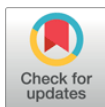


## The role of online debate in building future specialists' (philologists') professional competencies



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### Abstract

The pedagogical science has always been interested in the problem of identifying effective mechanisms for building future specialists' professional competencies. Methods: surveys and questionnaires, remote collection and processing of information, reduced version of the Multifactor Personal Questionnaire B5-10; Academic Motivation Scale; Short Self-Control Scale; Diagnostics of the Dominant Perceptual Modality; Raven's Progressive Matrices. Statistical analysis was carried out using the Kolmogorov-Smirnov test, Spearman's Rank correlation coefficient, and the Mann-Whitney U test was used to assess the reliability of differences between contrasting groups. According to the research findings, students are convinced that participation in debates can contribute to the professional competence development. Students' diligence was indicated as the main component of motivation for building professional competencies. Further research should be aimed at studying the role of debates in building professional competencies among students of narrow majors. It is also necessary to develop a detailed methodology of introducing the student debate.

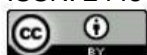
### Keywords

online debates; student debates; building competencies; professional competencies; distance education.

### O papel do debate *on-line* na construção das competências profissionais dos futuros especialistas (filólogos)

### Resumo

A ciência pedagógica sempre se interessou pelo problema de identificar mecanismos eficazes para a construção das competências profissionais dos futuros especialistas. Métodos: pesquisas e questionários, coleta e processamento remoto de informações,



versão reduzida do Questionário Pessoal Multifatorial B5-10; Escala de Motivação Acadêmica; Escala Curta de Autocontrole; Diagnóstico da Modalidade Perceptual Dominante; Matrizes Progressivas de Raven. A análise estatística foi realizada por meio do teste de Kolmogorov-Smirnov, coeficiente de correlação de Spearman e teste U de Mann-Whitney para avaliar a confiabilidade das diferenças entre grupos contrastantes. De acordo com os resultados da investigação, os alunos estão convencidos de que a participação em debates pode contribuir para o desenvolvimento de competências profissionais. O empenho dos estudantes foi apontado como o principal componente de motivação para a construção de competências profissionais. Mais pesquisas deveriam ter como objetivo estudar o papel dos debates na construção de competências profissionais entre estudantes de áreas específicas. Também é necessário desenvolver uma metodologia detalhada de introdução ao debate estudantil.

**Palavras-chave**

debates *on-line*; debates estudantis; construindo competências; competências profissionais; educação a distância.

**El papel del debate en línea en la construcción de competencias profesionales de los futuros especialistas (filólogos)****Resumen**

La ciencia pedagógica siempre ha estado interesada en el problema de identificar mecanismos efectivos para construir las competencias profesionales de los futuros especialistas. Métodos: encuestas y cuestionarios, recolección y procesamiento remoto de información, versión reducida del Cuestionario Personal Multifactor B5-10; Escala de Motivación Académica; Escala Corta de Autocontrol; Diagnóstico de la Modalidad Perceptual Dominante; Matrizes progresivas de Raven. El análisis estadístico se llevó a cabo mediante la prueba de Kolmogorov-Smirnov, el coeficiente de correlación de rangos de Spearman y la prueba U de Mann-Whitney para evaluar la confiabilidad de las diferencias entre grupos contrastantes. Según los resultados de la investigación, los estudiantes están convencidos de que la participación en debates puede contribuir al desarrollo de competencias profesionales. La diligencia de los estudiantes fue señalada como el principal componente de motivación para la construcción de competencias profesionales. Se deberían realizar más investigaciones para estudiar el papel de los debates en la construcción de competencias profesionales entre estudiantes de especialidades limitadas. También es necesario desarrollar una metodología detallada de introducción al debate estudiantil.

**Palabras clave**

debates en línea; debates estudiantiles; construyendo competencias; competencias profesionales; educación a distancia.

**1 Introduction**

The reasonless and brutal war of the Russian Federation against Ukraine violently changed all aspects of life. A large number of people, including many higher school students, became internally displaced persons as a result of military aggression.

This situation tasked pedagogical science with creating effective conditions for the continuation of quality education and the development of critical thinking. It is necessary to make maximum efforts in order to successfully train future specialists who will be responsible for the restoration of the country after the victory. Educators must solve this problem by creating optimal conditions for students' learning and development. This includes access to quality education, provision of support and psychological assistance, promotion of critical thinking and analytical skills.

In view of the new current challenges, the issue of the comprehensive application of distance education has become acute for pedagogical science. That is why the issue of effective development of professional competencies of higher school students with the help of digital means of communication has become very relevant. It is worth noting that professional competencies are not developed by themselves (Cleary *et al.*, 2019). This process is called the consistent accumulation of qualitative and quantitative changes in a certain type of competence and the achievement of the unity of its components in a specially organized educational process (Gott; Bauer; Long, 2019).

There is no single interpretation of the term "competence". A number of researchers believe that this is a requirement for a students' training, a set of their knowledge, abilities, skills and experience necessary for productive activities. A general ability which is based on knowledge and values enabling to think through actions to solve a problem. Competence is the readiness to use acquired knowledge, abilities and skills in practice, as well as life experience to resolve various situations. In other words, competence is defined not simply as the sum of acquired knowledge, abilities and skills, but also as the experience of using them. It is the willingness to apply one's knowledge for carrying out successful activities (Irwin, 2020).

Regarding professional competencies, it is a set of professional knowledge and experience, and the readiness to apply them in the professional field. Having developed professional competencies, the student acquires the ability to determine the connections between knowledge and the situation, can adequately solve emerging problems (Allam *et al.*, 2021). The peculiarity of competence as a result of education is as follows:

- it is an integrated learning outcome;
- manifests and exists in the form of activity, not information about it;

- builds up together with other competencies, due to which professional competence is built;
- competence as an action is not developed automatically, but consciously, and forms professional experience upon being repeated many times (Hawkins; Fulford; Phan, 2019).

