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To the readers of “The Modern Higher Education Review” international journal

The development of the European Higher Education Area and the European Research Area is becoming increasingly important for Ukraine. Higher education becomes a field for complex research and systematic analysis. The international scientific community unites efforts in higher education studies as one of the most powerful means of problems solving of globalization, migration, labour market mobility, intercultural education. Educational policy in Ukraine sets a goal to reform national higher education system in accordance with the European Higher Education Area and European Research Area standards. Ukrainian scientists together with European colleagues are investigating the problems of modern higher education development in the context of European integration and trends in preserving national traditions.

“The Modern Higher Education Review” journal aims to promote joint research and information exchange by scientists from different countries. We hope that this journal will facilitate cooperation between Ukrainian, European and scientists of the world.

*Sincerely,
Editor in Chief*

CONTINUOUS PROFESSIONAL EDUCATION: THEORY AND PRATICE

CASE STUDY: THE DIDACTIC MODEL OF SOCIO-COGNITIVE THEORY OF LEARNING IN THE TEACHING OF ENGLISH AS A FOREIGN LANGUAGE. TEACHING STATE AND ACTIVITY VERBS

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ABSTRACT

Language has generally been characterized as a tool of communication between people, the mean by which man expresses his feelings and thoughts. It has been the subject of research from various angles and methodological standards that largely reflect the variety of dimensions from which it can be studied but also the prevailing analysis trends. Language is also seen as a social process, as a way of creating interpersonal relationships and expressing emotions. Therefore, integrated language teaching takes into account the social character of the language and relies on it. The linguistic and cultural diversity within the European Union has created new demands for multilingual European citizens. To meet the new requirements, it is necessary, educational strategies to be designed by those who actively involved in foreign language education in various countries in a new context, which will ensure the “productivity” of learning foreign languages in the implementation of foreign language education. There is an urgent need to promote the process of communicative teaching, so that the student who learns the specific foreign language transmits his own concepts, in the cases, interacting and trying to adapt to the common knowledge and even the linguistic ability of a

person that this language is his/her mother tongue. The approach to the service of the communicative type of teaching emphasizes the communicative function of the language and tries to create in the students the opportunities for functional use of the language code, similar to those they will encounter outside the classroom. Students need to connect with each other to build friendly relationships within the classroom that becomes a student community. This effort also includes this paper, which introduces the model of socio-cognitive learning theory in the context of the communicative approach to the teaching and learning of foreign languages.

Key Words: *socio-cognitive learning, communicative approach, model of two-way determinism, State and Activity Verbs*

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INTRODUCTION

Language has generally been characterized as a tool of communication between people, the mean by which man expresses his feelings and thoughts.

A highly multidimensional phenomenon (both: individual and social, multifaceted and heterogeneous)¹, language has been the subject of research from various angles and methodological standards that largely reflect the variety of dimensions from which it can be studied (language theory, sociolinguistics, psycholinguistics, philosophy) but also the prevailing analysis trends.

Thus, it has from time to time been treated as a system of contradictions and differences in its oral and written form (systematic dimension) (Saussure 1916, pp.9-15), as an innate mechanism genetically predetermined in man, which is activated in the given language community (genetic, biological dimension) (Chomsky 1979, p.206), and as a social phenomenon in the context of the social sciences and anthropology in its relation to social parameters and which regulate its forms and uses (sociolinguistic dimension) (Labov 1971, p.105). At the same time, the language is treated in relation to purely philosophical and cognitive issues that signal its basic dimension of transmitting and decoding messages.

However, new requirements for multilingual European citizens have been created, by promoting and managing linguistic and cultural diversity within the European Union. Satisfaction of the created needs presupposes on the one hand the implementation of a specific language policy plan at the supranational level, and on the other hand, the formation and implementation of a separate foreign language educational policy which ensures the “productivity” of learning foreign languages in the educational institutions of the various states.

¹ Babinotis (1998, p.19), states about language “Language as a whole is something multifaceted and heterogeneous. Pressing at the same time in various scientific fields — in the physical, the normal, the psychological — still belongs to both the individual and society. So we can’t classify it in any category of human events, because we can’t discover its unity”.

This paper is the fruit of raising awareness and addressing these new demands. Satisfaction of these needs has arisen from the design of educational strategies by those actively involved and engaged in foreign language education in various countries. In light of the design of educational strategies to meet the new requirements, the purpose of this article is to introduce the educational model of socio-cognitive learning theory for teaching and learning foreign languages, presenting the case of the teaching of State and Activity Verbs where English is taught as a foreign language in the classroom.

GOAL OF FOREIGN LANGUAGE TEACHING

A foreign language learner² has already developed the ability to think and speak in his/her mother tongue³. It is necessary for him/her to interact with the culture of the foreign language in order to learn to express its ideas, perceptions and opinions. There is an urgent need to promote the process of communicative teaching, so that the student who learns the specific foreign language transmits his own concepts, in the cases, interacting and trying to adapt to the common knowledge and even the linguistic ability of a person that this language is his/her mother tongue.

The approach to the service of the communicative type of teaching emphasizes the communicative function of the language and tries to create in the students the opportunities for functional use of the language code, similar to those they will encounter outside the classroom⁴.

Starting with the gradual approach of communication in teaching, the socio-cognitive theory of learning⁵ serves the following purposes in teaching — learning a foreign language:

“a. It offers models for a gradual approach and gradual familiarization with the ideas, values, perceptions, attitudes, ways of thinking and acting of the community that have as a mother tongue the foreign language that the student learns.

b. Directs students to build the mechanisms that contribute to the assimilation of knowledge of the new language system.

c. It helps them with the internal symbolic coding to acquire the ability to deduce from the data of the senses (recruitment of stimuli — information

² Richards (1985, pp. 4-10) gives a brief overview of the nature of foreign language teaching and learning (Language policies and goals, Language curriculum development).

³ Regarding the learning of a foreign language as a second code of communication, see Pappas (2004, p.p. 18-23).

⁴ The general context of the communicative approach to teaching and learning foreign languages is given by Yule (1985, p. 154).

⁵ Albert Bandura holds a special place in the psychological theory of “social learning”. This is the learning that is carried out by the observer after monitoring the behavior and the consequences of the actions of the person-model. The social conditions in which this form of learning takes place and the personal-cognitive factors of the individual-observer are components of the so-called “socio-cognitive learning” as formed after the newer research of A. Bandura (Pappas 2004, p. 92).

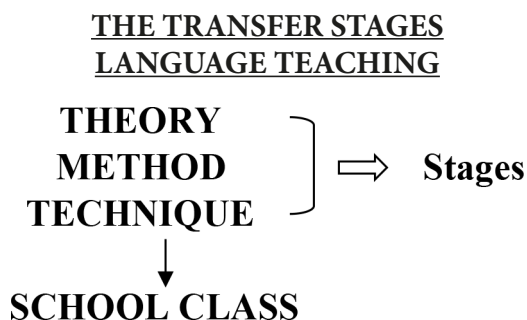
from the sensory organs) in the area of abstract thinking and in programmatic action.

d. With the internal-symbolic representation and the practical repetition, they manage to acquire the ability to use oral and written speech correctly and to conquer all the structures and textures related to semantics, morphology, sociolinguistics, psycholinguistics, phonetic-phonology of the new language system.

e. Finally, with the self-knowledge that students can acquire, they will be able to self-strengthen and feedback through individual and collaborative acquisition and utilization of knowledge” (Pappas 2004, p.p. 139-140).

BASIC STAGES OF TRANSITION FOR DATA CONVERSION INTO TEACHING PRACTICE

The formation of the didactic model of socio-cognitive learning⁶ requires the transition (Paparizos 1989, p.26) of linguistic elements and other data to various stages during which their gradual transformation into a didactic act will take place. These successive stages are theory, method and technique, as shown by the following diagram (Mitsis 1999, p.102):



The teaching of the second language is based on the theoretical basis of the socio-cognitive theory of learning, the background and philosophy of which is the constant indicator of course and determines the physiognomy of the whole teaching model.

It is noted that, the individual, the behavior and the environmental conditions interact and are determined according to the model of two-way determinism⁷.

Given that language is a code by which various functions are implemented, the most important of which is communication, the socio-cognitive theory of learning includes the following positions: first, communication is made with language, and second, the main goal of language teaching is to develop students' ability to communicate effectively in the new code, that is, students will be able

⁶ Regarding the transition from the didactic model of the socio-cognitive theory of learning to the teaching of a foreign language, see Pappas (2004, p.p. 134-208).

⁷ For the model of two-way determinism or tripartite reciprocity, see Bandura (1986).

to adapt their speech to the environment and the conditions under which they communicate. Language is also seen as a social process, as a way of creating interpersonal relationships and expressing emotions. Therefore, integrated language teaching takes into account the social character of the language and relies on it. Students need to connect with each other, to build friendly relationships within the classroom that becomes a student community.

According to the above diagram, the stage of the transition from theory to method follows. The method is the result of the background defined by the theory and includes the organization in a systematic set of principles of the data of the theory. The method includes the following data, which are analyzed according to the data of socio-cognitive learning:

- “a. The general and specific objectives of language teaching.
- b. The selection and prioritization criteria of the language material.
- c. The teaching activities, ways and means by which the principles of theory could be implemented (eg dialogue, communication activity, group work, individual, etc.).
- d. The role of the teacher and the student in the whole teaching process.
- e. The audiovisual media, their choice, use and role” (Mitsis 1999, p.103).

The last stage of transition to teaching practice is the technique, which is interwoven with the specific method and is implemented with specific activities during the teaching process.

The technique includes:

- “a. The teaching phases.
- b. The observed behavior and reactions during the application of the method.
- c. The interaction of teaching factors (students-teacher-material).
- d. The media used and their effectiveness (material-manuals-audio-visual media).
- e. The evaluation of teaching (assessment of teaching work — gaps — possible adjustments and improvements)” (Mitsis 1999, p.104).

APPLICATION OF THE TEACHING MODEL OF SOCIO-COGNITIVE LEARNING IN TEACHING ENGLISH: TEACHING STATE AND ACTIVITY VERBS

1. Class

The course is held for students of the B' Class (4th year of study). Students are 11-13 years old. It is noted that most students know their mother tongue empirically. So far, several tenses have been taught (Present Simple / Continuous, Past Simple / Continuous), which students use without significant difficulty, but often form incorrect types by putting State verbs in Duration tenses (e.g. * Mother is having a headache), on the grounds that it is a temporary situation. The Class is relatively homogeneous in terms of knowledge, although there are few exceptions in both directions.

2. Teaching Objectives

a. Grammar

- I. Distinction between State and Activity Verbs.
- II. Proper use of these verbs at appropriate tenses: Past Perfect. Comparison with other past tenses.

b. Skills

- I. Oral Speech: Practice the correct use of the / ɪ / phoneme at the end -ing.
- II. Written Speech: Practical practice in the use of verbs.

3. General Idea

The problem of using State and Activity Verbs can be approached through a text that contains a large number of verbs of both types in both Present Simple and Present Continuous. Students are asked to point out the peculiarities in the use of each verb. The text, which deals with holidays in the Himalayan Mountains, is expected to arouse students' interest, as it will be taught in mid-December. At the same time, with the distinction between State and Activity Verbs, the large number of verbs in Present Continuous will be used to practice the use of the vowel / ɪ / in the suffix -ing, a vowel problematic in the majority of students, who are taught English as foreign language.

4. Before the Lesson

Present Simple and Present Continuous tenses have been repeated with several exercises to clarify possible gaps and recall details about the use of these tenses.

5. Connection with the Previous Lessons

In previous lessons, there has been talk of various sports and leisure activities. The teacher asks the students to talk to him about the activities they are involved in. In this way, the taught vocabulary is repeated and its consolidation is checked.

The teacher directs the discussion to mountaineering and asks if some students have dealt with it. There is a brief discussion about the difficulties of the sport, the emotions it offers and the equipment required. As part of the discussion, keywords of the text are taught. Moreover, some questions are posed, he answers to which will be found in the text.

6. Introduction

After the discussion, the students are divided in groups of 2 people, with the criterion that there is a weak but willing student in the group, and that the second student is someone more capable so that he can help the weak student of the group. With the class divided in this way, students are asked to read the text, answer the questions and put italics in each paragraph. It is explained to the students that the aim is not to understand every word of the text, but

the general meaning. During this activity, the teacher walks around the classroom and explains keywords, where required. He also intervenes correctively in places where he believes there is a risk of misinterpretation of the text.

The students then read the text in paragraphs, while the teacher intervenes in moderation to correct the students' pronunciation, insisting on the phoneme / ɪ / . At the end of each paragraph the teacher asks general understanding questions, explains the essential vocabulary and solves any questions. Then, the students read the italics of the paragraphs and the best one is chosen, based on its grammatical correctness, completeness and brevity.

7. Phase 1 (*The problem is posed*)

The teacher divides the class into groups of four people, making sure that they are as homogeneous as possible and that there is at least one good student in each of the groups that serves as a model-student. In each group, he assigns two paragraphs of the text and asks them to underline all the verbs and classify them into two columns depending on the time in which they are (Present Simple or Continuous). If it is a simple task, it is possible to save time if these two tasks are performed in parallel by different members of each group.

The teacher then asks the students to replace the verbs in Present Simple, turning them into Continuous. Motivations are given to the team that will finish first without mistakes. Again, it is advisable to divide tasks within each group. The teacher checks for errors in the formation of tense (e.g. *They are going), but does not intervene if a state verb is used in Continuous tense (e.g. *He is understanding).

Students are asked to read the sentences and check pronunciation. Suggestions containing State verbs are listed on the board and students are told that these verbs cannot be placed in Duration tense. Students who are always working in groups are asked to classify verbs into categories and guess why they cannot be used in Duration tense.

8. Phase 2 (*Solution of the problem*)

Students, working in groups of four, place verbs in categories. During this process the teacher walks around the classroom helping and guiding. If necessary, the teacher, guide students' thought, by telling them to classify verbs into the following categories: Feelings, Thoughts, Being, Having and Senses. He also encourages them to consider whether these verbs describe an act or a situation. At the end, the findings are read to the class by representatives of each group.

9. Phase 3 (*Formulation of Conclusions*)

With the help of the teacher, the students are led to formulate the following conclusions:

I. In English, Verbs can be divided into two groups: Verbs of Activity and Verbs of State.

II. Activity Verbs can be found in all tenses, but State Verbs are usually not found in Continuous tenses.

III. State Verbs can describe the following things: Feelings, Thoughts, Being, Having, Senses

The teacher checks the comprehension of the rule, asking the students to give him examples.

10. Phase 4 (Induction verification)

Students, working again in groups, return to the text and check the correctness of their conclusions in the other paragraphs. At the same time, students are enriching their boards with other State Verbs. The teacher moves from group to group, assigning in each one, time substitutions for different verbs of both categories.

11. Phase 5 (Application)

Students are given an exercise in which 10 grammatically incorrect sentences are given and they are asked to correct them and justify their answer. The exercise is done individually, but each student is asked to check the answers of his neighbor. The correctness of their answer is checked, based on the rules formulated above. The teacher walks around the classroom helping the students and solving any questions that may arise in practice. Students who finish early and are accepted in the role of the student-model, by the rest of the class can help the teacher in this task. In the case that these students are used in this way, the teacher makes sure that these students do not give the answers as they are, but only to guide the others. The exercise is then checked, during which the students read the correct answers.

After this exercise, the students, working in pairs, solve an exercise in which they have to complete some sentences by placing the verb in the appropriate case tense. Alternatively — and if required by the class level — this exercise can take the form of multiple choice. The exercise is done and checked in the same way. The pronunciation is checked uninterrupted throughout the application phase.

12. Phase 6 (Evaluation / Feedback)

Students are given a series of exercises similar in form to those in the above paragraph. These exercises should be solved by students individually either in class or at home, depending on the time available. In any case, students are asked to write down their answers on separate pages that the teacher collects. Then the exercises are checked as in the application phase and possible problems are pointed out.

On the same page, students are asked to classify the new grammatical phenomenon on a scale of 1 to 5 based on its difficulty and to explain which points they have not understood well. This assessment can also be made anonymously, at the discretion of the teacher.

Based on the check and self-assessment exercises, but also the general performance of the students in the classroom, conclusions are drawn about the consolidation of the phenomenon, which are communicated to the students. Furthermore, it is repeated at the points where this is deemed necessary.

CONCLUSIONS

New requirements for multilingual European citizens have been created, by promoting and managing linguistic and cultural diversity within the European Union. Satisfaction of the created needs presupposes on the one hand the implementation of a specific language policy plan at the supranational level, and on the other hand, the formation and implementation of a separate foreign language educational policy which ensures the “productivity” of learning foreign languages in the educational institutions of the various states.

Satisfaction of these needs has arisen from the design of educational strategies by those actively involved and engaged in foreign language education in various countries. In light of the design of educational strategies to meet the new requirements, it is introduced the educational model of socio-cognitive learning theory for teaching and learning foreign languages, presenting the case of the teaching of State and Activity Verbs where English is taught as a foreign language in the classroom.

REFERENCES

- Bandura, Al. (1986). *Social foundations of thought and action. A social cognitive theory*. New Jersey: Prentice — Hall.
- Chomsky, N. 1979. Basic principles. *Εποπτεία* 32, 203-215 [translated excerpts from N. Chomsky's books, transl. An. Kladi].
- Labov, W. (1971). Some Principles of Linguistic Methodology. *Language in Society* 1: 97-120. DOI: <https://doi.org/10.1017/S0047404500006576>
- Mitsis, N.Sp. (1999). Language lesson. From Linguistic Theory to Teaching Practice. Αθήνα: Γλωσσολογική Βιβλιοθήκη, εκδόσεις GUTENBERG.
- Babiniotis, G. (1998). *Theoretical Linguistics. Introduction to Contemporary Linguistics*. Athens.
- Paparizos, Chr. (1989). *The Language Lesson in Primary School*, Athens.
- Pappas, G. (2004). *The teaching and learning of foreign languages by imitating of model of socio-cognitive learning theory*. “Thesis”, National & Kapodistrian University of Athens.
- Richards, J.C. (1985). *The Context of Language Teaching*. Cambridge University Press. DOI <https://doi.org/10.1093/elt/41.4.293>
- Saussure, Fe. De. (1916). *Cours de linguistique general*, Payot, Paris. In Greek version, translation-comments-preface note F.D. Apostolopoulos (1979) Athens: Papazisis.

Yule, G. (1985). *THE STUDY OF LANGUAGE*. Cambridge University Press.
DOI: <https://doi.org/10.1017/CBO9780511819742>

КЕЙС-МЕТОД: ДИДАКТИЧНА МОДЕЛЬ СОЦІАЛЬНО-КОГНІТИВНОЇ ТЕОРІЇ НАВЧАННЯ ПІД ЧАС ВИВЧЕННЯ АНГЛІЙСЬКОЇ МОВИ ЯК ІНОЗЕМНОЇ. ВИ- КЛАДАННЯ ДІЄСЛІВ СТАНУ ТА ДІЇ

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Спілкування — це зв'язок між людьми, а мова — його інструмент, що допомагає людині виразити свої почуття та думки. Саме мову досліджують з різних сторін та методологічних засад, які значною мірою відображають різноманітність вимірів, дозволяють краще досліджувати мову та проаналізувати її основні тенденції. Мову розглядають як соціальний процес, що створює міжособистісні стосунки а також є засобом вираження емоцій. Тому інтегроване навчання в процесі вивчення мови враховує та спирається на соціальний характер мови. Мовне та культурне різноманіття в межах Європейського Союзу створило нові вимоги до багатомовних європейських громадян. Для того, щоб відповідати новим принципам, необхідно, розробляти освітні стратегії тим, хто бере активну участь у навчанні іноземних мов у різних країнах та у новому контексті. Це забезпечить «продуктивність» вивчення іноземних мов при впровадженні іноземної освіти. Таким чином, існує нагальна потреба сприяти процесу комунікативного навчання, щоб студент, який вивчає іноземну мову, у процесі взаємодії з іншими студентами, ділився своїми ідеями. У окремих випадках, такий підхід дозволить адаптуватися до практичних знань та засвоювати іноземну мову як рідну. Комунікативне викладання іноземної мови підкреслює комунікативну функцію мови та дозволяє студентам в процесі спілкування побудувати дружні відносини. Стаття містить модель теорії соціально-когнітивного навчання в контексті комунікативного підходу до викладання та вивчення іноземних мов.

Ключові слова: соціально-когнітивне навчання, комунікативний підхід, модель двостороннього детермінізму, дієслова стану та дії.

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THE PREPARATION OF FUTURE TEACHERS: MODERN APPROACHES TO LEARNING

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ABSTRACT

The article is devoted to the issue of approaches to learning used by prospective teachers. The key difference between two main approaches to learning — deep and surface — lies in the intention or absence of intention to understand the material. Deep approach to learning is likely to result in a high level of understanding and better learning outcomes while surface approach leads to ineffective learning. Understanding students' approaches to learning helps adjust teaching strategies for more effective learning. The purpose of the article is to identify the approaches to learning used by prospective teachers and consider the implications for teacher trainers. The article reports findings of a survey study into the approaches to learning used by prospective teachers of the Ukrainian language and literature mastering English as a specialism at a Ukrainian university. The main research tool was a questionnaire consisting of twenty statements. Ten statements concerning deep approach include such aspects as deep approach per se, relating ideas, use of evidence, intrinsic motivation. The other ten statements relate to surface approach and include such subscales as surface approach proper, syllabus boundness, fear of failure, extrinsic motivation. The respondents were asked to express how much they agreed with the statements using Likert scale. The data were analysed to find out mean scores and standard deviation. The findings demonstrate that students employ both approaches almost equally intensely: the mean scores of the Deep Learning Approach and the Surface Learning Approach scales are 3.64 and 3.34 correspondingly. However, according to the evaluation criteria the figures fall into different categories: deep approach

has a high level of prevalence while surface approach has a moderate one. Basing on the obtained results, the authors suggest that teacher trainers should pay more attention to promoting deep learning approach through applying effective instructional strategies which improve the quality of learning; fostering students' personal interest in learning; changing the focus of the assessment system from reproducing to understanding.

Key words: approach to learning, deep approach to learning, prospective teacher, student, surface approach to learning.

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INTRODUCTION

Teacher's profession is one of the most important in the world as teachers are responsible for the education of the younger generation, i.e. they are building the future of the world. It is teachers' skills, abilities, professionalism that the final result depends on. Therefore teacher-training institutions should work hard to provide high-quality education of prospective teachers. A number of researchers point out that the quality of learning outcomes is affected by students' approach to learning and the study skills they use (Marton & Saljo, 1976; Entwistle & Ramsden, 1983; Biggs, 1987). It is therefore vital that prospective teachers use effective approaches and study skills in their learning.

As N. Nordin, R.A. Wahab & N.A. Dahlan (2013) observe, understanding prospective teachers' approaches to learning could provide a useful insight to planning and designing effective instructional strategies to facilitate learning. For this reason, investigating the approaches to learning of prospective teachers is very important. In Ukraine to date research on approaches to learning used by university students in general and prospective teachers in particular is limited, so it seems important to fill in the gap. Accordingly, **the purpose of this article** is to identify the approaches to learning used by prospective teachers and consider the implications for teacher trainers.

UNDERSTANDING APPROACHES TO LEARNING

Approach to learning is understood as the nature of the relationship between the student, context and task (Biggs, Kember & Leung, 2001). Students' approaches to learning have been in the focus of researchers' attention since 1970s when F. Marton and R. Saljo (1976) conducted early research based on text reading experiments. They identified two levels of processing of learning — deep and surface, the main difference between them being the intention or the absence of intention to understand. Their ideas were later developed in a number of studies (Biggs, 1987; Entwistle & Ramsden, 1983; Richardson, 1994).

According to N. Entwistle and P. Ramsden (1983) students using deep learning approach try to understand the main idea, meaning in the materials

they are studying and relate it to their previous knowledge or experience. They critically analyse the arguments and evidence in relation to their prior knowledge and other resources. Besides, they tend to be intrinsically motivated, enjoy learning and apply the acquired knowledge to the real world. In contrast, learners who prefer surface approach are inclined to minimize the use of their intellectual capacity, avoid personal understanding. They use different forms of rote learning and tend to reproduce the learning material by word in a test or exam rather than actually understand it. Being constrained by the specific learning task, they do not go beyond it. Students applying surface approach are likely to be extrinsically motivated, and predominant motivation is fear of failure and concern with the completion of a course.

Researchers assert that deep approach to learning is more likely to result in a high level of understanding and effective learning whereas surface approach is likely to lead to a low level of understanding and ineffective learning (Trigwell & Prosser, 1991). Surface approach, however, is not always that bad. Some researchers argue that surface learning strategies are necessary for further acquiring of deeper knowledge in certain fields of study (e.g. languages, mathematics and the sciences) and in specific contexts, for developing deep learning capabilities (Hattie & Donoghue, 2016; Ryan & Louie, 2007).

Learning approaches, however, are not stable traits of learners. Though some students are more likely to use deep approach while others tend to use surface approach, in general learners may adopt different approaches in different learning contexts (Biggs, 1987, p. 93). It is suggested that factors like «good teaching», «clear goals and standards», suitable «assessments», encouragement towards autonomous «learning» and quality feedback also promote using deep learning strategies (Wang, 2013, pp. 33–34, as cited by Desierto, Maio, O'Rourke & Sharp, 2018).

ORGANIZATION

The study was conducted in the form of survey and is based on quantitative research. The main research tool was a shortened and adapted version of the Approaches to Studying Inventory originally developed by N. Entwistle & P. Ramsden. It is reported that the scale has been piloted and its homogeneity and validity demonstrated by means of statistical tools (Swatevarcharkul, p. 51). Items 1–10 of the questionnaire concern the components of deep approach: deep approach per se (Items 1–3); relating ideas (Items 4–6), use of evidence (Items 7, 8) and intrinsic motivation (Items 9, 10). The other 10 items relate to the components of surface approach: surface approach per se (Items 11–14), syllabus boundness (Items 15, 16), fear of failure (Items 17, 18), extrinsic motivation (Items 19, 20). The respondents, however, were not informed of these categories.

As the aim of the research is to measure people's attitudes and beliefs, Likert Scale was used to collect the attitudinal data through getting reactions to statements. Students were asked to rate how much they agreed with each

statement. For scoring purposes the options «strongly agree», «agree», «uncertain», «disagree», «strongly disagree» are given weights of 5, 4, 3, 2, 1 respectively. The «weights» are interpreted as follows: 5 means very high prevalence of the approach, 4 — high, 3 — moderate, 2 — low, 1 — very low. Correspondingly, the evaluation criteria of the questionnaire are as follows: up to 1.50 means that the approach has very low prevalence, 1.51–2.50 — low, 2.51–3.50 — moderate, 3.51–4.50 — high, 4.51–5.00 — very high.

