oxford 2008).

Despite of significant interest of the scientists to the problem, it is the research absence on self-studying of future technical specialists in the formation of the professional-oriented English-language competence in monologue utterance.

Therefore, the **research actuality** is connected with:

•   The necessity of quality renovation of the process of future technical specialists

•   preparation including modern preparation demands;

•   The rising role of self-studying in the credit-module education system conditions;

•   The rising exception role of self-studying of the technical specialists in the formation of preparation for studying during the whole life; their personal development; their individual studying style formation; their psychological processes development etc. All these need the scientific ground of self-studying organization;

•   The research absence on self-studying organization of technical specialists including all modern English-language level demands

On **Figure 1** you can see the data of system analysis of self-studying and class-work correlation at Ukrainian higher educational institutions since 2018.
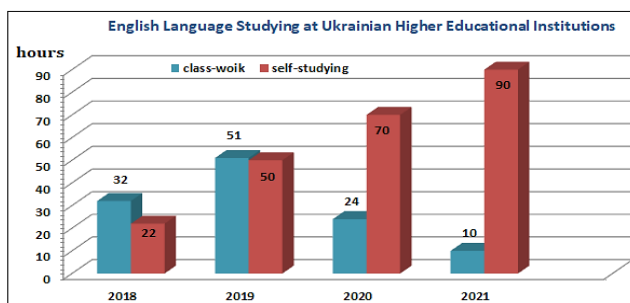

Figure 1. The correlation of self-studying and class-work hours.

From above-mentioned Figure 1 it follows the dominance of self-studying since 2018. On **Figure 2** we have stated this more definitely.
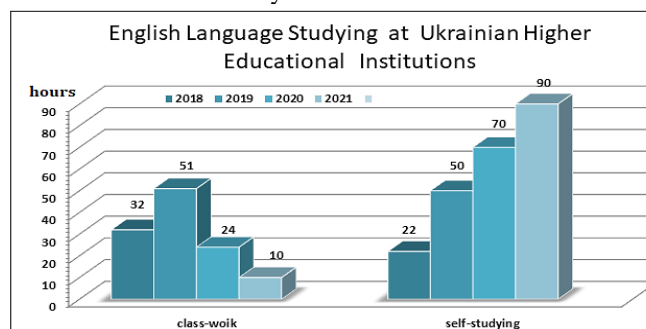

Figure 2. The dominance of self-studying since 2018.

Thus, we have proved the actuality of the research in this paper.

The **object** of our research we see in the process of self-studying organization of technical specialists in the formation of the professional-oriented English-language competence in monologue utterance.

The **subject** of our research means the components of the **learning-strategic competence** in self-studying of technical specialists of modern higher educational institutions in Ukraine.

3. 2. The self-studying definitions and autonomy of students. In our research we fulfilled the analysis of self-studying definitions in modern scientific literature and made the conclusion: the self-studying is the form of studying activity, which the student organizes and controls on the base of enter mediate tutor's ruling. The goal of such self-studying is mastering of the English-language communicative competence and the student's autonomy development (I. P. Zadorozhnaya, 2012, P. 9).

In this contest we share the point of view of I. P. Zadorozhnaya that autonomy of the student is the student's ability to make his / her own decisions on all stages of studying activity according to the goal of the English-language studying, to carry the responsibility for their fulfillment and result (I. P. Zadorozhnaya, 2012, P. 9).

In the conditions of studying in higher educational institutions in Ukraine the student's autonomy realizes only in the process of self-education. His / her autonomy overcomes the limits of educational program because it defines the student's accepted goals, studying style, materials, self-control and self-assessment. Therefore, the studying at higher educational institution means the full-conditional autonomy. It seems to have edging and finishing goals according to program demands and individual needs, which include the ability to be consulted by the tutor, self-realization of settled tasks, self-control and self-correlation, assessment of the results. It is added with the mediate and postponed control of gained results of the students' self-studying by the tutor. Full-conditional autonomy is described by the flexible managing character.

