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Nataliya MYKYTENKO 

Ivan Franko National University of Lviv, Ukraine
E-mail: nataliya.mykytenko@lnu.edu.ua

Lyubomyr BORAKOVSKYY 

Ivan Franko National University of Lviv, Ukraine
E-mail: lyubomyr.borakovskyy@lnu.edu.ua

Marianna KOPCHAK 

Ivan Franko National University of Lviv, Ukraine
E-mail: mariannekopchak@gmail.com

Oleksandr MYKYTENKO 

Ivan Franko National University of Lviv, Ukraine
E-mail: oleksandr.mykytenko.robota@gmail.com

Khrystyna POPOVYCH (TSYMBROVSKA) 

Lviv Danylo Halytsky National Medical University, Ukraine
Email: christina.tymbrovska@gmail.com

THE ROLE OF PERSONALITY TYPE AND SELF-DETERMINATION OF STUDENTS MAJORING IN NON-PHILOLOGICAL SPECIALITIES WHILE BUILDING ENGLISH FOR PROFESSIONAL PURPOSES COMPETENCE

Abstract

The purpose of the present research was to prove the assumption that considering students' personality type and self-determination, including motivation about their profession choice, has a direct positive effect on building their English for professional purposes competence. Considering obtained theoretical and empirical data, we can state that personality type and self-determination are interrelated with developing English for professional purposes competence of students majoring in non-philological specialities, namely in Sciences. To collect the data, we employed theoretical analysis and conducted two questionnaire polls to define the significant personality types of students and their motivation for their occupational choice. English for professional purposes competence is an integral characteristic of occupational and personal qualities of future specialists majoring in non-philological specialities. Acquisition of linguistic, specialised and cultural knowledge and building abilities and skills in speaking, writing, listening, and reading involve many psychophysiological mechanisms. Some conscious acts alter into a series of automatic, unconscious operations in language learning. Thus, building English for professional purposes competence involves focusing on activities consistent in the gradual accomplishment of different tasks, concentrating on structured performance according to the instructions, performing a series of automatic, unconscious operations and building associative links. In this way, constructing cognitive maps will bring fruitful results.

Keywords: English for professional purposes competence, personality type, self-determination, motivation, profession choice.

Introduction

Nowadays, higher education is to perform some social functions of utmost importance,

namely providing purposeful personality development and building specific skills and competencies. Personality type, self-determination (namely occupational one) and motivation are

considered to be the significant factors that influence the process of building English for professional purposes competence (EPP competence) in prospective specialists majoring in non-philological specialities.

The article aims to prove the assumption that considering students' personality type and their motivation for their professional choice while building their EPP competence has a direct positive effect on this process.

The surveys and testing also detect the personality types of prospective specialists and their dominant and optional interests and thinking. Such a system to identify professional aptitude was used to allow for the conditions of future professional activity.

Holland's typological theory of occupational choice (1997) serves as a paragon of psychological theories of vocational self-determination. This theory's central assertion states that personality type determines the occupational choice. J. Holland defines personality as a cluster of personal attributes which may be used to measure the person and claims that personal behaviour is stipulated by the interaction of personality and environmental context (Afolabi, 1996). Holland's theory assumes that job satisfaction, level of achievements and stability depend on compatibility between personality type and type of environment. Personality type is treated as a product of the interaction of cultural and individual factors, social environment, and heredity. Thereby J. Holland (1997) outlines the main types of personality and appropriate occupational paths for each of them:

- realistic type: honest, open, persevering, practical, thrifty, even-tempered, respecting material values. His/her main life values are authority, status, and material welfare. The distinguishing features of occupational choice are "structured performance" according to others' instructions that require agility, concreteness and acceptance of systematic manipulation. The individuals who belong to this type attempt to avoid activities involving so-

cial contacts. Most professions are in agriculture (agronomist, farmer, gardener) and engineering;