The research was carried out with a group of prospective teachers of the Ukrainian language and literature minoring in English at the Educational and Research Institute of Philology, Translation and Journalism of Nizhyn Mykola Gogol State University. The questionnaire was completed by 45 respondents studying in the 3rd and 4th years of Bachelor’s programme and in the 1st year of Master’s programme (10, 11 and 24 students respectively). The questionnaire was completed by the respondents in class and was anonymous.

The survey response data were tabulated using Microsoft Excel 2010. The results are displayed in Tables 1 and 2. For the convenience of presentation the five options of responses were reduced to three categories — disagreement, uncertainty and agreement, i.e. in the tables column «D» presents options «strongly disagree» and «disagree», column «U» — option «uncertain», column «A» — options «strongly agree» and «agree». The numbers in these columns present percentages of responses. The data were also analysed to find out mean score and standard deviation (columns «M» and «SD» in the tables).

FINDINGS AND DISCUSSION

The findings (see Tables 1 and 2) reveal that on average students employ both deep and surface learning approaches almost equally intensely: the mean of the Deep Learning Approach scale is 3.64 (SD=0.90) and the mean of the Surface Learning Approach scale is 3.34 (SD=0.98). The difference between the mean scores is not so big, nevertheless it is significant enough as according to the criteria mentioned above the first score falls into the «high» category whereas the latter belongs to the «moderate» range. This means that on average deep learning approach has a high level of prevalence while surface learning approach has a moderate level of prevalence.

Table 1

Mean of Each Item of Deep Approaches to Learning

Items	D	U	A	M	SD	Meaning
1. I usually set out to understand thoroughly the meaning of what I am asked to learn.	11.11	42.22	46.67	3.47	0.91	Moderate
2. I often find myself questioning things that I hear in lectures or read in books.	4.44	42.22	53.33	3.56	0.68	High
3. I generally put a lot of effort into trying to understand things which initially seem difficult.	13.33	42.22	44.44	3.51	0.96	High

Items	D	U	A	M	SD	Meaning
Deep Approach	9.63	42.22	48.15	3.51	0.85	High
4. I try to relate ideas in one subject to those in others.	13.33	22.22	64.44	3.84	1.15	High
5. I need to read around a subject pretty widely before I'm ready to put my ideas on paper.	8.89	35.56	55.56	3.56	0.93	High
6. I find it helpful to «map out» a new topic for myself by seeing how the ideas fit together.	13.33	22.22	64.44	3.58	0.88	High
Relating Ideas	11.85	26.67	61.48	3.66	0.99	High
7. When I'm reading an article, I generally examine the evidence carefully to decide whether the conclusion is justified.	15.56	35.56	48.89	3.40	0.83	Moderate
8. I am usually cautious in drawing conclusions if they are not well supported by evidence.	8.89	44.44	46.67	3.49	0.81	Moderate
Use of Evidence	12.22	40.00	47.78	3.45	0.82	Moderate
9. My main reason for being here is that I can learn more about the subjects which really interest me.	15.56	13.33	71.11	3.87	1.02	High
10. I find that studying academic topics can often be really exciting and interesting.	4.44	13.33	82.22	4.11	0.80	High
Intrinsic Motivation	10.00	13.33	76.67	3.99	0.91	High
Total	10.89	31.33	57.78	3.64	0.90	High

Let us analyse each subscale in detail. The subscale of Deep Approach per se has mean score of 3.51 (SD=0.85) which lies just above the moderate level of prevalence. The figures do not allow teacher trainers to be too optimistic as they demonstrate that in many learning situations the respondents have no intention to understand and critically analyze what they are learning.

All the mean scores in the subscale of Relating Ideas lie in the range between 3.50 and 3.70 which means that the attributes of deep approach to learning in this relation are manifested quite often by the majority of the respondents. Nevertheless, the responses are far from being unanimous, which implies that teacher trainers should put an extra effort into providing learning contexts which encourage these deep learning strategies.

Unlike other subscales of the Deep Learning Approach scale, the subscale Use of Evidence has mean score of 3.45 (SD=0.82) which characterizes a moderate level of prevalence. As the figures demonstrate, more than a half of the respondents either never or seldom critically examine the evidence and the conclusions based on it to decide if the conclusions are well justified. The responses also demonstrate a high degree of uncertainty. It can be inferred that critical thinking skills are either not well developed in the students or are not used by them in learning situations. This implies that teacher trainers should encourage learners to critically analyze the information, paying special attention to the evidence.

The results obtained in the subscale of Intrinsic Motivation reveal that students have a high level of intrinsic motivation with mean score of 3.99 (SD=0.91) being the highest among the other factors. No doubt, teacher trainers can depend on the learners' intrinsic motivation as a key factor encouraging deep learning approach.

Table 2 demonstrates the data concerning surface approach to learning. Mean scores of most items lie in the range between 3.0 and 3.5, with the whole scale having mean score of 3.34 (SD=0.98), thus indicating that surface approach has a moderate level of prevalence. Only Items 12, 15 and 19 got mean scores which characterize a high level of surface approach prevalence. Thus, we can assert that surface approach to learning is less pronounced than the deep one.

Table 2

Mean of Each Item of Surface Approach to Learning

Items	D	U	A	M	SD	Meaning
11. I usually don't have time to think about the implications of what I have read.	24.44	40.00	35.56	3.09	0.96	Moderate
12. When I'm reading, I try to memorise important facts which may come in useful later.	4.44	11.11	84.44	4.16	0.87	High
13. Often I find I have to read things without having a chance to really understand them.	28.89	33.33	37.78	3.13	0.96	Moderate
14. I find I have to concentrate on memorising a good deal of what we have to learn.	13.33	35.56	51.11	3.40	0.98	Moderate
Surface Approach	17.78	30.00	52.22	3.45	0.94	Moderate
15. I like to be told precisely what to do in essays or other assignments.	11.11	35.56	53.33	3.51	1.02	High
16. I tend to read very little beyond what's required for completing assignments.	22.22	68.89	8.89	2.78	0.73	Moderate
Syllabus Boundness	16.67	52.22	31.11	3.15	0.88	Moderate
17. The continual pressure of work assignments, deadline and competition often makes me tense and depressed.	28.89	26.67	44.44	3.22	1.30	Moderate
18. A poor first answer in an exam makes me panic and competition often makes me tense and depressed.	17.78	22.22	60.00	3.49	1.13	Moderate
Fear of Failure	23.33	24.44	52.22	3.36	1.22	Moderate
19. I chose my present courses mainly to give me a chance of a really good job afterwards.	15.56	13.33	71.11	3.62	0.90	High
20. I suppose I am more interested in the qualifications I'll get than in the courses I'm taking.	33.33	31.11	35.56	2.96	0.94	Moderate
Extrinsic Motivation	24.44	22.22	53.33	3.29	0.92	Moderate
Total	20.00	31.78	48.22	3.34	0.98	Moderate

Let us analyse each subscale in detail. The first subscale, Surface Approach per se, has a moderate level of prevalence with mean score of 3.45 (SD=0.94). Item 12, however, has mean score of 4.16 (SD=0.87). As it can be seen from the table, 84.44 % of the respondents, which is actually the highest percentage in the whole questionnaire, admitted that while reading they tried to memorise important facts which may come in useful later. The importance of memorization for the respondents is supported by the data concerning Item 14: 51.11 % of prospective teachers noted that they had to concentrate on memorising a good deal of what they have to learn. These findings can be explained, on the one hand, by the specifics of the field of study, and, on the other hand, by reproductive learning which is still widely spread

in Ukrainian educational establishments. It may seem really alarming that prospective teachers rely on memorization in their learning so much, as it can mean that their prevailing conception of learning is reproducing, and this is likely to impact their teaching practices in the future. However, K.C. Tang (1991, as cited in Kember, 2016) in her studies observes that memorization could be divided into surface and deep. She asserts that students may tend to employ a combination of understanding and memorizing approaches: they initially use deep approach to learning to understand the material but then switch to memorizing in order to obtain good marks as their courses and assessment system stress on reproduction. Thus, it can be concluded that memorization is not always that bad.

The data on Items 11 and 13 in this subscale are much more troubling though, as the figures demonstrate that more than a third of the respondents do not actually understand what they learn and do not have time to think about implications of what they have read. The latter may indicate that the students have excessive workload.

The subscale of Syllabus Boundness with mean score of 3.15 ($SD=0.88$) has a moderate level of prevalence. It's worth pointing out that more than a half of the respondents admit that they «like to be told precisely what to do in essays or other assignments» (Item 15). On the one hand, the desire to get clear instructions seems natural enough, but on the other hand, it can be inferred from these data that learners are devoid of initiative, they do not want to make an extra effort and learn something besides the compulsory task. Another figure of interest is the number of responses (68.89%) to Item 16 falling into the category «Uncertain». This might imply that whether students do anything «beyond what's required for completing assignments» for the majority depends on the learning context or task.

The subscale of Fear of Failure also has moderate prevalence with mean score of 3.36 ($SD=1.22$). The data indicate that fear of failure is pronounced in more than a half of the respondents which is really discouraging. The fact that as many as 60 % of them agreed that «a poor first answer in an exam made them panic» suggests drawbacks in the assessment system which is mainly based on reproducing the remembered material.

The subscale of Extrinsic Motivation has mean score of 3.29 ($SD=0.92$) which means that the students' level of extrinsic motivation is moderate. The data on Item 19, however, attract attention as it has mean score of 3.62 ($SD=0.90$), which indicates that it has a high level of prevalence. Traditionally, a high level of extrinsic motivation is regarded as a negative factor in learning. However, considering the economic situation in Ukraine, it cannot be denied that getting a good job after graduation is not important. So we suppose that this kind of extrinsic motivation is vital for learning as well and has rather positive than negative impact on the choice of approach to learning.

There is one more aspect in the data that attracts attention. In many cases a large per cent of answers falls into the category «Uncertain». Thus,

more than a third of respondents chose this option responding to items 1, 2, 3, 5, 7, 8 in the domain of deep learning approach and items 11, 13, 14, 15, 16 in the domain of surface learning approach. This suggests that students' approaches to learning vary so much from context to context, from situation to situation that it is difficult for them to give some definite answer.

The findings can have several practical implications for teacher trainers. Firstly, educators should provide a learning environment where students develop a strong personal interest in learning because as K. Warburton (2003) argues, the first step in reaching deep learning approach is a high level of commitment with the learning subject, i.e. motivation to understand. As, researchers suggest, it can be reached by helping students change their conceptions of learning, facilitating understanding that learning is about developing meaning and understanding, fostering in them qualitative perception of learning (Dart et al., 2000). Thus, by promoting deep approach to learning, it is hoped that surface approach to learning can be reduced.

Secondly, the findings could provide a useful insight to planning and designing effective instructional strategies, creating experiences that could enhance the learning of participants because, as J.T.E. Richardson (2005) points out, desirable approaches to studying can be brought by appropriate course design, appropriate teaching methods, or appropriate forms of assessment. Thus, teacher trainers can promote deep approaches to learning through the creation of learning environments that students perceive as safe, supportive, and offering helpful relationships. They can also present opportunities for exploration, inquiry, and experimentation by providing problems to be solved (Ak, 2008).

Finally, as the choice of approach to learning depends on the nature of assessment, it can be inferred from the findings that the assessment system needs considerable change. Unfortunately, N. Entwistle's statement that current assessment and teaching seems to encourage reproductive form of learning (Entwistle, 1984, as cited in Nordin et al., 2013), is still true for the Ukrainian educational context. Consequently, as N. Nordin et al. (2013) suggest, development of learning assessment should move beyond a grade based learning outcome to more comprehensive, skills and hands-on based learning outcomes.

CONCLUSIONS

Investigating the prospective teachers' learning approaches contributes to better understanding of students' perceptions of learning and their needs. On the one hand, it is encouraging to know that the respondents tend to use deep learning approach, especially that they have a high level of intrinsic motivation. On the other hand, the study reveals that the students are almost equally inclined to use surface learning approach, which is especially vividly demonstrated by their inclination to memorize learning material. To further promote deep learning approach teacher trainers should seek ways to change teaching

and assessment procedures and encourage critical thinking and conscious reflection on the content of learning material and the learning process itself.

As this study is intended to examine approaches to learning of a small group of prospective teachers at one university, it is neither comprehensive nor extensive. There are many more dimensions and pieces yet to be explored, such as the ways to promote deep learning approach, the correlation between learning approach and learner autonomy level, between teaching and learning approaches, between learning approach and learning outcomes, prospective teachers' conceptions of learning etc.

REFERENCES

- Ak, Ş. (2008). A Conceptual Analysis on the Approaches to Learning. *Educational Sciences: Theory and Practice*, 8. Retrieved from: <https://eric.ed.gov/?id=EJ837764> (eng.)
- Biggs, J. B. (1987). *Students approaches to learning and studying*. Hawthorn: Australian Council for Educational Research. Retrieved from: <https://eric.ed.gov/?id=ED308201> (eng).
- Biggs, J., Kember, D., & Leung, D.Y. (2001). The revised two-factor Study Process Questionnaire: R-SPQ-2F. *British Journal of Educational Psychology*, 71, 133-149. DOI: 10.1348/000709901158433 (eng).
- Dart, B., Burnett, P., Purdie, N., Boulton-Lewis, G., Campbell, J., & Smith, D. (2000). Students' Conceptions of Learning, the Classroom Environment, and Approaches to Learning. *Journal of Educational Research*, 93 (4), 262-270. DOI: 10.1080/00220670009598715 (eng).
- Desierto, A., Maio, C.D., O'Rourke, J., & Sharp, S. (2018). Deep or Surface? The learning approaches of enabling students in an Australian public university. *Proceedings of STARS Conference 2018 (New Zealand)* July 11, 2018. Retrieved from: <https://ro.ecu.edu.au/ecuworkspost2013/5226/> (eng).
- Entwistle, N. J., & Ramsden, P. (1983). *Understanding Student Learning*. London: Croom Helm. Retrieved from: <https://eric.ed.gov/?id=ED244959> (eng).
- Hattie, J.A.C., & Donoghue, G.M. (2016). Learning strategies: A synthesis and conceptual model. *Science of Learning*, 1 (16013), 1-13. DOI: 10.1038/npjscilearn.2016.13. (eng).
- Kember, D. (2016). Why do Chinese students out-perform those from the West? Do approaches to learning contribute to the explanation?. *Cogent Education*, 3 (1), 1248187. DOI: 10.1080/2331186X.2016.1248187 (eng).
- Marton, F., & Saljo, R. (1976). On qualitative differences in learning. I — Outcome and process, *British Journal of Educational Psychology*, 46, 4-11. DOI: 10.1111/j.2044-8279.1976.tb02980.x (eng).
- Nordin, N., Wahab, R.A., Dahlan, N.A. (2013). Approaches to Learning among Trainee Teachers: Malaysian Experiences. *Procedia — Social and Behavioral Sciences*, 105, 284-293. DOI: 10.1016/j.sbspro.2013.11.030. (eng).

- Richardson, J. (1994). Mature Students in Higher Education: I. A Literature Survey on Approaches to Studying. *Studies in Higher Education*, 19, 309-325. DOI: 10.1080/03075079412331381900 (eng).
- Richardson, J.T.E. (2005). Students' Approaches to Learning and Teachers' Approaches to Teaching in Higher Education. *Educational Psychology*, 25 (6), 673-680. DOI: 10.1080/01443410500344720 (eng).
- Ryan, J., & Louie, K. (2007). False Dichotomy? 'Western' and 'Confucian' concepts of scholarship and learning. *Educational Philosophy and Theory*, 39 (4), 404-417. DOI: 10.1111/j.1469-5812.2007.00347.x (eng).
- Swatevarcharkul, R. (2008). *An investigation on readiness for learner autonomy, approaches to learning of tertiary students and the roles of English language teachers in enhancing learner autonomy in higher education: Research report*. Dhurankij Pundit University. Retrieved from: <http://libdoc.dpu.ac.th/research/134463.pdf> (eng).
- Trigwell, K., & Prosser, M. (1991). Improving the quality of student learning: the influence of learning context and students approaches to learning on learning outcomes. *Higher Education*, 22, 251-266. DOI: 10.1007/BF00132290
- Warburton, K. (2003). Deep learning and education for sustainability, *International Journal of Sustainability in Higher Education*, 4 (1), 44-56. DOI: 10.1108/14676370310455332 (eng).

ПІДХОДИ МАЙБУТНІХ УЧИТЕЛІВ ДО НАВЧАННЯ

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Стаття присвячена дослідженню підходів до навчання, що застосовуються майбутніми вчителями. З'ясовано, що існує два основних підходи до навчання — глибокий і поверховий. Головна відмінність між ними полягає у наявності або відсутності наміру зрозуміти матеріал, що вивчається. Глибокий підхід сприяє кращим результатам навчання, в той час як поверховий підхід призводить до неефективного навчання. Розуміння підходів до навчання, які використовуються студентами, необхідне для оптимізації викладання з метою отримання найкращих результатів. У статті представлено результати дослідження підходів до навчання майбутніх учителів української мови і літератури, які опановують

спеціалізацію «Англійська мова». Дослідження здійснювалося шляхом анкетування. Анкета включала 20 тверджень, до яких респонденти повинні були висловити ставлення, користуючись шкалою Лікерта. Твердження щодо глибокого підходу охоплюють такі аспекти, як власне глибокий підхід, встановлення зв'язку між ідеями, використання доказів і внутрішня мотивація. Твердження, що стосуються поверхового підходу, включають такі підшкали як поверховий підхід сам по собі, обмеження програмою, страх невдачі, зовнішня мотивація. Дослідження виявило, що глибокий підхід до навчання має високий рівень поширення, а поверховий підхід — середній. Ґрунтуючись на отриманих результатах, автори вважають, що викладачам слід приділяти більше уваги заохоченню студентів до використання глибокого підходу. Пропонується створювати навчальне середовища, яке сприяє виробленню в студентів особистісного зацікавлення в навчанні; використовувати в навчальному процесі технології й стратегії, які покращують якість навчання, а також переносити фокус системи оцінювання з відтворення на розуміння матеріалу.

Ключові слова: глибокий підхід до навчання, майбутній учитель, підхід до навчання, поверховий підхід до навчання, студент.

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SYNERGETIC PRINCIPLES OF MODERNIZATION OF TEACHING NATURAL DISCIPLINES FORMS IN HIGHER MEDICAL EDUCATION

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ABSTRACT

The educational system is a synergetic system; it is an open, nonlinear, dynamic and complex system. The importance of synergetics for education and science is associated with the possibility of creating a transdisciplinary dialogue, more effective study of interdisciplinary links, using this interdisciplinary direction for a deep understanding of the unity of laws of nature and society, and thus personal development as the ultimate goal of all educational activities. Reforming and modernizing of higher education in Ukraine, increasing the importance of independent work of students in the total amount of classroom and extracurricular training have led to priority interest in the introduction of e-learning content and other components of distance and telematics education, focused on ensuring compliance of national educational standards with international requirements and full participation of Ukraine in the development of European and world educational area. This article outlines the introduction stages of the latest technologies for teaching medical and biological physics with adequate reflection of the specifics of the pedagogical process in higher medical education in Ukraine. The rational combination of the latest technologies and classical methods of teaching natural sciences promotes mutual synergistic strengthening of the effects of their application and minimizes cognitive dissonance and disproportion of information needs and proposals in higher medical education of Ukraine.

The article also tackles the issue of distance learning courses and programs by the world's leading higher education institutions that have resulted in a significant increase in the number of Ukrainian higher education institutions that actively develop and use e-learning Internet resources and other forms of distance learning.

Key words: *modernization, synergetics, implementation of new technologies, teaching, higher medical education*

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INTRODUCTION

The educational system is a synergetic system; it is an open, nonlinear, dynamic and complex system. The importance of synergetics for education and science is associated with the possibility of creating a transdisciplinary dialogue, more effective study of interdisciplinary links, using this interdisciplinary direction for a deep understanding of the unity of laws of nature and society, and thus personal development as the ultimate goal of all educational activities [1-8].

The implementation of strategic objectives of higher education in Ukraine requires the introduction of high-tech information and other science-intensive teaching tools. Current laws adopted by the Verkhovna Rada of Ukraine, orders of the Cabinet of Ministers of Ukraine, in particular, 'Law of 2014 on Higher Education' [9] orders of the Ministry of Education and the Ministry of Health of Ukraine emphasize the need to develop intelligent computer and distance learning technologies (including e-learning content) and create an industry of modern teaching tools. These tasks are also referred to the Priority Areas of Research in Education, Pedagogy and Psychology at the National Academy of Pedagogical Sciences of Ukraine for 2018-2022 [10-13].

MODERNIZATION OF HIGHER EDUCATION

Reforming and modernizing of higher education in Ukraine, increasing the importance of independent work of students in the total amount of classroom and extracurricular training have led to priority interest in the introduction of e-learning content and other components of distance and telematics education, focused on ensuring compliance of national educational standards with international requirements and full participation of Ukraine in the development of European and world educational area.

The harmonious combination of the latest technologies and classical methods of teaching natural sciences promotes mutual synergistic strengthening of the effects of their application and minimizes cognitive dissonance and disproportion of information needs and proposals in higher medical education in Ukraine.

An important task of our study was to conceptually justify the introduction stages of the latest technologies for teaching medical and biological physics with adequate reflection of the specifics of the pedagogical process in higher medical education in Ukraine.

There are following stages of the research:

1. Comparative analysis of the features of the latest technologies provision and classical methods of teaching natural sciences in higher medical education in Ukraine.

2. Substantiation of synergetic methods provision in the process of planning, development and effective implementation of modified approaches to teaching natural sciences in higher medical and pharmaceutical education institutions (HMPEIs) of Ukraine.

3. Creation and substantiation of new tools for harmonization and improving the education quality in the pedagogical process modification using a motivational model for the development and implementation of new technologies and classical methods of teaching natural sciences in higher medical education in Ukraine.

The development of telematics and, in particular, distance education in Ukraine began later than in the United States and the European Union and was carried out under conditions of relatively low level of general informatisation of society and insufficient systematization in technological and methodological support of e-learning content. Over the last decade, the basic organizational and legal aspects of the development of the distance learning system in Ukraine have been developed and reflected in the policy documents.

The large-scale introduction of distance learning courses and programs by the world's leading higher education institutions has resulted in a significant increase in the number of Ukrainian higher education institutions that actively develop and use e-learning Internet resources and other forms of distance learning.

In HMPEIs of Ukraine, in particular in Bogomolets National Medical University, is done a lot to improve the quality of information and communication services for staff and students and expand the use of the Internet that creates a technological basis for the development and implementation of e-learning content in all disciplines taught by departments [14]. Providing students with high-quality high-speed Internet access not only in educational buildings, but also in dormitories is constantly being improved, and a network of public wireless Internet connection based on Wi-Fi technologies is being developed.

In order to create conditions for further improvement of the quality of educational-methodological and scientific-pedagogical activities of educators and all categories of persons studying at the HMPEIs of Ukraine, measures are being taken to ensure free Internet access to international bibliographic databases of full-text scientific publications of medical and biological profile, professional publications.

Scientific staff potential of the department of the Department of Medical and Biological Physics and Informatics (MBPhI) in Bogomolets National Medical University (BNMU) is powerful and skilful. This provides an opportunity to conduct research effectively in the main areas of research at BNMU, according to the state strategic priority areas of innovation for 2011-2021, defined in the 'Law on Priority Areas of Innovation in Ukraine' of Ukraine,

in particular, on the development and implementation methods of optimizing the teaching and education of students in HMPEIs of Ukraine with extensive use of modern information and communication technologies.

In HMPEIs of Ukraine are implemented organizational measures for the creation of educational portals of universities and the introduction of e-learning content. The strategy for the development of educational portals provides students and teachers with a wide range of information services on the content and learning process. The use of the capacity of portals, the implementation of modern methods of telematics and distance education, successfully complements the traditional full-time and part-time forms of educational work and provides increased quality, convenience and prestige of education. Creating an innovative educational environment using a specialized set of software and hardware allows you to expand the practice of distance learning.

IBPhI in BNMU conducts active scientific and educational-methodical work and is a reference among single-profile departments in HMPEIs of Ukraine. For 2016-2020, in IBPhI research work (R&D) has been performed on the following topics:

For 2016-2018 — ‘Implementation synergism of new technologies and classical methods of teaching natural sciences in higher medical education of Ukraine’;

for 2017-2019 — ‘Development and implementation of innovative teaching tools in information disciplines for students of higher medical education institutions’;

for 2020-2022 — ‘System-synergetic combination of traditional and innovative technologies of teaching natural and information disciplines in the higher medical education of Ukraine’.

These and many other scientific studies create theoretical and methodological foundations for the modernization of higher education in Ukraine. In particular, they provide deepening of interdisciplinary dialogue ‘natural disciplines — medicine’ in HMPEIs of Ukraine.

The proposed modification of approaches to the implementation of educational web content on medical and biological physics and research are provided on the topics:

(a) substantiation of the synergetic system of rational application of the newest technologies and classical methods of teaching natural sciences with adequate consideration of psychophysiological features of the contingent of students;

(b) creation of a motivational model for the introduction of the latest technologies for teaching medical and biological physics, as a tool for improving co-creation relations in the dual complex ‘student-teacher’ and minimizing cognitive dissonance;

(B) application of assessment criterion and efficiency indicators of the newest technologies introduction in teaching medical and biological physics.

(d) methodology development for teaching physical, mathematical and computer science disciplines in order to deepen the interdisciplinary dialogue ‘natural sciences — medicine’ in HMPEIs of Ukraine.

CONCLUSIONS

The synergetic approach in education and science is based on the similarity of the main features of the processes that occur in systems of different nature, and the models that describe these processes. This allows to transfer the results of one, more accurate educational discipline or science (such as physics) to similar and much more complex objects of another educational field or science (such as medicine).

The rational combination of the latest technologies and classical methods of teaching natural sciences promotes mutual synergistic strengthening of the effects of their application and minimizes cognitive dissonance and disproportion of information needs and proposals in higher medical education of Ukraine.

Synergism of application of the newest technologies and classical methods of teaching natural sciences in higher medical education of Ukraine organically develops traditional (full-time and part-time) forms of educational work and contributes to the harmonization of organizational and methodological principles of participants' interaction in the educational process in the context of building an e-learning environment in HMPEIs of Ukraine.