Thus, as we prove in our research, the goal of self-studying of future technical specialists is the formation of professional-oriented English-language competence in reading / audio work / speaking / writing; gaining of the lexical, grammar, phonetic and complex communicative competences in general and particular (I. P. Zadorozhnaya, 2012, P.11).

3. 3. The role of the learning-strategic competence. As the result of scientific literature analysis, we define the psychological-pedagogical conditions and principles of self-studying organization of the technical students of higher educational institutions in professional-oriented English-language competence formation. Among pedagogical conditions of effectiveness of the technical students self-studying, we see the knowledge of rational methods of the foreign language materials work, the choice of optimal strategies for settled adequate tasks, according information level of the students' culture. All these provide the students' ability for quick search and interpretation of information, skills for rational hour parting and results control, immediate correlation on the base of results control and self-control.

To gain the practical and other goals in students' self-studying it is necessary to formulate the **learning-strategic competence(LSC)[1].**

The learning-strategic competence consists of two components: learning competence and strategic competence. In our research we mean the learning competence as ability and preparation of a person of a student to aware and effective managing of studying from the goal setting up to self-control and self-assessment (N. F. Koryakovzeva, 2002).

The content of learning competence consists of the knowledge about person's psychological characteristics, its advantages and disadvantages, which impact on the process of foreign languages accession. This knowledge concerns the ways of rational learning implementation at the class and home self-studying, the skills for changing and obtaining the most effective strategies according to studying goals and individual properties, the skills for command work, skills for putting down the troubles and overcoming negative emotions in the process of the foreign languages studying and speaking (Methodic, 2013, P. 444).

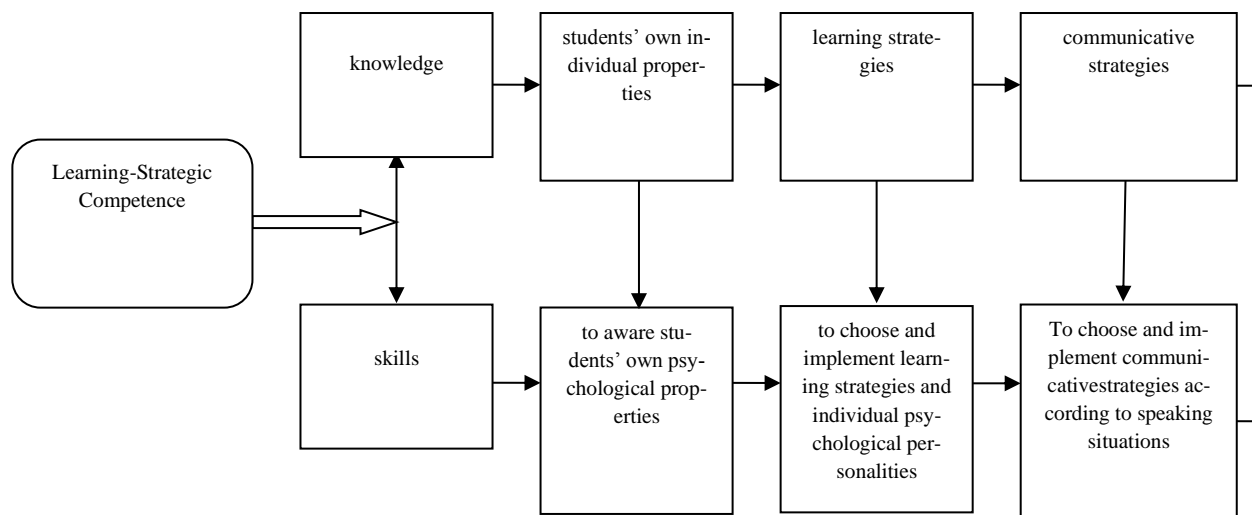On **Figure 3** we demonstrate the structure and content of LSC.