- exploring (intellectual) type: analytical, intellectual, introverted. The individuals who belong to this type are: cautious, critical, rational, precise, independent, unpretentious, focused on one's activity, and consistent in the gradual accomplishment of specific processes. Their primary life value is science. They opt for research professions that deal with the systematic examination; creative research of biological, physical and cultural phenomena with follow-up and control over them. These persons avoid entrepreneurial activities;
- social type: corresponds to the professions in the field of pedagogy, practical psychology, and social service;
- artistic type: prefer free and creative kinds of activities such as music, arts, and literature. They try to avoid systematic and precise activities as well as business and office jobs;
- entrepreneurial type: choose activities which imply authority, status, and power and also allow them to manipulate others. They are prone to start any kind of entrepreneurship, avoid monotonous work, be it mental or manual one;
- conventional type: would instead be engaged in well-structured activities; they do not strive for leadership and avoid creative assignments that entail creativity. The professions that comply with this type are careers in the economy (accounting, banking) and programming.

The theory of self-determination asserts that individuals demonstrate proactive or passive social behaviour according to the social conditions in which they are involved (Migliorini, Cardinali, & Rania, 2019). Self-determination of a future specialist is a systemically formative factor that allows us to analyse him as the complete personality that evolves during the educational process and considerably affects how he establishes himself as a highly qualified professional. Students' sphere of needs and motivation, aspiration for the

future and level of awareness belong to the distinctive aspects of self-determination (Pavlutenkov, 2008). Occupational choice is one of the crucial motivational impact factors that influence the effectiveness of building foreign language professional competence, for this factor is a dominant one in exposing students' attitudes to the educational activity.

One of the challenges higher education institutions face nowadays is providing meaningful opportunities for developing employability skills while academic study (Webster-Deakin, 2019). Often referred to as "soft skills", employability skills include communication, teamwork, problem-solving, professional ethics, initiative, planning, organising skills, decision-making, and self-management skills (Rao, 2015). According to the forecasts and as we can presume, by 2030, soft-skill-intensive occupations will have accounted for 2/3 of all jobs and jobs involving soft skills will grow much faster than other jobs. Most of the listed above skills focus on communication while performing professional roles and functions, and building them is tightly connected with building target competence, namely EPP competence in the process of studying at the university. Obtaining Bachelor's or Master's degree by students majoring in non-philological specialities in Ukrainian higher educational institutions involves learning such a compulsory discipline as Foreign Language for Professional Purposes. The main purpose of this discipline is to build EPP competence.

The educational process orientation has shifted from input, namely the amount of time needed for classroom and individual work, place, teaching-learning methods, and content of study, to learning outcomes: knowledge, abilities, skills, and competencies (Luka, 2014). In the last 40 years, the language learning process has suffered a significant shift from being teacher-led with a focus on grammar and vocabulary to a more student-centred approach with a strong emphasis on communicative competence (Cunico, 2019) that has been considered one of the critical components of professional competence and, respec-

tively, EPP competence. More than 40 years ago, Canale and Swain (1980) suggested their communicative teaching/learning model focusing on knowledge and skills necessary for communication. Then it was developed by Bachman and Palmer (1982), who stressed that the teaching/learning process considers lexis, morphology, syntax, and text organisation cohesion. Later on, the model was modified by Tarone and Yule (1989) with the shift to building language skills, namely to formation and understanding of lexis, phonology, the syntax of the language and speech skills: using the language appropriately in the socio-cultural context and applying appropriate communication strategies in typical and problem communication situations. To prepare students for effective communication in an international professional environment, teachers of foreign languages for professional purposes should concentrate on the acquisition of the linguistic and non-language elements of professionally-oriented communication in a foreign language as well as on developing open, conscious, and adaptable communicative behaviour (Hajdu & Domonyi, 2019).

Nowadays, most scientists agree that the importance of English as a means of communication is measured by the indicator of how many people speak it and what it is used for (Musikhin, 2016). As English is lingua franca and is traditionally used for communication among non-native speakers in different fields, students who learn English for Professional Purposes should be aware of the peculiarities of communicative behaviour of speakers from cultures outside the Anglo-Saxon world. Without background information, one may misunderstand them or may totally not understand them. The students should be aware that the British tend to speak in a straightforward, direct way to avoid misunderstandings and uncertainties. They give information in an explicit, detailed and, at the same time, accurate way. To correctly understand British speakers, students need to know that politeness is a crucial concept in the British language and culture, and this leads to the refined manner

