

The Problem of the Influence of Social Intelligence of Teachers on the Organization of Problem-Based Learning at Secondary Schools

Проблема впливу соціального інтелекту вчителя на організацію проблемного навчання в сучасних закладах середньої освіти

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ABSTRACT

The purpose of our article is to study the level of the development of teachers' social intelligence of teenagers and senior pupils who teach the natural sciences and humanities; to receive and to analyze the results according to Subtest 3 "Verbal Expressions" (Гулфорд & О'Саллівен, 2021), which determine the ability to understand the significance of such verbal reactions of people depending on the context of the situation; to study the problem of the influence of Social Intelligence of teachers on the organization of problem-based learning at secondary schools.

Methods of the research. The following theoretical methods of the research were used to solve the tasks formulated in the article: the categorical method, structural and functional methods, the methods of the analysis, systematization, modeling and generalization. In our research we used empirical methods, such as statement study and molding experiment. With the aim to diagnose the level of the development of social intelligence of teachers we used the test of J. Gilford and M. O'Sullivan "Research of Social Intelligence", adapted by O.S. Mykhailova (Гулфорд & О'Саллівен, 2021).

The results of the research. We diagnose the level of the development of the ability to predict the development of a social situation depending on external circumstances. There is a slight tendency towards higher indicators of social intelligence of women, but there aren't significant differences in the indicators of social intelligence of men and women at high, medium and low levels, which have been established. We can note that the subjects who performed the tasks of this test equally well, had indicators of a high level of development of social intelligence. We proved, that because respondents with a high level of the development of social intelligence according to this subtest are able to extract the maximum amount of information about people's behavior, they are able to understand the language of non-verbal communication, express quick and accurate judgments about other people, successfully predict their reactions in given

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conditions, show farsightedness in the relationships with others, which contributes to their successful social adaptation.

Conclusions. *So, teachers with a high level of social intelligence are usually successful communicators. They are characterized by contact, openness, tact, benevolence and cordiality. A high level of social intelligence is associated with a great interest in solving social problems, by the need to influence others and it is often combined with a high level of organizational pupils' skills development. All the listed personal qualities characterize teachers of humanitarian professions.*

Key words: *social intelligence, the organization of problem-based learning, successful communicators, verbal reactions, the context of the situation.*

Introduction

Social intelligence is often identified with wisdom as a form of intellectual talent. In the articles (Гончарук & Онуфрієва, 2018; Heino, Ellison & Gibbs, 2010; Rezaei & Mousanezhad Jeddi, 2020) scientists believe that the results of human acquisition of wisdom are the ways of the formation of mental models, which depend on the specifics of cognition and metacognition of the subject, his/her semiotic system, which preference is given to the specifics of the language and speech, as well as decentralized components of the person's intelligence.

The problem of the formation of social intelligence is also highlighted in the researches on the problems of developing the person's creative abilities. In particular, in the experiments (Lawson & Leck, 2006; Wright & Webb, 2011) on the development of creativity of schoolchildren, it was proved that a statistically significant increase in the results for all indicators of social intelligence occurs under conditions of positive dynamics of individual creativity. The authors (Nowak, Watt & Walther, 2009) note that a creative person, to a greater extent than an uncreative personality, is capable of understanding and accepting others and, therefore, makes the effective communication and adaptability in the social environment.

In the researches of scientists (Ramirez & Wang, 2008) it is emphasized, that the role of social intelligence in successful socially significant activity is high. It is noted that the leading

characteristics of people with a clearly expressed motive for achieving social success are activity and self-confidence, high self-esteem with actualization of their charm, highly developed social intelligence (Arbuthnott & Frank, 2000; Walther, 2011).

In the researches of scientists (Rains & Scott, 2007) it was also proved that higher indicators of social intelligence were often found according to people who had been more successful in the field of professional psychological counseling; at the same time, less successful psychologists-consultants were diagnosed with low values of social intelligence. Scientists (Pimperton, 2010) also studied the relationships between social intelligence and divergent thinking of teenagers in various conditions of multi-faceted activities. Thus, the researchers (Mykhalchuk & Ivashkevych, 2008) proved that social intelligence and divergent thinking functionally created a single cognitive system with the aim of understanding different meanings in general and the meanings of social situations in particular.

