Application of the Research Approach to Teaching Future Translators in Higher Educational Institutions

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ABSTRACT

The aim of the study was to experimentally implement the concept of teaching translation in the system of higher linguistic education using a research approach. The pedagogical experiment was conducted to test the effectiveness of the research approach in teaching future translators. The aim was achieved through the following methods: pedagogical experiment, Mehrabian Achievement Motivation Test; determining competence level in accordance with the criteria (low, medium, high). Wilcoxon test, McNimar’s test, \(\chi^2\) (chi-squared test) were used to process statistical data. The introduction of pedagogical conditions in the experimental group resulted in decreasing low level of knowledge from 34% to 28%, while the high level rose from 8% to 26%. The indicators of the control group changed slightly. The experiment showed that the average number of correctly completed final test assignments by experimental group students was 2.66 more than in the control group, and the variance in the number of correctly completed assignments in the experimental group as a whole was 1.76 less than in the control group. The analysis of the data obtained demonstrates the effectiveness of implementing a research approach in teaching future translators. The respondents from the experimental group showed a higher relative level of professional competencies when compared with the respondents who were taught by common curriculum. Further research will focus on finding effective models for combining different innovative methods of teaching future translators.

Keywords: didactic methods, higher education, linguistic education, research approach, translator training.

INTRODUCTION

Topicality

Translators, as professional mediators, have always supported intercultural and interethnic contacts in the context of global informatization. They helped to carry out communication, achieving mutual understanding, establishing political, economic and cultural relations. Translation is currently associated with the semantic processing of information, the value of which is determined by socio-economic and legal categories. Translators are considered national information security actors (Kenny et al., 2020).

One of the priority strategies of the state in the development of modern language education is training of highly qualified translation staff who are able to successfully solve professional problems. The translator’s ability to convey the meaning of a foreign language original message quickly, completely and accurately is especially important in the communication process. This determines the importance of a strong theoretical and methodological substantiation and the search for adequate technological solutions to ensure quality translation training and evaluate it (Monzó-Nebot & Wallace, 2020). A comprehensive understanding of the process of teaching translation in the system of modern higher linguistic education requires a methodological concept that
would take into account all the challenges of the modern world. The research approach is proposed as such a universal tool (Nazarova, 2020).

The research approach in the translator training as a way of introducing students to the methods of scientific knowledge is an important means to shape their scientific worldview, development of thinking and cognitive independence. The functions of the research approach in teaching include instilling cognitive interest; creating positive motivation for learning and education; assimilation of deep, strong and effective knowledge (Hussein, 2021).

The substance of the research approach in teaching is:
1. In the introduction of general and private methods of scientific research in the process of educational cognition at all stages (from perception to application in practice) (Forsdick & Spadaro, 2019);
2. In the organization of educational and extracurricular educational research, exploratory and creative activities;
3. In the actualization of intra-subject, inter-subject relations;
4. In making the substantive aspect of cognitive activity more complex and improving its procedural aspect;
5. In changing the nature of the teacher-student-student team relationship towards cooperation (Lee & Yun, 2020).

The substantive basis of the research approach in teaching is the relationship between the content of the material studied, methods and forms of teaching, organizational forms of educational work. Research, educational, exploratory and creative activities, which contribute to the organized assimilation of creative experience and the application of knowledge constitute its procedural background. A research approach in the training of future translators reveals the harmonious relationships between disparate phenomena and facts, the full picture as an integrated whole (Lambert, 2018).

When the students are completing research assignments, they are required to be able to arrange and analyse information obtained from various resources, to summarize facts, phenomena, to draw conclusions. In the course of completion of such assignments, students explain events and processes involving their theoretical knowledge, and establish the facts that need special consideration. The application of research methods in the process of acquiring knowledge at a comprehensible level puts the student in a position that requires not only the acquisition of ready-made knowledge, but independent research (Kultti, 2021).

Unexplored issues
Analysis of the topicality and the background of the problem allows concluding that there are a number of contradictions in pedagogical science and educational practice between:
1) socially determined need for highly qualified translation staff and poorly developed theoretical and methodological foundations necessary for successful learning;
2) requirements of educational standards and the lack of a methodological system that ensures the continuity of learning translation at different levels of linguistic education;
3) a set of scientific and theoretical data, positive experience of practical achievements in the field of teaching types and aspects of translation and the lack of models that implement training in the context of a research approach.