of utterances, often in the form of euphemisms or understatements. Students should examine different areas of the Anglo-Saxon world and focus on differences in speaking and writing. This aspect requires careful analysis and interpretation. Due to cultural differences, intonation and mimicry gain particular importance in the process of professionally-oriented communication. Students should know that the English for Professional Purposes they study conveys meaning through codes and context and thus understand how precise the process of giving information is. The essential point for a good understanding of professionally oriented speaking and writing is to consider the degree the speakers are straightforward, and the listeners have to guess or deduce some information. In employment situations, serious misunderstandings or even conflicts may arise when employees are unaware of certain statements or phrases' secondary or hidden meanings (Hajdu & Domonyi, 2019). Thus, prospective specialists should gain specific knowledge and skills that as significant components belong to the structure of EPP competence to perform professional roles and functions in the international professional team.

The notion "English for Professional Purposes" is a branch of the notion of "English for Specific Purposes" (ESP) that appeared in the early seventies of the 20th century. T. Hutchinson and A. Waters (1987) define English for Specific Purposes as based on learners' needs approach to language learning. T. Dudley-Evans and M. J. St. John (1998) employ a range of characteristics, namely absolute (ESP meets specific needs of the learners; ESP makes use of the methodology and activities of the discipline it serves; ESP is centred on the language appropriate to these activities with the focus on grammar, lexis, register, study skills, discourse and genre) and variable ones (ESP may be related to / designed for specific disciplines; in specific teaching situations ESP may use different methodology from that of General English; ESP is likely to be designed for adult learners mostly at a tertiary level institution

or in a professional work situation, sometimes at secondary school level; ESP is mostly designed for students with intermediate or advanced language level; most ESP courses assume basic knowledge of the language system) to define ESP.

Consequently, English for Professional Purposes relates to language for specific job-related purposes. Language competence needed by professionals in sciences should be related to their professional field, "allowing learners to perform a full-fledged communication in the typical situations of their professional activity" (Musikhin, 2016). EPP competence as an integral characteristic of occupational and personal qualities of future specialists should be multifunctional, systematic, flexible and mobile. It broadens specialists' minds and allows them current conditions of integration into European and world academic and scientific environments to perform professional activities more efficiently.

Based on the analysis of the works of T. Hutchinson and A. Waters (1987), O. Bihych, N. Borysko, H. Boretska (2013), E. Jendrych (2013), O. Tarnopolsky, V. Momot, S. Kozhushko (2008), English for Professional Purposes competence of prospective specialists of sciences is defined as a complex formation, essential characteristics of occupational and personal qualities which imply an ability to demonstrate highly qualified communicative capacity in foreign language professionally-oriented communication and exhibits in effective use of linguistic knowledge, lexical, grammatical and phonetic abilities and skills. It is measured by a full-fledged implementation of science's meta-language functions.

Considering dominant personal traits of sciences specialists and professional specifics, it has been discovered that EPP competence includes the following components (Konnova, 2003; Antonenko, 2009):

- practical component: speech, specialised learning, cognitive abilities and skills; behavioural responses in the situations of profes-

sionally-oriented communication in English in a particular professional and cultural environment; mastering of means and productive ways of professionally-oriented communication in a foreign language in order to solve professional assignments; mastering of the methods to enhance the level of acquisition of EPP competence; and experience of speech activity;

- cognitive and informational component: a system of integrated linguistic knowledge; specialised knowledge; cultural knowledge;

knowledge of the methods to develop individual EPP competence; development of cognitive activity; development of logical, divergent, associative thinking; and development of intersystem/intersubject associations;

- creative component: creative attitude towards the object of activity and creative potential;
- emotional and valued component: personal goal sets, motivation, focus on effectiveness of the communicative activity, and practical usage of communicative strategies (Fig. 1).