Also scientists (Ishkhanyan, Boye & Mogensen, 2019; Nunan, 2003; Stephens & Rains, 2011) studied the social intelligence of students with different psychotypes of their personality. The scientists (Mykhalchuk & Kryshevych, 2019) consider multifaceted activity as a condition for the synthesis of cultural and individual semantics, which ensure the functional relationships of social intelligence and divergent thinking of the subjects of the activity. The atmosphere in the family, the attitude of parents to the school, and the attitude of teachers is of great importance in showing the interest of pupils in learning (Amichai-Hamburger, 2005). Unfortunately, there are cases where parents in the presence of children express unethical agreement of teachers. This fact in a great degree damages the upbringing of pupils to a positive attitude to learning (Benson, 2001; Kim & Dindia, 2011).

Other scientists (Key-DeLyria, Bodner & Altmann, 2019), speaking about different ways to raise the interest of children to study, emphasize, that this can only be achieved under the condition when parents in the presence of children with praise will

respond to teaching and the scholars, from the other side, are praised by the teacher. Thus, the formation of a great interest of schoolchildren in learning is a quite complex phenomenon, which requires a systematic, painstaking, purposeful activity of the school and the family. It is only by their joint effort that it is possible to ignite the thirst for knowledge in the hearts of children, to ensure that this fire does not fade away, but on the contrary, everything shines brighter, encouraging pupils to continuous searches, to creativity.

So, the problem of our article is quite relevant. So, **the purpose** of our article is:

1. To study the level of the development of social intelligence of teachers of teenagers and senior pupils who teach the natural sciences and humanities.

2. To receive and to analyze the results according to Subtest 3 "Verbal Expressions" (Гилфорд & О'Салливан, 2021), which determine the ability to understand the significance of such verbal reactions of people depending on the context of the situation.

3. To analyze the results of the subtest "Stories with additions", which diagnose the level of the development of the ability to predict the development of a social situation depending on external circumstances.

4. To study the problem of the influence of Social Intelligence of teachers on the organization of problem-based learning at secondary schools.

5. To show social intelligence as a structure, which includes declarative and operational (procedural) knowledge.

6. To analyze the role of a cognitive aspect of social intelligence.

7. To determine the functional aspect of the microstructure of the cognitive aspect of social intelligence.

Methods of the research

The following theoretical methods of the research were used to solve the tasks formulated in the article: the categorical me-

thod, structural and functional methods, the methods of the analysis, systematization, modeling, generalization. In our research we also used empirical methods, such as statement study and molding experiment. With the aim to diagnose the level of the development of social intelligence of teachers we used the test of J. Gilford and M.O'Sullivan "Research of Social Intelligence", adapted by O.S. Mykhailova (Гилфорд & О'Салливен, 2021).

At this stage of the empirical research 395 teachers of secondary schools of different regions of Ukraine and 8 directors of these schools participated. At the beginning of the research we formulated the hypotheses that the level of the development of social intelligence of the teacher of secondary school will depend on the professional category (which he/she has; the category will show the degree of professionalisms of the teacher), the type of discipline of this teacher (to which cycle of disciplines belongs this or that subject), and (it is the main) from the psychological type of the personality and from the gender characteristics of the person. For the convenience of describing the results of the research (hence the description of those results that have or do not have a statistically significant difference among representatives of different groups), all respondents were distributed by large and small experimental groups. So, when the results of respondents within a single large experimental group had a statistically significant difference, they were described separately, taking into account their formation within small groups; in the case when there was no such difference, the results of all respondents were described in the paradigm of one large specially formed group. In such a way, all 403 respondents were divided into the following groups:

1) S group – 103 teachers of the third and the second categories (professional experience is from 5 to 10 years, the age is up to 30 years). This group includes: 56 teachers of secondary schools 5 and 15 of Kamianets-Podilskyi town, 23 teachers of Shpanivska and Alexandria secondary schools of Rivne region, 24 teachers of secondary schools 45 and 96 of Odessa city. In

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turn, all teachers of this group were divided into subgroups, depending on the discipline they teach:

- S1 group includes 34 primary school teachers (of which 4 teachers are men and 30 ones are women);
- S2 group includes 35 teachers of teenagers who teach the natural sciences and humanities (of which 17 teachers are men and 18 ones are women);
- S3 group includes 34 teachers of senior pupils of the physical and mathematical cycle (of which 17 teachers are men and 17 ones are women);

2) N group includes 108 teachers of the I-st category (professional experience is from 10 to 15 years, the age is from 30 to 35 years), among them there are 47 teachers of secondary schools 5 and 15 of Kamianets-Podilskyi town, 30 teachers of Shpanivska and Alexandria secondary schools of Rivne region, 31 teachers of secondary schools 45 and 96 of Odessa city. Teachers of N group were divided into such micro-groups:

- N1 group includes 39 primary school teachers (all of them are women);
- N2 group includes 37 teachers of teenagers who teach the natural sciences and humanities (among them there are 17 men and 20 women);
- N3 group includes 32 teachers of senior pupils of the physical and mathematical cycle (16 of them are men and 16 are women);

3) M group includes 110 teachers of the highest category (professional experience is from 15 years and more, age is from 35 years old and older); among them there are 55 teachers of secondary schools 5 and 15 of Kamianets-Podilskyi town, 22 teachers of Shpanivska and Alexandria secondary schools of Rivne region, 33 teachers of secondary schools 45 and 96 of Odessa city. Teachers of M group were divided into such micro-groups:

- M1 group includes 26 teachers of primary school (all of them are women);

- M2 group includes 42 teachers of teenagers who teach students of physical-mathematical cycle (there are 22 men and 20 women);

4) P group includes 74 teachers-methodologists and eight directors of secondary schools (their professional experience is 35-40 years, age is 40-47 years old), among them there are 32 teachers of secondary schools 5 and 15 of Kamianets-Podilskyi town, 13 teachers of Shpanivska and Alexandria secondary schools of Rivne region, 29 teachers of secondary schools 45 and 96 of Odessa city. This group also includes 8 directors of secondary schools (among them there are directors of schools, noted above, and also the director of Zdolbuniv schools 5 and 7 of Rivne region). Teachers of P group were divided into such micro-groups:

- P1 group includes 13 primary school teachers (all of them are women);
- P2 group includes 30 teachers of teenagers who teach the natural sciences and humanities (among them there are 12 men and 18 women);
- P3 group includes 31 teachers of teenagers and senior pupils of the physical and mathematical cycle (among them there are 15 men and 16 women);
- P4 group includes 8 directors of secondary schools (among them there are 4 men and also 4 women).

The distribution of teachers into groups and micro-groups was carried out using the method of randomization (technology of pair design), which allowed us to equalize the number of men and women in each micro-group (except for micro-groups, which included primary school teachers, because there were no men among this category of teachers). With the aim to diagnose the level of the development of social intelligence of teachers we used the test of J. Gilford and M.O'Sullivan "Research of Social Intelligence", adapted by O.S. Mykhailova (2021).

Results and their discussion

This stage of the experiment has the aim for studying the level of the development of social intelligence of teachers of teenagers and senior pupils who teach the natural sciences and humanities (S2, N2, M2, P2 groups). We will describe the features in the indicators of social intelligence of teachers of the natural sciences and humanities, which were identified at the stage of empirical research.

Thus, according to Subtest 3 "Verbal Expressions" (Гилфорд & О'Салливан, 2021), which determines the ability to understand the significance of such verbal reactions of people depending on the context of the situation, the rates of women in all groups were slightly higher than the ones of men. Thus, 34.25% of men and 40.96% of women were diagnosed with the high level of "verbal expressions" in S2 group; in N2 group with high results for this subtest were 30.95% men and 41.16% women, in M2 group there were 33.12% of men and 42.68% of women (Table 1).

In P2 group there were 33.44% of men and 45.04% of women. The difference between these results is rather significant at the level of reliability $p < 0.05$. Quite a large number of respondents in these groups have average level of development of social intelligence, based on the responses to "Verbal Expressions" subtest: 38.64% of men in S2 group and 33.88% of women; 39.65% of men in group N2 and 34.90% of women; 41.59% of men in M2 group and 37.28% of women; 45.70% of men in group P2 and 35.95% of women. The difference in the results of the middle level of the development of social intelligence is insignificant among the teachers of the natural sciences and humanities, except for P2 group, where there is a great difference in the mean of verbal expression rates between men and women at the level of reliability $p < 0.01$. A sufficiently large number of respondents in all groups (up to 30%) have a low level of outcomes for this subtest, which, first of all, will reduce the overall composite assessment of social intelligence of teachers of teenagers and se-

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nior pupils who teach the natural sciences and humanities, and, secondly, we prove the evidence about the lower level of social intelligence of these teachers compared with primary school teachers, who, as a rule, have a higher than average and the highest level of the development of social intelligence (Table 2).

