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### ARTICLE

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# **FUTURE IT-ENGINEERS' MOTIVATION** AND SELF-ESTEEM IN FORMING THEIR **READINESS TO USE ESP**

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Summary. This article is fixed on motives and self-esteem of future IT-engineers. They should be taken into account by ESP lecturers while preparing teaching material. It is important to consider them and provide students with the material they need in their future professional activity. The rise of the motivation and self-esteem exponents is proved by the results obtained at the beginning and at the end of the experiment. Person-oriented teaching ESP on the basis of multilevel approach has been an efficient means in achieving the set goals.

Keywords: motivation, self-esteem, person oriented teaching, multi-level approach.

Efficient and accessible vocational training is extremely important for every society economic development. V. Creminj states that "it is a prerequisite of ever person's self-realization who during their lives participate to some extent in distribution of the social roles, in particular in the labour market, it is also a prerequisite for development of the personal carrier as well as for progress of the Ukrainian society in general [1]. Teaching ESP requires studying of students' motivation and self-esteem to fully meet their academic needs. Motivation to studying is an important constituent of the teaching process, where a particular person's values are mostly displayed.

It is not an easy task to get a person interested in some subject. First of all it is essential to direct studying towards the particular students' needs and interests. Most IT-students are highly-motivated in learning English. Still there are some who lack self-direction in studying, therefore they require additional attention and inducement.

Psychologist O. Asmolov defines two planes for the analysis of a person's manifestation as an activity subject: productive and instrumental. The first one implies "processes of a person's activity, in which he/she has to make a choice between different motives, positions and roles. The latter contains character and capabilities. A personality's individuality is the sum of a human's sense attitudes and

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sets in the world, which are possessed in the course of the social life, provide orientation in the value hierarchy and gaining behaviour in the situation of the motives struggle. They are embodied through activity and communication in the culture products, other people, a person oneself for the sake of continuation of the life way existence, which is the value for this person" [2]. Personal levels cause an individual's situational choice, giving reason for the behaviour.

We support the three-component structure of a personality offered by I. Malafijik. The first component is direction, manifested in needs, interests, ideals, persuasions, motives of activity and behaviour, and outlook. Knowledge, skills and abilities refer to the second component. The third group consists of individual and typological peculiarities, expressed in character, temper and abilities. The scientist reasonably asserts, that "knowledge as a way of the personality change, as development and upbringing is narrowed to the components change of the personality structure, and to the change of the links between them" [3]. We consider that all the mentioned components need to be developed in every individual to the necessary extent. Lacking some of them causes obstacles either in life values in general or in professional satisfaction and personal life in particular.

We suppose that implementation of the person oriented teaching can influence the motivation of learning English and also a person's self-esteem. We make a hypothesis that they will increase and have positive impact on the general state of mind and activity. It is known that "just readiness to realization of professional career is characterized by a student's ability to self-perfection, selfeducation, search and perception of novices in solving professional problems" [4]. IT sphere develops very quickly, thus the ability to learning, self-education and getting some new skills is of vital importance. Thus raising students' motivation to become more educated we contribute to their future professional achievements.

The motives of learning FL are important as this knowledge gives the possibility to correctly arrange the priorities and methods search for the students to get interested in the subject. There were no strict restrictions concerning the number of answers since usually people have several motives. This caused a situation when the total exceeded 100 %. Table 1 presents students' answers, where percentage and absolute numbers (AN) are given.

Table 1

	Doers	s Motives													
		Entrance		Joi	Joint Work		Communication		Self-		Work with		Others		
		exams for		venture abroad		in travel		development		sources					
		master's													
		degree													
		%	AN	%	AN	%	AN	%	AN	%	AN	%	AN	%	AN
	EG	24,1	52	6	13	31,9	69	16,1	34	66,2	143	42,1	91	18,1	39
Ī	CG	8,1	17	2,8	6	27,9	59	37,9	80	39,8	84	25,1	53	7,1	15
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Motivation of the future IT-engineers to learning FL

Taken from [7].

As seen from our analysis, self-development takes the first place among the students' priorities – 66,2 % in the experimental group (EG) and 39,8 % in the control group (CG). To gain the necessary skills we apply a special kind of work – an annotation of English articles from newspapers or magazines. The students are offered a scheme for description and characteristics of the received information to

make the analysis easier.

Work with English sources was marked by 42,1 % in EG and 25,1 % in CG. Besides, it is also important for the students to communicate with foreigners during journeys (16,1 % in EG and 37,9 % in CG) and to work abroad (31,9 % in EG and 27,9 % in CG). The exam in English for entering the Master's degree courses became the choice of 24,1 % in EG and 8,1 % in CG. Some students plan to organize a joint venture – 6 % in EG and 2,8 % in CG. From 7,1 % to 18,1 % of the students name a number of other motives which were not given in the list, in particular: curriculum requirements, interest, being convinced that knowledge of English is a necessary prerequisite for successful career etc.