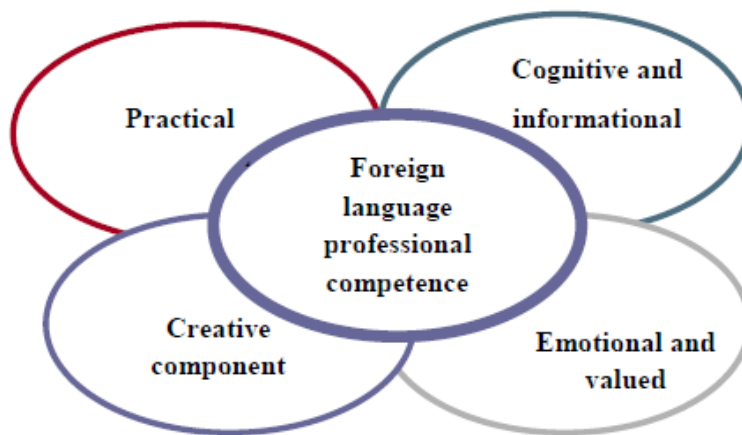


Figure 1. The Components of English for Professional Purposes Competence.

The components of EPP competence, namely practical, cognitive and informational components, creative, emotional and valued ones, are integrated into all stages of the competence building, starting from presenting new material, moving to exercising to build the system of knowledge, skills and abilities and ending with activities through which students show highly qualified communicative interaction (Mykytenko, 2011). The integrated knowledge system that represents the cognitive and informational components is embodied in practical components such as skills of communicative behaviour (Kushnir, 2008).

The operating system of the analytical apparatus of prospective sciences specialists is related to their personality type and is instrumental in

building EPP competence while solving professional assignments employing professional communication in English. Thus, together with motivation, it is especially vital for the problem of building EPP competence (Konnova, 2003).

Materials and Methods

This study's execution was approached by applying the following theoretical and empirical scientific methods: theoretical analysis of scientific sources while conducting a literature review; education process monitoring, observation, two questionnaire polls, classification, comparison and generalisation were employed to obtain results and make conclusions.

Results

Research has been conducted to define personality types among the students of Sciences at the Ivan Franko National University of Lviv in order to find out whether personality type, compliance of personality type with chosen professions, satisfaction of occupational choice, and motivation caused by profession choice are all the factors which influence the effectiveness of

building EPP competence in prospective specialists of Sciences. The respondents were informed about the research and gave verbal consent to participate.

The research engaged 258 students in their first through fourth years at three Science faculties (geography, geology, chemistry, physics) of the abovementioned higher educational institution (Fig. 2).

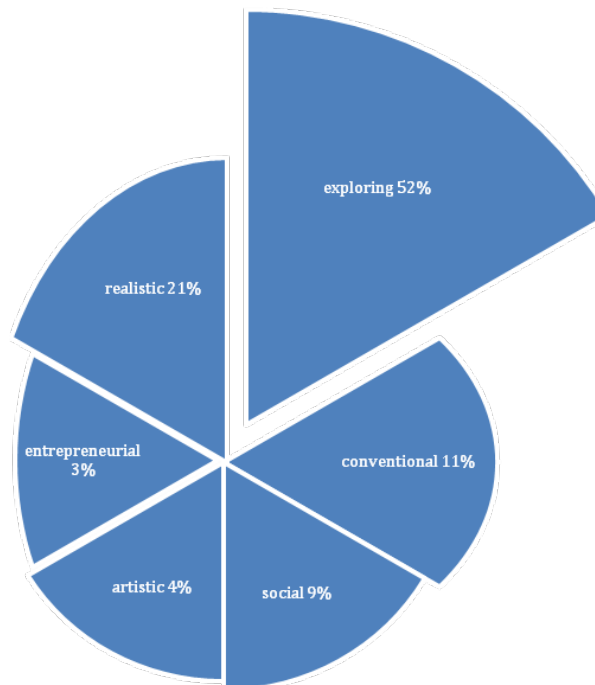


Figure 2. Breakdown of Students of Sciences According to Their Personality Types.

According to the occupational choice questionnaire findings, compiled by J. Holland (1997), 52% of the respondents belong to an exploring type of personality and professions in sciences comply with their psychological traits. 21% of the respondents represent a realistic type, and their occupational choice (some professions of sciences) is also compatible with their psychological personality qualities. Some sciences professions reflect a conventional personality type, accounting for 11% of respondents. 9% of respondents displayed signs that are typical of a social type, 4% belonged to an artistic type, and

3% belonged to an entrepreneurial type. According to Holland's theory, the characteristics of social, artistic, and entrepreneurial personality types do not conform to the directions of occupational choice of the students surveyed.