Table 1

The levels of the development of social intelligence of teachers of groups M1, M2, M3 (in %)

The level of social intelligence of teachers by subtests of the test of J.Gilford and M.O'Sullivan "Research of Social Intelligence", adapted by O.S.Mykhailova	Groups					
	M1		M2		M3	
	men	women	men	women	men	women
I Subtest "Stories with completion"						
High level	-	79.0	61.3	60.6	69.2	31.2
Middle level	-	21.0	18.4	18.3	30.8	47.8
Low level	-	0	20.3	21.1	0	21.0
II Subtest "Groups of expressions"						
High level	-	64.6	31.1	42.2	68.0	37.1
Middle level	-	24.2	48.6	38.2	13.7	35.9
Low level	-	11.2	20.3	19.6	18.3	27.0
III Subtest "Verbal expression"						
High level	-	63.1	33.1	42.7	68.9	38.2
Middle level	-	24.2	41.6	37.3	17.1	45.8
Low level	-	12.7	25.3	20.0	14.0	16.0
IV Subtest "Stories with additions"						
High level	-	77.1	44.7	32.2	71.0	35.9
Middle level	-	22.9	38.3	42.7	29.0	40.0
Low level	-	0	17.0	25.1	0	24.1

In general, the data obtained indicated that women (teachers of the natural sciences) were more sensitive to the nature and various manifestations of human relationships and they were able to show considerable role of flexibility in the situations that were arisen. This may be explained by the fact that education in the paradigm of "love" (passion) for the natural sciences contributes to the development of women's style aimed at emotional

sensitivity, communicative compatibility. Men, on the contrary, are encouraged to develop the ability to hide and suppress their feelings, that is, emotional restraint, competition, activity, the ability to control the situation are encouraged.

Table 2

The levels of the development of social intelligence of teachers of groups P1, P2, P3, P4 (in %)

The level of social intelligence of teachers by subtests of the test of J.Gilford and M.O'Sullivan "Research of Social Intelligence", adapted by O.S.Mykhailova	Groups							
	P1		P2		P3		P4	
	wo-men	men	wo-men	men	wo-men	men	wo-men	
I Subtest "Stories with completion"								
High level	68.0	65.1	60.3	72.8	35.1	71.0	40.4	
Middle level	32.0	15.9	22.1	27.2	48.3	21.0	45.6	
Low level	0	19.0	17.6	0	16.6	0	14.0	
II Subtest "Groups of expressions"								
High level	61.0	31.5	42.1	71.1	36.5	71.0	38.0	
Middle level	31.3	41.4	32.8	14.8	41.8	16.5	43.1	
Low level	7.7	27.1	25.1	14.1	11.7	12.5	18.9	
III Subtest "Verbal expression"								
High level	62.1	33.4	45.0	65.1	38.0	63.9	38.4	
Middle level	28.1	45.7	36.0	21.0	43.8	20.1	44.6	
Low level	9.8	20.9	19.1	13.9	18.2	16.0	17.0	
IV Subtest "Stories with additions"								
High level	70.7	43.0	31.2	72.8	38.1	74.3	35.2	
Middle level	29.3	38.9	47.7	27.2	40.5	25.7	44.7	
Low level	0	18.1	21.1	0	21.4	0	20.2	

The subtest "Stories with additions" diagnoses the level of the development of the ability to predict the development of a social situation depending on external circumstances. There is a slight tendency towards higher indicators of social intelligence of women, but there are no significant differences in the indicators of social intelligence of men and women at high, medium and low levels, which have been established. We can note that the subjects who performed the tasks of this test equally well, had

indicators of a high level of development of social intelligence, such as: 65.14% of men and 63.17% of women of S2 group; 62.49% of men and 64.02% of women – group N2; 61.25% of men and 60.58% of women of M2 group; 65.11% of men and 60.34% of women of P2 group. There is no statistically significant difference in the results of men and women at medium and low levels of the development of social intelligence according to the 1st subtest "Stories with completion" (results at these levels do not exceed 20% for both men and women), which indicates a philological training of teachers of the natural and humanities cycle, because respondents with a high level of the development of social intelligence according to this subtest are able to extract the maximum amount of information about people's behavior, they are able to understand the language of non-verbal communication, express quick and accurate judgments about other people, successfully predict their reactions in given conditions, show farsightedness in the relationships with others, which contributes to their successful social adaptation.

Our research and its results have shown that problem-based learning can be successfully used as a mean of developing independent thinking in the process of the activity with low-achieving pupils. We'd point out that the problem situations in these cases are created mainly on the basis of the experiment, by the demonstration and laboratory setting of cognitive tasks, which correspond to the aspiration of pupils to practical forms of the activity, causes them high increased interest, the results of which are stimulating pupils' educational activity in the whole.

The problem-solving system in all classes can be effectively applied to virtually each section if pupils have certain skills to solve problem questions and tasks. These requirements put forward by schools at the present stage of the development of our society, the issue of verification and assessment of pupils' knowledge and the level of their formation have not been adequately developed yet. We'd also like to note that verification

of knowledge is often carried out by monotonous methods that don't cause the pupils' creative activity.