Therefore a teacher should take into account personal aspects, considering the processes of perception and remembering as well as respect students' feelings. A. Ghurzhij states that "the level of the mental activity is not a stable values, it changes during day and night" [5]. It is necessary to mind this dynamics of the mental activity, pondering over the time distribution of the teaching material.

Speaking about presentation of the teaching material, we consider that new vocabulary will be better learnt at the beginning of the lesson, when students' perception is very active. At the same time grammatical information should be presented in the context of the worked out text, gently moving from the known abstract to the theory with the further reinforcing by means of exercises. Giving an understandable example, a grammatical notion is easily perceived. For example, in the sentence «Anti-virus programme cannot help renovating periodically» we explain the way of rendering two negations in comparison with gerund.

Most students try to improve their English through self-development, a teacher should take this as the basis in planning lessons. Scientist V. Morozov underlines that "a pedagogical process is governed by the objective laws, which should obligatory be taken in consideration in teaching and upbringing; theory gives only general orientation for actions, offers some samples for solving pedagogical tasks. But every time general principles need to be used considering particular circumstances, peculiarities of the pedagogical situation" [6]. To improve the students' level of knowledge one can prepare cognitive texts for speech development.

Representatives of different specialities have their direction in the topics of interests. Future IT-engineers can get interested in the work description of certain computer systems, peculiarities of administration, characteristics of the digital TV new technology, advantages and disadvantages of a new application etc.

It is also important to introduce information about uniqueness of English and present culture of the English-speaking countries. Many students are fascinated by interesting traditions and customs of foreigners, their cultural peculiarities seen in the language. Let's take an example of the longest word in English, with no letter repeated, it is uncopywrightable. There are also unique comparisons, clichés, etc. To describe a hungry person Englishmen use the phrase «hungry like a horse», which is quite different from the Ukrainian expression meaning «hungry like a wolf», the notion of the renovated force is included in the phrase «second wind», but not in a literal translation with the word "breath".

Communication in journeys abroad requires knowledge of conversational English. Thus it is evident that one cannot use only ESP, since tourists should be able

Student's self-esteem means much for the successful personal development. It does not only define direction and the way of learning, but it also guides the general behavioural reactions, including self-control and self-perfection. Since we have conducted the questioning on determining of the students' self-esteem it is considerable to trace its dynamics. The results of the analysis are given in the table 2.

Table 2

Doers		Hi	gh			Low							
	E	3	E		В		E		В		E		
	%	AN	%	AN	%	AN	%	AN	%	AN	%	AN	
EG	6,9	15	10,2	22	80,1	173	84,7	183	13	28	5,1	11	
Dynamics	cs +3,3					-7,9							
CG	15,2	32	10	21	80,1	169	83,8	177	4,7	10	6,2	13	
Dynamics	nics -5,2					+3,7				+1,5			

#### Comparison of the future IT-engineers' self-esteem at the beginning (B) and at the end (E) of the experiment

Taken from [7].

After application of the person oriented teaching on the basis of the multi-level approach we discovered the changes in the students' self-esteem and fixed its positive dynamics. The data received prove raise of self-esteem in the EG (high self-esteem rose on 3,3 %, the sufficient one did on 4,6 %) as compared with the initial results. In the control group we observe inconsiderable decrease of the high self-esteem on 5,2 %, and increase of the sufficient one on 3,7 %. We consider that the self-esteem level is especially influenced by the session results, awareness of particular disciplines complexities, change of life priorities etc.

Having implemented person oriented teaching we have fixed establishment of the psychological stability and considerable liveliness in the future IT-engineers' academic and cognitive activity. While using the multi level approach students do not feel psychological discomfort because of different level of general school education, individual cognitive styles etc. That is why this approach to teaching ESP is an efficient tool of achieving educational and upbringing purpose – formation of a qualified specialist's readiness, which does not only include professional knowledge, skills and abilities, but also has a psychological readiness to use them.

We observe a number of positive changes in the psychological aspects. The most important of them are the following: absence of fear concerning difficult tasks since it is possible to use the easier level; low level students' interest due to the real opportunity to cope with a task; absence of subjective estimation; transparency of the points accumulation during their studying; an opportunity to raise their level as the choice of the level can be changed according to the knowledge of the particular theme. There are democratic relations within the studying activity when a student makes a choice which contributes to getting positive emotions. Besides there is СЕКЦІЯ ХХУ. ПЕДАГОГІКА ТА ОСВІТА

acquirement of more confidence in answering; increase of self-esteem among the low-level students; decrease of responsibility because of bad absorption of the difficult teaching material (its basis is the principles of the three possible levels); decrease of the unlearnt material amount; individual striving for level increase in mastering the language; appearance of the sound competition.