To define the level of motivation of students' occupational choice to major in Sciences, a questionnaire poll was conducted among 150 first-year students of the Ivan Franko National University of Lviv in the first class of the compulsory discipline English for Professional Purposes. Hence, a questionnaire concerning awareness of occupation choice, impact factors, interest in

their specialities, and volition to work in the chosen field of professional activity was carried out, as mentioned above, among first-year students. Qualitative and quantitative evaluation of the obtained data has been performed; the findings showed that while choosing a future profession, students are guided by the following motives:

aspiration to obtain higher education, parents' influence, family values, friends' advice, and school teachers' council. Thus, the level of satisfaction with profession choice among the students of Sciences at the moment of entrance to higher educational institutions is considered to be low (Table 1).

Table 1.

The Data About Motivation of Occupational Choice Among the Students of Sciences

<i>Indicators of motivation of occupational choice</i>		<i>Percentage of students' count in decreasing order (%)</i>
<i>Motives of profession choice</i>	aspiration to obtain higher education	28%
	parents' influence	23%
	family traditions	15%
	friends' advice and school teachers' council	14%
	school vocational counselling	12%
	prestige of profession	7%
	material motives	1%
<i>Satisfaction with occupational choice</i>	high	10%
	medium	27%
	low	23%
	undefined	28%
	absent	12%
<i>Plans for further professional activity</i>	work by speciality	45%
	do not plan to work by speciality	32%
	will obtain another education	14%
	others	9%

Among applicants to Ukrainian higher educational institutions, we can deduce that the prestige of Sciences professions occupies a low place in the rating of profession choice motives. Although the personality types of the questioned students mostly comply with their occupational choice, the level of profession choice satisfaction is low, and it can be seen that half of the respondents expressed a desire to work by speciality in the future.

Job specification should be viewed in a functional aspect, i.e. while professionals complete their professional missions. Thus, the language learning approach and language learning method should be based on the activities that are relevant

and typical to the profession in an international context (Musikhin, 2016). In order to follow this recommendation, it is essential to transform the content of language learning as it has to become more practically oriented and more applied to professional and cultural contexts (Luka, 2014).

The crucial aspect of the organisation of educational activity is focusing on student development as a high-priority task. In this vein, compatibility of personality type with the chosen profession, satisfaction with occupational choice, and motivation immediately affect student's achievement and development of professional and critical competencies. The significant role belongs to EPP competence.

Building speaking, writing, auditing, and reading skills entails an array of psychophysiological mechanisms. As a rule, while reading, a student belonging to an exploring type identifies what he hears, pronounces, or writes (any lexical unit); therefore, he must comprehend its factual content. Having adopted Luria's study (2002) to the obtained results of the survey of students of Sciences breakdown according to their personality types (among students majoring in sciences prevail individuals belonging to exploring and realistic types), we can ascertain that, at the elementary level of language learning, i.e. while teaching pronunciation, it is necessary to shift the learner's attention from the content of utterance onto its sounding. Thus, the analysis of sounding breaks into some individual acts. In the early stages of writing skills acquisition and analysis of the sound, its correspondence to a specific letter and writing of this letter are separate operations (Luria, 2002).

Gradual, systematic development of the above skills leads to building students' EPP competence step by step. Hence, the learners majoring in Sciences and belonging to exploring realistic and conventional personality types should focus on separate processes; then, the skills become automatic and turn into complex operations. Students' attention is riveted on more complex coherent acts at the consequent stages of English as Foreign Language learning.

Let us illustrate this process as it happens while teaching writing:

1. detecting sequential sounds that compose a word, clarification of phonemes, sound analysis and differentiation of consonant blending, correspondence of sounds to letters, graphic signs of sounds in writing;
2. automating skills to correspond phonemes to their graphical representation, i.e. a student stops focusing on the analysis of correspondence of sounds to letters, writing of letters;
3. concentrating on more difficult complex assignments such as writing words and phrases, analysing their meanings, grammatical structures, and rendering of thoughts.