One of the main drawbacks of traditional knowledge testing is that it promotes the development of memory, rather than the thinking of a pupil, and it does not provide objective information about the depth of awareness, the flexibility of knowledge. Estimation in the traditional verification does not show the mental activity and independence of schoolchildren. As a rule, the system of education at schools in Ukraine examines only the surface layer of knowledge that is already prepared for graduation from the system of the person's thoughts. We have the same situation when we tell about the quality of the pupil's mental activity, his/her success in the development of observation and thinking, and the imagination of such a survey, in the most cases, can not be estimated.

One of the most important conditions for improving the effectiveness of knowledge testing is the development of the variety of qualities for stimulating cognitive activity of pupils at this stage. Along with other means of stimulation, a great deal of the place is solving problem questions and tasks for verifying knowledge of pupils, which contributes improving the quality of education.

Polling becomes not only a mean of checking knowledge, but also a mean of gaining and deepening them, the instrument of the development of the person's thinking. It is particularly important here that problem questions and tasks prompt themselves to find new connections and attitudes of individual phenomena, to cover them from different points of view. The correlation of checking functions varies in such a way: there is an interweaving of control and educational functions, as a result of which testing becomes a special link in the process of knowledge formation.

The use of problem questions and tasks for checking knowledge also creates conditions for ascertaining whether the pupil understands the material having been studied, or consciously have mastered it. The ability to generalize, to apply general laws

and to explain certain facts, freely use knowledge in various situations – one of the main indicators of the independent activity and depth of understanding of educational material.

The significance of the use of problematic questions and tasks is also that they can be solved during doing home tasks with the subsequent verification in the classroom, thus depriving the pupils of one-minute solution according to this or that problem. But the situations themselves are arisen at the lessons when problems are solved in the process of acquiring new knowledge – the lesson is limited and does not allow to stretch the processes of analysis, generalization, and they are not the same for different pupils. Because of this, the part of children constantly remains only witnesses to the problem, rather than being active participants. Problem questions and tasks that are given to pupils for a thorough and comprehensive reflection and decisions with the subsequent verification of the results of independent activities extend the scope of the pupils' creative autonomy and create favorable conditions for this.

The use of problem questions allows the teacher to determine the level of cognitive activity and develop pupils' autonomy, which is very important for the development of these qualities of schoolchildren and for the organization of individual activity with them.

Conclusions

So, teachers with a high level of social intelligence are usually successful communicators. They are characterized by contact, openness, tact, benevolence and cordiality. A high level of social intelligence is associated with a great interest in solving social problems, by the need to influence others and it is often combined with a high level of organizational pupils' skills of development. All the listed personal qualities characterize teachers of humanitarian professions. This, in our opinion, largely explains the high results obtained by both women and men on the subtest "Stories with additions" of middle and high levels of intelligence of teachers of the science and humanities cycle.

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We believe that social intelligence, clearly, includes *declarative and operational (procedural) knowledge* that the individual uses in a real life to interpret events, to create plans and predict both the actions of everyday life and professional situations. These ideas, personal memories and rules of interpretation constitute the cognitive aspect of social intelligence. In turn, the mnemonic aspect fills the experience gained by a person, while the empathic capabilities of the subject have the aim actualizing the mechanisms of anticipation in solving various problems of social life.

Thus, *the cognitive aspect* of social intelligence includes a set of fairly stable knowledge, assessments, rules for interpreting events, people's behavior, their relationships, etc., based on the formed system of interpretations at the microstructural and macrostructural levels. The microstructure of the cognitive aspect of social intelligence is determined by the functions of the latter, such as *the cognitive-evaluative one*, the competent processing and the evaluation of information perceived by the subject are depended on; *prognostic function*, on the basis of which the planning and forecasting of the development of interpersonal interactions are carried out; *communicative functions*, which ensure the effectiveness of the actual communicative process (this function is associated with adequate perception and understanding of the partner in communication); *reflexive function*, which is reflected directly by the person's self-knowledge. In turn, the macrostructure of the cognitive aspect of social intelligence is manifested in the individual's attitude to himself/herself as a value, value-semantic position to interpersonal relationships, as well as by the actualization of motivational and value orientations of the individual, axiological attitude by him/her to professional and other activities.

Literature

Гилфорд Дж., О'Салливан М. Тест «Социальный интеллект». В адаптации Е.С. Михайловой. 2021. URL: lib.chdu.edu.ua/pdf/posibnuku/160/41.pdf.