One of the modern challenges that is of great concern to pedagogical science is building professional competencies by means of online education (Elicor, 2021). Online learning provides enormous opportunities:

- use of various learning tools (presentations, video materials, Skype training, chats, etc.);
- learning from home is convenient for people with difficulties in free movement (for example, people with disabilities);
- the ability to view the lesson several times;
- saving time;
- saving money;
- the opportunity to receive education for residents of remote regions of the country.

At the same time, there are certain disadvantages of this format:

- lecturers and students must have computer skills;
- different possibilities of different platforms for delivering courses (individual pros and cons of different platforms);
- lack of personal contact with the teacher and other students;
- self-discipline difficulties, etc. (Senyshyn, 2019).

The Covid-19 pandemic revealed the most obvious significance of the development of online education, because the traditional form of conducting classes became impossible because of quarantine restrictions, and all educational institutions of Ukraine were transferred to the online format (Stiedl; Straub, 2020). Such resources as Zoom video chats, Google Meet, Jitsi Meet and Discord have become the most popular (Saavedra, 2020). A number of problems such as:

- lack of electronic devices from which it would be possible to take online courses;

- lack of internet connection in some regions of the country;
- high load of online platforms due to the large number of concurrent users;
- organizational difficulties;
- low staff training in working with learning platforms;
- using multiple platforms for different courses;
- paid access to platforms;
- sabotage and disruption of lessons by students, etc. (Elicor, 2019).

Summarizing the above, it is possible to identify the following features of online education: technical, economic, temporal, psychological. When developing online platforms, more attention is paid to the first three of the listed features.

One of the effective formats for building professional competences is thematic student online debates. Thematic online debates enable junior students to take their first steps in science, while senior and master's students — to perfect the skill of producing oral and written academic texts, present the results of their research, state their positions with arguments, and replenish their portfolio (Cooper, 2023). Preparing students for participation in debates is an important stage in the building many competencies: research, various professional and general cultural competencies.

Building informational and communicative competence is of particular importance at the current stage. Supervision of research work involves training students to search for academic information on the Internet. It is not easy for an inexperienced researcher to find the necessary content, there is a huge amount of similar information, often unreliable, compiled by non-professionals (Marinoni; Van't Land; Jensen, 2020). Therefore, research supervisors help to learn not only to determine the aim and objectives of the research, but also to study materials written by reputable specialists, not popular bloggers, in accordance with the assigned tasks. Student thematic debates in teleconference formats are the means of building professional communicative and research competencies (Wardale, 2020).

The issue raised in the article was the subject of many studies. Du Fresne (2020) study learning technologies in the field of developing students' joint strategic thinking. Cassidy (2022) raised the issue of maintaining motivation for distance learning in his article. Zhu, Berri and Zhang (2021) explored the effectiveness of using blended learning technologies. Zdanevych *et al.* (2019) addressed issues of distance education as an

effective teaching method. Chinn, Barzilai and Duncan (2020) addressed developing teachers' telecollaborative competencies in online learning. Bleazby (2020), Bleazby *et al.* (2022) covered the issues of virtual collaboration. Knowledge sharing in teams was addressed by Emami Zeydi *et al.* (2022). Belda-Medina (2022) dealt with the issue of developing students' critical thinking through debate. Facer and Buchczyk (2019) investigated debate in the study of bioethics. So, the issue of student debates is widely covered, but the issue of effective building of professional competencies when using them remains poorly studied.

*Aim of the research:* study the aspects of building students' professional competencies through participation in online debates. The aim involves the fulfilment of the following research objectives:

- study the approaches to building professional competencies;
- identify the principles underlying building professional competencies of higher school students.

## 2 Methodology

### 2.1 Research design

The theoretical background of the methodology is the concept of intrinsic and extrinsic motivation of educational activity in the self-determination theory. Extrinsic motivation is “social” — interest in activity is caused by external or social influences. With intrinsic motivation, the activity arouses interest in itself, is intrinsically valuable for the subject. Intrinsic motivation is associated with a sense of flow, enthusiasm, and satisfaction from an activity.

### 2.2 Sample

The research was conducted in the form of an online anonymous survey of 139 undergraduate students of the 1<sup>st</sup>-2<sup>n</sup> years of Borys Grinchenko Kyiv University, who study full-time at the Philosophy and Philology Departments. Two groups of respondents were formed from these students: 69 students were included in the main group and 70



students were included in the control group. The allocation was made by a double blind draw. This number of respondents makes it possible to conduct a representative survey. The division into two groups of respondents enabled a comparative analysis.

The experiment was conducted in three stages.

Stage I of the experiment (2022) was summative. Experimental work at this stage involved:

- study of the process of building students' professional competencies;
- analysis of factors that can reflect the effectiveness of professional competence building models;
- definition of the criterion to be studied.

Stage II of the pedagogical experiment (December 2022 - March 2023) was formative. At the formative stage, the experimental work included:

- development of the Experimental Work Programme;
- implementation of pedagogical conditions for building students' professional competencies;
- control over the course of the pedagogical experiment using questionnaires;
- analysis and processing of the results obtained during the experiment.

Stage III of the pedagogical experiment (May 2023) was the final one. This stage of the experiment included the systematization and generalization of the results of experimental work, drawing study-based conclusions.

The main limitations of the study were the final number of respondents who would meet the sampling conditions; conducting research among students of one higher education institution, which, in turn, does not distort the reliability of the results obtained because the sample is formed in such a way as to cover all student groups studying in the average higher education institution of Ukraine.

### **2.3 Methods**

1. The main research method was questionnaires such as: Multifactor Personal Questionnaire B5-10; Academic Motivation Scale; Short Self-Control Scale; Diagnostics of the Dominant Perceptual Modality; Raven's Progressive Matrices.

B5-10 looks like a scale consisting of 10 items, each being a short description of a person (for example: “he/she is friendly and empathetic”), which includes some personality traits that belong to one from the features of the Big Five (Appendix A). The respondent needs to rate his similarity with each description on a 6-point scale. The test-retest reliability indicators range between 0.61-0.84. The Indicators of consistency of questionnaire items (Cronbach’s alpha) range between 0.38–0.62 (Johnson, 2017).