Separate elementary acts of writing unify, transforming into a more complex activity – written communication. Thus, in the process of language learning, some conscious acts alter into a series of automatic, unconscious operations. Some psychological processes merge while doing writing activities, so it is difficult to distinguish them during pedagogical experiments (Luria, 2002).

The observation of the elementary stage of teaching students majoring in Sciences English as Foreign Language reveals that while writing down new words, the students pronounce them (mentally, in a whisper, or under their breath). Half of the questioned students who belong to exploring realistic and conventional personality types and begin learning a foreign language continue pronouncing new words mentally while putting them down. They often utter new words, pronouncing certain letters of the foreign language alphabet employing their native language's phonemes, which sound similar. Consequently, we raise a question: what role does articulation play in building receptive (reading, listening) and productive (speaking and writing) skills?

A simple experiment was conducted with a group of students of the Geography Faculty (18 persons, speciality "Physical Geography") who study English at the elementary level. The students were offered to utter the words and phrases in a whisper during dictation. The results of the dictation indicate the successful accomplishment of the assignment. Eight students coped with the set assignment and received an "Excellent" mark. Seven students failed to handle the assignment partially and received "Good". Three students only managed the assignment in part and received "Satisfactory". The following experiment stage implied a dictation, but the students were forbidden to utter the words and phrases during dictation. In order to deter from articulating, they were offered to open their mouths wide. This time students' performance decreased. The works of four students were scored as "Excellent", and five students received

“Good”. The works of seven students were evaluated as “Satisfactory”, and two works - as “Unsatisfactory”.

The experiment results profusely illustrate the considerable slump in the successful accomplishment of the assignment. Why does utterance improve writing at the early stages of language learning in students belonging to realistic and conventional personality types? It allows them to retain the appropriate succession of sounds to be put down, whereas learners do not get enough grasp of an internal image of a lexical unit. Besides, teaching English to the students of the Geography Faculty at the elementary level shows that the students with minor articulation defects often make mistakes in writing. Apparently, indistinct utterance complicates the sound analysis of words and phrases, hindering their transfer in writing (Luria, 2002).

The analysis of the cutting-edge research taking place in the field through the search for new information, compiling specialised glossaries of terms and key phrases (Musikhin, 2016) using visualisation, e.g. semantic graphs or intellectual maps, as well as doing students’ own experiments and projects with further oral presentations of the received results have proved to be effective, especially with the students belonging to the exploring type of personality.

Discussion

A. Luria (2002) emphasises that psychological mechanisms engaged in learning foreign languages will be somehow different, for phonetic and graphic characteristics of the structure of each language differ considerably. The neurologists consider awareness, acceptance, and retention of the set assignment necessary conditions for successful foreign language teaching performance. Thus, the level of development of speech abilities and skills of prospective specialists of Sciences is thought to be one of the main evaluation benchmarks of acquiring foreign language professional competence.

Traditional teaching in higher educational institutions is oriented toward developing formally logical thinking of students. Such an approach leads to stereotyped conclusions and inhibition of students’ initiative and creativity. The logical thinking process presumes an in-depth analysis of ideas, thoughts, and problems. Nevertheless, we consider the ability to make a multi-faceted analysis of the problem, especially by students belonging to exploring and realistic personality types, to be last but not least. The ability to think divergently is associated with many cognitive processes. Both verbal and visual divergent thinking involves the ability to find many different and new responses or solutions to open-ended problems (Palmiero, Nori, Piccardi, & D’Amico, 2020). Development of divergent or so-called image-bearing thinking provides for comprehensive analysis of situations or data, exteriorisation, i.e. transition from “internal” to “external”, from thought to image, action with mental and volitional efforts involved, and emotional assessment of the situation.

The role of divergent thinking in the process of EPP competence building consists in (Korobova, 2000):

- analysis of vision structure, selection of intrinsic features, instant synthesis of the whole image;
- the commitment to the process;
- image detection;
- establishment of adequate, meaningful ties, associations between objects and developing images.