REFERENCES

- Andruschenko, V. P., Zyazyun, I. A., Flint, V. G., Maksimenko, S. D. (et al.). (2003). Continuous professional education, philosophy, pedagogical paradigm forecast: Monograph. Kremen, V. G. (Ed.). Kyiv: Naukova Dumka (in Ukrainian)
- Chalyi, A.V. (2000). Synergetic principles of education and science. (in Ukrainian)
- Chalyi, A.V., Tsekhmyster, Ya. V., Stuchinskaya, N.V., Chalyi, K.O., Oliynyk O.I., Paschenko, V.V., Chayka, O.M. (et al.) (2004). Medical and biological physics (2004). (in Ukrainian)
- Chalyi, A.V., Tsekhmyster, Ya. V., Stuchinskaya, N.V., Chalyi, K.O., Oliynyk O.I., Paschenko, V.V., Chayka, O.M. (et al.) (2017). Medical and Biological Physis. (in Ukrainian)
- Chernavsky, D.S. (2001). Synergetics and information: Dynamic information theory. (in Russian)
- Hacken, G. (1980). Synergetics. (in Russian). DOI: 10.1007/978-3-662-10184-1
- Lutay, V.S. (2004). The main question of modern philosophy. Synergetic approach. (in Russian)
- Mospan, N., Slipchuk, V. (2020). International students in higher education medical institutions in Ukraine: current state of play and prospects. *Continuing Professional Education: Theory and Practice*, 3, pp. 60-70. DOI: <http://dx.doi.org/10.28925/1609-8595.2020.3.7>

- Nikolis, G., Prigogine, I. (1979). Self-organization in no equilibrium systems. (in Russian). DOI: https://doi.org/10.1007/978-94-009-6239-2_1
- Sysoieva S., Mospan N. (2015). New Law of Higher Education in Ukraine: innovations and risks. *Didactica Slovenica*, 30(3-4). P. 166–174 http://www.pedagoska-obzorja.si/revija/Vsebine/PDF/DSPO_2015_30_03.pdf URL: <http://lib.iitta.gov.ua/id/eprint/711729>
- Law on Higher Education of Ukraine (2019). Bulletin of the Verkhovna Rada of Ukraine, No243-VIII. 2300 — VIII. (in Ukrainian). URL: <https://zakon.rada.gov.ua/laws/show/1556-19>.
- Law on Education of Ukraine (2019). Bulletin of the Verkhovna Rada of Ukraine, No2657-VIII. 2661 — VIII. (in Ukrainian). URL: <https://zakon.rada.gov.ua/laws/show/2145-19>.
- Law on Amendments to the Law of Ukraine on the National Informatization Program (2018). Bulletin of the Verkhovna Rada of Ukraine, N 27-28, art. 181. (in Ukrainian). URL: http://search.ligazakon.ua/l_doc2.nsf/link1/Z980074.html
- On approval of the Concept of development of natural and mathematical education (STEM-education). Order of the Cabinet of Ministers of Ukraine, № 960-p. 05.08.2020. (in Ukrainian). URL: <https://zakon.rada.gov.ua/laws/show/960-2020--%D1%80#Text Phone>

СИНЕРГЕТИЧНІ ЗАСАДИ МОДЕРНІЗАЦІЇ ФОРМ НАВЧАННЯ ПРИРОДНИЧИХ ДИСЦИПЛІН У ВИЩІЙ МЕДИЧНІЙ ОСВІТІ

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Освітня система — це синергетична система (відкрита, нелінійна, неврівноважена, складна). Синергетичний підхід до освіти та науки відіграє важливу роль, оскільки створюється міждисциплінарний діалог та глибше вивчаються міждисциплінарні зв'язки. Основна місія освітньої діяльності — розвиток особистості, а використання міждисциплінарного напрямку дозволить краще розуміти глобальну систему «суспільство — природа». Реформування та модернізація вищої освіти в Україні, підвищення значення самостійної роботи студентів у загальному обсязі аудиторної та позааудиторної підготовки призвели до впровадження електронного навчального змісту та інших компонентів дистанційної та телематичної освіти, що зосередженні на забезпеченні відповідності національних освітніх стандартів міжнародним вимогам та повної участі України у розвитку європейського та світового освітнього простору. У цій статті викладено етапи впровадження новітніх технологій викладання медичної та біологічної фізики та відображено особливості педагогічного процесу у вищій медичній освіті України. Визначено, що раціональне поєднання новітніх технологій та класичних методів викладання природничих наук сприяє взаємному синергетичному покращенню викладання та мінімізує когнітивний дисонанс, диспропорцію інформаційних потреб та пропозицій у вищій медичній освіті України.

У статті також розглядається питання дистанційних курсів та програм провідних вищих навчальних закладів світу, що призвело до значного збільшення кількості українських вищих навчальних закладів, які активно розробляють та використовують Інтернет-ресурси електронного навчання та інші форми дистанційного навчання.

Ключові слова: модернізація, синергетика, впровадження новітніх технологій, навчання, вища медична освіта

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LOGICAL AND RATIONAL COMPONENT OF MODERN EDUCATIONAL PROCESS

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ABSTRACT

The formation of a new historical type of personality requires appropriate changes in the content of education, means of the set tasks' implementation and the organization of the education system itself. Achieving this goal is impossible without the formation of a high intellectual culture of a person and the ability of the individual to its further continuous improvement. However, nowadays the role and place of cultural and anthropological factors, as well as logical and rational ones, are often underestimated in the modernization process of the society.

The proposed article emphasizes the need to reveal the role of logical and rational component as a necessary part of the modern educational process and the way to improve mental culture through education.

It is noted that the level of modern culture of thinking, rational reasoning, the ability to conduct constructive dialogues has fallen significantly. The inability and unwillingness of many members of society to analyze situations critically, lack of skills to express their opinions consistently and reasonably, to persuade their fellow citizens in a rational and logical way can lead to barbarism. The results of hours' reduction in logic disciplines at the University are given. This fact is reflected in the inability of students to establish the relationship of genus and species, causal relationships between objects and phenomena, to make classifications. The need for logic knowledge, which helps to identify false information, to reveal logical errors, is indicated.

Emphasis is placed on the importance of high appreciation of rationality. It has its origins in antiquity and finds its expression in ancient philosophy. Ancient philosophers proceeded from the fact that the world can be comprehended only with the help of reason and rational methods, based on the power of persuasion, thought.

The role of language as a cultural phenomenon is emphasized. Cultural phenomenon in combination with consciousness, mental and cognitive processes is impossible without the rational use of the laws of logic.

Key words: *educational process; educational ideal; content of education; culture of thinking; logic, logical and rational means*

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INTRODUCTION

The need to form a new historical type of personality determines the nature of changes in the process of human socialization. The new tasks and the new goals require adequate changes in the content of education, means of the set tasks' implementation and the organization of the education system itself.

Awareness of the essence of social and cultural changes of the individual, adequate to modern social processes, and ways of its transformation eventually accumulate in the so-called "educational ideal" that would meet the demands of modern society. This new ideal, as a category of pedagogical science, should become the core of the educational policy of the state, its social order in school (the Law of Ukraine "On Education", p. 44).

Conceptually clear reproduction of personality characteristics, which is adequate in the social and cultural dimension to the requirements of this society, is the basis for the formation of the educational ideal. The transformation of Ukrainian society into a state governed by the rule of law, leads to the consolidation of this ideal and the means of its achieving at the legislative level. The Law on Education defines the purpose of education and its place in modern Ukrainian society. "The purpose of education is the comprehensive development of human as a person and the highest value of society, the development of his talents, mental and physical abilities, formation of citizens capable of conscious social choice, enrichment of intellectual, creative, cultural potential of the people, raising the educational level of the people, providing the national economy with highly qualified specialists" (Volkov, 1971, p. 168). However, such definitions, without being specified through the means of achieving the goal and certain schemes of their application, are purely declarative. Unfortunately, we live among other realities. The peculiarity of modern social consciousness is the underestimation of the place and role of cultural and anthropological, and foremost logical and rational factors in the modernization process of society. A similar situation has developed not only in our country, but also in other post-Soviet countries. However, concerns about this are expressed only by scientists, mainly in Russia

(for example, G. Tulchinsky, G. Sorina, V. Meskov, A. Subbotin, V. Bryushinkin and etc.). In Ukraine, there are only a few works of scientists, philosophers and educators who try to draw public attention to the rationality of reasoning (V. Titov, O. Tyaglo, O. Bandurka), in particular, the role of critical thinking and means of its formation and development. Achieving this goal is impossible without the formation of a high intellectual culture of a person and the ability of the individual to its further continuous improvement.

The purpose of the proposed article is to reveal the role of the logical and rational component as a necessary unit of the modern educational process and to comprehend the ways to improve the mental culture by means of education.

Today, a wave of alogism and irrationalism has swept our culture. Unfortunately, the fact of the decline in the level of thinking, rational reasoning and the ability to conduct constructive dialogues is indisputable. The inability and unwillingness of many members of society to analyze certain situations critically, the lack of skills to express their own opinions consistently and reasonably, to persuade their fellow citizens in a rational and logical way in politics and other spheres of public life — is the path from civilization to barbarism. Such dogmatic thinking, absolute trust in authority and the search for these authorities, real or imagined, is a characteristic feature of a human in a totalitarian society, ready to carry out the orders of his leaders exactly and unquestioningly. This is an atavism of the totalitarian mentality.

In modern society, controversy dominates the debate, because the goal is not to find an optimal, rational solution, but to win the dispute. The desire to be understood and to understand oneself is not in sight. Moreover, an attempt at clear reasoning or simply clear, coherent language provokes aggression. We can talk about the terrible triumph of logical ignorance, the absence of any logical culture — in everyday life, in business, in political life. Verbosity in the absence of argumentation, in fact, inability to think concretely, irresponsible decisions, inability to agree laws, inability and unwillingness to seek and determine the meaning of concepts that reflect the essence of certain objects and phenomena, inability to define the subject of agreement or dispute, their own position. Logic, which should guarantee understanding, rational thinking, communication and action, is not only perceived, but even denied, rejected.

However, as V. Lektorskiy rightly emphasizes “Rationality is one of the cultural values, and without reliance on it a person would not be able to act and learn. Because action involves a rational choice of goals and selection of the most effective means of their implementation and obtaining true results in cognition is impossible without the use of rational methods. Extremely high assessment of rationality in antiquity found its expression in ancient philosophy. In spite of all the differences between the philosophers of that time, the majority concluded that the world can be comprehended with the help of reason and rational methods. The ability of rational argumentation was indispensable in discussing social problems.” (Kuzmin, Artemenko, 2006, p. 26).

The problem of the role of logical culture in the educational process is not new. The importance of logic as a necessary prerequisite for teaching and education was emphasized by such well-known teachers as John Amos Comenius, Konstantin Ushinsky, Vasyl Sukhomlynsky. Issues of teaching logic and ways of forming and improving the culture of thinking are discussed at scientific and practical conferences, in publications of specialists. Unfortunately, the modern educational reforms and their original interpretation by educational institutions are not aimed at achieving the legally established goal, but also contribute to the opposite results. Some theorists of education believe that first of all the school should develop not critical thinking, but aesthetic abilities, not the ability to argue their position, but affectivity and imagination. Since the teacher, from this point of view, embodies the repressive norms of culture, in particular, the repressive norms of rational reasoning, his authority must be significantly reduced.

Logic, which was one of the main sciences of the medieval education system, in our time of the information society has become an academic discipline of choice. The situation became absurd when at our university it was included in the number of disciplines of the student's choice, along with such as "Business Etiquette", "Kyiv Studies", "Philosophy of Love", "Psychology of Intersexual Relations", "Ethics of Business Communication", etc. As a result, only about 10% of students (future philologists, translators, journalists, historians, psychologists, preschool teachers and primary school teachers) study logic. The results were not long in coming. Students often do not know how to establish the relationship of genus and species, causal and consequential relationships between objects and phenomena, to classify.

It is an indisputable fact that the ability to operate with concepts plays an important role in the learning process. The process of defining concepts is especially important. It is not only difficult but almost impossible to master the basics of science thoroughly and deeply without a clear mastery of the basic concepts of any science and discipline, as well as the whole system of interconnected concepts of a particular subject or science. Teachers of professionally oriented disciplines do not pay due attention to the formation of the conceptual apparatus of students, as a result, they perceive the content of concepts on an intuitive level mainly. For example, answering the exam in Ukrainian literature on the question "Romanticism in T. Shevchenko's ballads" students simply retell the meaning of ballads, and cannot give a logically correct definition of "romanticism", to analyze works in accordance with the question.

Logic studies the laws and forms of thinking, and thinking is inextricably linked to language. It is impossible to master language well without knowledge of logic, because language is the materialization of thought, and incorrectly constructed reasoning will be similarly expressed in language. Grammar knowledge, which is initially formed spontaneously, is systematized later and honed throughout the school period and even in higher education institution (the so-called "language of professional communication", which,

in our opinion, is an unjustified use of study time). “Philologists, first of all, need to know such logical categories as “sign”, “meaning”, “artificial language”, “metalanguage”, the relationship between the categories of grammar and logic” (Lektorskiy, 2012, p. 98).

Improving the culture of thinking remains a mostly spontaneous process, it is not given due attention. The fact that nowadays a lot is said about the culture of speech, culture of communication, food, clothing, political, legal culture, etc., and at the same time such concepts as “culture of thinking”, “logical culture” occur only in a narrow circle of experts, is already a logical paradox. After all, the basis of any culture is the culture of thinking, and its level determines the level of all other “cultures”. Students who do not have basic logical knowledge today will become teachers and tomorrow they will come to class or student audience to teach others. Will they be able to transfer knowledge, form skills and abilities in their students, influence the formation of their worldview? Obviously no. Since, the pedagogical process involves not only the transformation of knowledge that can be memorized and reproduced, but the formation of a holistic worldview, belief system. This cannot be achieved without understanding and explanation, aimed at achieving understanding as a result. Teaching logic is very important in the intellectual and moral development of the individual, because it is the foundation of any school discipline and any science (social, natural, technical). Today the problem of logical culture is urgent for education as never before. Continuous improvement of the level of logical culture is a necessary component of modern education.

The teaching of traditional logic should be aimed at fostering a culture of thinking in the process of pedagogical activity. It can be teaching of any discipline by all teachers (physicists, mathematicians, chemists, linguists, historians, etc.). Raising the level of mental culture will have positive results when it is done not only by teachers of logic, but in the teaching of each discipline, when each teacher has a high level of mental culture and constantly strives to improve it, when logic helps to learn educational material.

Nowadays, the task of rational construction of the learning process becomes especially important in the educational institutions. Extensive methods, which provide for the expansion of the amount of assimilated information, should give way to intensive methods, which provide for the rational selection of the most important information. A necessary condition for attracting new teaching methods is the development of logical culture of both teachers and students, mastering of methodology and methods of scientific knowledge, rational methods and techniques of evidence-based reasoning, the formation of creative thinking.

Logical culture is not innate. For its development it is necessary first of all to acquaint teachers and students of pedagogical educational institutions with the basics of logical science, which has accumulated theoretically sound methods and techniques of rational reasoning and argumentation. Teachers who have the basics of logical knowledge will be able to pass this knowledge

and thinking skills to their students. Logic contributes to the formation of self-awareness, intellectual development of the individual, helps to form a scientific worldview. The successful solution of complex problems of teaching and educating young people largely depends on the teacher, on his intellectual level, professional skills and culture. The profession of a teacher requires constant creativity, tireless work of thought and improvement of its culture. To improve the training of teachers, it is necessary to introduce a course of logic in the curriculum, and also to expand its teaching, to increase the number of teaching hours and to improve the programs.

Information is better remembered if it is logically structured, systematized. Logical processing of information is much easier when a person has a high level of mental culture development. If knowledge is presented as a logically unstructured text, as an unsystematic set of facts — then we talk about mechanical memorization, which doesn't lead to the formation of a holistic view of the subject, and this information is usually quickly forgotten. Knowledge of logic helps to identify false information, to reveal logical errors.

Problems of the culture of thinking, ways and means of its formation in the educational process are posed and discussed in the works of Evald Ilyenkov, especially in his article "Our Schools Must Teach How to Think!", published in 1964 in the journal "Public Education". Nowadays this work doesn't lose its relevance. Doctrine of Evald Ilyenkov is becoming even more acute in modern conditions. In particular, this applies to Ukraine.

Conceptually clear reproduction of personality characteristics, which is adequate in the social and cultural dimension to the requirements of this society, is the basis for the formation of the educational ideal. It should be the criterion by which you can determine the degree of compliance of the problems in the field of education, the real needs of society. The transformation of Ukrainian society into a state governed by the rule of law, leads to the consolidation of this ideal and the means of its achieving at the legislative level.

The social mission of education is multifaceted. It is about improving social inequality, about inculcating citizenship standards, about contributing to culture and the economy, where it is the core of civilization. Education is the cultural center of society with its unchanging values, pedagogical experience and focus on education and preservation of its human origins.

The results of education should include, above all, the development of personality. The subjective side of social relations is the main generator of its development and modernization in the information society. This very fact is indisputable. Therefore, the very institutional and structural changes in Ukraine require the formation of new meaningful life orientations and new cultural abilities. This is the main task of the national education system. Similar challenges lead to a number of problems associated with the process of improving and modernizing the system itself. The main directions of modern national education development should be provided by the adequate ways, where solution and implementation of the set problems really coincide. According

to the author, the determining means consist in the formation of high intellectual culture of the individual and his ability to further continuous improvement, scientific worldview, which would provide the ability to problematize ideas and generate the new ones, the systematic and critical thinking which lead to understanding and social interaction. "The culture of thinking is not just intelligence and "primitive" mind, but in some way developed, rich, cultivated mind. This is not a gift of nature and heredity, but a "gift" of society. And if so, then the question is natural: "how to learn the culture of thought? What is it?" — wrote G. Volkov (Aristotel, 1984, p. 12). Philosophical sciences play a leading role in solving the set tasks.

In recent years, there is an opinion that if the main purpose of the university is the training of future professionals in a particular field of activity, then the curriculum should be subordinated to this goal. Anything that is not aimed directly at training future professionals should be removed from the curriculum. Such considerations are the basis for reducing the number of hours devoted to the study of philosophy and philosophical disciplines in the universities. However, true science has always been associated with philosophy. Philosophy in the complex of all its sciences cultivates tolerance for other people's thoughts and a critical attitude to one's own views.

The desire for narrow professionalization of higher education expresses the tendency, which has long manifested itself in Western Europe and the United States, to transform the majority of the population into "one-dimensional people" (G. Marcuse, in "people of crowds, masses" (José Ortega y Gasset), whose consciousness can be easily manipulated. Ultimately, it is a movement towards the establishment of a universally totalitarian society. Currently, brainwashing techniques, propaganda, advertising, the media are able to subdue the human mind completely, to instill any purpose and values, to awaken any feelings and attitudes to things and phenomena, to form the tastes and even more. Thus, in modern society not only the behavior but also the human consciousness is also controlled by the state or power elites. The history of mankind has never known such total control over person. Depriving the philosophy of influence on the worldview formation of the young generation and its intellectual culture will mean another important step towards complete spiritual slavery of human.

The history shows, that the level of logical culture and the authorities' attitude to it meets the demands of the social order and the nature of social processes. No wonder the formation of logic as a science occurred in ancient society primarily due to democracy. Democracy requires a government based not on coercion or the barbaric sword, but on the power of persuasion and thought.

Verbosity in the absence of argumentation, in fact, is inability to think concretely, which lead to irresponsible decisions, inability to agree laws, inability and unwillingness to seek and determine the meaning of concepts that reflect the essence of certain objects and phenomena, inability to define the subject of agreement or dispute, to define one's own position. Logic, which should

guarantee understanding, rational thinking, communication and action, is not only perceived, but even denied, rejected.

The real social status of logic in our society at this stage of its development is unsatisfactory. Experience has shown that the transition from totalitarianism to democracy does not necessarily have real democracy as its end point. The atmosphere of fear for someone's position, conformism and social anemia contributes to the emergence of oligopoly.

Logical culture is unnecessary here. There is no question of the relationship between the declared and the desired, necessary and existing in real politics, legislation, large-scale economic projects and their implementation, in the field of education. Skepticism towards the declared political and legal, social and economic decisions is not accompanied by independent thinking and taking into account the logical consequences arising from the election promises. Society has an unsatisfactory "logical status". Our economists and politicians have not studied logic and have a fairly low level of logical culture. It is impossible to train a highly professional specialist without proper philosophical and logical education in any field, especially in the humanities. Take philology as an example. Any education has a purpose. A natural question arises: what is the purpose of philological education? The object of study is language here. As a result, we can hardly do without answering the question: what is language, when and why it occurs, how language belongs to consciousness, what is the role in the process of cognition in the social environment, how it affects and whether it affects the formation of personality, nation-building processes, etc.

The answers to these questions can be given by logical and philosophical reflection on language as a cultural phenomenon. Scientists for centuries have tried to give a philosophical understanding of this complex and even mysterious phenomenon to some extent. In the III century B.C. the famous ancient Greek philosopher Plato tried to give a philosophical understanding of language through Socrates in his dialogues, in particular in the dialogue "Cratylus". The phenomenon of language remains the subject of study by modern scientists.

CONCLUSIONS

We live in an era of rapid social change. Today, humanity has entered the phase of finding new strategies for civilizational development, the search for new values, when it becomes necessary to analyze the previous meanings of life that guide the development of civilization. To the eternal philosophical problems of existence, consciousness, meaning of life and others, the modern era has added a fundamentally new, never-before-existing problem of a single destiny of mankind and the preservation of life on Earth (Pavlov, 1984, p. 12). Recognition of the important role of unconscious motives in human life, the presence of cases of self-deception does not preclude understanding of the fact that normal participation in social life involves awareness

of unconscious urges and their rational control. Rationality is a condition for the possibility of responsible actions.

V. Lektorskiy emphasizes, that it is quite common to think that modern civilization is increasingly becoming a “civilization of knowledge”, in which the production, dissemination and use of knowledge has a decisive influence on technical, economic, social and cultural processes. Scientific knowledge plays a special role in this. Knowledge, especially scientific, implies rational validity (Kuzmin, Artemenko, 2006, p. 35).

The task of modern education is not only to prepare a highly professional specialist in a particular field of science or business, but to educate a citizen with a high level of cultural thinking and speech, who understands the problems facing him, is able to solve tasks, to persuade and engage in dialogue. Achieving this goal is impossible without the formation of a high intellectual culture of a person and the ability of the individual to its further continuous improvement.

REFERENCES

- Aristotel, O. (1984). On sophistic refutations. Essays: v 4 t. T. 2: Translated from ancient Greek. Moscow, Mysl. S. 533–594. (*in Russian*)
- Bulletin of the University of Internal Affairs (1999). Volume 9. p. 418–421. URL: http://nbuv.gov.ua/UJRN/VKhnuvs_1999_9_93 (*in Ukrainian*)
- Volkov, G.N. (1971). At the cradle of science, *Young guard*. 224 p. (*in Russian*)
- Law of Ukraine “On Education” (1997). Kyiv. t. 10, P. 168–229. (*in Ukrainian*)
- Krasnopolskaya, A. P. (2006). Sophistic argumentation: ideal and methods. *Mysl. Yearbook of The Saint-Petersburg philosophical society*, 6. P. 121–132. (*in Russian*)
- Kuzmin, M. N., Artemenko, O. I. (2006). A person of civil society as the goal of education in a multi-ethnic Russian society. *Question Paper for Philosophy*, 6. P. 40–51. (*in Russian*)
- Kulik, A. (2012). 10 logical mistakes of our time. *The Mirror of the Week. Ukraine*, Vol. 42. (*in Russian*)
- Lektorskiy, V. A. (2012). Rationality as a cultural value. *Question Paper for Philosophy*, 5, P. 26–35. (*in Russian*)
- Pavlov, V. T. (1984). The Problems of improving the teaching of logic in universities. *Philosophical Thought*. P. 90–98. (*in Ukrainian*)
- Markuze, Gerbert. (1994). One-dimensional man. Moscow. ‘REFL–book’, 368 p. (*in Russian*)
- Jose Ortega y Gasset. (2016). Rise of the masses; AST, 256 p. (*in Russian*)
- Platon, (2015). Dialogues. *Non-Fiction*. Publisher: Azbuka, 448 p.
- Senchylo, A. (2010). From the history of the introduction of critical thinking in the modern educational space. Psychological and pedagogical problems of rural school: coll. of science. works of Uman State Pedagogical University named after Pavel Tychyna, Uman. Vol. 33, P. 273 — 278. (*in Ukrainian*)

- Sorina, G. V. (2003). Critical thinking: history and current status. Moscow University Bulletin, Series 7. Philosophy, Vol. 6. P. 97–111. *(in Russian)*
- Sorochenko, V. (2002). Encyclopedia of Propaganda Techniques (How We Are Treated by the Media, Politicians and Advertising). URL: /http://www.psyfactor.org/propaganda1.htm *(in Russian)*
- Sukhomlynskyi, V. O. (1977). I give my heart to children. *Selected works in 5 Volumes*. Radianska shkola, Vol. 3. P. 280–289. *(in Ukrainian)*
- Sukhomlynskyi, V. O. (1976). How to raise a real person. *Selected works in 5 Volumes*. Vol. 2. P. 149–200. *(in Ukrainian)*
- Titov, V. D., Tyaglo, A. V., Voropay, T. S. (1999). Critical Thinking: The Challenge of the 21st Century World Education. Kharkiv University of Internal Affairs. 285 p. *(in Russian)*
- Titov, V. D. (2004). Logical knowledge in its socio-cultural determination (religious, legal, political context of Antiquity and the Middle Ages). «Region-inform». 259 p. *(in Russian)*
- Tulchynskyi, G. L. (2009). Logical culture and freedom: logic in Russian society of 20–21st centuries. *Philosophical Sciences*, Vol. 4. P. 46–61. *(in Russian)*
- Chumakov, A. N. (2012). Globalistics in the system of modern scientific knowledge. *Question Paper for Philosophy*, 7. P. 3–16. *(in Russian)*

ЛОГІКО-РАЦІОНАЛЬНИЙ СКЛАДНИК СУЧАСНОГО ОСВІТНЬОГО ПРОЦЕСУ

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Формування нового історичного типу особистості вимагає адекватних змін змісту освіти, засобів реалізації поставлених завдань та самої організації системи освіти. Досягнення поставленої мети неможливе без формування високої інтелектуальної культури людини та здатності індивіда до її подальшого постійного вдосконалення. Однак роль і місце культурно-антропологічних, і перш за все логіко-раціональних чинників у модернізаційному процесі суспільства в наш час часто недооцінюється.