The success of participation in online debates (an objective indicator of effectiveness) was assessed on a 100-point scale in accordance with the university’s point rating system. The level of respondents’ educational performance was monitored using testing on a special resource developed on the basis of the Moodle platform, the information was provided by the university administration. At the same time, information about the students’ success was collected in two sessions for all subjects who studied offline and online. The evaluation of the usefulness of the direction of the debate, the degree of its difficulty and the increase in knowledge as a result of participation in online debates were taken as subjective indicators.

2. Statistical measurements were carried out using the following methods: correlation analysis; factor analysis, regression analysis. Descriptive statistics were conducted based on the test results, which included such indicators as: range of results, mean, standard error, asymmetry, and kurtosis. The normality of the distribution of the test results for each scale of the used methods was calculated separately using the Kolmogorov-Smirnov test (Formula 1):

$$F_n(x) = \frac{1}{n} \sum_{i=1}^n I_{x_i \leq x} \quad (1)$$

where X is a sample.

As the Kolmogorov-Smirnov test revealed the absence of normality of distribution for many of the studied variables, non-parametric data analysis methods were used:

- Spearman’s correlation coefficient (Formula 2):

$$P = \frac{6 \sum d_i^2}{n(n^2-1)} \quad (2)$$

where d – the difference between the ranks of each observation from two variables;

- Mann-Whitney test to assess the reliability of differences between contrasting groups.



## 2.4 Instruments

Google Forms were used to conduct the survey. The obtained data were entered and processed in Microsoft Excel and SPSS Statistics 15.0 programs. All data are given in relative values (% of the number of respondents).

Preliminary validation of the data collection tool was carried out using the method of construct validation to ensure the reliability and effectiveness of the survey. The metric quality of the survey was assessed by analyzing its reliability and plausibility. The size and parameters of the instrument were taken into account when conducting the survey, as well as ensuring its flexibility for different response types and metric scales. This facilitates the collection of reliable and representative data for research.

## 3 Results

In the questionnaire, students were asked to indicate one of the directions in which they participated in online debates. The indicated directions were related to the general educational cycle of Philosophy, History of Ukraine, Political Science.

All scales have acceptable reliability ( $0.71 < \alpha < 0.91$ ) and demonstrate predictable correlations with indicators of curiosity, close questionnaires of intrinsic and extrinsic motivation, as well as indicators of basic needs (autonomy, competence, and relatedness). The differences related to the specifics of the higher educational institution turned out to be stronger than the gender differences in the sample. A small list of directions and a sample limited by the direction of training made it possible to obtain a more reliable result about the connection between the results of online debates and the predictors of its success. The Kolmogorov-Smirnov test shows that the distribution on all three scales of the method differs from the normal one (Table 1).

**Table 1** – Descriptive statistics according to the scales of the Dominant Perceptual Modality technique N=139

Scale	Range/dimensionality	Mean	Asymmetry	Kurtosis	Normality
Visual	12/16	4,3	0,7	0,9	-
Audial	10/16	4,5	0,5	0,1	-
Kinesthetic	11/16	4,7	1,1	1,4	-

Source: Calculated by the authors based on research results.

Regarding the mean of the indicators of the Dominant Perceptual Modality technique scales (8-10 points), the average results of the students are low (Table 1). This means that, on average, the tested subjects do not have any pronounced perceptual modality. This is confirmed by the asymmetry values ( $|As| \geq 0.5$ ) – the distribution is asymmetric, positive asymmetry. However, the highest value of the mean is observed for the perceptual modality “kinesthetic”, while the range on this scale is not the highest, which is also reflected in the value of kurtosis on this scale (peaked distribution ( $Ex > 0$ )).

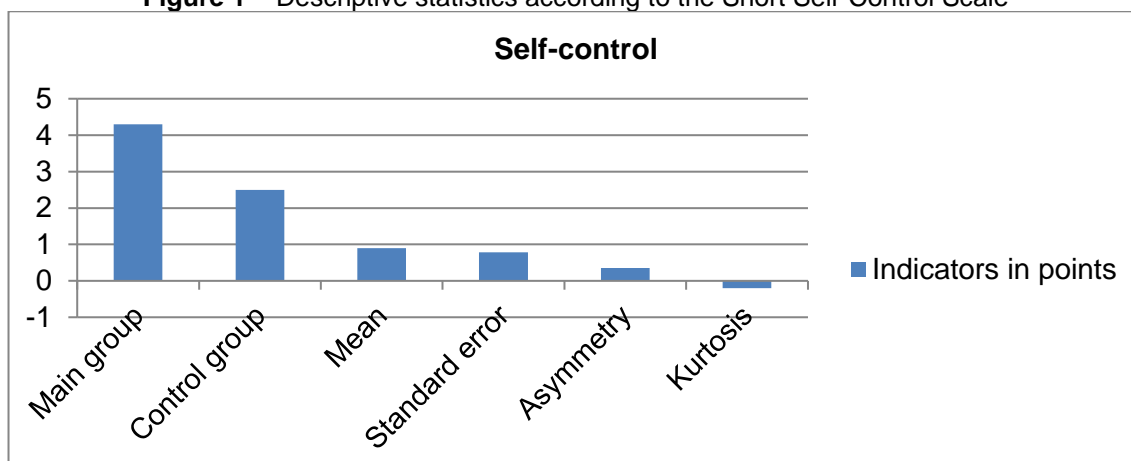
The average scores on the motivation scales related to intrinsic motivation (cognitive motivation, achievement motivation, self-development motivation) are higher than on those scales related to external motives (Table 2). According to the Kolmogorov-Smirnov test, the distribution is normal, plateau-shaped ( $Ex < 0$ ). So, students have an above-average level of self-control, which means that in most situations they are able to control their behaviour and emotions, manage them deliberately, restrain impulsive urges, and respond to life events accordingly (Figure 1).