Imagination is a significant factor in developing students majoring in Sciences in both divergent and associative thinking. It stimulates mentioned types of thinking due to unconventional bonding of usual things through producing associations. The levels of mental activity depend on the combination of associations as natural links between two or several psychological processes (senses, feelings, imagination, thoughts, and images) (Masol, 2009). The following combinations exist: local, partially systemic, internally

systemic, intersystemic, and interobjective. Inter-systemic and intersubject kinds of association combinations are notable for the high level of mental activity of a student.

Most prospective specialists of Sciences, belonging to exploring and realistic types of personality, demonstrate an ability to link different phenomena and perceive them as the whole mentally. Following an active study of Sciences and interaction with the environment, “images-visions” are formed (“cognitive mappings”). The process of perceptual logical thinking centres on certain features of objective reality, but the bond of these elements transforms into an image-bearing sense (Masol, 2009).

Building associations is considered effective in acquiring specific knowledge as structural parts of EPP competence, namely professional lexis, as it influences students’ short-term and long-term memory activity. As a rule, 80% of the memorised information gets lost shortly. The function of long-term memory is maintained by abilities and skills (Pavlutenkov, 2008), using which students can successfully retrieve core knowledge concepts from long-term memory. Methods of instruction play a significant role in this process (Chinaka, 2021). Therefore, building associative links and constructing cognitive maps will be beneficial in this process. Thus, the level of development of speech abilities and skills of prospective specialists of Sciences is thought to be one of the main evaluation benchmarks of acquisition of EPP competence.

The neurologists and specialists in Applied Linguistics consider awareness (observation of language variation and change, affected by users’ language everyday experience; “understanding of language variation as a means of creating social difference” (Kristiansen, 2017)), retention (the ability of a student to remember what has been learned over time and it is influenced by instructional approaches (Lysne & Miller, 2017)) and technology acceptance (implementation of devices into foreign language learning (Arning & Zeifle, 2007) to be a necessary condition of successful performance of the set assignment in

English as Foreign Language teaching and learning. The language learning process should also focus on enhancing students’ comprehensive awareness, enabling them to communicate successfully with colleagues from other countries (Musikhin, 2016).

Limitations

Students’ attitudes to defining their personality type and motivation about their profession choice were positive. However, this study was limited only to the respondents from Ivan Franko National University of Lviv in Ukraine. Further and larger-scale research may be necessary before any generalisations are made. We plan to continue our research and conduct the same questionnaire poll about profession choice among the same students as they become graduates of Baccalaureate before passing the final exams to compare the obtained results and see whether their motivation about their profession choice has grown.

Conclusion

The research proved that the successful acquisition of EPP competence is accompanied by understanding and involving the analysed personality type and self-determination theories. Considering the basics of the theories, teachers of English for Professional Purposes should stage by stage build in their students’ examined knowledge and skills constituting EPP competence, providing students with the range of adequate learning activities and materials and thus motivating them to demonstrate proactive communicative behaviour in modelled real-life social and professional situations. Thus, we can state that students’ personality type, self-determination, and motivation about the occupational choice are the factors that directly affect the process of building their EPP competence. The research of personality types among the students of sciences (258 respondents) revealed that 51% of the respondents belong to an exploring type;

21% of the respondents represent a realistic type; 11% of the respondents refer to a conventional type, 9% respondents displayed the signs of a social type. They conform to the directions of occupational choice of the students surveyed. Therefore, building EPP competence of the students of Sciences envisages focusing on activities consistent in the gradual accomplishment of different tasks, concentrating on structured performance according to the instructions, performing a series of automatic, unconscious operations, involvement of divergent thinking and building associative links. Thereafter, constructing cognitive maps will bring fruitful results while building EPP competence in students majoring in Sciences. The data of the questionnaire polls conducted among 150 first-year students majoring in Sciences showed that satisfaction with occupational choice is low, undefined or totally absent, and only less than a half of respondents (45%) expressed their willingness to work in the field of the chosen speciality in the future.

In contrast, 32% did not plan to work by speciality chosen. We also assume that learning English for Professional Purposes is aimed at building students' EPP competence considering their personality type. Choosing appropriate methods will boost students' motivation about their profession choice and the effectiveness of the whole learning process. A high level of EPP competence in prospective Sciences specialists in future will allow them to realise their professional and creative potential fully.

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