Figure 3. The structure of LSC.

3. 4. Learning competence. It is necessary to underline the special role of learning-strategic competence, in particular, the **learning competence.** The latter one is the main basic condition of the students' development in the general language awareness. Without learning competence, it is impossible the effective formation of language competence. For example, there are the skills of the students to choose and to implement the variety learning strategies for obtaining lexical units. They stimulate the students' ability development and wish to think and mind about the processes of lexical unit formation. Therefore, the students can construct their own system of lexical knowledge. And, otherwise, the developed lexical awareness is the base of the student's ability to analyze his / her own variety of learning strategies, to take away non-effective strategies and to try new ones.

3. 5. Strategic competence. The **strategic competence** is discussed as the ability to compensate the lack of language knowledge in the student's speaking and as the language and social experience for foreign languages communication (E. G. Azimov, A. N. Schukin, 2009).

The strategic competence helps the students to overcome the language barrier, difficulties in the real foreign languages communication. The strategic competence provides the existent knowledge of verbal and non-verbal means of the foreign language gap compensation, knowledge of people's behavior models and language action sets for obtaining the communicative tasks.

3. 6. Strategies. The **"strategy"** is analyzed by us as one of the ways of obtaining, keeping and implementing the information, which is necessary for attaining the communicative goal (Bigich, O. B., 2013, P. 35).

From above-mentioned information, we can prove that the strategic competence consists of learning competence (study skills for mental operations of analysis, synthesis, study activities) and communicative strategies (language

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[1]The current study adopts the term for learning strategic competence (Methodic, 2013, p. 444).

means of skills development for monologue utterance production).

The **learning strategies** help the effective obtaining of the foreign languages material. They can be divided into **studying** and **teaching** strategies. The teaching strategies mean the student's needs, interests, motivation, abilities. The analysis of scientific research states that communicative strategies are based on compensation the language, discourse and socio-cultural components. They include non-verbal strategies and help to overcome the language and psychological barriers in foreign languages communication. There is no a single point of view on strategies differences. (J. M. O'Malley, R. L. Oxford, J. Rubin, A. Wenden).

Some scientists (J. O'Malley, A. Shamo) differentiate the learning and communicative strategies thank to their functions differences: learning to study and learning to communicate (Bigich, O. B., 2013, P. 35).

R. Polititzer states that technical students have the lower ratio of effectiveness of learning strategies implementation than the human direction students (R. L. Polititzer, 1999). This point of view is shared by R. Oxford and other researchers.

3. 7. Components of LSC. It is proved that successful foreign language study process of the technical students is subjected the following characteristics: mental and speaking properties, the ways of thinking, the ways of obtaining information and its renovation etc.

In our research we state that learning-strategic competence consists of such components: language, linguistic, socio-linguistic and semantic components.

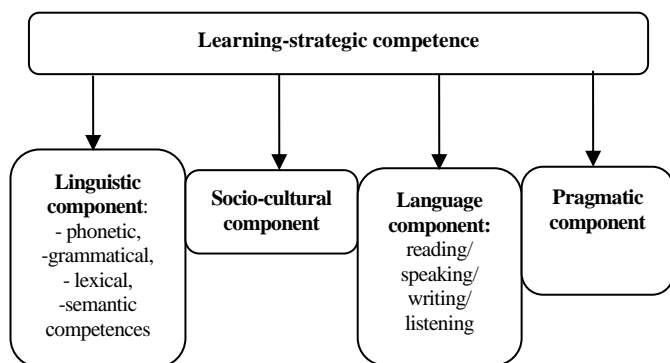On **Figure 4** you can see the structural components of LSC.

Figure 4. The structural components of LSC

Thus, we elaborated the competences in the professional-oriented English-language monologue utterance of the technical students and made the conclusion about the main role of the strategic competence.