- Гончарук Н., Онуфрієва Л. Психологічний аналіз рівнів побудови комунікативних дій. *Psycholinguistics. Психолінгвістика. Психолінгвістика*. Переяслав-Хмельницький, 2018. Вип. 24(1). С. 97–117. URL: <https://doi.org/10.31470/2309-1797-2018-24-1-97-117>.
- Amichai-Hamburger Y. The social net: Understanding human behavior in cyberspace. Oxford, UK: Oxford University Press, 2005. 166 p.
- Arbuthnott K., Frank J. Executive control in set switching: Residual switch cost and task-set inhibition. *Canadian Journal of Experimental Psychology*. 2000. Vol. 54. P. 33–41. URL: <https://doi.org/10.1037/h0087328>.
- Benson P. Teaching and Researching Autonomy in Language Learning. Harlow: Longman, 2001. 565 p.
- Heino R.D., Ellison N.B., Gibbs J.L. Relationshopping: Investigating the market metaphor in online dating. *Journal of Social and Personal Relationships*. 2010. Vol. 27 (4). P. 427–447. DOI:10.1177/0265407510361614.
- Ishkhanyan B., Boye K., Mogensen J. The Meeting Point: Where Language Production and Working Memory Share Resources. *Journal of Psycholinguistic Research*. 2019. Vol. 48, P. 61–79. URL: <https://doi.org/10.1007/s10936-018-9589-0>.
- Key-DeLyria S.E., Bodner T., Altmann L.J.P. Rapid Serial Visual Presentation Interacts with Ambiguity during Sentence Comprehension. *Journal of Psycholinguistic Research*. 2019. Vol. 48. P. 665–682. URL: <https://doi.org/10.1007/s10936-018-09624-9>.
- Kim J., Dindia K. Online self-disclosure: A review of research. *Computer-mediated communication in personal relationships, K.B. Wright & L.M. Webb (Eds.)*. New York: Peter Lang, 2011. 164 p.
- Lawson H.M., Leck K. Dynamics of Internet dating. *Social Science Computer Review*. 2006. Vol. 24 (2). P. 189–208. DOI:10.1177/0894439305283402.
- Mykhalchuk Nataliia, Ivashkevych Eduard. Psycholinguistic features of the development of social intelligence of the teacher. *Psycholinguistics. Психолінгвістика. Психолінгвістика*. Переяслав-Хмельницький, 2018. Вип. 23 (1). С. 242–257. URL: <https://doi.org/10.5281/zenodo.1211618>.
- Mykhalchuk Nataliia, Kryshevych Olga. The peculiarities of the perception and understanding of Sonnets written by W.Shakespeare by the students of the Faculty of Foreign Languages. *Psycholinguistics. Психолінгвістика. Психолінгвістика*. Переяслав-Хмельницький, 2019. Вип. 26(1). С. 265–285. URL: <https://doi.org/10.31470/2309-1797-2019-26-1-265-285>.

- Nowak K., Watt J.H., Walther J.B. Computer mediated teamwork and the efficiency framework: Exploring the influence of synchrony and cues on media satisfaction and outcome success. *Computers in Human Behavior*. 2009. Vol. 25(5). P. 1108–1119. DOI:10.1016/j.chb.2009.05.006 .
- Nunan D. Nine steps to learner autonomy. 2003. Retrieved June 20. URL: http://www.andrasprak.su.se/polopoly_fs/1.84007.1333707257!/menu/standard/file/2003_11_Nunan_eng.pdf.
- Pimperton H., Nation K. Suppressing irrelevant information from working memory: Evidence for domain-specific deficits in poor comprehenders. *Journal of Memory and Language*. 2010. Vol. 62(4). P. 380–391. URL: <https://doi.org/10.1016/j.jml.2010.02.005> .
- Rains S.A., Scott C.R. To identify or not to identify: A theoretical model of receiver responses to anonymous communication. *Communication Theory*. 2007. Vol. 17 (1). P. 61–91. DOI:10.1111/j.1468-2885.2007.00288.x.
- Ramirez A. Jr., Wang Z. When online meets offline: An expectancy violation theory perspective on modality switching. *Journal of Communication*. 2008. Vol. 58 (1). P. 20–39. DOI:10.1111/j.1460-2466.2007.00372.x.
- Rezaei A., Mousanezhad Jeddi E. The Contributions of Attentional Control Components, Phonological Awareness, and Working Memory to Reading Ability. *Journal of Psycholinguistic Research*. 2020. Vol. 49. P. 31–40. URL: <https://doi.org/10.1007/s10936-019-09669-4> .
- Stephens K.K., Rains S.A. Information and communication technology sequences and message repetition in interpersonal interaction. *Communication Research*. 2011. Vol. 38 (1). P. 101–122. DOI:10.1177/0093650210362679 .
- Walther J.B. The effect of feedback on identity shift in computer-mediated communication. *Media Psychology*. 2011. Vol. 14. P. 11–26. DOI:10.1080/15213269.2010.547832 .
- Wright K.B., Webb L.M. Computer-mediated communication in personal relationships. New York: Peter Lang, 2011. 144 p.