У запропонованій статті наголошено на необхідності розкриття ролі логіко-раціонального складника як необхідного компоненту сучасного освітнього процесу та осмисленні шляхів вдосконалення мислительної культури засобами освіти. Зазначено про факт падіння рівня сучасної культури мислення, раціонального міркування, вміння вести конструк-

тивні діалоги, нездатності і небажання багатьох членів суспільства до критичного аналізу ситуацій, відсутність навичок послідовного і обґрунтованого викладу власних думок, переконання своїх співгромадян раціонально-логічним способом, що може призвести до варварства. Наведені результати скорочення годин дисциплін з логіки в Університеті, що відобразилося на невмінні студентів встановити відношення роду і виду, причинно-наслідкових зв'язків між предметами і явищами, здійснювати класифікації. Вказано на необхідність знань логіки, яка допомагає виявити хибну інформацію, розкрити логічні помилки.

Акцентовано увагу на важливості високої оцінки раціональності, яка веде свій початок з античності і знайшла своє вираження в античній філософії, де філософи виходили з того, що тільки за допомогою розуму, тільки раціональними методами можна досягнути світ, спираючись на силу переконання, на думку.

Підкреслено роль мови як культурного феномену, який у сукупності зі свідомістю та мислинневими і когнітивними процесами неможливий без раціонального використання законів логіки.

Ключові слова: зміст освіти; культура мислення; логіка; логіко-раціональні засоби; освітньо-виховний ідеал; освітній процес.

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SOCIAL AND CULTURAL ASPECTS OF HIGHER EDUCATION

INSTITUTIONALIZATION OF SCIENCE AND THE SOCIAL FUNCTIONS OF THE UNIVERSITY — DIFFICULTIES AND OPPORTUNITIES

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ABSTRACT

It is evident that, especially in the recent decades, the scientific institutions have strongly evolved and modified their structures in order to be adapted to the changing socio-cultural environment as well as to be more aware of the need to generate new knowledge in order to support the economic growth. Social sciences tried to interpret the process of institutionalization of science in the academic world in various ways, analyzing the social components of the process of creating the knowledge. The approach in social sciences is primarily characterized by the study of the level of institutionalization that enables the study of the features that, in turn, define science as a social institution. This approach is useful in the study of higher education systems because the institutionalized principles make the structure of an organization and primarily provide the information about what regulates the formation of a university and not only about what regulates the behavior of an individual. The organization of the university is a clear example to understand the changes that are taking place in social institutions based on scientific and technological knowledge. In fact, in recent decades, universities have changed the way they organize their activities. The new requirements favor the reorganization of the knowledge creation process which has significant consequences for changes in the internal structure of a science institution.

This article focuses on the analysis of the process of institutionalization of science. This approach to science is primarily characterized by the analysis of the features that define science as a social institution. In this context, the most important challenges and difficulties related to these processes in a globalized world are presented.

Keywords: *institutionalization, social sciences, university, social institutions.*

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INTRODUCTION

It is evident that, especially in the recent decades, the scientific institutions have strongly evolved and modified their structures in order to be adapted to the changing socio-cultural environment as well as to be more aware of the need to generate new knowledge in order to support the economic growth. Social sciences try to interpret the process of institutionalization of science in the academic world in various ways, analyzing the social components of science, that is, examining the way in which the scientific community is organized into *production* and dissemination of knowledge (Znaniński, 1994). The approach in social sciences is primarily characterized by the study of the level of institutionalization that enables the study of the features that, in turn, define science as a social institution (Merton, 1949). This approach is useful in the study of higher education systems because the institutionalized principles make the structure of an organization and primarily provide the information about what regulates the formation of a university and not only about what regulates the behavior of an individual (Meyer, 1977).

As part of the analysis of the process the institutionalization of science, the main trends that characterize it were described. First, reference was made to the classical view, an important representative of which was Robert K. Merton, who promoted the normative structure of science. Then, various interpretations made about the social function of science are presented which show the evolution of the way of configuring the scientific activity carried out by John Ziman and among others. The concept of institutionalization of science developed by Richard Scott was also recalled. The analyzed research perspectives and the presented theories of the institutionalization of science will serve a more complete presentation of the diversity of changes in the context of globalization.

NEW LEARNING FEATURES

Throughout history, opposing opinions about the usefulness and value of scientific activity have emerged. The English philosopher Francis Bacon positively considered the science because it allowed him to know the world and also to rule over it (Bacon, 1605). The adherents of this tradition saw

science as a way to expose the deliberate distortions of knowledge by economic and political interest groups. This was also what they saw as a chance for social development.

The opposite position, which may be broadly described as a pessimistic view of science, appeared almost in parallel. It was characterized by the fact that it undermined faith in the relationship between science and social development. Representatives of this position regarded science as a *discovery* of selfless researchers who tried to discover the truth for its own sake. The notion that *the greater the knowledge, the greater the progress of mankind* has been rejected. In this interpretation, the value of science was primarily theoretical and moral. Science was important for the development of ideas that contributed to understanding the world and not because of their application (Kozyr-Kowalski, 2005).

With the twentieth century, the belief that science itself was not enough to create a harmonious society began to prevail (Elias, 1991). Robert K. Merton was a major exponent and defender of the *normative* vision of science. He defined science as a social institution referring to the values and rules that organized its operation (Merton, 1942). Merton described the ideal conditions under which scientists should develop their activities, as well as the values that determined the work of a scientist (Merton, 1942). He focused on a set of values and cultural traditions governing scientific activity. He defined the set of these values and norms as the *ethos of science*, which expressed the imperatives and recommendations legitimizing the activities of institutions and shaping scientific awareness¹.

The classic vision of science as a social institution promoted by Merton began to be heavily questioned at the end of the 20th century when criticism of the normative dimension of his theory emerged. The main opponents believed that the thesis about the normative values of science was merely a legitimizing tool, applied in accordance with the interests of a specific situation and did not correspond to the actual behavior of scientists (Mulkay, 1969). For this reason, they advocated breaking the relationship between the norm and scientific action. From this perspective, not only scientific institutions were normative but also other cultural and social systems had a normative significance (Barnes, 1977). With the development of this concept, its supporters postulated that

¹ These were four sets of imperatives that can be briefly described as: 1) «universalism», that is, the search for truth subject to predetermined impersonal criteria, based on previously confirmed objective evidence and arguments; 2) «community», that is, common ownership of goods, assumed that the discoveries of science are the product of social cooperation, and therefore constitute part of the community; 3) «disinterestedness», ie the principle according to which a scientist should not pursue through work to a greater benefit than that provided by personal satisfaction with the work performed and the recognition and prestige that work in the interest of the community gives; 4) «structured skepticism» implied that the scientific researcher had to study each type of phenomenon with the available scientific research tools in such a way as to answer questions that could be objectively analyzed. (Merton, 1942). In the course of further work on the concept, Marton added two more elements to this structure: 5) «originality» as knowledge developed through innovative input; and 6) «humility», used to limit abuse that might be committed by scientists (Merton, 1949).

the only standards that guided scientific activity were those of a technical nature that derived from theoretical and methodological assumptions. According to them, the normative values are the result of particular assumptions adopted by scientists in accordance with their concept of science (Mulkay, 1969).

In this context, Ian Mitroff (1974) postulated the superior role of the researcher's individual motivation in scientific activities. Thus, he pointed the existence of *counter-norms* due to the incompatibility of universal principles, postulated, inter alia, in by Merton. All of them played a positive role in popularizing science but according to Mitroff they do not adequately describe the process of creating knowledge and changes taking place in scientific institutions. According to him, the process of constructing science is determined primarily by elements of the cultural aspects of society and the individual characteristics of scientists. The study of these aspects is connected, on the one hand, with the analysis of the evolution of a scientific organization, and, on the other hand, with the change of behavioral patterns that influence the normative systems in scientific institutions (Mitroff, 1974).

It is worth recalling that one of the first theoretical approaches to interpreting social change in science is *the linear model of innovation*. This model assumes that innovation begins with basic research, continues through applied research, and ends with the production and subsequent dissemination of the invention (Gilbert, 1989). This is an interpretation that has had a great impact on the organizational structure of universities. According to this model, knowledge is produced individually, in a discipline environment, in order to deepen information about reality and results from academic interests. This means that knowledge has little relation to social needs, only at the end of the process the results are transferred to the public sector (Kirk, 2016).

Along with the deepening of social sciences' reflection on the process of constructing knowledge, the way of describing this process has changed. The relationships between basic research, applied research and technological development have been compared to those typical of an ecosystem where each element requires and uses the properties of the others. In this case, knowledge is developed not only at the university, but also outside it, in cooperation with other institutions and taking into account social needs (Aronson, Aronson, 2018). Since the 1980s, the vision of science as a dynamic system that depends not only on the internal factors of university organization, but also on external conditions, begins to become increasingly subordinated to political determinants. Science is beginning to be seen as an economic potential that generates economic and social benefits. This way of understanding science makes it more and more dependent on the socio-economic context and therefore generates less autonomy in the selection of research priorities (Campbell, 2004).

In this context, the concept of John Ziman is significant, in which he presents the definitions of *post-academic science*. In his opinion, it is produced by local experts and falls under the authority of managers and is organized as the social

context and economic determinants of development. Ziman's work is unique in characterizing the notion of *post-academic science*. He describes it as a radical, irreversible and global transformation of the way science is organized and implemented. The described model emphasizes profit and profitability. Science loses objectivity because it is not based on the free thought of a scientist but is subject to group interests and external pressures to the research itself. The main mechanism conducive to change is the progressive increase in the competitiveness of research institutions (Ziman, 2000). This pressure defiles the academic science with the rules of the industrial game, placing more emphasis on usability and providing it with more bureaucracy.

The described processes have led to the fact that the discourse on science has evolved towards the analysis of interactions between three main areas: 1) scientific communities; 2) the economic sector; 3) institutions of political power. As part of these relationships, in the last decade of the 20th century, a model called the triple helix appeared (Leydesdorff and Etzkowitz, 1997). The starting point is not an autonomous unit of analysis, but the subsystems that form the three *propeller* blades: university, industry and government (Connell, 2007). The relationship between these *blades* is the engine of innovation. In each spiral, they take on new role that previously belonged to the others and create new hybrid institutions in social spaces (Leydesdorff, Etzkowitz, 1997). This model takes into account the institutional changes related to the emergence of a globalized knowledge-based society. In this approach, the role of the university is fundamental because it performs new functions. In addition to two traditional missions (teaching and research), it contributes to economic and social development through innovation that is based on knowledge (Knight, 2008). Universities with this new function have greater flexibility to respond to the changing needs of society.

The analyzed elements have an impact on the internal organization of scientific institutions, their relation to other fields, including economic, political and business. Scientific organizations are expected to make profound changes to adapt their structure to new ways of generating knowledge. In fact, the various approaches analyzed demonstrate the ability of science institutions to adapt to a changing social environment. Thus, we can conclude that scientific institutions are constantly evolving to meet the demand for new forms of knowledge creation in a globalized world (Meyer, Rowan, 2006).

It is worth emphasizing that current knowledge society, which is developing as a result of globalization processes, has the following features: the importance of information and communication technologies in social processes; knowledge as a source of economic growth; knowledge-based and service-based production; rapid knowledge production and the importance of educational processes throughout life (Heilbron, 2013). In this global context, knowledge production processes are increasingly adapted to the requirements of the economic market and policy guidelines. In this way, the research activities were oriented towards functional practices based on technological models.

In the contemporary globalized world, knowledge is a principle that structures changes in the economic system, labor markets and culture (Collins, 2011). This means that the term *knowledge society* does not only refer to the development of certain sectors, such as science or technology, but is a phenomenon that permeates all spheres of social life (Moody, Light, 2006). It should be emphasized that current scientific institutions, primarily universities, are increasingly focusing on transferring the areas of academic activity to business and industrial production. In this way, knowledge must demonstrate its social significance and economic efficiency. This promotes competitiveness and the centrality of knowledge as the producer of wealth and power, and is therefore sometimes considered a commodity (Miller, 2013).

In the social and cultural sphere at the global level, the process of creating knowledge fosters the development of pluralism (Keim, 2011). However, it must be emphasized that globalization also causes the emergence of tendencies that contradict pluralism that, in turn, confirms that current society is a consumer society that classifies its members primarily on the basis of their ability to purchase goods and services (Bauman, Bordon, 2014). Therefore, one should not think that the knowledge society implies the emergence of a harmonious world society in which there is an increasing integration of cultures (Longino, 2002).

INSTITUTIONALIZATION OF SCIENCE

Due to the processes described above, it is reasonable to say that the evolution of universities should be analyzed in the context of changes in social institutions. Therefore, there should be the recalling the concept of Richard Scot, who presents an interesting definition of the concept of institution. He describes it as a multi-faceted structure that is socially stable and has material resources; it is relatively resistant to change and is passed down from generation to generation to achieve its reproduction (Scott, 2001).

The outline of the analytical elements that contribute to the creation of an institution is defined by Scott as pillars that work together, have aspects that differentiate them. The first of the pillars, the regulatory one, corresponds completely to the conscious stage of the institution's development. It assumes that the institution presents regulatory aspects that are binding and define the behavior of individuals through the norms, rules and laws established for the operation of the institution. The main instrument of control is coercion, so monitoring compliance with these standards is one of the main mechanisms describing this pillar. Therefore, the regulatory pillar follows the instrumental logic that helps institutional members to recognize performance guidelines (Scott, 2001).

The second pillar, normative, also plays an important role in shaping institutions, according to Scott. In this case, it is a semi-conscious stage because the emphasis is on normative rules that cover the evaluative and obligatory scope of the functioning of the institution. They take into account the values that are

desired or preferred in the institution. In this way, the members of the institution act on the basis of imposed norms, but also have the opportunity to correct their actions based on personal and moral criteria. Certification and accreditation are mechanisms to legitimize the autonomy of members of an institution (Scott, 2001).

Finally, the third pillar, in Scott's view, focuses on the cultural-cognitive elements of institutions. The cognitive dimension is treated as a "mediator" between external stimuli and individual reactions of institution members. Its meaning is primarily symbolic representations of the outside world. Routine is the basic mechanism used in this pillar to justify specific actions of individuals. Internalized patterns of behavior outweigh obligations. Therefore, the social structure of the world plays an important role in the behavior of individuals.

The concept presented by Scott (2001) is useful in the analysis of the functioning of contemporary scientific organizations. There are regulatory, normative and also cognitive elements in science. The first one corresponds to the formal rules that legitimize the behavior and activities of scientists, establishing reward and punishment systems. On the one hand, these are the laws over the institution that regulate the so-called scientific systems of the country, and on the other hand, they are regulations that are established at the institutional level, guiding the rules of this institution. The second element, normative, is based on social obligations, patterns of behavior which, although not legally regulated, are considered obligatory and legitimize the actions of individuals. The third element, cultural and cognitive, concerns behaviors that are assimilated and taken for granted and are realized unconsciously as natural and spontaneous (Rifkin, 2000).

SOCIAL RESPONSIBILITY OF THE UNIVERSITY

In most societies, higher education is one of the engines of social development and the main instrument for transferring knowledge, experience and culture (Mayer, Salovey, 1993). The changing reality at both national and global levels has made higher education one of the fundamental social issues. In social development, knowledge and technology should be treated as elements of culture serving the development of human skills and relationships. In university education, in the face of the large amount of information characteristic of current society, the importance of cognitive abilities to distinguish information from knowledge should be emphasized. Therefore, it can be argued that an important function of the university in the 21st century will be to promote comprehensive education focused on shaping critical thinking and not accumulating knowledge (Melosik, 2002). This is related to the need to shape the attitude of lifelong learning due to the rapid production of knowledge.

In this context, many researchers postulate that universities facilitate the development of skills that will help in the proper processing and use of knowledge. The researchers' proposals can be presented generally in four basic

areas. Firstly, the ability to abstract which implies the ability to: simplify reality that discover patterns and organize different aspects of reality; interpreting a multitude of information; creating models, analogies and metaphors. Secondly, the ability to think in systems that includes understanding social processes in the context of broader change trends. Thirdly, it contains the ability to experiment, that is, to understand the causes and consequences of various social processes and to predict their next stages. Fourthly, there should be the ability to team working, the ability to communicate the information, and the ability to accept constructive criticism (Goldman, 2002). There also can be found another list that describes the intended principles related to university education, such as: equality of differences, solidarity, creating meaning, dialogue and cultural intelligence (Knight, 2008). In this sense, the university education should be based on the development of communication skills to enable individuals to participate more actively and critically in society. Therefore, the university education should be a form of social practice that arises from specific historical conditions, social contexts and cultural relations. Moreover, it should also offer knowledge that helps to build conscious and responsible participation in public life.

In this context, it is necessary to emphasize the new role of science, not only in bringing science institutions closer to society, but also in terms of communication between them. Breaking the isolation of science, it requires a broader commitment to researching the problems posed by society. Science, i.e. universities should be more open to the technical and economic principles as well as to the cognitive and moral utility. It is expected that science will be widely disseminated and this will generate new social processes. There are also positions that are against this function of science. In this sense, Vavakova (1998) believes that governments promote the development of science as a strategy to avoid exclusion from the technology race. It is not, therefore, about promoting knowledge to increase its scope, but supporting the development of society. Pritchard (1998) believes that there is a loss of autonomy and academic freedom with this vision of science. The expansion of scientific organizations leads to the submission of the traditional concept of science to the arguments of responsibility through which national governments gain the right to define science policy.

Consequently, it can be concluded that the relationship between the institutions that generate new knowledge and society is increasingly complex, governed by ambivalence and uncertainty. However, despite its increasing complexity, the university is the main place where the institutionalization of science is most visible. Universities are considered as fundamental pillars for the development and maintenance of science as they play an important role in creating and transferring knowledge as well as establishing links with non-academic areas through the transfer of university potential along with the commercialization of scientific resources (Meyer, Rowan, 2006). Each university opens up to this process in a specific way, according to its own strategy, which can lead to an increase in the heterogeneity of university systems and a greater ability to respond to the emerging challenges of the knowledge society.

CONCLUSIONS

The conducted analyzes show how scientific institutions have gradually evolved and modified their structures to adapt in accordance with the changing environment. It was the result of the increased responsibility of the scientific community for economic growth and the need for more conscious creation of new knowledge.

Scientific institutions internalized new requirements posed by the socio-economic context in the recent years. In fact, the main result of the institutionalization of science was the exponential increase in the flow of knowledge through its production and wider distribution in the social sphere. Thus, it was recognized that the progress of knowledge, i.e. the activity carried out by universities, was and is one of the main sources of wealth in modern economies.

In this context, the organization of the university is a clear example to understand the changes that are taking place in social institutions based on scientific and technological knowledge. In fact, in recent decades, universities have changed the way they organize their activities. Gradually, research institutions must find the right balance between their traditional functions and the new expectations that are placed on them. The new requirements favor the reorganization of the knowledge creation process which has significant consequences for changes in the internal structure of a science institution. The advent of the knowledge society has created a new socio-cultural context, marked by the process of *knowledge production* which social sciences are trying to explain in order to better use for future development. This allows us to describe the knowledge creation process as more than just a message. It also allows the assumption that in this process, as in any social situation, there are unrecognized conditions and unforeseen consequences. This confirms the view that nowadays science institutions, and above all universities, should provide conceptual tools more than ever so that as many citizens as possible can coexist in an uncertain and complex knowledge society, where critical thinking and joint action can be the key to solving the most important problems, and thus same to improve the quality of life.

REFERENCES

- Aronson, E., Aronson, J. (2018). *The Social Animal*. Twelfth Edition. New York: W.H. Freeman and Company.
- Bacon, F. (1605). *The advancement of learning*. London:, J.M. Dent and Sons. (Published by G.W. Kitchin in 1973).
- Baden, J. A. and Noonan D. S., eds. (1998). *Managing the Commons*. Bloomington: Indiana University Press.
- Barnes, B. (1977). *Interests and the Growth of Knowledge*. London: Routledge & Kegan Paul. DOI: <https://doi.org/10.4324/9781315763576>

- Bauman, Z., Bordon, C. (2014). *State of Crisis*. Cambridge: Polity Press.
- Campbell, J. L. (2004). Problems of institutional analysis, en J. L. Campbell, *Institutional change and globalization*. Princeton, Princeton University Press, pp. 1-30
- Collins, H. (2011). Language and practice. "Social Studies of Science", 41(2), 271–300. URL: <https://www.jstor.org/stable/41301905>
- Connell, R. (2007). *Southern theory: The global dynamics of knowledge in social science*. Cambridge: Polity Press. DOI: 10.1080/14767720903412325
- Elias, N. (1991). *The Society of Individuals*. Oxford: Blackwell. (Translation from German by Edmund Jephcott of *Die Gesellschaft der Individuen* (1987)).
- Gilbert, M. (1989). *On Social Facts*. Princeton: Princeton University Press.
- Goldman, A. (2002). Knowledge and Social Norms. "Science" 296 (June 21): 2148-2149. DOI: 10.1126/science.1071097
- Heilbron, J. (2013). The social sciences as an emerging global field. "Current Sociology", 62(5), 685–703. DOI: 10.1177/0011392113499739
- Keim, W. (2011). Counter hegemonic currents and internationalization of sociology: Theoretical reflections and an empirical example. "International Sociology" 26(1), 123–145.
- Kirk, L. (2016). *From Individual to Plural Agency: Collective Action I*. Oxford: Oxford University Press.
- Knight, J. (2008). *Higher education in turmoil: The changing world of internationalization*. Boston College Centre for International Higher Education & Sense Publishers.
- Kozyr-Kowalski, S. (2005). *University and the Market*. Poznań: Scientific Publishers of the University of Adama Mickiewicza.
- Leydesdorff, L., Etzkowitz, H. eds. (1997). *A triple Helix of University-Industry-Government relations. The future location of Research*. Nueva York: State University of New York.
- Longino, H. (2002). *The Fate of Knowledge*. Princeton: Princeton University Press.
- Meyer, J. (1977). The effects of education as an institution, "American Journal of Sociology", vol. 63, pp. 55-77. DOI: <https://doi.org/10.1086/226506>
- Mayer, J. & Salovey, P. (1993). The Intelligence of Emotional Intelligence. *Intelligence*, Vol.17. 433–442. DOI: [https://dx.doi.org/10.1016/0160-2896\(93\)90010-3](https://dx.doi.org/10.1016/0160-2896(93)90010-3)
- Meyer, J. y Rowan, B. (2006). *The new institutionalism in education*. New York: State University of New York Press.
- Melosik, Z. (2002). *University and Society. Discourses of freedom, knowledge and power*. Poznań, Publisher: WOLUMIN.
- Merton, R. (1942). The normative structure of science, en: R.K. Merton (1973): *The sociology of science: theoretical and empirical investigations*. Chicago: University of Chicago Press.
- Merton, R. (1949). *Social Theory and Social Structure*. New York: Free Press. DOI: <https://doi.org/10.1177/000271625026700169>

- Miller, B. (2013). When Is Consensus Knowledge Based? Distinguishing Shared Knowledge from Mere Agreement. "Synthese" 190(7): 1293-1316. URL: <https://www.jstor.org/stable/41931809>
- Mitroff, I. (1974). The Apollo Moon Scientist: A case study of the ambivalence of scientists, "American Sociological Review", 39, 579-595. DOI: <https://doi.org/10.2307/2094423>
- Moody, J., & Light, R. (2006). A view from above: The evolving sociological landscape. "The American Sociologist", 37(2), 67–86. DOI: 10.1007/s12108-006-1006-8
- Mulkay, M. (1969). Some aspects of cultural growth in the natural sciences, *Social Research*, 36 (1) 22-52.
- Pritchard, R.M.O. (1998). Academic freedom and autonomy in the United Kingdom and Germany, "Minerva" 36 (2) 101-124.
- Rifkin, J. (2000). The Age of Access. New York: Tarcher/Putnam.
- Scott, R. (2001). Institutions and organizations. London: Sage.
- Vavakova, B. (1998). The new social contract between governments, universities and society: Has the old one failed? "Minerva", 36 (3) 209-228. DOI: <https://doi.org/10.1023/A:1004384519396>
- Ziman, J. (2000). Real science: what it is and what it means? Cambridge: Cambridge University Press. DOI: <https://doi.org/10.1086/374156>
- Znaniecki, F. (1994). The Scientific Function of the Sociology of Education. *Educational Forum*, No. 1, p. 243–255.

ІНСТИТУЦІОНАЛІЗАЦІЯ НАУКИ. СОЦІАЛЬНІ ФУНКЦІЇ УНІВЕРСИТЕТУ: ТРУДНОЩІ ТА МОЖЛИВОСТІ

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Впродовж останніх десятиліть наукові заклади розвивають та покращують свої структури з метою адаптації до нелінійного соціально-культурного середовища, а також забезпечують впровадження нових знань з метою підтримки економічного зростання. В процесі аналізу соціальних компонентів суспільні науки по-різному тлумачили процес інституціоналізації науки. Насамперед, такий підхід у соціальних науках характеризується вивченням рівня інституціоналізації — це дає змогу вивчати особливості, які, в свою чергу, визначають науку як соціальний інститут. Принципи інституціоналізації складають структуру закладу та надають інформацію не лише щодо регулювання поведінки особистості, а й про те, що регулює формування університету. На основі на-

уково-технічних знань, організація університету найкраще відображає розуміння змін, що відбуваються в соціальних закладах. Останнім часом, університети змінили спосіб організації своєї діяльності. Нові вимоги сприяють реорганізації процесу створення нових знань, що значно впливають на зміни у внутрішній структурі наукового закладу.

У статті проаналізовано процес інституціоналізації науки, оскільки цей підхід характеризується аналізом особливостей, що визначають науку як соціальний інститут. Стаття також представляє найважливіші виклики та труднощі, пов'язані з цими процесами в глобалізованому світі.

Ключові слова: інституціоналізація, соціальні науки, університет, соціальні інститути.

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SOCIAL AND PEDAGOGICAL SUPPORT OF STUDENTS WITH DISABILITIES IN HIGHER EDUCATION INSTITUTIONS

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ABSTRACT

The article considers the issue of education of students with disabilities in higher education institutions. It emphasizes the importance and features of social and pedagogical support that takes into consideration the main points that cause difficulties in this category in obtaining educational services. The article defines the perspective ways of solving the problems that concern the organization of support to students with disabilities in the environment of higher education institutions. Understanding the essence of social and pedagogical support of students with disabilities in higher education institutions involves, first of all, knowledge of the specifics of various types of developmental disorders, identifying

existing problems, needs and opportunities of such students as well as creating appropriate conditions in the educational environment.

The growing number of people with disabilities in Ukraine raises a number of issues related to their adaptation, socialization, including education and employment. A special place in the system of higher education in Ukraine is occupied by the integrated form of education of students with disabilities together with other students, the main condition of which is to ensure equal access to education, extracurricular activities and equal rights to obtain the higher education.