**Table 2** – Descriptive statistics according to the Academic Motivation Scale N=139

Scale	Range/ dimensionality	Mean	Asymmetry	Kurtosis	Normality
Cognitive motivation	16/20	14.0	-0.39	-0.03	+
Achievement motivation	16/20	13.8	-0.48	-0.15	-
Self-development motivation	16/20	13.2	-0.32	-0.48	+
Self-esteem motivation	16/20	11.6	0.14	-0.02	+
Introjection motivation	16/20	12.3	-0.23	1.11	-
Extrinsic motivation	16/20	12.2	-0.22	-0.11	-
Amotivation	16/20	13.8	-0.36	-0.17	+

Source: Calculated by the authors based on research results.

**Figure 1** – Descriptive statistics according to the Short Self-Control Scale



Source: Created by the authors based on research results.

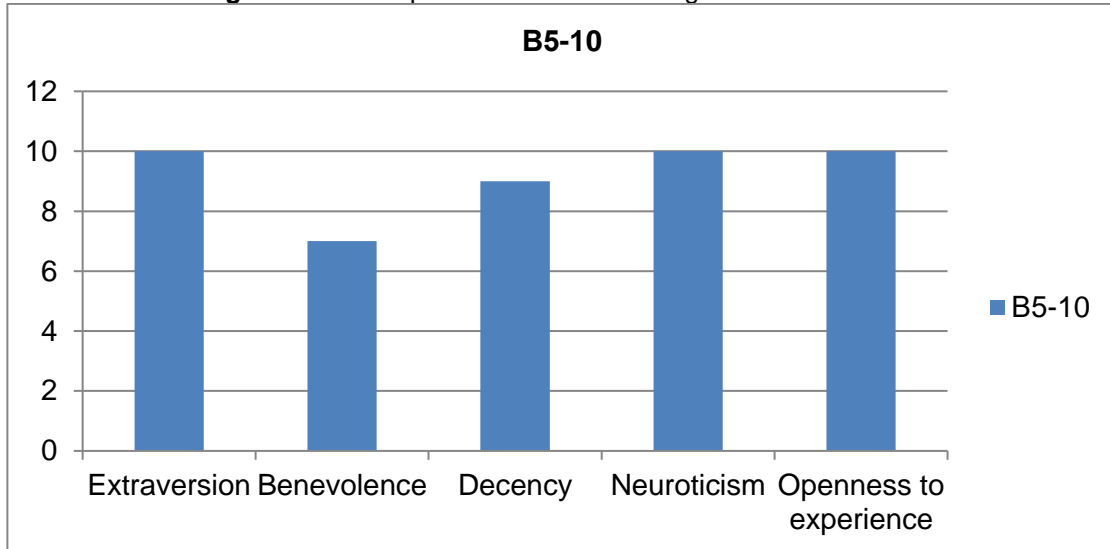
Among the motivation scales, the highest mean value is observed on the Cognitive Motivation scale, while a normal distribution on this scale is observed according to the Kolmogorov-Smirnov test. A fairly high mean value and a normal distribution is also observed on the Motivation Scale. When participating in online debates, the respondents in the study relied more on their own interest, the willingness to gain new knowledge, and expand their horizons. Quite high mean values on the Achievement Motivation scale indicate that the respondents strive for high results in education, success, and they are interested in completing difficult assignments in educational activities. On the other hand, Amotivation is also strong. It can be assumed that the high values on the Amotivation scale are primarily related to the fact that the debates in which the students of the sample participated are related to the Humanities, while their major is Natural Sciences. Relatively low means on the Self-esteem Motivation scale indicate that the students of the sample taking online courses did not have a desire to increase their sense of self-importance.

The mean value of the results of the subjects on the scale Short Self-Control Scale is close to the median value of the scale (32.5 points).

The results of respondents on this scale differ from all other scales by positive asymmetry. This means that the sample as a whole is characterized by an average level of neuroticism. Respondents cannot be called impulsive, emotional or, on the contrary, very restrained and calm. But the shift towards low indicators means a slight predominance of emotionally stable students. On other scales of the technique, except for the Neuroticism scale, the average results of students are closer to high, this is confirmed by the values of asymmetry ( $As < 0$  negative asymmetry). The values of kurtosis

show that the distribution of the results of the subjects on all scales of the technique is plateau-shaped ( $Ex < 0$ ). The Kolmogorov-Smirnov test revealed that only the Openness to Experience scale has a normal distribution according to the test results; according to this scale, the distribution is shifted towards high scores (Figure 2).

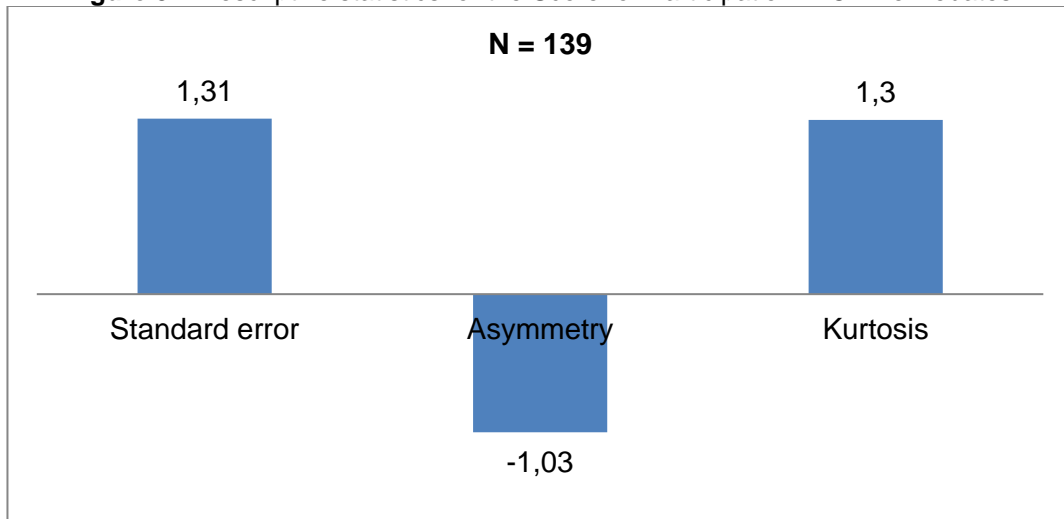
**Figure 2** – Descriptive statistics according to the B5-10 scale



Source: Created by the authors based on research results.