In general liberalization, equality and democracy in teaching are important factors in forming integral personality. Thus we support the opinion of L. Sheljuk who asserts that "democratization of the higher education is not the final stage, but it is simultaneously a process and a purpose, which should be strived for. It will be really efficient only when teachers and students take constant care of it, root it and defend it, treat it as an embodiment of the civil rights and freedom" [8].

We have traced the students' readiness change at the beginning and at the end of studying after using person-oriented approach to teaching ESP. The control and experimental groups have shown gradual increase in academic exponents. However experimental group has more essential changes. Increase of the high level is on 23,1 % in EG and on 1,9 % in CG, increase of the middle level is on 15,8 % in EG and on 8,1 % in CG.

Initial research data prove the low level of the future IT-engineers' readiness to use a foreign language in their professional activity. Thus there is a necessity of interaction between teachers and students. In connection with this scientist M. Koroljchuk emphasizes that "knowledge, abilities and skills are not physical objects, which can be passed from one to another. No knowledge will appear without a student's feedback. There should be activity and interaction in the relations "teacher-student" [9].

Development of self-consciousness is also an important aspect to form a personality. The researcher L. Ghrymak reasonably proves that "self-consciousness as a peak of the human psyche includes three closely connected components: self-cognition, self-control and self-perfection" [10]. Therefore it is of vital importance to develop a need to self-cognition, which is correlated with the necessity to consciously control one's own activity, improving it in this way. No external factor can influence a person so much as people themselves, for it is possible to escape from the others but there is no chance to escape from oneself.

We have taken into account the students' motivation to form and implement the model of the future IT-engineers' readiness formation to use a foreign language in their professional activity in to the teaching process of the ESP course.

During teaching a foreign language according to the offered experimental model we focused the students' attention on the possibilities and prospects to use knowledge, abilities and skills obtained at the lessons in their future professional activity (to trace novices in the IT area abroad, to get additional information on the advanced producers of the computer equipment, communication with foreign colleagues via various communication media). The students were also informed about the necessity of mastering a foreign language for the use of the obtained professional knowledge, abilities and skills in every day life (for orientation in foreign instructions, medicine descriptions, household appliances etc.). Positives of a foreign language competence was much underlined, in particular understanding of language innovations and English borrowings (e.g. half back, creative, mass media

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and so on).

After implementation of the person oriented teaching we stated great positive changes in psychological stability and noticeable liveliness in learning-cognitive activity among the students.

Academic exponents include the following changes: interest increase in doing academic tasks, better preparation for lessons, absence of fear concerning a wrong answer, improvement of memory due to systematic learning, decrease of the academic debts at the moment of taking credits, real estimation of one's own abilities, increase of experience in usage of lexis and absorption of grammar rules.

The personal advance exponents are shown in the following aspects: increase of self-esteem among the experiment participants, mutual respect between the groupmates, a strong feedback between a teacher and students, establishment of the students' critical thinking, striving for self-perfection by a gradual raise of level doing some tasks, acquiring of self-confidence in one's own abilities. As a result we observed the establishment of democratic principles of teaching interaction.

Therefore it is evident that person oriented teaching on the basis of the multi level approach is of vital importance for the professional training and formation of a future IT-engineer's mature personality.

#### **References:**

- [1] Кремінь В. (2015) Формування глобально конкурентоспроможного людського капіталу найважливіше завдання професійної освіти. *Педагогіка і психологія*. *Вісник НАПН України*, (4 (89)), 5–10.
- [2] Асмолов А. (1990) Психология личности : учебник. М. : Изд-во МГУ.
- [3] Малафіїк І. (2009) Дидактика. Київ : Кондор.
- [4] Гребеник Т. (2014) Формування готовності студентів вищих навчальних закладів до реалізації професійної кар'єри. *Вісник Черкаського університету.* Серія педагогічні науки, (25 (318)), 34–40.
- [5] Гуржій А., Жук Ю., Волинський В. (1997) Засоби навчання: навчальний посібник для студентів вузів та слухачів курсів підвищення кваліфікації. Київ : Знання.
- [6] Морозов В. (2013) Педагогічний процес як просвітництво і дослідницька діяльність. Вища освіта України : теоретичний та науково-методичний часопис, (1 (52)), 36–41.
- [7] Колісник В. Ю. (2018) Формування готовності в майбутніх інженерів-програмістів до використання іноземної мови у професійній діяльності (автореф. дис... канд. пед. наук). Черкаський національний університет імені Богдана Хмельницького, Черкаси, Україна.
- [8] Шелюк Л. (2014) Зміст і проблеми впровадження демократичної вищої освіти. Вища освіта України : теоретичний та науково-методичний часопис, (№ 3 (54)), 64–68.
- [9] Корольчук М. (2004) Психофізіологія діяльності: підручник для студентів вищих навчальних закладів (2-е вид, випр. та доп.). Київ : Ельга, Ніка-Центр.
- [10] Гримак Л. (1989) *Резервы человеческой психики: введение в психологию активности.* М. : Политиздат.