The important component of the process of integration of youth with disabilities into society is the creation of appropriate conditions for learning and development of students with disabilities in higher education institutions, acquisition of knowledge, skills and competencies. In modern conditions, the accessibility of higher education for people with disabilities is an acute social and pedagogical problem which is associated with the formation of a holistic vision and the specifics of the socio-pedagogical process.

Key words: *higher education institution, integrated group, students with disabilities, education, training*

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INTRODUCTION

The most important stage on the way to personal development and professional emergence for each person, in particular for a person with a disability, is the period of learning in a higher education institution. It should be noted that the issue of access to higher education for people with disabilities is an acute social problem due to social, psychological, spatial, economic barriers and is complicated by a number of problems, including: the level of quality of general secondary education for people with disabilities; lack of conditions for combination of professional training of disabled people and their medical rehabilitation; insufficient development of the regulatory framework for the education of people with disabilities; lack of inclusive space; insufficient level of development of public consciousness to understand the problems and needs of people with disabilities and provide such students with educational and methodological literature; insufficient cohesion of people with disabilities in defending their rights including the right to education.

LITERATURE REVIEW

Kolchenko, Mazarska, Raver-Lampman studied the issues of interaction between lecturers and students with disabilities in higher education institutions; the specifics of social and pedagogical support of families with children with disabilities are the subject of research for Alekseenko, Boginskaya; Kolupaeva,

Teslenko, Kharchenko, Shandor, Shevtsov study the problems of socialization, social rehabilitation and integration of people with disabilities in educational institutions; Wojciechowski, Nagorna, Naida, Savchenko, Skrypnyk studied the issues of integration of students with peculiarities of psychophysical development into the educational space; socio-pedagogical conditions for the integration of young people with functional limitations in the modern environment were studied by Myroshnichenko.

The subject of scientific research is such aspects of the problem as: the psychological support of students with disabilities (Tomarzhevska); education of spiritual and moral values of students with disabilities (Khoroshailo); support of students with special needs (Tchaikovsky); rehabilitation and adaptation support in higher education institutions (Avramenko, Makarova, Sushkevych, Talanchuk, Yevseyev); training of social lecturers for integration of students with peculiarities of psychophysical development into the environment of general secondary education institution (Persheko).

The priority of country should be the ensuring equal access to education, creating the necessary conditions for improving the situation of people with disabilities by involving them in full participation in all spheres of public life, addressing the issues of security and accessibility of social infrastructure, further integration of people with disabilities into society along with other citizens and the inclusion their fulfilling life of communities.

Despite the significant amount of research on the integration of people with disabilities into modern society, the issue of social and pedagogical support of students with disabilities in higher education institutions requires further in-depth study.

RESEARCH FINDINGS

For people with disabilities the higher education, a prestigious specialty, decently paid work is almost the only way to overcome the state of alienation, social isolation in which they find themselves under objective conditions related to health (Dikova-Favorska, 2015). It is education that provides an opportunity for self-realization, personal development, expanding the circle of communication, gaining new social experience and economic independence.

The integration of youth with special needs into the educational environment helps them to acquire professional knowledge, gain a profession, find personal fulfillment, achieve success in life and further career and feel themselves as members of society. To this purpose, the higher education institutions need to provide a free inclusive space in which students with disabilities can move, study and communicate safely.

The peculiarity of teaching students with disabilities in an integrated team is that, perceiving them as equals, they are subject to the same requirements as to other students. In the integrated group is impossible to slow down the pace of lecture, for example, reduce the number of pairs and their duration, simplify

or reduce the amount of educational material, because it affects the quality of training of students with disabilities. That is why it is possible to compensate for the functional limitations that affect the quality of education of students with disabilities only by providing social and pedagogical support to them in the teaching and educational process.

Lecturers working in the integrated student environment should promote the awareness of students with disabilities that they can live a full student life, must constantly acquire knowledge about their capabilities, features, abilities and to form positive thinking for themselves.

According to statistics, out of 2.5 million students of domestic educational institutions of 1 to 4 levels of accreditation there are about 10 thousand students with disabilities (Statistical Yearbook, 2019). The Constitution of Ukraine, the UN Convention on the Rights of Persons with Disabilities guarantees the rights of people with disabilities to development, education and rehabilitation.

For social and pedagogical support of students with disabilities in higher education institutions should be created so-called barrier-free campuses with appropriate buildings, dormitories and other facilities where these students can receive technical training, assistance from psychologists, physicians and social workers.

In particular, the issue of supporting students with disabilities is one of the priorities in the educational activity of Borys Grinchenko Kyiv University. The University's strategy is to ensure equal access to quality higher education for all, regardless of their state of health. Currently, 116 students with disabilities study at the university and 23 of them study at the University College.

Student Disability Resource Center (SDRC) works to ensure that students with disabilities are provided with additional support. According to the concept of SDRC, there should be technical, psychological, pedagogical and socio-pedagogical support. This support begins from the moment a person with disability applies to the University and covers the processes of preparation for admission, training and employment.

SDRC has created computerized workstations equipped with speech synthesizers as part of technical support. In particular, for students with visual impairments there is a portable Braille display, a portable 5-inch video magnifier, a desktop Braille font printer. Students with disabilities have access to adaptive technical equipment for scanning textbooks and translating them into electronic form, listening to audio recordings of lectures and creating their own recordings using a digital dictaphone. In addition, the Resource Center provides services for the formation and improvement of hearing-speech and cognitive skills through the program *Live Sound*.

The Resource Center is equipped with a physical unloading area. There are installed the *Interactive Floor Projection System* and *Interactive Panels* to improve the psycho-emotional background, stimulate active physical activity, psychomotor development and relaxation. The area of psychological unloading is also equipped.

The specialists of SDRC implement special training for scientific and pedagogical workers to work in integrated groups, there are also conducted the workshops and trainings on the issue of pedagogical interaction with students with disabilities. Psychological and socio-pedagogical support includes psychological diagnosis, monitoring of personal development and social situation of students, promotes the socialization of students with disabilities by involvement in all spheres of public life. There are the tutoring and volunteer support from SDRC specialists, students and lecturers for the students with disabilities throughout their studying at the University.

Students with disabilities have certain problems that have formed in previous periods of life and study that significantly affect not only on their cognitive activity but also their integration into the educational environment. Thus, the social and pedagogical support of students with disabilities in the educational process in higher education institution becomes relevant (Talanchuk, 2004). Commonly, these students are very inquisitive and diligent but have certain problems such as: gaps in knowledge; difficulties in overcoming environmental barriers and the perception of educational material in the conventional form; reduced efficiency, impaired concentration; increased anxiety, vulnerability, emotional instability, fatigue and exhaustion, vulnerability to infectious diseases and therefore problems with attending the sessions; low level of physical training; lack of sociability; insufficient orientation in society, low self-esteem and social activity; low level of motivation to achieve the goal, etc.

To work with such people, it is necessary to introduce special methods, pedagogical technologies and adaptive technical means into the teaching and educational process as each student with disability has certain features and limitations that complicate learning.

The general situation regarding the education of students with disabilities in Ukraine is characterized by the fact that out of 100 young people with disabilities who could study, only a few percent receive higher education today. Fear of unsuitability to the social environment, lack of barrier-free access, lack of specially adapted public transport for low-mobility groups, special devices, equipment and undeveloped teaching methods for students with disabilities is not a complete list of reasons for the small number of students with disabilities in higher education. (Pichuhina, 2009). The analysis of the scientific literature provides the basis to conclude that the motivation of entrants with disabilities to enroll a higher education institution is reduced, mainly due to the experience of integrated education in general secondary education. That is why the professional orientation with the definition of individual abilities and features of mastering a profession and the desire to learn are the important components of socio-pedagogical work at the stage of preparing young people with disabilities to university admission (Bohinska, 2013).

Yulia Bohinska signed out the perspective ways of the social and pedagogical support system's improvement for people with disabilities in higher education institutions: development of the network of different types and kinds

of structural subdivisions concerning work with the disabled people; training of specialists; improvement the material, technical and rehabilitation bases, adherence to the principles of humanism, accessibility, continuity, systematics, tolerance, individuality (Bohinska, 2013). The researcher believes that the organization of education and socialization of students with disabilities and methodological readiness of academic and teaching staff to work with them provide three groups of conditions: structural-functional, adaptive-integration and psychological-pedagogical. The scientist also singles out the social accessibility of the environment and information provision as the main opportunity for higher education for young people with disabilities as well as educational accessibility that depends on the legislative provision of the opportunity to study in higher education institutions.

Modern education is designed to ensure a high level of intellectual and professional development of future professionals. Taking into account the proclamation of the idea of accessibility and development of information technologies, nowadays more and more higher education institutions provide distance learning for entrants with disabilities. Nowadays, distance learning is carried out using technologies such as Internet in voice and text modes, e-mail, telephone and facsimile, video conferences using the platforms Meet and Zoom that provide daily communication between students with disabilities and scientific and pedagogical employees.

Borys Grinchenko Kyiv University has established the Center for Distance Learning Technologies. The main tasks of the Center are: ensuring the work of distance learning studios; conducting workshops and online sessions for lectures on the preparation, creation (recording, editing) and implementation of video materials (video lectures, webinars, screencasts, video tutorials, online conferences); consulting on the organization of e-learning, electronic cooperation and communication using WebEx software; conducting research on e-learning; development of an ecosystem of continuous professional development of lecturers.

To ensure equal access of young people with disabilities to higher education, it is recommended to form a positive public opinion on the feasibility of joint education of healthy students and students with disabilities, to develop teaching materials, introduce special methods, pedagogical technologies, use adaptive technical means and complex programs of integration, adaptation and self-realization of young people with disabilities. Dikova-Favorska pays attention to the accessibility of the environment of higher education institutions as an important condition for promoting social adaptation and adaptation of students with disabilities to the educational process (Dikova-Favorska, 2015).

According to Andreeva, students with disabilities are characterized by such generalized problems of this social group as irresponsible attitude to their own lives, professions, lack of initiative in learning, lack of subjective behavior and desire to acquire new knowledge, professional and creative personal fulfillment, insufficiency of life experience, passivity in public work,

indifference to health, insecurity, limited sources of new social experience due to lack of a wide range of social contacts; disorientation in social values; intolerant and consumer attitude to the environment; dependence of a student due to the family hyperopia; anxiety, conflict in connection with the violation of understanding with parents and parents' disbelief in the possibility of full social development of their child (Andreeva, 2013). The researcher identified a social worker as an important subject of work with students with disabilities in a higher education institution. The specialist in the inclusive education is entrusted with important functions such as: organizational; diagnostic and prognostic; preventive prevention; socio-therapeutic; communicative; human rights; psychological, socio-pedagogical; moral and humanistic functions (Andreeva, 2013). Hence, a social worker must be ready for interdepartmental and interdisciplinary interaction in everyday situations, identify ways of mutual assistance, be able to work in a team, and, most importantly, become a driving force in creating a tolerant attitude in society to people with disabilities. However, nowadays in many higher education institutions of Ukraine this specialist is not even included in the staff, and, consequently, a significant part of these functions are performed by curators of academic groups.

In the context of the problem of professional training of social workers to work with students with disabilities, research by Ukrainian educators who consider the formation of tolerant consciousness is of considerable interest. At present, the issues of tolerance, the formation of a tolerant consciousness and the education of a tolerant culture must be discussed not only at the level of equal rights and opportunities but also at the level of responsible duties. We can identify the main areas of tolerance in social workers: development of intercultural tolerance, education of openness and understanding of other peoples, the diversity of their cultures and histories; renunciation of violence, usage of peaceful means to resolve conflicts; altruism and respect for others, awareness and acceptance of personal identity and recognition of the diversity of the world around; improving knowledge and skills of interaction with clients on the basis of respect and acceptance of others; formation of skills of constructive, conflict-free communication and cooperation on the basis of tolerant values.

The pedagogy of tolerance is based on patient and attentive attitude to other people's beliefs. It is one of the means of solving the problems of students with disabilities and resolving conflict situations. The process of education of tolerance involves the purposeful organization of a positive experience of tolerance i.e. the creation of a space of direct or indirect interaction with other views or behavior of people, their communities, in other words *the coexistence of differences*.

Tolerance as a democratic value and having social roots is formed gradually. It is a complex, lengthy process that goes through the following stages: general awareness of who you are in a relationship; formation of a positive image of personality; communication by exchanging views with the identification

of similarities and differences; defining the principles and conditions of communication and cooperation.

The most important task is to implement the principles of multicultural education that involves the development of the content of education that would help the subjects to understand the process of stereotypes about people with disabilities. The main principles of the pedagogy of tolerance are: the principle of cooperation; the principle of ecology of relationships; principle of jurisprudence; the principle of synergetism (Kostiuk, 2000).

The key to successful education of students with disabilities is specialized technical support that aims to provide these students with adaptive technical means and special learning technologies. Technical support should compensate for the functional limitations of students and ensure the principle of access to quality higher education for all students, regardless of the type of nosology and the severity of the disease. At all stages of technical support is provided the social and pedagogical support of students with disabilities in solving individual problems of mastering academic disciplines.

CONCLUSIONS

The task of social and pedagogical support is to create a comfortable living space for students with disabilities, learning strategies for overcoming difficulties in a particular problem situation, equipping with possible ways to solve life's problems. The organization of social and pedagogical support for students with disabilities depends on the readiness of academic and teaching staff to provide such support; trusting relationships between lecturers, the integrated academic group and students with disabilities; creating a situation of success and belief in the possibility of students with disabilities of the immediate environment and society in general; assessment not of the individual, but of his actions and knowledge; student-centered approach in the organization of the educational process.

Thus, social and pedagogical support of students with disabilities is: in the implementation of a comprehensive socio-educational impact on the level of social competence of students with disabilities and is revealed in the implementation of such main areas such as: organization of academic and teaching staff and tutors of academic groups for social competence of students with disabilities, in carrying out the work on the formation of tolerant communication with the student academic group and the development of social competence in students with disabilities.

The main principles of social and pedagogical support of students with disabilities are: individual approach; nature compliance; security; respect; establishing interdisciplinary, intersectoral and partnership cooperation; benevolence; tolerance; taking into account previous experience; reliance on positive characteristics and potential opportunities; development orientation; responsibility.

REFERENCES

- Andrieieva, M. (2013). Development of Social Competence of Students with Special Needs in Higher Educational Establishment: PhD (Education) Dissertation: Municipal Establishment *Kharkiv Humanitarian-Pedagogical Academy*. (in Ukrainian). URL: http://nbuv.gov.ua/UJRN/Nzkip_2015_38_3
- Bohinska, Yu. (2013). Theory and Practice of Socio-Pedagogical Support for Students with Disabilities in Higher Educational Establishment: PhD (Education). (in Ukrainian)
- Hluzman, O., Shchekolodkin, V., Podobiedova, T. Yu., & Chuieva, O. (2006). Education of Students with Special Needs in High School: Simferopol — Yalta. (in Ukrainian)
- Dikova-Favorska, O. (2015). Creative Method of Educating Young People with Disabilities: *Contemporary Social Problems in Terms of Sociology of Management: Collection of Scientific Papers: Donetsk State University of Management*, 10 (116 *Sociology of Public Administration; Series Special and Branch Sociologies*), 324. (in Ukrainian)
- Kostiuk, I. (2000). *20+1 Lesson Syllabus on Civic Education on «Tolerance»* (I. Kostiuk & P. Kendzior, Edit.). Publishing Department of Lviv Polytechnic International Institute of Education, Culture and Relations with Diaspora. (in Ukrainian)
- Pichuhina, T. (2009). Support of the Need to Monitor the Education of Students with Disabilities in Higher Educational Establishment: *Collection of Scientific Papers Kamianets-Podilskyi National University*, 12, 92–95. Kamianets-Podilskyi. (in Ukrainian). URL: http://www/nbuv.gov.ua/porta/soc_gum/znpkp/Sp/2009_12/24.pdf
- Aliexsieienko, T., Zhdanovych, YU., Malyshonevskyi, R., Kunytsia, T., & Serhieieva, N. (2017). *Social-Pedagogical Support for Children and Students: monograph*. LLC Zadruha. (in Ukrainian)
- Vehner, I. (Edit.). (2019). *Statistical Yearbook of Ukraine for 2018*. State Statistics Service of Ukraine. (in Ukrainian)
- Talanchuk, P., Kolchenko, K., & Nikulina, H. (2004). *Support for Students with Special Need in the Integrated Education Environment: Teaching Guide*. Sotsinform. (in Ukrainian)

СОЦІАЛЬНО-ПЕДАГОГІЧНА ПІДТРИМКА СТУДЕНТІВ З ІНВАЛІДНІСТЮ У ЗАКЛАДАХ ВИЩОЇ ОСВІТИ

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У статті розглянуто питання навчання студентів з інвалідністю в закладах вищої освіти, підкреслено важливість та зазначено особливості соціально-педагогічної підтримки, яка враховує основні моменти, які викликають труднощі у даній категорії при отриманні освітніх послуг. Визначені перспективні напрямки розв'язання проблем щодо організації підтримки студентів з інвалідністю у середовищі закладу вищої освіти. Розуміння сутності соціально-педагогічної підтримки студентів з інвалідністю в закладах вищої освіти передбачає, насамперед, знання специфіки різних видів порушень розвитку, виявлення наявних проблем, потреб та можливостей таких студентів, а також створення доцільних умов в освітньому середовищі для надання їм необхідної допомоги.

Зростання чисельності людей з інвалідністю в Україні висуває низку проблем, пов'язаних з їх адаптацією, соціалізацією, зокрема з освітою та працевлаштуванням. Особливе місце в системі вищої освіти України займає інтегрована форма навчання студентів з інвалідністю разом з іншими студентами, головною умовою якої є забезпечення рівного доступу до навчання, позанавчальної діяльності, рівних прав на отримання вищої освіти.

Створення відповідних умов для навчання та розвитку студентів з інвалідністю у закладах вищої освіти, опанування знаннями, навичками, компетентностями є важливою складовою процесу інтеграції молоді з інвалідністю в суспільство. У сучасних умовах доступність вищої освіти для інвалідів є гострою соціальною і педагогічною проблемою, яка пов'язана із формуванням цілісного бачення й специфіки соціально-педагогічного процесу.

Ключові слова: заклад вищої освіти, інтегрована група, студенти з інвалідністю, освіта, навчання.

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SOCIAL LEADERSHIP: CRITERIA, INDICATORS AND LEVELS OF FORMATION IN FUTURE SOCIAL WORKERS

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ABSTRACT

Nowadays it is extremely important for society to be aware of the professional and experienced professional training of the future social workers. The article is devoted to the main issue of formation the social leadership in the conditions of professional training the future social workers. Contemporary conditions indicate the need to highlight certain scientific approaches to leadership in social work. It is determined that the theoretical study of the phenomenon of “social leadership” as a social phenomenon at the present stage of development of society determines the search for criteria for its formation in future professionals in the social sphere. On the basis of substantiated criteria (motivational-value, cognitive, activity-behavioral) there are established the corresponding indicators that reflect the characteristic of the manifestation the levels of formation the social leadership at future workers in social work (reactive, active, proactive). The purpose of the research is to determine the criteria, indicators and levels that can further influence the dynamics of social leadership in students — future social workers to improve the current state of society, in particular in the field of social work.

The realization of this goal involved the use of the following methods: scientific knowledge, analysis of scientific literature, synthesis, comparison, generalization, specification, classification, systematization as well as the descriptive method.

Based on the analysis, it is characterized that the components of social leadership and substantiates the criterion, indicators and levels of its formation in accordance with the understanding of the factors of formation of social leadership of future social workers in terms of training.

Key words: social worker; social work; social leadership; criterion; level of formation; indicator.

INTRODUCTION

Nowadays it is extremely important for society to be aware of the professional and experienced professional training of the future social workers. The search of ways to achieve the goals of understanding the content and results of professional activities with the needs of society led to the interest of higher education in training new generation who should have key competencies and be able to organize quality and professional educational activities. The leadership position of future social workers which is externally manifested in leadership behavior and professional activities is also internally determined by a system of leadership orientations, goals and values. Thus, it reflects the nature of needs, motives and beliefs in the specialist's personality of a social sphere.

The successful formation of social leadership will help the future social worker to organically engage in professional work and begin the practical application of leadership knowledge and skills in the process of professional activity. However, it is important to determine the aspiration to study the problem of forming social leadership in the context of training future professionals for social work. The purpose of research is to determine the indicators, criteria and levels of social leadership in future social workers in training which will provide an opportunity to determine the current state and predict the dynamics of social leadership.

ANALYSIS OF PREVIOUS STUDIES ON THE PROBLEM

Different aspects of *leadership*, highlighting the content, structure, types and characteristics have received increased attention from foreign and domestic researchers (Hizzatullin, I., Kalashnikova, S.). Specific types of leadership that are more adapted to the values of social work are proposed (Iachini, Cross & Freedman, 2015, p. 650). Leadership becomes included in social work education based on the model of social change of leadership through the promotion of basic values of social work. It proves the strong position of creating a value base of the profession *social work* (Iachini, Cross & Freedman, 2015, p. 650). The use of ideas of change and innovation applies the ideas of transformational leadership where the charisma of the leader determines the motivation and understanding of people as accessibility and inspiration which contributes to achieving both individual and organizational goals (Colby Peters, 2018, p.32). Communities of social work practitioners have significant potential for leadership development through the focus of social learning concepts and the promotion of leadership through knowledge and experience (Haworth, Miller & Schaub, 2018). At the same time, client-centered leadership (Sullivan, 2016) as an actual model defined by the client or user of social services focuses

on the motivation and satisfaction of practitioners with social work which are the means to achieve the desired goal and satisfaction of social services to improve difficult life circumstances.

At the same time, the model of adaptive leadership is also important for the field of social work. As the diversity and speed of social change it requires its application in social learning, innovation and adaptation to practical social work (Heifetz et al, 2009). Since the professional practice focuses on the development of social work innovations — the leadership in social work is based on distributed leadership, supporting practical environments related to professional values and purposeful organizational and individual actions (Gibson, 2017, p.8). A common approach in solving social problems allows us to define the essence of leadership as the vision and ability to influence the views and actions of others as well as to inspire and cultivate change (Holosko, 2009, p. 449). The issues of reviewing the concept of leadership-and-serving (Greenleaf, 2008) in various spheres of society continue to study and improve the mechanisms of formation the leadership qualities and leadership potential of individuals of different ages (Nestulia, 2014, p. 46). As a result, attention to leadership research in the field of social work is constantly increasing which determines the decisive influence of the social sphere both locally and globally. Proportionately, this increases the need for research in the field of social leadership (Hizzatullin, I.) as the maximum organizational and managerial principles serve only as a solid foundation for successful and long-term development of its theoretical basis and practical implementation in the field of social work. Thus, “the leader must set the direction, prove own example and share the danger” (Hryzhenko, 2014, p.49).

However, there has been little attention paid to the study and analysis of the phenomenon of *social leadership* which affects the effectiveness of training for professional activities in modern higher education. Analysis of recent research has shown that the social leadership has increasingly become the subject of research (Structural Analysis of the Notion of *Social Leadership*, 2015). Thus, *the purpose of our article* is to analyze, define and substantiate the main criteria, indicators and levels of formation of social leadership in future social workers. Along with this, the criteria and indicators of the formation the social leadership of future social workers remain unexplored.

METHODOLOGY

The methodology consists of theoretical methods: methods of scientific knowledge, analysis of scientific literature, synthesis, comparison, generalization, specification, classification, systematization. Methodological principles of the process of social leadership formation focus on the main methodological principle of professional training of future social workers on the conformity in the combination of theoretical knowledge, practical

skills and the formation of appropriate requirements for the acquisition of competencies and leadership skills to ensure maximum effectiveness of the criteria.

THE STUDY

The professional training of future social workers has a prominent place in the system of higher education. The search and development of leaders are of a particular importance (Kalashnikov, 2016, p. 5). The basis for the formation of social leadership in the field of 23 *Social Work* is certainly the creation of institutionalized and pedagogical conditions that promote the development, self-development and realization of students — future social workers as experienced professionals. The demonstration of the manifestation the social leadership of future social workers plays an important role.

Therefore, it is necessary to define the objective social phenomenon of social leadership as the presence of a social position of the individual in the community or group of people providing the ability to manage and organize the team according to goals and values as well as situational conditions of the social environment (Hizzatullin , 2015, p.16).

The results of our theoretical study are based on the analysis of scientific sources and are devoted to the study of structural analysis of the notion *social leadership*. As a dynamic integrative social formation it allowed us to distinguish our own definition of the notion *social leadership*. Thus, social leadership is a process of social workers to implement socially significant and professionally-oriented initiatives, the success of which should contribute to improving the society life's quality.

We have also identified the following provisions:

Social leadership in future social workers is understood as an integral new formation which occurs in a combination of methods, forms and means of formal and informal components of training the social workers.

The formation of social leadership in social workers is a complex process that starts at the stage of training as well as it has certain conditions and specifics of its development.

It should be theorized the notion of *social leadership of future social workers* as a proactive inclusion to socially significant social activity in accordance with leadership and value orientations in the social sphere. Social leadership of future social workers is a combination of the following elements (*Table 1.1*):

Table 1.1

Components of the formation the social leadership in future social workers

Elements of the formation the social leadership	Informative provision of the elements
Motivational	It characterizes the following items: — the aspiration of future social workers for global change related to the awareness of leadership in society; — a sense of social responsibility of the future specialist; — as the specialist with leadership skills there is the aspiration to manage locally the professional activity; — the formation of leadership motivation in students to organize the social activities; — the formation of interest, aiming at the organization of professional training and the aspiration of improving it through a set of motives that encourages social workers to study the courses of leadership as well as the attitude to these courses as the essential component in further training and practical activities; — the motives that encourage the leadership activity.
<i>Informative</i>	It determines: — the features of social and community activities; — the requirements of educational curricula in <i>Social Work</i>; — the educational curricula of the elective courses that form a system of students' knowledge about the social leadership on the basis of the leadership competence in a social worker that in turn projects the future professional activity.
Activity	It ensures: — the implementation of professional readiness of future social workers to make an informed choice of self-realization, self-development and self-improvement as well as professional and personal growth in the process of professional training; — the availability of leadership capacity of the individual that is necessary for the effective organization of social activity.

According to the structure of social leadership we have identified *motivational-value, cognitive and activity-behavioral criteria* (Table 1.2) which allow us in terms of professional education to determine the level of formation the social leadership in future social workers (Table 2).