According to the Kolmogorov-Smirnov test, the distribution differs from the normal one (Figure 3). So, the subjects of our study coped quite well with participation in the debate.

**Figure 3** – Descriptive statistics for the Score for Participation in Online Debates



Source: Created by the authors based on research results.

In our study, “Participated in debates” is the primary measure of debate effectiveness. The maximum possible score for participation is 100 points. The mean value of the subjects is above the median of the scale (50 points), therefore, on average, the tested samples had high scores based on the results of participation in online debates, which is confirmed by the asymmetry values ( $As_0$ ).

The students’ results for Raven’s Progressive Matrices, show that the range increases and the average value decreases, which is explained by the increased complexity of the assignments with each subsequent series of the test. At the same time, the average value of the subjects’ scores is above the median on the scales of the series for all series of the technique. The final average score obtained by the respondents is 50.73 points, which is 84.55%. This indicator is interpreted as 114 IQ points for the average age of our subjects - 18.7 years.

So, it can be concluded that the respondents’ intellectual development level is above average. The results for all five series of the technique correspond to an asymmetric distribution with negative asymmetry. According to the kurtosis indicators, the distribution for all series, except Series E, is peaked, which is probably explained by the fact that Series E is the most difficult in the test, and that is why the variability of the test subjects’ answers is greater than in the previous series.

Two contrasting groups were distinguished according to each scale of all methods used in the study: with high and low values. The obtained contrasting groups were compared according to the results of online learning “The student participated in debate” and “Debate score”. It is interesting that the average scores stated by students are higher than the actual average scores. It can be concluded on this ground that the respondents estimate the results of the debate higher than their actual scores.

In almost all the scales of the techniques, the group with high values on the scale also had a higher learning score, both stated and real. Exceptions were the Neuroticism, Cognitive Motivation, Extrinsic Motivation, Visual scales. The pattern across these scales was the opposite, with groups low on the scale having higher mean debate scores than groups high on the scale. In the Kinesthetic and Audial scales, the average values according to the indicator of the points indicated by the student for debates are higher in the group with high values on the scales. But

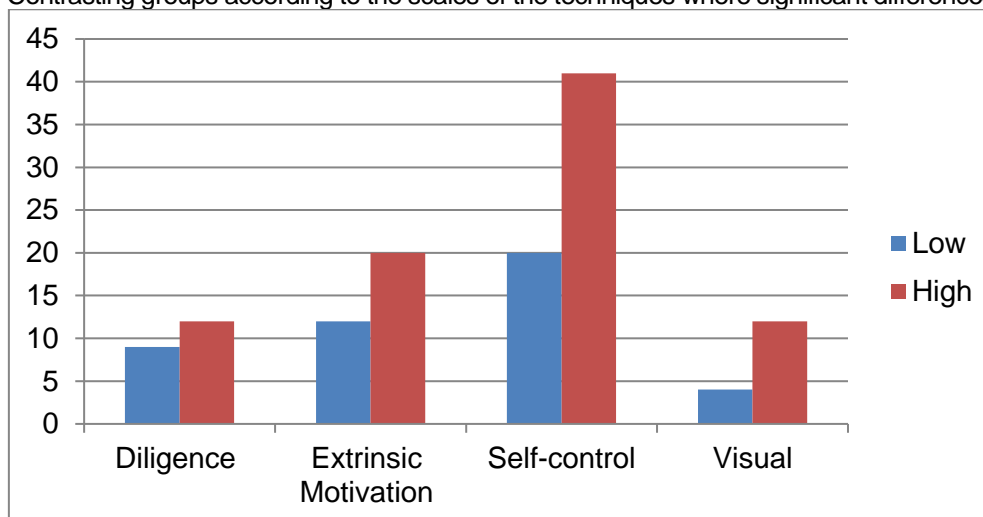
according to the indicator of the score for online debates, on the contrary, the average score is higher in the group with a low indicator. In most studies of neuroticism, a negative relationship of this personal characteristic with academic performance was shown, which can also be traced in the analysis of contrasting groups in our study.

Comparing the results of contrast groups on the Cognitive Motivation scale suggests that students with low scores on this scale coped with online courses better than students with high cognitive motivation and evaluated their learning outcomes in the same way. Although the difference between the averages of the contrasting groups of the Cognitive Motivation scale according to the Score for Debates indicator is only 0.06 points. It can be assumed that students who were more interested in gaining knowledge during online debates were more immersed in learning new information than earning good grades, compared to those who took the course without interest. Most likely, the same results on the Extrinsic Motivation scale can be explained by the fact that the lower the pressure of society's demands on the students, the less stressful the students are and the easier it is for them to participate in debates. Higher average scores for participation in debates with low scores on the Visual scale indicate that students for whom the visual system is not the best when learning information cope more effectively with participation in debates. Although, it would seem that working at a computer, where absolutely most of the information is visual, should have been more comfortable for "visual people". Perhaps this can be explained by fatigue of the visual system when using a computer.

Analysis of contrasting group differences was performed using the Mann-Whitney test. The results are presented in Figure 4. Significant differences in scores on online debates between groups with low and high indicators were found on the Conscientiousness, Extrinsic Motivation, Self-control, and Visual scales. At the same time, the group with high results on the Diligence and Self-control scales have higher scores, while the pattern is reversed on the other two scales. On the Diligence scale, significant differences were also found between the high- and low-scoring group.



**Figure 4** – Contrasting groups according to the scales of the techniques where significant differences were found



Source: Created by the authors based on research results.