Aim
The aim of the research was research and experimental implementation of the concept of teaching translation in the system of higher linguistic education through a research approach. The pedagogical experiment was conducted to test the effectiveness of the research approach in the training of future translators.

Objectives
1. Check the motivation of future translators.
2. Verify the effectiveness of the implementation of the pedagogical condition — a research approach in teaching future translators.

LITERATURE REVIEW
The study of theoretical literature evidences the established scientific background for the creation of the concept of teaching translation in the system of higher linguistic education. Despite the active development of methods of teaching translation as an independent field, there are theoretical foundations that rely on current linguistic concepts and theories of translation. It seems natural that the study of translation is considered in the works of these authors, as well as in the publications of modern translation theorists, as a section of applied translation studies (Chernova, 2021). There is a tradition in the methodological research to attribute the problems of teaching translation to linguodidactics. Researchers (Van Rijt et al., 2020) have, however, repeatedly noted that teaching translation is fundamentally different from the target settings, other requirements for knowledge of not only foreign but also native language.
The next group of modern research deals with the methodological aspects of teaching different types of interpretation, in particular, paragraph-and-phrase (Samoylova et al., 2021), consecutive (Rodolfà & Schaffer, 2019), simultaneous interpretation (Povidaychyk, 2019). Nevertheless, the problem of comprehensive translation training remains unresolved. The development of the content of methods of teaching translation through the research method is of theoretical and practical importance. Translation extralinguistic and background knowledge was the subject of the study (Olloqova, 2021). It is important to identify the dominant difficulties of different types of translation and to teach future translators how to overcome them. The analysis of scientific papers revealed the current active search for technologies for teaching translation in supplementary education curricula, taking into account the professional orientation of students. It is recognized that the framework of supplementary education limits the volume of interpretation training in favour of written translation.

Researchers focus on simulating the pedagogical conditions of professional development of future translators in addition to solving methodological and didactic problems of translation training. A broad problem field is making future translators ready for translation activities (Oller et al., 2021). A number of studies have elaborated methods for the development of qualities related to cognitive activity and interest (O’Mathúna et al., 2020). It seems necessary to adapt the obtained scientific results to different levels of linguistic education, ensuring its consistency and continuity.

Many-sided integration is one of the best solutions for the theoretical and methodological substantiation for teaching translation. The integrativeness is becoming the defining trend of modern higher education, thus allowing to successfully implement a research approach (Povidaychyk & Shtymak, 2019). Reliance on a research approach that performs an instrumental methodological function, contributes to the establishment of system-forming elements that make up the methodological concept. This approach is conceptually embodied in the learning model developed by Ilyuschenko and Bagdasarova (2021). Essential for this study is the work of O’Mathúna et al. (2020) because the issue of ensuring the integrity of translation activity is crucial today. According to the author, the integrity of translation activity should be ensured by the broad integration of humanistic principles and trends. According to the authors’ team, this issue should receive more coverage. The work of Van Rijt et al. (2020) explores the issue of the impact of metaconcepts on language perception. Even though the study is aimed at high school students, the principles and methods covered in the article are particularly interesting to this study. The interest lies precisely in the choice of research methodology. The possibility of applying a research approach to improve the quality of teaching various types of translation activities in the system of higher linguistic education needs further research.

METHODS
Research procedure
Experimental work on the training of students of Translation majors through a research approach in teaching was carried out consistently in several stages:

1. Stage I
   - developing indicators that determine the levels for components of competence of students majoring in Translation;
   - developing generalized characteristics of the levels of each component of competence;
   - selecting and developing diagnostic tools for evaluating the degree and dynamics of levels of professional foreign language competencies.

2. Stage II
   - conducting a study of the initial level of professional foreign language competencies of students majoring in Translation;
   - determining of the stages of the formative experiment on the basis of the results obtained.

3. Stage III
   - conducting formative experiment;
   - conducting control study, comparative analysis of the data obtained.
   - generalizing and drawing conclusions.