References

- Amichai-Hamburger, Y. (2005). *The social net: Understanding human behavior in cyberspace*. Oxford, UK: Oxford University Press.
- Arbuthnott, K., & Frank, J. (2000). Executive control in set switching: Residual switch cost and task-set inhibition. *Canadian Journal of Experimental Psychology*, 54, 33–41. Retrieved from <https://doi.org/10.1037/h0087328>.
- Benson, P. (2001). *Teaching and Researching Autonomy in Language Learning*. Harlow: Longman.
- Honcharuck, Nataliia, & Onufrieva, Liana (2018). Psykhologichnyi analiz rivniv pobudovy komunikatyvnykh dii – Psychological analysis of le-

- vels of communicative actions' constructing. *Psycholinguistics. Psykholinhvistyka. Psikholingvistika – Psycholinguistics. Psycholinguistics. Psycholinguistics*, 24 (1), 97–117. Retrieved from <https://doi.org/10.31470/2309-1797-2018-24-1-97-117> [in Ukrainian].
- Heino, R.D., Ellison, N.B., & Gibbs, J.L. (2010). Relationshopping: Investigating the market metaphor in online dating. *Journal of Social and Personal Relationships*, 27 (4), 427– 447. DOI:10.1177/0265407510361614.
- Guilford, J., & O'Sullivan, M. (2021). *Test «Sotsialnyi intelekt» – Test “Research of Social Intelligence”*. Adapted by E.S. Mikhailova. Retrieved from lib.chdu.edu.ua/pdf/posibnuku/160/41.pdf.
- Ishkhanyan, B., Boye, K., & Mogensen, J. (2019). The Meeting Point: Where Language Production and Working Memory Share Resources. *Journal of Psycholinguistic Research*, 48, 61–79. Retrieved from <https://doi.org/10.1007/s10936-018-9589-0>.
- Key-DeLyria, S.E., Bodner, T., & Altmann, L.J.P. (2019). Rapid Serial Visual Presentation Interacts with Ambiguity During Sentence Comprehension. *Journal of Psycholinguistic Research*, 48, 665–682. Retrieved from <https://doi.org/10.1007/s10936-018-09624-9>.
- Kim, J., & Dindia, K. (2011). Online self-disclosure: A review of research. *Computer-mediated communication in personal relationships*, K.B. Wright & L.M. Webb (Eds.). New York: Peter Lang.
- Lawson, H.M., & Leck K. (2006). Dynamics of Internet dating. *Social Science Computer Review*, 24 (2), 189–208. DOI:10.1177/0894439305283402.
- Mykhalchuk, Nataliia, & Ivashkevych, Eduard (2018). Psycholinguistic features of the development of social intelligence of the teacher. *Psycholinguistics. Psykholinhvistyka. Psikholingvistika. – Psycholinguistics. Psycholinguistics. Psycholinguistics*, 23 (1), 242–257. DOI: <https://doi.org/10.5281/zenodo.1211618>.
- Mykhalchuk, Nataliia, & Kryshevych, Olga (2019). The peculiarities of the perception and understanding of Sonnets written by W.Shakespeare by the students of the Faculty of Foreign Languages. *Psycholinguistics. Psykholinhvistyka. Psikholingvistika – Psycholinguistics. Psycholinguistics. Psycholinguistics*, 26(1), 265–285. DOI: [10.31470/2309-1797-2019-26-1-265-285](https://doi.org/10.31470/2309-1797-2019-26-1-265-285).
- Nowak, K., Watt, J.H., & Walther, J.B. (2009). Computer mediated teamwork and the efficiency framework: Exploring the influence of synchrony and cues on media satisfaction and outcome success. *Computers in Human Behavior*, 25(5), 1108–1119. DOI:10.1016/j.chb.2009.05.006.