So, 4 psychological variables are important for effective online learning. In studies of full-time education, Diligence and Self-Control are the variables that are positively related to academic performance. According to the data obtained during the analysis of contrasting groups, they play an important role in the success of online learning. Extrinsic Motivation refers to the external type of motivation and expresses the motivation that arises under the pressure of the society's demands. The group of students, where the results on this scale are low, are characterized by higher scores on the online course than the group with high extrinsic motivation. This means that the feeling of forced learning activities, characteristic of extrinsic motivation, hindered the achievement of high results in online learning.

The same regularity was found on the Visual scale. Students with a pronounced visual perceptual modality have lower scores than students for whom the visual system is not leading in the perception of information. This is probably explained by the fact that the visual perception channel of such students is overloaded and tired during online debates, which hinders effective learning.

## 4 Discussion

Despite the fact that the correlation between the grades for participation in online debates, indicated by the students themselves and the real grades, turned out to be the highest of all reliable correlations, this relationship indicates that the students are not

completely sincere and responsible when answering the questions. To some extent, this is an indicator of the degree of confidence in the results of the survey itself as a whole.

Of all psychological indicators, only Diligence and Perceptual Modality showed reliable connections with the outcome of online debates. These data contradict the study of Allam *et al.* (2021), which did not reveal such a pattern. The authors point to improved students' success as the most significant indicator of the effectiveness of online debates. Instead, a study by Duque *et al.* (2020) confirms the obtained results. The author conducted a study of debates as an innovative means of learning and found that Diligence can be considered as an indicator of the effectiveness of online debates. Diligence is significantly positively related to the outcome of online debates. This is explained by the fact that the fundamental difference between the online learning regime and the traditional form is significant independence in the organization of educational activities, therefore, Diligence is one of those personal qualities that contributes to the high-quality assimilation of educational material, which leads to a high result. These results contradict the research of Franco and Ortiz (2020), which links debate performance with extrinsic motivation. On the contrary, the findings of Díaz (2020) confirm the obtained results and connect the effectiveness of the debate with the development of Diligence.

A negative relationship was found between the result of participation in online debates and the Visual Perceptual Modality. We assume that this is explained by the fact that an increased load falls on the visual signal system with this form of training, compared to the traditional one, as all information comes from the computer screen. These findings are supported by Ortiz and Millan (2022) and Acuto and Leffel (2021). This pattern is probably explained by the fact that first-year students are more involved in their studies, because the university is a new environment where everything is interesting for them, where they want to show their best side to the teachers. These findings support the results obtained by Zhu, Berri and Zhang (2021). Gradually, when they continue their studies, students adapt to the university environment, a narrower circle of interests in the future major is formed, students begin to show diligence in certain subjects only, pushing others aside and not paying so much attention to them.

The factor of overall performance confirms the statement that if students study well offline, they also study successfully online. This thesis is confirmed by the study of

Zdanevych *et al.* (2019), which was aimed at identifying the regularity between the form of education and academic performance. The researchers found that successful full-time students continue their successful distance learning. This factor is actually the resulting indicator of education, which does not depend on the form of education: traditional or distance. There is nothing new in distinguishing this factor as a predictor of successful online learning, but it is an important fact that demonstrates that academically successful students are successful regardless of the learning format: offline or online. This thesis is supported by Cleovoulou, Iznardo and Kamani (2022). The study was aimed at determining the impact of the transition of students from offline to online learning. The study did not reveal the dependence of success on the form of education: successful students in offline learning remained successful in online learning as well.

So, everything that has been accumulated by the vast pedagogical experience and psychological research regarding the quality of the learning outcome is also applicable in online learning as well. The importance of this factor does not separate, but unites different forms of education: offline and online learning.

The factor of internal motivation, which is of great importance for the development of professional competences through participation in online debates, is of exceptional importance. The way each student is able to organize their own educational activities undoubtedly determines success, and online debates provide an opportunity to develop the competencies necessary for learning.

The study had several limitations. First, it is important to note that this study only examined certain psychological and academic aspects of remote debate participation. In other aspects, student activity and motivation for learning can influence results. An additional limitation is that the study was conducted only among freshmen. Results may differ among senior or master's students who already have learning experience and motivation. It is also essential to consider that the research was conducted in a specific university, and the results may not completely represent other educational institutions.

## 5 Conclusions

The relevance of the study is determined by the need to find new methods of developing professional competencies of students of higher education institutions. In the

current conditions dictated by quarantine restrictions, student online debates are an effective tool for building these competencies. The results of the study revealed reliable connections between students' participation in online debates and the improvement of their academic performance. A positive relationship was found with all-subject GPA for the entire period of study, the score for participation in online debates specified by students, the average score for the course, and diligence. Diligence emerged as the only psychological quality that was reliably positively related to academic performance and online debate. This regularity is consistent with the results of research on psychological predictors in offline education. Visual perceptual modality and course of study were found to be significantly negatively related to the outcome of participation in online debates. Using contrast groups, significant differences in scores for participation in online debates were found between groups with high and low scores on the Diligence, Extrinsic Motivation, Self-Control, and Visual scales. The overall aim of this research was to explore the nuances of fostering students' professional competencies through engagement in online debates. To address this aim, our research objectives encompassed a comprehensive review of various approaches to cultivating professional competencies and the identification of underlying principles underpinning these competencies' development among higher education students. The results of the study can be used by both students and employees of educational institutions to improve the educational process during quarantine. Further research should be aimed at finding the optimal format for conducting online debates among students and identifying patterns of such effectiveness for various areas of training.

## 6 References

- ACUTO, M.; LEFFEL, B. Understanding the global ecosystem of city networks. *Urban Studies*, [S.l.], v. 58, n. 9, p. 1758-1774, 2021. DOI: 10.1177/0042098020929261.
- ALLAM, A.; KURI, A.; AJAZ, A.; AHMED, S.; CARTER, P.; KORSZUN, A. Critical Psychiatry Debates; A Neglected Tool in Undergraduate Medical Education. *MedEdPublish*, [S.l.], v. 10, n. 1, p. 55, 2021. DOI: 10.15694/mep.2021.000055.1.
- BELDA-MEDINA, J. Promoting inclusiveness, creativity and critical thinking through digital storytelling among EFL teacher candidates. *International Journal of Inclusive Education*, [S.l.], v. 26, n. 2, p. 109-123, 2022. DOI: 10.1080/13603116.2021.2011440.