In statistical terms, the problem is as follows: null hypothesis (H₀) — in the general population the share of students from the experimental group, who get more significant results compared to students from the control group, is equal to the share of the experimental group. That is, (but: P = Q = 1/2). Alternative hypothesis (H₁) indicates that this ratio is not observed and the high results of students from the experimental group confirm the importance of the research approach.

Sampling
The research was conducted at Kyiv National Linguistic University (Department of English Philology and Translation) and Taras Shevchenko National University of Kyiv (Department of Turkology). The sample
consisted of 190 bachelors — full-time students of 3rd-5th years of study. The control group is represented by 90 students, the experimental group consisted of 100 students.

Methods
1. Mehrabian Achievement Motivation Test was used to determine the level of students’ motivation for professional training, as part of professional identity (http://personal.in.ua/article.php?id=470), upon adaptation for research objectives.
2. Since the effectiveness of the educational process is an evaluative act — it shall be comprehensively considered and evaluated through the use of criteria. A criterion is a feature as the basis for the evaluation, definition or classification of something. The criterion is a kind of measure of effectiveness, but still not its evaluation. The criterion can serve as a basis for judging the success of the educational process, the particular implementation results of this process. The learning effectiveness criterion is one of the dimensionless, relative criteria, which shows the relationship between the parameters of learning quality (effectiveness) and learning time required to achieve a given level of knowledge and skills. The students of the experimental group were involved in the pedagogical experiment where the research approach was applied in teaching.

The standard methods were used for teaching students of the control group. Ten teachers of the Department of Translation Studies evaluated the success of students of control and experimental groups. The following subjects were chosen to monitor the students’ performance ranking: Translation Theory and Translation Practice. The control group was taught according to the standard programme following the curriculum. Pedagogical conditions of the research approach were introduced for the experimental group. Students of the experimental group were invited to study the above subjects according to a variable plan, that is to work in research groups under the guidance of teachers. Each of the research groups consisted of 10 people. The students of the control group were also divided into subgroups of 10 people to correlate the performance results during the experiment. The results of the current control and the final test in these subjects were evaluated to summarize the results of the experiment. The study’s main limitations are caused by the Covid-19 pandemic and consist of the need to use remote methods of information collection. The gaps in the research procedures are primarily related to the limitations of the research, which is the impossibility of taking into account the mental and physical condition of the respondents. However, considering the methods, research design, and statistical data processing techniques, the adverse effects on the results are within the limits of statistical error.

3. Statistical processing of the data obtained was performed using $\chi^2$ (chi-squared test) at the level of $p \leq 0.05$. The chi-squared test is used to compare the distribution functions of objects in two sets in terms of the state of a property based on measurements of that property in two independent samples. $\chi^2$ is calculated as follows:

$$\chi^2 = N \left[ \sum_{j=1}^{m} \left( \sum_{i=1}^{n} \frac{x_{ij}^2}{Q_{i,j}} \right) - 1 \right]$$

where $N$ – the total number of students who participated in the formative stage of the pedagogical experiment; $m$ — the number of possible values of the first feature; $n$ — the number of possible values of the second feature; $x_{ij}$ — the total number of combinations of the $i$th value of the first feature with the $j$th value of the second feature; $Q_{i,j}$ — the total number of observations of the $i$th value of the first feature; $R_{j}$ — the total number of observations of the $j$th value of the second feature.

Critical values are usually given for several levels of significance. The level of significance is the probability of error, which is to reject the null hypothesis, that is the probability that the differences are considered significant, while they are actually random. Pedagogical research usually uses a significance level (denoted by $\alpha$) of 0.05, that is no more than 5% error rate is allowed. This is the level of significance used in our study. We have chosen Wilcoxon test, McNimar’s test from a number of criteria of nonparametric statistics as the most adapted to the specifics of the research objective.

5. Student’s t-test is aimed at estimating the differences between the values of $\bar{X}$ and $\bar{Y}$ of $X$ and $Y$ samples (experimental and control groups). The following formula is proposed to calculate the Student’s t-test in the experimental and control groups at the beginning of the experiment:

$$Sd = \sqrt{\frac{\sum(c_i - \bar{y})^2 + \sum(c_i - \bar{y})^2}{(n-1)n}}$$

4. Google Forms were used for the survey. Data entry and processing was performed using Microsoft Excel and SPSS Statistics 19.0. All data are given in absolute (number of choice of answers) and relative (% of the number of respondents) values.