4. Conclusion. In this paper we tried to contribute to development of self-studying in present conditions (Covid-19 pandemic). We see the great importance of self-studying in education process nowadays as

* the kind of activity for stimulation of the activity interests of the students;

* the base of their self-education throughout their lives;

* the system of pedagogical conditions, which provides

the tutor's ruling role in the students' self-studying;

* the knowledge creativity and upbringing as the method of studying.

The results of our research are based on the critical analysis of Ukrainian and foreign linguistic, pedagogical, psychological and methodological literature resources on self-studying. The conducted analysis of resources allows for developing a deeper understanding of the fundamental role of the learning-strategic competence in foreign-languages training of technical students at Higher Schools, which serves to provide:

- the students' ability for quick search;
- quick interpretation of information;
- skills for rational hour parting and results control;
- immediate correlation on the base of results control and self-control.

The content of learning competence consists of:

- the knowledge about person's psychological characteristics, its advantages and disadvantages;
- knowledge about the ways of rational learning implementation at class and home self-studying;
- the skills for changing and obtaining the most effective strategies according to studying goals and individual properties;
- the skills for command work;
- skills for putting down the troubles and overcoming negative emotions in the process of foreign-languages studying.

We defined the strategic competence as the ability to compensate the lack of language knowledge in the student's speaking and as the language and social experience for foreign-languages communication.

It * helps the students to overcome the language barrier; * provides the existent knowledge of verbal and non-verbal means of foreign-language gap compensation; * provides knowledge of people's behavior models and language action sets.

We analyzed the following strategies:

- learning strategies (study skills for mental operations of analysis, synthesis, study activities);
- communicative strategies (language means of skills development for monologue utterance production);
- teaching strategies (the student's needs, interests, motivation, abilities);
- studying strategies (learning to study and learning to communicate).

In our research we stated the learning-strategic competence components:

- language;
- linguistic;
- socio-linguistic;
- semantic.

From above-mentioned information we can make the conclusion: the means to gain necessary knowledge by the students, master skills, learn to work systematically, think and form own style of mental activity is self-studying. The formation of learning0strategic competence is the main condition for this reason.

REFERENCES

1. Arhangelskiy,S. I. (1980). "Educational process at higher school, its natural foundations and methods". Moscow: Higher school.
2. Azimov, E. G. & Schukin, A. N. (2009). "The new dictionary of methodology terms and definitions". Moscow: Ikar.
3. Bigich, O. B, Bondar, L. V., Voloshinova, M. M. (2013). "The theory and practice of foreign language professional-oriented competence in non-linguistic student's speaking". Kyiv: publishing center of KNLU.
4. Hamaniuk, V., Semerikov, S., Shranko, Y. "How learning technology wins coronavirus". Retrieved from: http://doi.org./10.1051/shsconf/20207500001
5. Konkin, A., Dronova, S., Tretyakova, G., Bermudez-Alehina, A., Kotenko, V. "Prospects of using innovations in post-pandemic higher education". Retrieved from: http://doi.org./10.1051/shsconf/202112701001
6. Molibog, A. G. (1975). "Pedagogical labor scientific organization questions at higher school". (2-ed). Minsk: Higher School.
7. Nizamov, R. A. (1975). "Didactical foundations of students' educational labor activization". Kazan: KGU.
8. Nikolaeva, S.U., Borisko, N. F., Bigich, O. B. (2013). "Methodic of foreign languages and cultures training: theory and practice". Kyiv: Lenvit.
9. Politzer, R. L. (1991)." An exploratory study of self-reported language learning behaviors and their relation to achievement". In Studies in Second Language Acquisition, 6. 1, 4-51.
10. Yoganzen, B. G. (1973). "Pedagogical activity and scientific labor organization". Tomsk: Tomsk university.
11. Zadorozhnaya, I. P. (2012). "Theoretical and methodological principles of self-studying work organization of future teachers in obtaining of the English communicative competence". (DSc thesis abstract).
12. Zinoviev, S. I. (1975). "Education process at Soviet higher school". Moscow: Higher School.