Table 1.2

Criteria of formation the social leadership in future social workers

Motivational-value	<i>Indicators:</i> leadership orientations, leadership values of social work; motivation for professional activity, the need of leadership capacity implementation; orientation towards the leadership style.
Cognitive	<i>Indicators:</i> the availability of cognitive interest in awareness of social leadership; educational activity, the involvement in various types of offline and online learning; social activity in non-formal learning.
Activity-behavioral	<i>Indicators:</i> leadership skills, activity in classroom and extracurricular social and educational activities; ability to cooperation and team interaction.

According to the common validity of formation the indicators of social leadership in future social workers by various criteria there can be provided a modified description of levels of social leadership in future social workers

in the context of professional education. Thus, we can determine the following levels: proactive, active and reactive.

Table 2

Levels of formation the social leadership in future social workers

proactive (high)	constant manifestation
active (medium)	episodic manifestation
reactive (low)	minimal manifestation

In accordance with the scientific research we can conclude that the proactive level is characterized by a constant manifestation of indicators, while the active is characterized by episodic manifestation, and reactive is characterized by a minimal manifestation of indicators of formation the social leadership in future social workers.

Thus, the proactive level of formation the social leadership in students (future social workers) is characterized by following items: high degree of manifestation the leadership orientation, profound knowledge about social leadership, high perception of the leadership in social work, high level of manifestation the values in society, clear awareness and high activity, independence and initiative, manifestation of the motivation, hypersensitivity to social problems and ways to solve them.

Active level of formation the social leadership in students (future social workers) is characterized by the following components: the sufficient degree of manifestation the leadership orientation, the availability of a basic level of knowledge about social leadership, the sufficient perception of the leadership in social work, the basic level of values in society, the sufficient awareness and activity, independence and initiative, the manifestation of motivation, the availability of the sufficient level of hypersensitivity to social problems and ways to solve them.

Reactive level of formation the social leadership in students (future social workers) reflects the insufficient level of formation the social leadership. This level is also characterized by the low set of criteria: high degree of leadership orientation, the availability of a basic level of knowledge about social leadership, the sufficient perception of leadership in social work, the basic level of manifestation the value orientations in society, sufficient awareness and activity, independence and initiative, the manifestation of motivation, the availability of the sufficient level of hypersensitivity to social problems and ways to solve them.

Thus, the social need focuses on the necessity to train future social workers who are raised on value foundations. The students must be able to act effectively in situations of uncertainty, think creative in solving social problems, produce new ideas and unite people around a socially useful goal.

According to the experts' opinion of each group, the results of assessing the indicators of formation the social leadership in future social workers can complement the importance of the level of formation by the following steps: students (future social workers) engagement in the search for information

about possible participation in various activities and social leadership programs; active participation in various social projects; effective partnership with governmental, non-governmental and business structures to test their own training programs and projects.

It can be generally stated that leadership should evolve in step of changes as the development of leadership capacity of future social workers will contribute to the formation of effective social leadership in Ukraine and ensure high-quality updating the social sphere and the country as a whole (Bybyk, 2018, p. 124).

CONCLUSIONS AND PROSPECTS

Social leadership is a formation of the specialists' personality of a new generation. It consists of the motivational, cognitive and activity components; and the levels of its formation contain a reactive, active and proactive set of criteria (motivational-value, cognitive and activity-behavioral).

These criteria are characterized by relevant indicators. The use of means in the process of professional training of future specialists in the social sphere will not only completely identify the degree of their readiness for professional activity but also to correct possible drawbacks in time. Thus, the manifestation of social leadership promotes the development of a professionally competent professional who not only has the knowledge and skills but is sufficiently developed, capable of partnership, ready to take responsibility for themselves and their activities, make decisions and see global perspectives.

Thus, based on our research, we highlight the prospects for further research focusing on the experience of forming social leadership in future professionals in the social sphere.

REFERENCES

- Bybyk, D., & Savelchuk, I. (2018). Social Leadership as a basis for the development of partnerships in the educational environment at the university: Scientific journal National Pedagogical Dragomanov University Series 11: Social Work. Social Pedagogy: Coll. of sciences, (25), 119-125 (in Ukrainian). URI: <http://enpuir.npu.edu.ua/handle/123456789/25347>
- Hizzatullin, I. (2015). Structural Analysis of the Notion of Social Leadership. Pedagogical Education in Russia, (10), 12-16 (in Russian)
- Hryzhenko, L. (2014). Leadership as a Social Phenomenon. Hrani, (5), 48-52 (in Ukrainian)
- Gibson, M. (2017). Leadership and Practice Development: A literature review. Unpublished, University of Birmingham
- Iachini, A., Cross, T. & Freedman, D. (2015). Leadership in Social Work Education and the Social Change Model of Leadership. Social Work Education. 34(6), 650-665. DOI: 10.1080/02615479.2015.1025738

- Kalashnikova, S. (2016). Development Leadership Qualities of a Modern University: Basics and Means: textbook. Kyiv : Science-Production Center "Priority", 44 (in Ukrainian)
- ColbyPeters, S. (2018). Defining social work leadership: a theoretical and conceptual review and analysis. Journal of Social Work Practice. 32(1), 31- 44. DOI: <https://doi.org/10.1080/02650533.2017.1300877>
- Nestulia, S. (2014). Leadership and Serving — the concept that Ukrainian Society Needs. Higher Education in Ukraine (№ 4. Appendix. 1. Issue «University and Leadership»), 46–51 (in Ukrainian)
- Haworth, Miller & Schaub (2018). Leadership in Social Work <https://www.birmingham.ac.uk/Documents/college-social-sciences/social-policy/Misc/leadership-in-social-work.pdf>
- Heifetz, R. et al (2009). The practice of adaptive leadership: Tools and tactics for changing your organisation and the world. Boston, Harvard Business School Press <https://www.hks.harvard.edu/publications/practice-adaptive-leadership-tools-and-tactics-changing-your-organization-and-world>
- Holosko, M. (2009). Social Work Leadership: Identifying Core Attributes. Journal of Human Behavior in the Social Environment (19), 448-459. DOI: 10.1080/10911350902872395

СОЦІАЛЬНЕ ЛІДЕРСТВО: КРИТЕРІЇ, ПОКАЗНИКИ Й РІВНІ СФОРМОВАНOSTІ У МАЙБУТНІХ СОЦІАЛЬНИХ ПРАЦІВНИКІВ

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Підготовка майбутніх соціальних працівників до професійної діяльності є надзвичайно складним та водночас важливим завданням. Стаття присвячена актуальній проблемі формування соціального лідерства в умовах професійної підготовки майбутніх соціальних працівників. Умови сьогодення засвідчують потребу висвітлення окремих наукових підходів до лідерства в соціальній роботі. Визначено, що теоретичне дослідження феномену «соціального лідерства» як соціального явища на сучасному етапі розвитку суспільства зумовлює пошук критеріїв його сформованості у майбутніх фахівців соціальної сфери. На основі обґрунтованих критеріїв (мотиваційно-ціннісний, когнітивний, діяльнісно-поведінковий) встановлено відповідні показники, що відображають характеристику прояву рівнів сформованості соціального лідерства у майбутніх працівників соціальної роботи (реактивний, активний, проактивний). Визначення критеріїв, показників та рівнів, які зможуть в подальшому вплинути на динаміку формування соціаль-

ного лідерства у студентів — майбутніх працівників соціальної сфери для покращення сучасного стану суспільства, зокрема в галузі соціальної роботи є метою наукового дослідження.

Реалізація поставленої мети передбачала використання методів: наукового пізнання, аналізу наукової літератури, синтезу, порівняння, узагальнення, конкретизації, класифікації, систематизації, а також до описового методу.

На основі проведеного аналізу автором схарактеризовано компоненти соціального лідерства та обґрунтовано критерії, показники та рівні його сформованості відповідно до розуміння чинників формування соціального лідерства майбутніх соціальних працівників в умовах професійної підготовки.

Ключові слова: соціальний працівник, соціальна робота, соціальне лідерство, критерій, рівень сформованості, показник.

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INFORMATIZATION OF HIGHER EDUCATION

PRACTICES AND PERSPECTIVES OF TEACHER TRAINEES UPON ONLINE LANGUAGE EDUCATION PROGRAMME

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ABSTRACT

The expansion of instructional technologies in education has made it possible to learn and teach a second or foreign language online, without recourse to face-to-face teaching. A great deal of information is available on the varying formats and relative efficacy of online language-learning programmes. Teaching and learning is one of the core activities within higher education, such as universities and colleges. Almost every university in the USA now offers some type of computer online courses and most offer online programs in which all or most of the courses are taken via electronic means with a minimum of face to face real personal contact between instructor and student. There are many instructors and professors who claim that this electronic instruction is the future of teaching and the future of learning. Technology brings a lot of benefits to online classes such as flexibility, reduced costs, networking, documentation, increased student time, accessibility and self-discipline.

Instructional technologies have been used extensively after the spread of COVID19. Council of Higher Education in Turkey closed down all the universities and embarked on online education by issuing a statement that all universities were free to choose the platform they wished to use. This study aims at discovering how online language teacher education programmes yielded emerging patterns and how teacher trainees' perspectives were in relation with

these online language teacher education programmes. To reach this aim, 275 teacher trainees at the Department of English Language Teaching participated in the study and semi-structured interviews were held with them. This discussion illuminates critical issues and attitudes of teacher trainees along with the challenges unique to programmes as a future research agenda.

Keywords: *teacher trainees, networking, online education, online language-learning programmes, merit, demerit.*

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INTRODUCTION

The expansion of instructional technologies in education has made it possible to learn and teach a second or foreign language online, without recourse to face-to-face teaching. A great deal of information is available on the varying formats and relative efficacy of online language-learning programmes (Blake, 2009; Hockly, 2015; Hubbard, 2008; Pawan et al., 2016; Shin & Kang, 2018; White, 2014). Technology allows us to simplify our daily work, thus adding more values to our productivity. Teaching and learning is one of the core activities within higher education, such as universities and colleges. Almost every university in the USA now “offers some type of computer online courses and most offer online programs in which all or most of the courses are taken via electronic means with a minimum of face to face real personal contact between instructor and student. There are many instructors and professors who claim that this electronic instruction is the future of teaching and the future of learning” (Faulk, 2011, p.26). Higher education administrators in Turkey have jumped on the electronic bandwagon and have demanded that all programs of study should start online course offerings after the COVID19 pandemic.

ONLINE EDUCATION

Online education has been used extensively in the world, which leads a lot of institutions to apply and adapt instructional technologies in the classes. In addition, digital literacy has been accepted one of the 21st century competencies in education for teachers to possess. Online learning refers to language learning that takes place fully online via the internet, with no face-to-face component, within the context of both formal language courses and more informal learning scenarios (Hockly, 2015). The ease, flexibility and adaptability pave the way for teachers to increasingly employ such online classes and enhance their learning. Technology brings a lot of benefits to online classes such as flexibility, reduced costs, networking, documentation, increased student time, accessibility and self-discipline (<https://www.ccaurora.edu/programs-classes/online-learning/benefits-online-education>):

1. Flexibility: Students have the freedom to access any time they wish to because they are not tied down to a fixed schedule. In a traditional classroom setting, class meeting times are set, and the student has no power over this, forcing them to work their schedules around these dates.

2. Reduced Costs: Online education can cost less due to a variety of reasons. For example, there is no cost for commuting, lunch breaks and refreshments.

3. Networking Opportunities: Online education also provides students with the chance to network with peers across their own city, country, nations or even different continents. This often leads to other opportunities in terms of collaboration with other individuals in the implementation of a project.

4. Documentation: All the information that students need is safely stored in an online database. This includes things like live discussion documents, training materials and emails. This means that if they need something to be clarified, they are able to access these documents fast, saving valuable time.

5. Increased Instructor — Student Time: Students in traditional classrooms may not get the personalized attention they need to have concepts clarified.

6. Access to Expertise: An online college education might give students access to specialized degree courses that may not be available in an easily accessible or local institution of learning. Online classes allow the sharing of expertise that helps more people have access to education that is not readily available in certain geographic locations.

7. Self-discipline and responsibility: It is true that studying online requires more self-motivation and time-management skills, because students will spend a lot of time on their own without someone helping them.

8. Comfortable learning environment: Commercials that feature online students studying in their pajamas only skims the surface of one of the benefits of online education: no physical class sessions. Students listen to lectures and complete assignments sent to them electronically, with no need to fight traffic and leave early for class.

One of the goals in online education is to provide equal opportunities for all members of the society, however, it is not an easy task to do so (Nash, 2004; Shields, 2015). Online learning, among all possible approaches, is one solution to provide equal chances or at least curb this gap.

Online education is of two types: known as synchronous and asynchronous (Su et al, 2005). In the first type of learning, the primary participants are the teachers and the learners within the collaboration. Such a situation will simulate a real physical class with students and teachers facing each other so old text-based instruction will fade away and will no longer be of any use (Su et al, 2005; Williams, Paprock, & Covington, 1999). The second one, asynchronous, has the instructor leaving “posts to present the material or lessons for the learner to read or use, which in our case it can include leaving a text to be paraphrased or summarized” (Moqadam Tabrizi, 2018, p.178).

Some studies maintain that online courses are very effective for students, with regard to improved linguistic competence, when used over an extended

period of time (Isti'anah, 2017; Molchanova, 2015; Yang et al, 2013) and claim that students also find online courses more instructive, motivating and helpful in terms of gaining proficiency and independence.

METHODOLOGY

Study Group

275 teacher trainees aged between 20-22 studying at the Department of English Language Teaching at a western state university participated in the study during the spring term of 2019-2020 academic year. All their courses were given online due to the mandate of the Council of Higher Education that was applied after COVID19 pandemic all around Turkey. Their online courses lasted for 9 weeks and at the end of the term, they were asked to fill in the semi-structured forms online after they gave their consent forms. The form had the questions of "are you happy with the online education classes?", "What are the merits of online education?", "what are the demerits of online education", "what is the most challenging aspect?", "what is the fun aspect?". The researcher then compared the fall and spring term GPA results of the learners to discover in which term they were more successful.

DATA RESULTS

Satisfaction Level

Teacher trainees unanimously state that they are not happy with the online classes as they wish to have face-to-face classes where they believe they learn overwhelmingly better. They contend that their online classes do not give them the same amount of satisfaction they have had in classes. Through interaction with their fellow classmates and instructors, their learning level is beyond comparison. There is nobody who says positive things about online education.

St 1: Lots of things are going on at the same time. I have to deal with the distractions of the real world around me such as my family. However, when you are in a real class, it's sacred. No one disturbs you.

St 2: I do not think I am truly making a progress.

St 3: I understand right now what it means to be in class and how privileged we were in classes.

Merits

Time: Time is mentioned as a merit by 200 teacher trainees (72.7 %), mentioning the possibility to watch the videos at their own available time, typically discussing how easy it is to have many chances to watch the videos over and over for topics (64.72 %) and assignments as in Table 1.

Shy personality: Some teacher trainees (25 of them, 9 %) note that they have more relaxed time in online classes as they do not have to join the class discussions and avoid being visible in the public eye.

Table 1

Merits		
Merits	n	%
Time	200 (72.7 %)	34.90
Recycling the videos	178 (64.72 %)	31.06
Less cost	170 (61.81 %)	29.66
Shy personality	25 (9 %)	4.36
Total Items	573	100

Teacher trainees are not aware of the model behind online education as Cope and Kalantzis (2007) have proposed in addressing new digital teaching and learning: design, pluralism, synaesthesia, and pedagogy. They do not show any cognition, awareness and recognition to perceive the design of the classes, platform. Plurality component does not see individual or group traits as static, but rather as ever-shifting and developing in complex interaction with the world. The third dimension of new learning, synaesthesia, is the melding of perception between and among visual, aural and textual modalities. Hence, none of these components are visible to teacher trainees.

Demerits

Table 2 showcases the disadvantages of online education in the eyes of 275 teacher trainees.

Table 2

Demerits		
Demerits	n	%
Collaboration	275 (100%)	37.67
Practice	250 (90 %)	34.24
Social interaction	225 (81 %)	30.82
Logistics	30 (10.9 %)	4.10
Total Items	730	100

Community building and Collaboration: All teacher trainees state that they miss the interaction between them and teachers, between them and classmates. They also hold that they need support with completing the assignments given on a weekly basis in all the classes in relation with academic writing, regardless of their language backgrounds; this need might be more serious for L2 students who are new to the discourses and genres of English for academic purposes than it is for their English-native-speaking counterparts (Shin & Kang, 2018, p.377). Although students can utilize support from their more successful friends who provide face-to-face help to those who live in the same towns neighbourhoods) and/or online, they indicate that they are in need of seeking out more support from the class learning communities.

St 4: Whenever we needed help, there were hundreds in the building to help us including teachers. Now we have nobody.

St 5: All we have is the uploaded videos and google.

St 6: I do not feel I am in a class. Even the teacher looks out of reach...not like the real life.

Practicum: Practicum and field experience in language teacher education provide student teachers with an inevitable opportunity to observe how learning and teaching take place in the real classroom situations, and to gain first-hand experiences in applying textbook knowledge to real teaching situations. When it comes to the provision of practicum and field experience, 90 % of teacher trainees mention that they could not find real life situations and could not empathize with the teachers in real life situations as they could not face the real life situations but only simulated situations.

St 7: We do not encounter real situations...teachers give us possible problems to deal with, but each learner is unique and the coping ways are different.

St 8: Teaching online has nothing to do with teaching in class. We do not see students eye and facial expressions and we cannot see them through.

Social Interaction: The student teachers’ diverse cultural backgrounds emphasize a need to challenge the assumption that equal and increased student participation would be possible in online classrooms, when compared with face-to-face classes. 81% of them believe that this social bonding is amiss in the virtual class.

St 9: Nonverbal cues such as mimes, gestures, facial expressions are the things that stimulated me...but now they are all gone.

St 10: I realize that what teaches us and what gets us going on is the sustenance of the interaction with classmates and teachers.

St 11: Nothing is as inspirational as one look and one word of the teacher given face-to-face.

Logistics: The issue related to technological access is concerned with existing disparities in access to most up-to-date technologies. This access issue warrants a critical examination of the notion of equity in online classes that makes education accessible and affordable to everyone notwithstanding locational constraints, given the digital divide between the technology ‘haves’ and ‘have-nots’. 30 teacher trainees (10.9 %) state that they have constant problems with the online connection due to the places they live, most of whom live in the rural areas.

The worst and fun side: All teacher trainees think the fun part is that they watch the videos synchronously in their casual clothes and even attend classes in bed. The worst part is they cannot learn very well –79.27 %--as they do not have the self-regulated strategies—67.63 %-- and that they cannot find opportunities to socialize with friends –63.63 %-- as in Table 3.

Table 3

The fun and worst aspects		
Items	n	%
Relaxed atmosphere such as casual outfits	275	100
Low cost	252	91.6
Higher scores	220	80
Low performance	218	79.27
Lack of interaction	213	77. 45
Lack of autonomy	186	67.63
Lack of socialization	175	63.63

Spring and fall term GPAs: Teacher trainees’ fall and spring term scores show a significant difference to the advantage of online classes although they believe that they have not learned as well as and as much as possible as the t-test result highlights in Table 4. Interestingly enough, the high scores they have obtained in the spring term does not prevent them from believing that despite high grades, they are aware of the fact that they have not learned enough.

Table 4

Comparison of the scores			
	Mean	Std Dev.	P value
Fall Term	2.68	13.26	.00
Spring term	3.25	15.83	

DISCUSSION AND CONCLUSIONS

This research is consistent with others in this area. Some studies have found the similar echoes comparing student opinions of required group work that students in online sections were more resistant and displeased to the online classes (Kules & McDaniel, 2010; Marken & Dickinson, 2013). Although some studies maintain that technology-based learning empowers students with more responsibility and enhances their motivation and that technology integration with education is likely to increase students’ motivation (Chun, 2011; Darasawang & Reinders, 2010; Ushida, 2005; Warschauer, 1996), this study seems to not yield the similar results.

For synchronous sessions, students need to have a quiet space and computers with strong internet connections to thrive during live class meetings. Moreover, synchronous instruction does not always offer students with special learning needs or disabilities what they need to learn. Some professors who lecture live record their meetings do post them online afterward, with transcripts and other materials, but not all. There has been an exponential increase in using the online platforms, for example, “Zoom usage went up 20-fold. The service does not release education-specific numbers, but there’s been an obvious higher ed boom there and on similar platforms, such a Google Hangouts and Microsoft Teams” (<https://www.insidehighered>).

John Dewey is widely considered to be one of the first thinkers in the progressive education movement. Dewey’s writing on the continuity of experience contains three elements. “First, he believes that experience must lead to growth; second, that it should stimulate creativity or the motivation to learn more; and third, that it must be genuine and situated in the community” (Dewey, 1938, p. 28-39), none of which are shared by teacher trainees in relation with online education. Based on the limitations of the study the following conclusions have been drawn: Teacher trainees show negative opinions and perceptions regarding the use of online courses to train future teachers. A large majority of the teacher trainees do not fully agree that online courses or programs would fully prepare

future teachers for conditions that would be faced within the public schools. Specific areas such as classroom management and the social aspects of teaching are not viewed as being positive in terms of online preparation. Other areas such as the theories and principles of teaching are considered as very theoretical not suitable for the applications. Several teacher trainees note that online courses and programs would not be adequate without an abundance of field experiences and student teaching. Teacher trainees of English language education appeared to be very concerned that many of the teachers prepared online would possibly not endure the rigors of the classroom without having real classroom experience. Several of them mention that future teachers needed to be taught by mentors in a real classroom setting in order to enhance modeling. Teacher trainees believe that they are open-minded to use innovative techniques but they sound unconvinced that it will prepare teachers for the challenges that teachers face. It is not wrong to say that a lot of things about online teaching will make our face-to-face teaching better.

REFERENCES

- Blake, Robert (2009). The use of technology for second language distance learning. *The Modern Language Journal*, 93(1), 822-35. DOI: <https://doi.org/10.1111/j.1540-4781.2009.00975.x>
- Chun, Dorothy (2011). CALL technologies for L2 reading post Web 2.0. In N. Arnold & L. Ducate (Eds.), *Present And Future Promises Of CALL: From Theory and Research to New Directions in Language Teaching* (pp. 131-169). San Marcos, TX: CALICO.
- Cope, Will and Kalantzis, Mary (2007) . New media, new learning. *The International Journal of Learning*, 14(1), 75-79.
- Darasawang, Pornapit and Reinders, Hayo (2010) Encouraging autonomy with an online language support system. *CALL-EJ Online*, 11(2). http://callej.org/journal/11-2/darasawang_reinders.html
- Dewey, John (1938) *Experience and education*. New York, NY: Macmillan.
- Faulk, Neil. (2011) Perceptions of Texas public school superintendents regarding online teacher education. *Journal of College Teaching & Learning*, 8 (5), 25-31. DOI: <https://doi.org/10.19030/tlc.v8i5.4254>
- Hockly, Nicky (2015). Developments in online language learning. *ELT Journal*, 69(3), 308-13. DOI: <https://doi.org/10.1093/elt/ccv020> <https://www.ccaurora.edu/programs-classes/online-learning/benefits-online-education> Accessed on June 6, 2020.
- Hubbard, Philip (2008) CALL and the future of language teacher education. *CALICO Journal*, 25(2), 175-88. DOI: <https://doi.org/10.1558/cj.v25i2.175-188>
- Isti'annah, Arina (2017). The effect of blended learning to the students' achievement in grammar class. *Indonesian Journal of English Education*, 4(1), 16-30. DOI: 10.15408/ijee.

- Kules, Bill and Mcdaniel, Jennifer (2010). LIS program expectations of incoming students' technology knowledge and skills. *Journal of Education for Library and Information Science*, 51(4), 222-232.
- Marken, James and Dickinson, Gail. (2013). Perceptions of Community of practice development in online graduate education. *Journal of Education for Library and Information Science*, 54 (4), 299-306. URL: <https://www.jstor.org/stable/43686959>
- Moqadam-Tabrizi, Mehdi (2018). Investigating the effectiveness of an online course in English language teaching program in a rural Iranian context. *Language Teaching and Educational Research (LATER)*, 1(2), 175-186.
- Molchanova, Irma (2015). Influence of the internet on studying English. *International Education Studies*, 8(1), 133-141.
- Nash, Roy (2004). Equality of educational opportunities: In defense of the traditional concept. *Educational Philosophy and Theory*, 36(4), 361-377. DOI: <https://doi.org/10.1111/j.1469-5812.2004.00075.x>
- Pawan, Faridah, Wiechart, Kelly, Warren, Amber and Park, Jaehan (2016). *Pedagogy and Practice for Online English Language Teacher Education*. Alexander, VA: TESOL Press.
- Shields, Liam, (2015), From Rawlsian Autonomy to Sufficient Opportunity in Education, *Politics, Philosophy & Economics*, 14(1), 53-66. DOI: 10.1177/1470594X13505413
- Shin, Dong Shin and Kang, Hyun Sook (2018). Online language teacher education: Practices and possibilities, *RELC Journal*, 49(3), 369-380. DOI: <https://doi.org/10.1177/0033688217716535>
- Su, Bade, Bonk, Curtis, Magjuka, Richard, Liu, Xiaoching and Lee, Seung Hee (2005). The importance of interaction in web-based education: A Program-level case study of online MBA courses. *Journal of Interactive Online Learning*, 4 (1) 1-19.
- Ushida, Eiko (2005). The role of students' attitude and motivation in second language learning in online language courses. *Calico Journal*, 23(1), 49-78. DOI: <https://doi.org/10.1558/cj.v23i1.49-78>
- Warschauer, Mark (1996). Motivational aspects of using computers for writing and communication. In M. Warschauer (Ed.), *Telecommunication in Foreign Language Learning: Proceedings of the Hawaii Symposium* (pp. 29-46). Honolulu: University of Hawaii, Second Language Teaching & Curriculum Center.
- White, Cynthia (2014). The Distance learning of foreign languages: a research agenda. *Language Teaching*, 47(4), 538-53. DOI: <https://doi.org/10.1017/S0261444814000196>
- Williams, Marcia, Paprock, Kenneth and Covington, Barbara (1999) . *Distance learning: The essential guide*. Thousand Oaks, California: SAGE Publications, Inc. DOI: <http://dx.doi.org/10.4135/9781452229140>
- Yang, Carolyn, Chuang, Ya-Chin, Li Lu-Yun and Tseng, Shin Shang (2013). A blended learning environment for individualized English listening and speaking integrating critical thinking. *Computers and Education*, 63, 285-305. DOI: 10.1016/j.compedu.2012.12.012

ПІДГОТОВКА ВИКЛАДАЧІВ У МЕЖАХ ОНЛАЙН ПРОГРАМ ДЛЯ ВИВЧЕННЯ ІНОЗЕМНОЇ МОВИ: ЗДОБУТКИ ТА ПЕРСПЕКТИВИ

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Розширена сфера використання інтегрованого навчання дозволяє дистанційно вивчати та викладати іноземну мову у власному ритмі. На сьогоднішній день, доступна велика кількість інформації в різних форматах та існує відносна ефективність онлайн-програм для вивчення мови. Викладання та навчання є основними напрямками діяльності вищої освіти, таких як університети та коледжі. Майже всі університети США проводять онлайн-курси, а більшість з них проводять ці курси на он-лайн платформах. Електронне навчання дає можливість пройти весь курс у власному темпі. Багато викладачів та професорів стверджують, що дистанційне навчання це майбутнє як викладання так і навчання. Завдяки сучасним технологіям існує безліч переваг для проведення дистанційних занять: гнучкість, зменшення витрат, мережева взаємодія, оформлення документації, збільшення кількості вільного часу, доступність та самодисципліна.