- Nunan, D. (2003). *Nine steps to learner autonomy*. Retrieved June, 20. Retrieved from: http://www.andrasprak.su.se/polopoly_fs/1.84007.1333707257!/menu/standard/file/2003_11_Nunan_eng.pdf.
- Pimperton, H., & Nation, K. (2010). Suppressing irrelevant information from working memory: Evidence for domain-specific deficits in poor comprehenders. *Journal of Memory and Language*, 62(4), 380–391. Retrieved from <https://doi.org/10.1016/j.jml.2010.02.005>.
- Rains, S.A., & Scott, C.R. (2007). To identify or not to identify: A theoretical model of receiver responses to anonymous communication. *Communication Theory*, 17 (1), 61–91. DOI:10.1111/j.1468-2885.2007.00288.x.
- Ramirez, A. Jr., & Wang, Z. (2008). When online meets offline: An expectancy violation theory perspective on modality switching. *Journal of Communication*, 58 (1), 20–39. DOI:10.1111/j.1460-2466.2007.00372.x.
- Rezaei, A., & Mousanezhad Jeddi, E. (2020). The Contributions of Attentional Control Components, Phonological Awareness, and Working Memory to Reading Ability. *Journal of Psycholinguistic Research*, 49, 31–40. Retrieved from <https://doi.org/10.1007/s10936-019-09669-4>.
- Stephens, K.K., & Rains, S.A. (2011). Information and communication technology sequences and message repetition in interpersonal interaction. *Communication Research*, 38 (1), 101–122. DOI:10.1177/0093650210362679.
- Walther, J.B. (2011). The effect of feedback on identity shift in computer-mediated communication. *Media Psychology*, 14, 11-26. DOI:10.1080/15213269.2010.547832.
- Wright, K.B. & Webb, L.M. (2011). *Computer-mediated communication in personal relationships*. New York: Peter Lang.

Івашкевич Едуард, Сімко Руслан. Проблема впливу соціального інтелекту вчителя на організацію проблемного навчання в сучасних закладах середньої освіти.

Метою нашої статті є дослідження рівня розвитку соціального інтелекту вчителів, які викладають природничі та гуманітарні дисципліни у підлітків і старшокласників; отримати та проаналізувати результати за субтестом № 3 «Вербальні вирази» (Гилфорд & О'Саллівен, 2021), які визначають здатність вчителів розуміти значущість таких вербальних реакцій людей залежно від контексту ситуації; дослідити проблему впливу соціального інтелекту вчителя на організацію проблемного навчання в закладах середньої освіти.

Методи дослідження. Для розв'язання поставлених завдань використовувалися такі теоретичні методи дослідження: категоріальний,

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структурно-функціональний, аналіз, систематизація, моделювання, узагальнення. Також у своєму дослідженні ми використовували емпіричні методи, такі як констатувальне дослідження та формувальний експеримент. Для діагностики рівня розвитку соціального інтелекту застосовувалась «Методика дослідження соціального інтелекту» Дж. Гілфорда та М.О'Саллівена, адаптована О.С. Михайловою (2021).

Результати дослідження. Діагностовано рівень розвитку здібності вчителів до прогнозування розвитку соціальної ситуації залежно від зовнішніх обставин. Простежується незначна тенденція до вищих показників соціального інтелекту у жінок, проте відчутних відмінностей у показниках соціального інтелекту чоловіків і жінок за високим, середнім та низьким рівнем не встановлено. Респонденти однаково добре виконали завдання цього тесту. Також не виявлено статистично значущої різниці в результатах чоловіків та жінок за середнім та низьким рівнями розвитку соціального інтелекту за I субтестом «Історія із завершенням» (результати за цими рівнями не перевищують 20% як у чоловіків, так і у жінок), що свідчить про високий рівень філологічної підготовки вчителів природничо-гуманітарного циклу, адже респонденти із високим рівнем розвитку соціального інтелекту за цим субтестом здатні отримувати максимум інформації про поведінку людей, здатні розуміти мову невербального спілкування, висловлювати швидкі та точні судження про людей, успішно прогнозувати їхні реакції в заданих умовах, виявляти далекозорість у стосунках з іншими, що сприяє їхній успішній соціальній адаптації.

Висновки. Доведено, що люди з високим рівнем розвитку соціального інтелекту, як правило, бувають успішними комунікаторами. Їм притаманні контактність, відкритість, тактовність, доброзичливість та сердечність. Високий рівень соціального інтелекту пов'язаний із інтересом до соціальних проблем, наявністю потреби впливати на інших і часто поєднується із високим рівнем розвитку організаторських здібностей. Показано, що всі перераховані особистісні якості характеризують осіб гуманітарних професій.

Ключові слова: соціальний інтелект, організація проблемного навчання, успішні комунікатори, вербальні реакції, контекст ситуації.

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