BLEAZBY, J.; THORNTON, S.; BURGH, G.; GRAHAM, M. Responding to climate change 'controversy' in schools: Philosophy for Children, place-responsive pedagogies & Critical Indigenous Pedagogy. *Educational Philosophy and Theory*, [S.l.], p. 1-13, 2022. DOI: 10.1080/00131857.2022.2132933.

BLEAZBY, J. Fostering moral understanding, moral inquiry & moral habits through philosophy in schools: A Deweyian analysis of Australia's Ethical Understanding curriculum. *Journal of Curriculum Studies*, [S.l.], v. 52, n. 1, p. 84-100, 2020. DOI: 10.1080/00220272.2019.1650116.

CASSIDY, C. *Philosophy for/with children and learning for sustainability*. Philosophy with Children and Teacher Education: Global Perspectives on Critical, Creative and Caring Thinking. London: Routledge, 2022.

CHINN, C. A.; BARZILAI, S.; DUNCAN, R. G. Disagreeing about how to know: The instructional value of explorations into knowing. *Educational Psychologist*, [S.l.], v. 55, n. 3, p. 167-180, 2020. DOI: 10.1080/00461520.2020.1786387.

CLEARY, Y.; SLATTERY, D. M.; FLAMMIA, M.; MINACORI, P. Developing strategies for success in a cross-disciplinary global virtual team project: Collaboration among student writers and translators. *Journal of Technical Writing and Communication*, [S.l.], v. 49, n. 3, p. 309-337, 2019. DOI: 10.1177/0047281618775908.

CLEOVOULOU, Y.; IZNARDO, M.; KAMANI, F. An examination of equity pedagogy during program coherence building in teacher education. *Teaching and Teacher Education*, [S.l.], v. 120, p. 103866, 2022. DOI: 10.1016/j.tate.2022.103866.

COOPER, G. Examining science education in chatgpt: An exploratory study of generative artificial intelligence. *Journal of Science Education and Technology*, [S.l.], v. 32, n. 3, p. 444-452, 2023. Available at: <https://link.springer.com/article/10.1007/s10956-023-10039-y>. Accessed on: June 29, 2023.

DÍAZ, A. Justicia social, reconocimiento y solidaridad. Sobre la actualidad de la pedagogía de Paulo Freire. *Revista del IICE*, [S.l.], n. 48, 2020. DOI: 10.34096/iice.n48.10209.

DU FRESNE, K. Climate change teaching as dogmatic as religious indoctrination. *Stuff*, [S.l.], 2020. Available at: <https://www.stuff.co.nz/dominion-post/comment/columnists/118953618/climate-change-teaching-as-dogmatic-as-religious-indoctrination> Accessed on: June 29, 2023.

DUQUE, I.; ORTIZ, C.; SAMPER, J.; MILLAN, G. Mapping repertoires of collective action facing the Covid-19 pandemic in informal settlements in Latin American cities. *Environment and Urbanization*, [S.l.], v. 32, n. 2, p. 523-546, 2020. DOI: 10.1177/0956247820944823.



ELICOR, P. P. I am keeping my cultural hat on: Exploring a 'culture-enabling' philosophy for/with children practice. *Childhood & Philosophy*, [S.l.], v. 17, p. 1-18, 2021. DOI: 10.12957/childphilo.2021.54161.

ELICOR, P. P. Philosophical inquiry with indigenous children: An attempt to integrate Indigenous forms of knowledge in philosophy for/with children. *Childhood & Philosophy*, [S.l.], v. 15, p. 1-22, 2019. DOI: 10.12957/childphilo.2019.42659.

EMAMI ZEYDI, A.; GHAZANFARI, M. J.; SUHONEN, R.; ADIB-HAJBAGHERY, M.; KARKHAH, S. Effective interventions for reducing moral distress in critical care nurses. *Nursing Ethics*, [S.l.], v. 29, n. 4, p. 1047-1065, 2022. DOI: 10.1177/09697330211062982.

FACER, K.; BUCHCZYK, M. Understanding learning cities as discursive, material and affective infrastructures. *Oxford Review of Education*, [S.l.], v. 45, n. 2, p. 168-187, 2019. DOI: 10.1080/03054985.2018.1552581.

FRANCO, I. D.; ORTIZ, C. Medellín in the headlines: The role of the media in the dissemination of urban models. *Cities*, [S.l.], v. 96, p. 102431, 2020. DOI: 10.1016/j.cities.2019.102431.

GOTT, T.; BAUER, T.; LONG, K. Student Leadership Today, Professional Employment Tomorrow. *New Directions for Student Leadership*, [S.l.], v. 162, p. 91-109, 2019. DOI: 10.1002/yd.20336.

HAWKINS, W. A.; FULFORD, M.; PHAN, S. V. Using Debates as the Primary Pedagogy to Teach Critical Care in PharmD Curriculum Elective Course. *Currents in Pharmacy Teaching and Learning*, [S.l.], v. 11, n. 9, p. 943-948, 2019. DOI: 10.1016/j.cptl.2019.05.010.

IRWIN, R. Climate change and education. *Educational Philosophy and Theory*, [S.l.], v. 52, n. 5, p. 492-507, 2020. DOI: 10.1080/00131857.2019.1642196.

JOHNSON, J. A. Big-Five model. In: ZEIGLER-HILL, V.; SHACKELFORD T. K. (ed.). *Encyclopedia of Personality and Individual Differences*. New York: Springer, 2017. p. 1-16. DOI: 10.1007/978-3-319-28099-8\_1212-1.