У зв'язку з поширенням COVID19, ефективно почали використовувати сучасні технології в освіті. Рада вищої освіти Туреччини закрила всі університети країни та розпочала дистанційне навчання. У Раді заявили, що вищі навчальні заклади можуть вільно вибрати платформу для навчання онлайн. У статті розкрито як онлайн програми вивчення мов вплинули на створення нових закономірностей викладання. Встановлено перспективи використання онлайн програм для вивчення мов. В межах дослідження було проведено напівструктуроване опитування 275 викладачів-стажистів кафедри Викладання англійської мови. Стаття висвітлює найважливіші проблеми викладання під час онлайн-трансляцій та ставлення викладачів-стажистів до дистанційного навчання.

Ключові слова: викладач-стажист, мережева взаємодія, онлайн-освіта, онлайн-програми для вивчення мови, переваги, недоліки.

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SOCIAL MEDIA AND HIGHER EDUCATION INSTITUTIONS: USING SOCIAL NETWORKS TO RECRUIT STUDENTS

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ABSTRACT

The number of offers in higher education both in Ukraine and everywhere in the world is quite large, and accordingly the competition for new students is high. Higher education institutions (HEIs) in such conditions must know how to effectively present themselves to target audiences. New digital technologies and social media can help. Social media has become especially important during the quarantine restrictions associated with the COVID-19 pandemic. Universities have to use the Internet as their main source of communication, both for disseminating information and for recruiting new students. As a result, the use of social media in higher education is growing rapidly, and HEIs are making increasing efforts to establish their online presence. Higher education institutions try to establish contact with their potential students when they study in high school using various media platforms, including social networks and messengers.

This article is devoted to the theoretical analysis and practical research of using social media, in particular social networks, by higher education institutions in Ukraine to recruit students and maintain two-way communication with them. The study has shown that most freshmen actively used social networks to search for information about a HEI and some of them maintained a dialogue with the university through these social networks before the admission. An important regularity has been defined: the more widely and qualitatively a higher education institution is presented in social networks, the more often entrants and students turn to them in search of the necessary information. However, social networks still remain an auxiliary tool, as the majority of Ukrainian entrants first of all trust the official websites and feedback of graduates when choosing a higher education institution. In any case, the higher education marketing is becoming increasingly digital and this trend doesn't look to slow down anytime soon.

Key words: higher education institution (HEI), higher education marketing (HEM), social media, social networks, student recruitment.

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INTRODUCTION

Nowadays, higher education institutions have to operate in a competitive environment. On the one hand, it is due to the growing demand for highly qualified personnel capable to work effectively in the context of social transformations towards innovative technologies, on the other hand — a large number of proposals in the field of educational services (public, municipal, private institutions, etc.). The vast majority of universities in Ukraine are funded from the state or local budgets. However, such funding is also provided on a competitive basis, on the principles of openness and transparency, equality, objective and impartial evaluation of bids (On Higher Education, 2014).

Universities around the world compete with each other in recruiting students, top researchers and funding, and only those that remain relevant and take advantage of new digital technologies will benefit at this digital age (PwC, 2015).

Uncertainty and limited ability to measure the success indicators of the social media use have historically deterred HEIs from using social networks to recruit students. However, increasing competition and students' and parents' concerns that the university is not worth the investment, are factors that have pushed HEIs to move forward into the unknown (Pew Research Center, 2011).

According to the Digital 2020 report of the resource DataReportal, in Ukraine there are 27.46 million Internet users, which is 63% of the population. Among them 19.00 million (43%) are active users of social networks. The number of social network users is growing rapidly, as evidenced by an increase of 1.5 million (+ 8.3%) in the period from April 2019 to January 2020 (DataReportal, 2020).

It can be assumed that during the COVID-19 pandemic and strict quarantine restrictions, in particular restrictions on movement, the number of active Internet users increased significantly. The pandemic has actually made online marketing the main tool for attracting new students in 2020. Professionals involved in student recruitment and marketing have to use social media as one of the main sources of communication, both for the dissemination of information and for the direct attraction of students. As a result, the use of social media in higher education is growing rapidly, and HEIs are making every effort to maintain their online presence.

Therefore, the use of social media to maintain a positive image of a HEI among potential students and the general public is no longer a whim of certain universities, but a present-day requirement, an adequate response to the challenges of modern realities. This raises the questions: “What are the benefits of social media to the modern university in solving this problem?”, “How effective are social media for HEM?”, “What social networks to use?”

BACKGROUND

The research has raised the issue of the functioning of higher education institutions in the competitive global environment and the search for new forms of student recruitment, including social media (Choudaha & Chang, 2012). The term “social media”, which describes a wide range of next-generation Internet applications, has aroused considerable commercial interest and discussion in scientific circles. Among the topics in these discussions are: 1) the impact of social media on human behavior (Barker, 2009; Kolbitsch & Maurer, 2006); 2) their role in the enrollment of students by universities and in the process of HEI selecting by students (Constantinides & Zinck Stagno, 2012; Khan, 2013; Kusumawati, 2019; Martin, 2015).

Social Media is defined as: “forms of electronic communication (as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (as videos)” (Martin, 2015: pp. 11-12). Social media is typically used for social interaction, access to information and decision making. The research by U.S. scientists shows that people who use social media for personal communication are more likely to use services such as Facebook, Instagram, Twitter and YouTube as a source for news and information, live conversations and entertainment. Users rely on these sources to keep in touch with family and friends, gather information and share what is important to them (Duggan et al., 2015; Lenhart et al., 2015; Martin, 2015).

In today's world, news and information spread faster than ever before. Social media has made it possible and it has offered unprecedented personalized and real-time access for people to connect with individuals and businesses in various ways, at any time of the day, even at night. Higher education

is a competitive business in the large scale market. And without enrollment growth, higher education institutions will not sustain. Universities face the challenge of maintaining relevance among students who are increasingly more reliant on technology as a communication source. Social media is an everyday part of teens' lives and social spaces are effective places for universities to reach prospective students (Kusumawati, 2019; Martin, 2015).

Researchers Asatryan and Oh (2008) explained the affinity towards feedback from a Psychological Ownership Theory perspective using the example of the hospitality industry. Consumers tend to grow an affinity towards the organizations they receive service from and take ownership of the feedback that they leave on their websites. This observation shows justification why social media users might be inclined to actively spread by word of mouth, their experiences about an education institution if suitable platforms are provided. Apparently, this is where one of the greatest possibilities for universities exists in gaining a long term intangible asset through the branding process from their consumers, the students (Khan, 2013).

Thus, the emergence of social media has made it possible to solve higher education marketing (HEM) tasks using the following innovations: 1) interactive presentation of the university (general information, mission, values, training areas, demonstration of environment and infrastructure, benefits, prospects, potential, etc.); 2) interactive communication online; 3) online PR (communication with media representatives, other organizations); 4) the activities of virtual pages and communities in social networks (Facebook, Twitter, LinkedIn, Instagram, Pinterest, etc.); 5) banner advertising; 6) exchange of services via the Internet (distribution of news, offers, etc.); 7) interactive surveys (of employees, students, graduates, potential applicants and their parents); 8) operational marketing research on the Internet (demand, needs and behavior of consumers, the effectiveness of banner advertising, traffic to sites, pages, etc.) (Datsenko, 2016).

METHODOLOGY

The research was based on the well-known scientific ideas that social media is: 1) an important channel of communication between HEIs and target audiences; 2) an effective tool for attracting new students. However, along with the rapid development of technology and new challenges in higher education, it is necessary to study promptly the known phenomena in a new environment.

The study consisted of three stages. The first stage was preparatory, devoted to the analysis of scientific sources and the development of a questionnaire; at the second stage, with the help of the Internet, the survey was conducted; the third stage included processing and analysis of the received data.

The study was conducted by means of an indirect Internet survey. The custom questionnaire was developed for this survey. The questionnaire included 16 items, among which there were 13 closed- and 3 open-ended

questions. The survey involved 735 respondents (n = 735) who entered HEI this year and lived in Ukraine.

The survey was open from 18 to 23 September 2020. It was conducted in the Ukrainian language.

MAIN RESULTS

Students from 5 cities of Ukraine — Kyiv, Kryvyi Rih, Lviv, Uman and Vinnytsia took part in the research. Such a fairly wide geographical coverage and speed of data collection became possible owing to the Internet. The age of respondents: **17-18 years old — 88 %, over 18 years old — 12 %**.

The majority of respondents (**45.6 %**) answered that they learned about their HEI from the Internet, slightly less (**43.3 %**) — from acquaintances and a small part (**11.2 %**) — from family members (Figure 1).

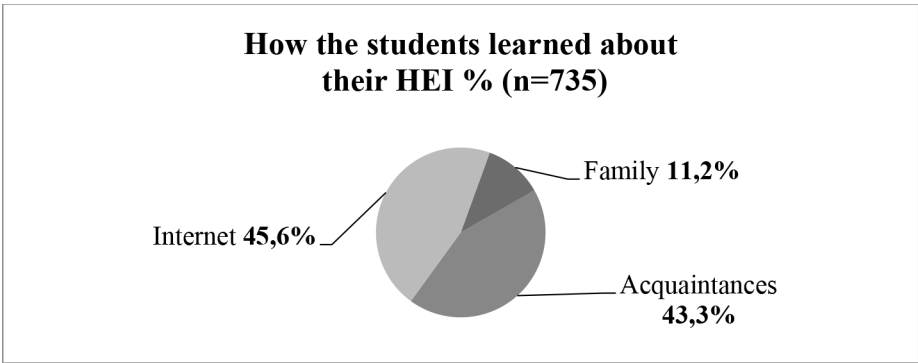


Figure 1. The main sources of information about HEI (according to respondents)

It is important that **41.9 %** of respondents paid attention to online comments when choosing HEI. When asked on what resources students searched for information about HEI — **64.9 %** answered that they did it on the main website of the institution, **29.3 %** — on the official pages of social networks, the remaining **5.9 %** — on other educational websites and portals (Figure 2).

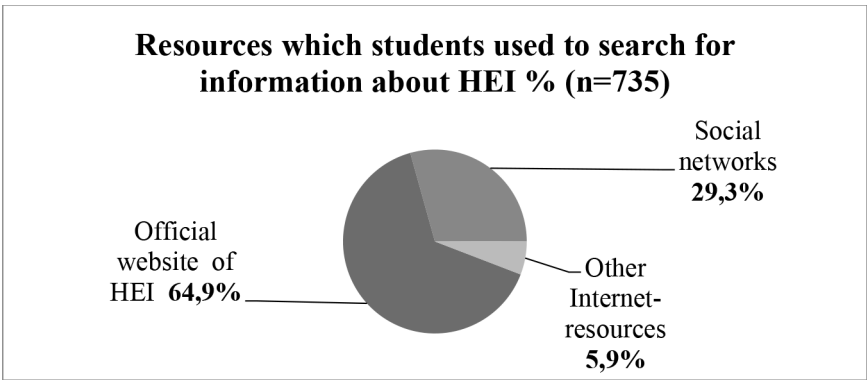


Figure 2. The main Internet resources for searching information about HEI (according to respondents)

As we can see, social networks have a significant share of trust. It is important to note that the entrants' choice of social networks as the main source of information about the university also depends on the representation of the institution in social networks.

The results with regard to which social media students use to find out about news and events in their HEI turned out to be interesting. Thus, the vast majority — **77.4 %** indicated they used Instagram, **5.7 %** — Facebook, **4.5 %** — YouTube. Other popular social media were mentioned by **2% or less** of respondents. In addition, **23.9 %** of respondents said that they maintained a dialogue with the representatives of HEI before admission through social networks.

As for what the content and design of the pages of an educational institution in social networks should be, the students emphasized that in the first place there should be high quality information (**75.6 %**), aesthetically attractive (**18.6 %**), but the level of audience involvement turned out to be less important (**5.7 %**) (Figure 3).

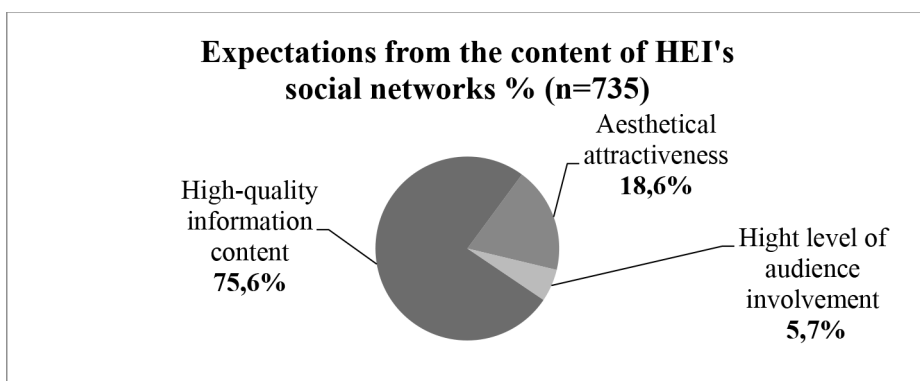


Figure 3. Expectations from the HEI's pages content in social networks (according to respondents)

As the research shows, information about the institution's reputation, prospects, educational programs, logistics and academic staff has proved to be of the most relevance to students. Entertainment content and audience engagement have been less important. Most students noted the convenience and efficiency of such communication channel as social networks.

CONCLUSIONS

Thus, the conducted research enables us to draw the following conclusions: 1) the Internet is the main source for searching information about higher education institutions for prospective students; 2) most entrants trust the official websites of HEI and students comments; 3) social networks are an important resource for recruiting students and maintaining communication between potential students, students and HEI representatives; 4) the better and more qualitatively a HEI is represented in social media, the more effective they are.

Digital technologies are nearby and they are here to stay. Mobile devices are always and everywhere switched on; social media is the main channel of communication for many; new capabilities of cloud computing provide a means for creating new tools and products at a speed that was previously difficult to imagine; geolocation sensors enable new tracking and targeting capabilities; digital is now the first choice for media consumption — the list goes on, according to PwC (2015). Such progress affects and changes higher education and science, and it will gain momentum.

The young audience is using all new tools and applications that are appearing and developing at an extremely fast pace, and the most agile universities are trying to keep up. As the competition among higher education institutions to attract the best students continues to grow, both in Ukraine and world-wide, universities have to demonstrate that they are capable of providing the digital experience that students nowadays take for granted. In digital era, where the voice of consumers is more prevalent than ever, transforming students into ambassadors for their university is one of the most powerful marketing tools available.

The universities that are aware of the power of social media and positive impact they can have on student recruitment will always be ahead. The universities with a large presence in social networks are able to maintain a reliable two-way connection with their target audiences — to present scientific achievements, share information, news, explanations, answer questions quickly and efficiently.

The strategies for maintaining social networks will look different for each institution, depending on its specifics and goals. Removing barriers and enabling certain university departments to create their own social media pages can help revitalize and strengthen the university-wide online presence.

REFERENCES

- Asatryan, V., & Oh, H. (2008). Psychological ownership theory: An exploratory application in the restaurant industry. *Journal of Hospitality & Tourism Research*, 32(3), 363. DOI: <https://doi.org/10.1177/1096348008317391>.
- Barker, V. (2009). Older Adolescents' Motivations for Social Network Site Use: The Influence of Gender, Group Identity, and Collective Self-Esteem. *Cyberpsychology & behavior: the impact of the Internet, multimedia and virtual reality on behavior and society*. 12. 209-13. DOI: <https://doi.org/10.1089/cpb.2008.0228>.
- Choudaha, R., & Chang, L. (2012). Trends in International Student Mobility. URL <http://www.wes.org/ewenr/12feb/feature.htm>
- Constantinides, E., & Zinck Stagno, M. (2012). Higher Education Marketing: A Study on the Impact of Social Media on Study Selection and University Choice. *International journal of technology and education marketing*, 2(1), 41-58. DOI: <https://doi.org/10.4018/ijtem.2012010104>.

- DataReportal (2020, February 18). “Digital 2020: Ukraine”, *DataReportal*. URL: <https://datareportal.com/reports/digital-2020-ukraine>
- Datsenko, T. (2016, September 29-30). Supporting Positive Image of Modern University by Interactive Media. (in Ukrainian). *Zbiór raportów naukowych. Konferencji Międzynarodowej Naukowo-Praktycznej “Economy. Zarządzanie. Osiągnięcia naukowe, rozwój, propozycje”* (pp. 12-14.).
- Duggan, M., Lenhart, A., Lampe, C., & Ellison, N. (2015). Parents & Social Media. Pew Research Center — Internet, Science & Tech. <http://www.pewinternet.org/2015/07/16/parents-and-social-media>.
- Khan, R. (2013). Marketing Education Online: A Case study of New Zealand Higher Education Institutions. *Procedia — Social and Behavioral Sciences*. 103. 637-646. DOI: <https://doi.org/10.1016/j.sbspro.2013.10.382>.
- Kolbitsch, J., & Maurer, H. (2006). The transformation of the web: How emerging communities shape the information we consume. *Journal of Universal Computer Science*, 12, 187 — 213. [Web of Science®].
- Kusumawati, A. (2019). Impact of Digital Marketing on Student Decision-Making Process of Higher Education Institution: A Case of Indonesia. *Journal of e-Learning and Higher Education*. 1-11. DOI: <https://doi.org/10.5171/2019.267057>.
- Lenhart, A., Smith, A., Anderson, M., Duggan, M., Perrin, A. (2015). “Teens, Technology and Friendships.” Pew Research Center. URL: <http://www.pewinternet.org/2015/08/06/teens-technology-and-friendships/>
- Martin, C. (2015). “Social Media Engagement and Collegiate Recruitment: An Examination of the Use of Social Networks in the College Recruitment and Student Choice Processes”. URL: <http://digitalcommons.wku.edu/diss/93>.
- On Higher Education # 1556-VII. (2014). URL: <https://zakon.rada.gov.ua/laws/show/en/1556-18/ed20140701#Text>
- Pew Research Center (2011). Is college worth it? College presidents, public access, value, quality and mission of higher education. URL: <http://www.pewsocialtrends.org/2011/05/15/is-college-worth-it/>.
- PwC (2015). “The 2018 digital university: Staying relevant in the digital age,” PwC. URL: <https://www.pwc.co.uk/assets/pdf/the-2018-digital-university-staying-relevant-in-the-digital-age.pdf>

СОЦІАЛЬНІ МЕДІА ТА ЗАКЛАДИ ВИЩОЇ ОСВІТИ: ВИКОРИСТАННЯ СОЦІАЛЬНИХ МЕРЕЖ ДЛЯ РЕКРУТИНГУ СТУДЕНТІВ

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Кількість пропозицій у вищій освіті, як в Україні, так і у світі в цілому, достатньо велика, а відповідно і конкуренція за нових студентів. Заклади вищої освіти (ЗВО) в таких умовах повинні знати як ефективно презентувати себе цільовим аудиторіям. У цьому можуть допомогти нові цифрові технології та соціальні медіа. Особливо важливими соціальні медіа стали у період карантинних обмежень, пов'язаних із пандемією COVID-19. Університети змушені використовувати Інтернет як основне джерело комунікації, як для розповсюдження інформації, так і для безпосереднього набору студентів. Як результат, використання соціальних медіа у галузі вищої освіти стрімко зростає і ЗВО докладають усе більше зусиль щодо своєї присутності в Інтернет-просторі. Заклади вищої освіти намагаються налагодити контакт із потенційними абітурієнтами ще в старших класах школи, використовуючи різні медіаплатформи, а саме соціальні мережі та месенджери.

Ця стаття присвячена теоретичному аналізу та практичному дослідженню проблеми використання соціальних медіа, зокрема соціальних мереж, закладами вищої освіти в Україні для рекрутингу студентів та підтримки двостороннього зв'язку з ними. Дослідження показало, що більшість першокурсників активно використовували соціальні мережі для пошуку інформації про ЗВО, частина з них підтримувала діалог із університетом за допомогою соціальних мереж до вступу. Важливою є закономірність: чим ширше та якісніше ЗВО представлений у соціальних мережах, тим частіше абітурієнти та студенти звертаються до них за пошуком необхідної інформації. Проте соціальні мережі все ж залишаються допоміжним інструментом, адже більшість українських абітурієнтів при виборі ЗВО, у першу чергу, довіряють офіційним вебсайтам та відгукам випускників. У будь-якому випадку, маркетинг вищої освіти стає все більш цифровим, і ця тенденція найближчим часом не зменшиться.

Ключові слова: заклад вищої освіти (ЗВО), маркетинг вищої освіти, соціальні медіа, соціальні мережі, рекрутинг студентів.

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COMPUTER-BASED TESTING: A NECESSARY EVIL OR A SENSIBLE CHOICE?

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ABSTRACT

For many students and teachers working in online environments during the current pandemic crisis, the use of computers for educational testing is often an unavoidable predicament. This may be due to the fact that computer-based materials are not merely a useful addition to the learning and teaching resources, but rather the only option available. However, although in some contexts computers may indeed be a significant hindrance to test developers and test takers alike, they actually offer a number of substantial benefits. It is also worth pointing out that, by and large, educational tests delivered through online platforms with the aim of measuring progress and achievement in learning have a lot in common with traditional paper-based tests. This article is thus an attempt at balancing the advantages and disadvantages of computerized testing with a view to finding out whether this mode of testing can be recommended as the preferred choice. Based mainly on a literature review of research and practice in the area of computerized and online educational testing, the paper provides a synthesis of key issues relevant to using electronic devices for the purpose of constructing, administering, and analyzing tests and assessments. In particular, the discussion focuses on the models of test administration, the merits and demerits of computer-assisted testing, the comparability of paper-based and computer-based test scores, as well as selected features of web-based testing systems, such as text-to-items converters, test generators, full-screen delivery mode, automated scoring (and human verification thereof), score reporting, feedback, as well as quantitative analysis of test scores. The article also puts forward some arguments in favour of developing one's own testing application.

Keywords: computerized testing, web-based technology, merits and demerits of electronic educational testing

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INTRODUCTION

As anticipated over two decades ago by Chalhoub-Deville (1999, p. xv), computers are fast becoming the primary mode of delivering educational tests and assessments. Computer-based testing (CBT) is particularly prevalent in technologically advanced countries such as the United States (Way, Davis, Keng, & Strain-Seymour, 2016; Winke & Isbell, 2017). Nevertheless, in many schools and universities around the world, paper-based testing (PBT) still remains the status quo, which often coincides with the continuing predominance of traditional materials for learning and teaching provided in printed form. The reasons behind the persistent dominance of PBT may include an objective lack of access to the necessary technologies, or insufficient resources for implementing CBT, as well as personal preferences for traditional methods of testing. However, in the last several months, many educators have had to turn to web-based testing as part of a general move to online instruction, as dictated by pandemic restrictions imposed in many regions. It is thus important to review the key issues involved in computerized testing because in switching to this mode of test delivery and development, both teachers and students should be able to make informed decisions and take the best possible advantage of the benefits afforded by technology.

CBT types

One of the key points to bear in mind with regard to CBT is that this approach to testing is not always radically different from traditional PBT. The degree of similarity between CBT and PBT partially depends on the model of CBT administration. These models include the following types: linear fixed-form, linear on-the-fly, multistage, and adaptive (Mills & Breithaupt, 2016).

To all intents and purposes, a linear fixed-form computer-based test (CBT) is simply a computerized version of a paper-based test (PBT). In this model, every test taker receives the same test items, which is typically the case with traditional PBTs. Linear on-the-fly tests also closely resemble traditional PBTs, although they are not exactly the same for every test taker. Rather, when the test is administered, a different test form is created for each examinee by importing items from an item bank. What all linear tests, whether fixed-form or on-the-fly, have in common is that they are equal in length for every test taker.

On the other hand, multistage and adaptive tests represent a major departure from traditional PBTs. Multistage tests, sometimes called semi-adaptive tests (Winke & Fei, 2008; Ockey, 2009) or branching tests (Fulcher, 2010), consist of several testlets (sets of items), and the selection of every next testlet is adapted to each examinee's level of ability, as estimated on the basis of his or her responses to the items in the previous testlet. Multistage tests are thus

adaptive at the testlet level, whereas tests which are known as computer-adaptive tests (CATs) are adaptive at the item level, which means that the selection of every next item is tailored to the examinee's level of ability. Adaptive tests may well be different in length for each individual because tests of this type present the examinees with questions that are gradually more difficult or easier for as long as an accurate assessment of their ability is obtained (e.g. Chapelle & Douglas, 2006).

Despite their many unquestionable advantages (such as greater efficiency and accuracy, or the potential to increase motivation thanks to the fact that the test takers are not presented with inordinately easy or difficult questions), CATs are not really a viable option for classroom-based testing. This is mainly because adaptive testing entails developing extremely large item banks to guarantee item security, and it requires sophisticated IRT calculations (Ockey, 2009). Moreover, from the perspective of the examinees, it may not be quite clear how the final estimate of ability has been obtained on the basis of a test which was different for each individual. Taking into consideration all the technical and practical issues with implementing CATs, Fulcher (2010) pointed out that linear tests actually have many advantages over CATs, particularly in small-scale testing. It is therefore safe to conclude that the type of CBTs which are most likely to be useful in school and university contexts as measures of progress and achievement have a lot in common with traditional PBTs.

One more type of computerized testing should be mentioned, namely web-based testing (WBT). According to the classic definition given by Roever (2001), web-based tests (WBTs) are essentially CBTs written in the HyperText Markup Language, or HTML. Besides the language in which the test content is coded, WBTs differ from CBTs in how the tests are delivered (Suvorov & Hegelheimer, 2014). In the case of WBTs, the mode of delivery is the internet. Although WBTs can be constructed by the test developer as static web pages and uploaded to a hosting server with the aid of an FTP client (Marczak, Krajka, & Malec, 2016), it is now common practice to use an authoring tool for this purpose, either embedded in an online LMS (learning management system) or installed as an add-on extension (Douglas & Hegelheimer, 2007).