MARINONI, G.; VAN'T LAND, H.; JENSEN, T. *The impact of COVID-19 on higher education around the world—IAU Global Survey report*. International Association of Universities, 2020. Available at: [https://www.iau-aiu.net/IMG/pdf/iau\\_covid19\\_and\\_he\\_survey\\_report\\_final\\_may\\_2020.pdf](https://www.iau-aiu.net/IMG/pdf/iau_covid19_and_he_survey_report_final_may_2020.pdf). Accessed on: June 29, 2023.

ORTIZ, C.; MILLAN, G. Critical urban pedagogy: Convites as Sites of Southern Urbanism, Solidarity Construction and Urban Learning. *International Journal of Urban and Regional Research*, [S.l.], v. 46, n. 5, p. 822-844, 2022. DOI: 10.1111/1468-2427.13119.



SAAVEDRA, J. Educational challenges and opportunities of the coronavirus (COVID-19) pandemic. *World Bank*, 2020. Available at: <https://blogs.worldbank.org/education/educational-challenges-and-opportunities-covid-19-pandemic>. Accessed on: June 29, 2023.

SENYSHYN, R. M. A first-year seminar course that supports the transition of international students to higher education and fosters the development of intercultural communication competence. *Journal of Intercultural Communication Research*, [S.l.], v. 48, n. 2, p. 150-170, 2019. DOI: 10.1080/17475759.2019.1575892.

STIEDL, O.; STRAUB, N. COVID-19 as an accelerator of digital collaboration. *PWC*, 2020. Available at: <https://people-organisation.pwc.at/en/2020/04/covid-19-as-an-accelerator-of-digital-collaboration/>. Accessed on: June 29, 2023.

WARDALE, D. Improving international student transition to professional employment. *In: Sixth International Conference on Higher Education Advances*. Valencia: Universitat Politecnica de Valencia, 2020. p. 283-291. DOI: 10.4995/HEAd20.2020.11039.

ZDANEVYCH, L.; KRUTY, K.; DEMIANENKO, O.; PAKHALCHUK, N.; PERMINOVA, L.; GARACHKOVSKA, O. E-Learning Methods in Students' Education. *International Journal of Innovative Technology and Exploring Engineering*, [S.l.], v. 8, n. 12, p. 251-256, 2019. DOI: 10.35940/ijitee.L3621.1081219.

ZHU, M.; BERRI, S.; ZHANG, K. Effective instructional strategies and technology use in blended learning: A case study. *Education and Information Technologies*, [S.l.], v. 26, p. 6143-6161, 2021. DOI: 10.1007/s10639-021-10544-w.

## 7 Appendix A

### Five-Factor Questionnaire Test (Johnson, 2017)

1. Do you have a good appetite?
2. In the morning you usually feel that you have slept well and rested.
3. There is a lot of interesting things in your everyday life.
4. You work with a lot of tension.
5. Sometimes you have such bad thoughts that it is better not to talk about them.
6. You are very rarely constipated.
7. Sometimes you really wanted to leave home forever.
8. Sometimes you have fits of uncontrollable laughter or crying.
9. Sometimes you are bothered by nausea and the urge to vomit.
10. You have the impression that no one understands you.
11. Sometimes you want to swear.

12. You have nightmares every week.
13. It is more difficult for you to concentrate than for most people.
14. Strange things happened (or are happening) to you.
15. You would achieve much more in life if people were not against you.
16. As a child, you once committed theft.
17. It happened that you could not do anything, because it was difficult to force yourself to get involved in work for several days, weeks or whole months.
18. You have intermittent and restless sleep.
19. When you are among people, you hear strange things.
20. Most of the people who know you do not consider you an unpleasant person.
21. You often had to obey someone who knew less than you.
22. Most people are more satisfied with their lives than you.
23. Many exaggerate their misfortunes in order to gain sympathy and help.
24. Sometimes you get angry.
25. You definitely lack self-confidence.
26. You often have muscle twitches.
27. You often have the feeling that you have done something wrong or ugly.
28. You are usually happy with your fortune.
29. Some like to command so much that you want to do everything contrary, although you know that they are right.
30. You think that something is being planned against you.
31. Most people are able to seek benefits in a not entirely honest way.
32. Your stomach often bothers you.
33. Often you cannot understand why you were in a bad mood and irritated the day before.
34. Sometimes your thoughts flowed so quickly that you did not have time to express them.
35. You believe that your family life is no worse than that of most of your acquaintances.
36. Sometimes you are sure of your own uselessness.
37. In recent years, your health has been mostly good.
38. You have had periods during which you did something and then could not remember what it was.
39. You believe that you have often been undeservedly punished.
40. You have never felt better than you do now.

41. You don't care what others think about you.
42. Your memory is fine.
43. It is difficult for you to maintain a conversation with a person with whom you have just met.
44. Most of the time you feel general weakness.
45. You rarely have a headache.
46. Sometimes it was difficult for you to keep your balance while walking.
47. You don't like everyone you know.
48. There are people who try to steal your ideas and thoughts.
49. You believe that you have committed acts that cannot be forgiven.
50. You think that you are too shy.
51. You almost always worry about something.
52. Your parents often disapproved of your acquaintances.
53. Sometimes you lie a little.
54. Sometimes you feel that it is unusually easy for you to make decisions.
55. You have a strong heartbeat and you often suffocate.
56. You are hot-tempered, but forgiving.
57. You have periods of such anxiety that it is difficult to sit still.
58. Your parents and other family members often cling to you.
59. No one is particularly interested in your fate.
60. You do not condemn a person who does not mind taking advantage of the mistakes of others.
61. Sometimes you are full of energy.
62. Your eyesight has recently deteriorated.
63. You often have ringing or noise in your ears.
64. In your life there were cases (perhaps only one) when you felt that you were under the influence of hypnosis.
65. You have periods when you are unusually cheerful for no particular reason.
66. Even when you are in society, you usually feel lonely.
67. You believe that almost anyone can lie to avoid trouble.
68. You feel more acutely than most people.
69. Sometimes your head works more slowly than usual.

70. You are often disappointed in people.

71. You abuse alcohol.

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