Merits and demerits of CBT

A variety of advantages and disadvantages of CBT have been widely discussed in recent years. For example, Brown (2016) provides a review of the drawbacks and benefits of computerized language testing, grouped into physical and performance drawbacks on the one hand, and test designer, test administrator, and examinee benefits on the other. Some of the points addressed by Brown (2016) relate specifically to CAT, some predominantly to WBT, while others to CBT in general. The following

discussion is particularly pertinent to linear WBTs because tests of this type are currently most commonly used in schools and universities delivering online instruction.

Potential problems with CBT

Without wishing to state the obvious, many of the merits and demerits of CBT do not apply universally to all testing situations, but rather have to be evaluated in each given context. A case in point may be the first two physical drawbacks listed in Brown (2016). These drawbacks relate to the availability and quality of equipment. Although access to high-quality hardware and software is undoubtedly essential for CBT, this physical drawback is increasingly waning in importance as various electronic devices are becoming more easily available. Moreover, thanks to the internet, no specially designed software or delivery platforms are needed for computerized testing. In fact, WBTs may be said to be platform independent (Fulcher, 2000), requiring only a standard web browser. On the other hand, equipment-related drawbacks cannot be entirely disregarded. For example, we still cannot take it for granted that no technical problems will occur, such as server failure or browser incompatibility (Roever, 2001). It also bears pointing out that certain types of equipment, for example small mobile devices, may not be the best choice for all testing situations.

The significance of another physical drawback, namely limitations in item types, should also be considered in the light of the particular circumstances. First, testing systems vary widely in the types of items that they allow to construct (and score automatically). Second, testers who need, for example, multiple-choice items only will not be bothered by the fact that a specific testing system does not allow them to create constructed-response items, such as gap-filling. Therefore, limitations in item types will represent a major drawback only as long as the requirements set out in the test and item specifications cannot be satisfied by the testing system being used. Interestingly, CBT may actually allow testers to develop new and innovative item types (as pointed out by Brown, 2016).

The remaining physical drawbacks apply particularly to CATs. As mentioned earlier, the need for extremely large item banks (as a precaution against overexposure of test items) is a serious limitation, which may preclude the possibility of implementing adaptive tests in certain contexts. CATs may additionally require programming expertise and specialist knowledge of IRT. The same limitations may also affect linear computerized tests, but to a much lesser extent.

While most of the physical drawbacks of CBT may well be deemed insignificant in many situations, or they may be relatively easy to overcome, performance drawbacks are more likely to have serious consequences. Physical drawbacks can make it difficult to construct and administer tests in accordance

with the design specifications, whereas performance drawbacks can actually threaten the appropriateness of score interpretations and uses.

The first two performance drawbacks examined by Brown (2016) pertain to the differences between CBT and PBT scores as well as to computer familiarity and anxiety. It has long been recognized that the comparability of CBT and PBT scores may be affected by computer familiarity (see, e.g., Dooey, 2008). This problem can be resolved by allowing examinees to choose their preferred mode of testing, one which is consistent with their regular routine (as pointed out by Maycock & Green, 2005). Given that we cannot assume that all learners have easy access to digital technologies, this may be the best way to guarantee fairness (Papp & Walczak, 2016). On the other hand, this solution may simply not be a viable option in many situations. Moreover, if the test is not administered in the same conditions for all examinees, questions arise about the relevance of test standardization (Jones & Maycock, 2007).

An alternative solution to the potential lack of CBT and PBT score equivalence is to give the test takers a tutorial before they take a computerized test. For example, after administering a specially designed CBT tutorial, Taylor, Kirsch, Eignor, and Jamieson (1999) found that inadequate previous computer familiarity did not actually affect CBT scores. In all likelihood, tutorials of this kind will inevitably become redundant for younger learners who are increasingly familiar with computer technology (Chapelle & Voss, 2017).

An interesting observation regarding fears related to computer anxiety can be found in Maycock and Green (2005). Specifically, the researchers found that expectations of lower test performance resulting from lack of computer familiarity actually proved to be false. In other words, the examinees believed that those who were more experienced in using computers would do better on a CBT, but in reality no such effect was detected.

The problem of score equivalence has been investigated by, for example, Wang, Jiao, Young, Brooks, and Olson (2008), who performed a meta-analysis of 36 studies devoted to CBT and PBT administration effects. Their study found no statistically significant differences between reading achievement scores obtained from the two modes of administration. On the other hand, a study by Clariana and Wallace (2002) showed computer-based test delivery to have a positive impact on scores relative to PBT, whereas the reverse was found to be the case in Pomplun and Custer (2005). A research review by Blazer (2010) suggests that score comparability may be conditional on examinee demographic characteristics, computer skills, test and item characteristics, as well as content areas tested. In another study by Keng, McClarty, and Davis (2008), mode effects were more significant when examinees were required to scroll lengthy reading passages on computer screens or performed graphing and geometric manipulations on the computer. In short, the conclusion that may be drawn from a review of the literature is that differences between CBT and PBT performance continue to be a potential drawback of CBT, and test developers must be aware of it.

The next performance drawback pertains to security and cheating. This is indeed a significant disadvantage of most CBTs, even when these are administered in supervised conditions (see Bartram, 2006, for more on levels of supervision in CBT). Supervision during a test delivered online may be conducted through the use of webcams. However, while taking a WBT, students may be able to access the answer key by viewing the source code of the web page (Randolph, Swanson, Owen, & Griffin, 2002). One solution to this problem is to encode the keyed responses as strings of unicode characters (as in *Hot Potatoes*). Nevertheless, an online unicode converter (e.g. www.branah.com/unicode-converter) can be used to easily decode the answers (Marczak et al., 2016). A better solution is to entirely prevent the key from being delivered to the browser during test administration. This can be done with the aid of a MySQL database and server-side scripting (see also Malec, 2018).

The last two performance drawbacks involve reliability and validity. Brown (2016) includes reliability in the list of drawbacks due to the fact that the reliability of CBT scores is often unknown (in truth, this is also the case with many teacher-made PBTs). Apart from that, CBT has the potential to actually contribute positively to reliability, thanks to the consistency of automated scoring (see below). Referring to validity, CBT can result in construct-irrelevant variance, defined by Haladyna and Rodriguez (2013) as systematic error in test scores, i.e. variance which is unrelated to the construct being measured. This happens when, for example, computer literacy is unintentionally measured by a CBT (Davidson & Coombe, 2012). Additionally, validity may be threatened when the testing system imposes methods of assessment which are completely distinct from the learning tasks. On the other hand, CBTs may be able to contribute to task authenticity in language testing (Douglas, 2010) and in this way increase the validity of score interpretations. For example, test tasks may be constructed to include sound and video and thus closely resemble real-life situations, such as telephone conversations, university lectures, or job interviews.

Advantages of CBT

As regards the advantages of CBT, these have been grouped by Brown (2016) into three categories, depending on who they are mostly relevant to, i.e. test designers, test administrators, and examinees. The rest of this section will concentrate on selected advantages of CBT, i.e. those which are particularly applicable to classroom-based testing.

One of the oft-repeated test designer benefits is that CBT scoring is more accurate and reliable. This is indeed true because the sources of unreliability in PBT include various kinds of errors made by humans while scoring the test, even when it is a multiple-choice test, and while transferring the scores to computer records (Fulcher, 2010). In the case of CBT, such errors are practically eliminated because computers are fully consistent in how they

process test data. Thanks to automated scoring, CBT guarantees stability of scoring across different test forms and administrations. Moreover, although human judgment may sometimes be required for scoring constructed-response items, even those where the expected response is relatively short (as in gap-filling), CBT systems are generally capable of ensuring that identical responses from different examinees are never given different scores. In PBT, by contrast, human rating may negatively affect both inter-rater and intra-rater reliability. As reported in Malec (2018), raters are liable to disagree in their evaluation of even short answers consisting of only several words. It is worth adding that automated scoring of extended responses, though still not widely available, is already technically feasible (for a study devoted to automated assessment of essays, see, e.g., McNamara, Crossley, Roscoe, Allen, & Dai, 2015).

CBT advantages also include design and administration flexibility. As mentioned above, the use of computers allows testers to develop innovative task types (such as those involving the use of drag-and-drop), which may additionally incorporate multimedia, glosses (displayed on mouse hover) with explanations of difficult words, as well as various forms of support for examinees with disabilities (Stone, Laitusis, & Cook, 2016). Design flexibility also means that, depending on the system being used, test forms can be compiled by running a test generator programmed to import items from an item bank. Moreover, the items themselves may be created automatically (Gierl & Haladyna, 2013) or by parsing a piece of text, so that it is not necessary to write individual items from scratch (Malec, 2016). Referring to administration flexibility, CBT makes it possible to administer tests either to an entire group of examinees or to selected individuals only, with or without a time limit. Moreover, the same test form can be presented to the test takers either on a single (scrollable) web page or one item per page with a navigation menu (without the necessity of making any changes to the test form itself). Finally, students can be easily allowed to retry a CBT, even an unlimited number of times. By contrast, traditional PBTs would have to be printed out and distributed again.

Another advantage of CBT is related to feedback (an examinee benefit). Among other things, the effectiveness of feedback depends on its timing (Alderson, 2000). Thanks to automated scoring, feedback on examinees' responses can be provided immediately after completing a test or individual items, rather than being substantially delayed, as is the case with PBT. In addition to that, computers can easily deliver answer-specific feedback, which means that it will be presented only to the examinees who submitted a given response, thus enhancing the relevance of feedback. Answer-specific feedback is illustrated in Figure 1, which is part of a WBT administered at www.webclass.co. This figure also shows examples of automated marking with incorrect words being crossed out and the missing ones provided in the form of speech bubbles.

Gap-filling
Fill in each gap with one word.

1. The convict tenaciously refused to plead guilty own up to the crime he has been charged with. 0

 That's two words. Moreover, we say plead guilty to something, not up to something.

2. Local people terrorised by joyriders are worried now that some may take the law into their own hands. 1

3. Carrie's teacher told her that she isn't good enough to become a doctor, and it has dented her ambition confidence. +1

 Perhaps, but ambition is rather unusual in this context.

ALSO: self-esteem

4. The doctor set my mind at peace ease by explaining exactly what effect the drug would have on me. +0.5

 Set my mind at peace is not a very common collocation.

ALSO: rest

Figure 1. Feedback on responses to computer-based gap-filling items

Finally, it is probably true that computers are most beneficial and convenient for those interested in statistical evaluation of tests and items (as pointed out by Kubiszyn & Borich, 2013). Indeed, for test developers who need to carry out quantitative analyses of test scores on a regular basis, CBT may actually prove to be the only viable option. This is because PBT necessitates entering large amounts of numeric data into, for example, spreadsheets before this data can be used for analysis. CBT systems, by contrast, are often capable of conducting test and item analysis automatically (see also Malec, 2018, for more on this).

Selected features of CBT Tools

While many of the merits and demerits of CBT discussed above generally apply to all computerized tests (such as the anytime/anyplace availability of WBTs), the tools and platforms that are used for test development and delivery also have their own specific strengths and limitations. For example, as noted by Green (2014), the implementation of innovative task types is heavily dependent on the functionality of the software being used. In fact, if none of the available test authoring tools offers a feature that is critically important to the test developer, the only option may be to develop one's own in-house testing system (Shin, 2012).

With respect to test construction, the above-mentioned availability of specific task formats, as defined in the design specifications, may be a decisive factor in determining the appropriateness of a given system. In addition to that, however, there are certain practical issues worth considering. One of them is the amount of time required to create test items and compile them into a test form. This time is often much longer than in the case of PBTs, which may be simply edited in a

word processor and then printed out. Indeed, some testing systems may require dozens of mouse clicks to create a single test question. Generally speaking, it is useful to have some kind of tool that converts user-formatted text into test items. Another issue related to practicality is the possibility of reusing items from previous tests. If items are stored in an item pool, it may even be possible to fully automate the process of compiling test forms by using a test generator.

As far as test administration is concerned, among the issues worthy of note is the option of delivering tests in full-screen mode. When this mode is activated at the start of the test, switching to a different program or changing the browser tab may be additionally disallowed. In case examinees actually do so, their test may be automatically suspended until the test administrator allows them to continue. Another feature that is potentially very useful from the point of view of test administration is the possibility of changing the time limit during the test. In some situations, such as the occurrence of technical problems, it may be necessary to lengthen the time allotted, and if the system disallows this, examinees will be disadvantaged.

With regard to test scoring, one of the biggest benefits of CBT compared to PBT is that this scoring may be entirely automated. Nevertheless, machine scoring sometimes introduces problems of its own. For example, some scoring algorithms are not capable of accepting responses containing additional spaces or punctuation marks, while errors of this kind may well be regarded as irrelevant by a human scorer. In addition to that, it is very important that the system should allow the tester to modify the scoring key after the test has been submitted by the examinees. Otherwise, the system would be simply assuming that the test is a final product. In reality, this is often not the case. For example, humans can make inadvertent errors when defining the correct options of multiple-choice items. Moreover, it may be impossible to predict all of the acceptable responses to certain gap-filling items. It is thus essential that the testing system should offer some kind of human verification of the automated scoring. In addition to the above, the scoring procedure may require awarding partial credit to answers which are not completely wrong. Again, the availability of this feature depends on the testing system being used.

Differences between testing systems also apply to score reporting and feedback. For example, teachers who have administered several tests to a group of students in a period of study may or may not be able to access tabulated summary reports containing scores obtained by all of the students in the group, with average final results calculated for each student. As for feedback, it may be of several different types, such as immediate or delayed, simple (i.e. information about the score and correct response) or elaborated (with some additional comments), general (irrespective of the response given) or answer-specific. The marking of the examinees' responses can also be styled in various ways. If these are different from the keyed responses, they may additionally be auto-corrected (as in Figure 1 above). Testing systems may vary substantially in how they implement such features.

Finally, probably some of the most obvious differences between testing systems lie in the way they handle quantitative analysis of test scores. As a matter of fact, the possibilities for test and item analysis offered by educational platforms are often either very rudimentary or simply non-existent. Quite naturally, many teachers may believe that they do not need this functionality. However, those who do may be limited to very basic item and test statistics, not necessarily the right ones. A case in point is the test reliability estimate, which is often restricted to Cronbach's alpha, or the item discrimination index, which is often expressed as the Pearson correlation coefficient. However, in principle, these statistics should only be used with norm-referenced tests, while most of the teacher-administered tests are actually criterion-referenced. The need to conduct the appropriate statistical analyses of test scores was one of the main reasons behind the decision to develop the testing system that is part of WebClass (as discussed in Malec, 2018).

CONCLUSION

Leaving aside the current pandemic situation, the increasing importance of CBT in education is a natural consequence of the popularity and significance of computers in learning. Given that one of the principles of assessment is that test tasks should mirror learning tasks, the switch from PBT to CBT is a welcome change. As pointed out by Winke and Isbell (2017), the present dominance of CBT is a sign of normalization, which has been possible by virtue of the wide availability of low-cost testing software and the fact that test takers are increasingly more familiar with computer technologies. Thanks to this, CBT is no longer perceived as a peculiarity.

Referring to the question posed in the title of the paper, it does not seem to be possible to give a definitive answer because, as has been shown, the choice between PBT and CBT is dependent on a wide array of factors. This paper has reviewed a number of strengths and limitations of CBT, tentatively implying that the strengths compensate for the limitations. Indeed, CBT has a lot to recommend it as a better option than PBT. On the other hand, certain disadvantages of CBT might be somewhat difficult to overcome (such as cheating in online testing). It is therefore up to the individual to decide whether the merits of CBT actually outweigh the demerits.

REFERENCES

- Alderson, J. C. (2000). Technology in testing: The present and the future. *System*, 28, 593–603. DOI: [https://doi.org/10.1016/S0346-251X\(00\)00040-3](https://doi.org/10.1016/S0346-251X(00)00040-3)
- Bartram, D. (2006). Testing on the Internet: Issues, challenges and opportunities in the field of occupational assessment. In D. Bartram & R. K. Hambleton (Eds.), *Computer-Based Testing and the Internet: Issues and Advances* (pp. 13–37). Chichester, UK: Wiley. DOI: 10.1002/9780470712993.CH1

- Blazer, C. (2010). Computer-based assessments (Information Capsule Vol. 0918). Miami, FL: Miami-Dade County Public Schools.
- Brown, J. D. (2016). Language testing and technology. In F. Farr & L. Murray (Eds.), *The Routledge Handbook of Language Learning and Technology* (pp. 141–159). London: Routledge. DOI: 10.4324/9781315657899
- Chalhoub-Deville, M. (1999). Preface. In M. Chalhoub-Deville (Ed.), *Issues in Computer-Adaptive Testing of Reading Proficiency* (pp. ix–xvi). Cambridge: University of Cambridge Local Examinations Syndicate and Cambridge University Press.
- Chapelle, C. A., & Douglas, D. (2006). *Assessing Language through Computer Technology*. Cambridge: Cambridge University Press. DOI: <https://doi.org/10.1177/02655322090260010602>
- Chapelle, C. A., & Voss, E. (2017). Utilizing technology in language assessment. In S. L. Thorne & S. May (Eds.), *Encyclopedia of Language and Education, Volume 7: Language Testing and Assessment* (3rd ed., pp. 149–161). Cham, CH: Springer International Publishing.
- Clariana, R., & Wallace, P. (2002). Paper-based versus computer-based assessment: Key factors associated with the test mode effect. *British Journal of Educational Technology*, 33(5), 593–602. DOI: <https://doi.org/10.1111/1467-8535.00294>
- Davidson, P., & Coombe, C. (2012). Computerized language assessment. In C. Coombe, P. Davidson, B. O'Sullivan, & S. Stoyloff (Eds.), *The Cambridge Guide to Second Language Assessment* (pp. 267–273). Cambridge: Cambridge University Press.
- Dooley, P. (2008). Language testing and technology: Problems of transition to a new era. *ReCALL*, 20(1), 21–34. DOI: <https://doi.org/10.1017/S0958344008000311>
- Douglas, D. (2010). *Understanding Language Testing*. London: Hodder Education. DOI: <https://doi.org/10.1177/0265532210373604>
- Douglas, D., & Hegelheimer, V. (2007). Assessing language using computer technology. *Annual Review of Applied Linguistics*, 27, 115–132. DOI: 10.1017/S0267190508070062
- Fulcher, G. (2000). Computers in language testing. In P. Brett & G. Motteram (Eds.), *A Special Interest in Computers* (pp. 93–107). Manchester: IATEFL Publications.
- Fulcher, G. (2010). *Practical Language Testing*. London: Hodder Education. DOI: <https://doi.org/10.1177/0265532210394641>
- Gierl, M. J., & Haladyna, T. M. (Eds.). (2013). *Automatic Item Generation: Theory and Practice*. New York and London: Routledge. DOI: <https://doi.org/10.4324/9780203803912>
- Green, A. (2014). *Exploring Language Assessment and Testing: Language in Action*. New York, NY: Routledge. DOI: 0.1111/modl.12233
- Haladyna, T. M., & Rodriguez, M. C. (2013). *Developing and Validating Test Items*. New York, NY: Routledge. DOI: <https://doi.org/10.4324/9780203850381>

- Jones, N., & Maycock, L. (2007). The comparability of computer-based and paper-based tests: Goals, approaches, and a review of research. *Cambridge ESOL: Research Notes*, 27, 11–14.
- Keng, L., McClarty, K. L., & Davis, L. L. (2008). Item-level comparative analysis of online and paper administrations of the Texas Assessment of Knowledge and Skills. *Applied Measurement in Education*, 21(3), 207–226. DOI:10.1080/08957340802161774
- Kubiszyn, T., & Borich, G. D. (2013). *Educational Testing and Measurement: Classroom Application and Practice* (10th ed.). Hoboken, NJ: John Wiley & Sons.
- Malec, W. (2016). Automating the construction of selected-response items with a text-to-items converter. *CBU International Conference Proceedings*, 4, 864–872. DOI:10.12955/cbup.v4.866
- Malec, W. (2018). *Developing Web-Based Language Tests*. Lublin, Publisher: KUL. DOI: <https://doi.org/10.31261/tapsla.7701>
- Marczak, M., Krajka, J., & Malec, W. (2016). Web-based assessment and language teachers — from Moodle to WebClass. *International Journal of Continuing Engineering Education and Life-Long Learning*, 26(1), 44–59. DOI: 10.1504/IJCEELL.2016.075048
- Maycock, L., & Green, T. (2005). The effects on performance of computer familiarity and attitudes towards CB IELTS. *Cambridge ESOL: Research Notes*, 20, 3–8. DOI: <https://doi.org/10.1017/S0261444808005399>
- McNamara, D. S., Crossley, S. A., Roscoe, R. D., Allen, L. K., & Dai, J. (2015). A hierarchical classification approach to automated essay scoring. *Assessing Writing*, 23, 35–59. DOI:10.1016/j.asw.2014.09.002
- Mills, C. N., & Breithaupt, K. J. (2016). Current issues in computer-based testing. In C. S. Wells & M. Faulkner-Bond (Eds.), *Educational Measurement: From Foundations to Future* (pp. 208–220). New York: The Guilford Press.
- Ockey, G. J. (2009). Developments and challenges in the use of computer-based testing for assessing second language ability. *Modern Language Journal*, 93, 836–847. DOI:10.1111/j.1540-4781.2009.00976.x
- Papp, S., & Walczak, A. (2016). The development and validation of a computer-based test of English for young learners: Cambridge English young learners. In M. Nikolov (Ed.), *Assessing Young Learners of English: Global and Local Perspectives* (3rd ed., pp. 139–190). Cham, CH: Springer International Publishing.
- Pomplun, M., & Custer, M. (2005). The score comparability of computerized and paper-and-pencil formats for K-3 reading tests. *Journal of Educational Computing Research*, 32(2), 153–166. DOI:10.2190/D2HU-PVAW-BR9Y-J1CL
- Randolph, G. B., Swanson, D. A., Owen, D. O., & Griffin, J. A. (2002). Online student practice quizzes and a database application to generate them. In M. Khosrow-Pour (Ed.), *Web-Based Instructional Learning* (pp. 142–149). Hershey, PA: IIRM Press.
- Roevers, C. (2001). Web-based language testing. *Language Learning & Technology*, 5(2), 84–94. DOI: 10.125/25129

- Shin, S.-Y. (2012). Web-based language testing. In C. Coombe, P. Davidson, B. O'Sullivan, & S. Stoyloff (Eds.), *The Cambridge Guide to Second Language Assessment* (pp. 274–279). Cambridge: Cambridge University Press.
- Stone, E., Laitusis, C. C., & Cook, L. L. (2016). Increasing the accessibility of assessments through technology. In F. Drasgow (Ed.), *Technology and Testing: Improving Educational and Psychological Measurement* (pp. 217–234). New York and London: Routledge.
- Suvorov, R., & Hegelheimer, V. (2014). Computer-assisted language testing. In A. J. Kunnan (Ed.), *The Companion to Language Assessment* (Vol. 2, Chap. 36, pp. 594–613). London: John Wiley & Sons. DOI: <https://doi.org/10.1002/9781118411360.wbcla083>
- Taylor, C., Kirsch, I., Eignor, D., & Jamieson, J. (1999). Examining the relationship between computer familiarity and performance on computer-based language tasks. *Language Learning*, 49(2), 219–274. DOI: <https://doi.org/10.1111/0023-8333.00088>
- Wang, S., Jiao, H., Young, M. J., Brooks, T., & Olson, J. (2008). Comparability of computer-based and paper-and-pencil testing in K–12 reading assessments: A meta-analysis of testing mode effects. *Educational and Psychological Measurement*, 68(1), 5–24. DOI: 10.1177/0013164407305592
- Way, W. D., Davis, L. L., Keng, L., & Strain-Seymour, E. (2016). From standardization to personalization: The comparability of scores based on different testing conditions, modes, and devices. In F. Drasgow (Ed.), *Technology and Testing: Improving Educational and Psychological Measurement* (pp. 260–284). New York and London: Routledge. DOI: 10.31094/2020/1
- Winke, P. M., & Fei, F. (2008). Computer-assisted language assessment. In N. Van Deusen-Scholl & N. H. Hornberger (Eds.), *Encyclopedia of Language and Education, Volume 4: Second and Foreign Language Education* (2nd ed., pp. 353–364). New York, NY: Springer.
- Winke, P. M., & Isbell, D. R. (2017). Computer-assisted language assessment. In S. L. Thorne & S. May (Eds.), *Encyclopedia of Language and Education, Volume 9: Language, Education and Technology* (3rd ed., pp. 313–325). Cham, CH: Springer International Publishing.

КОМП'ЮТЕРНІ ТА ОНЛАЙН ТЕХНОЛОГІЇ ТЕСТУВАННЯ В ОСВІТІ: ОГЛЯД ОСНОВНИХ АСПЕКТІВ

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Для багатьох студентів та викладачів, які працюють в Інтернет-середовищі під час пандемічної кризи, використання комп'ютерів для навчального тестування часто є невідворотним безвихідним становищем.

Це пов'язано з тим, що матеріали он-лайн є не просто корисним доповненням до навчальних та викладацьких ресурсів, а, скоріше, єдиним доступним рішенням. Попри те, що комп'ютери ускладнюють як процес розробки тестів так і їх проходження — вони мають ряд суттєвих переваг. Варто також зазначити, що освітні тестування як ефективний спосіб перевірки прогресу та досягнень у навчанні відбувається у електронному варіанті, що має багато спільного з паперовим варіантом. У статті представлені переваги та недоліки комп'ютеризованого тестування з метою з'ясування чи можна рекомендувати такий режим тестування як альтернативу паперовому варіанту. Стаття узагальнює ключові питання, що стосуються використання електронних пристроїв з метою побудови, адміністрування та аналізу тестування та оцінок на основі огляду літератури досліджень та практики в галузі комп'ютеризованих та онлайн-навчальних тестувань. Зокрема, у дослідженні зосереджено увагу на моделях адміністрування тестів, висвітлено переваги та недоліки комп'ютеризованого тестування, виокремлено порівняння результатів тестування у електронному та паперовому варіантах, а також виділено особливості веб-систем тестування, таких як перетворювачі текстових повідомлень, генератори тестів, повноекранний режим, автоматичне оцінювання (та їх перевірка), звітування про бали, зворотний зв'язок, а також кількісний аналіз тестових балів. У статті також запропоновані ідеї щодо розробки власної програми тестування.

Ключові слова: комп'ютеризоване тестування, веб-технологія, переваги та недоліки електронного навчального тестування

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