RESULTS
Table 1 presents the results of calculating the significance of statistical differences in the means of performance of future translators in the process of implementing the project method.
Table 1: The results of calculating the significance of statistical differences in the means of performance in the experimental and control groups

<table>
<thead>
<tr>
<th>Topic No.</th>
<th>Experimental group</th>
<th>Control group</th>
<th>Experimental group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Results ((x_i-\bar{x}))</td>
<td>(\sum (x_i-\bar{x})^2)</td>
<td>Results ((y_i-\bar{y}))</td>
<td>(\sum (y_i-\bar{y})^2)</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>-0.97</td>
<td>0.9409</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>0.03</td>
<td>0.0009</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>1.03</td>
<td>1.0609</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>1.03</td>
<td>1.0609</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>0.03</td>
<td>0.0009</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>1.03</td>
<td>1.0609</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>-0.97</td>
<td>0.9409</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>0.03</td>
<td>0.0009</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>1.03</td>
<td>1.0609</td>
<td>3</td>
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<tr>
<td>10</td>
<td>2</td>
<td>0.03</td>
<td>0.0009</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>-0.97</td>
<td>0.9409</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>-0.97</td>
<td>0.9409</td>
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</tr>
<tr>
<td>13</td>
<td>3</td>
<td>1.03</td>
<td>1.0609</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>1</td>
<td>-0.97</td>
<td>0.9409</td>
<td>2</td>
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<tr>
<td>15</td>
<td>2</td>
<td>0.03</td>
<td>0.0009</td>
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<td>10</td>
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<td>3</td>
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<tr>
<td>15</td>
<td>2</td>
<td>0.03</td>
<td>0.0009</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Authors

The following results were obtained after calculations based on the results of the survey of the experimental and control groups at the end of the experiment. The value of the t criterion fell into the area of significance. So, the experimental and control groups differ from each other at the end of the experiment at a statistically significant level (at \(p \leq 0.01\)). It can be concluded that the pedagogical conditions introduced in the experimental group are more effective than traditional teaching methods.

The calculation of the total score for the standard method showed that the motivational tendency prevailed in most subjects — the desire to succeed, while the motive to avoid failure prevailed in a smaller number of subjects (Table 2).

Table 2: The level of motivation for professional training in students of experimental and control groups at the summative stage (in percent)

<table>
<thead>
<tr>
<th>Groups/levels</th>
<th>Striving for success, %</th>
<th>Avoiding failures, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Control</td>
<td>59</td>
<td>41</td>
</tr>
</tbody>
</table>

Source: Authors

It should be noted that the indicators in Table 2 are very close in their values. This allows us to determine the mean for the level of the value-motivational component of the professional identity of future translators in the experimental and control groups at the summative stage (Table 3).

Table 3: The level of the value-motivational component in students of the experimental and control groups at the summative stage (in percent)

<table>
<thead>
<tr>
<th>Groups/levels</th>
<th>High, %</th>
<th>Medium, %</th>
<th>Low, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>60</td>
<td>40</td>
<td>Not found</td>
</tr>
<tr>
<td>Control</td>
<td>63</td>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors

As the Table shows, low values of the value-motivational component of professional identity in students were not found. This suggests that students in both groups are equally motivated to learn and the experiment will show only the effectiveness of the proposed pedagogical conditions.

The results of measuring the level of knowledge were presented in the ordinal scale for the purposes of the analysis. Three levels of knowledge were distinguished (L=3): satisfactory (the number of completed
assignments is less than or equal to 12), good (the number of completed assignments is strictly more than 12, but less than or equal to 15), and high (the number of completed assignments is strictly more than 15). After that, the results were aggregated to the previously selected frequency levels. For example, based on Table 3, the number of the control group members who received a score belonging to a certain range before the experiment: m1=34 (that is, 34% of the control group students before the experiment showed a satisfactory level of competence), m2=56, m3=8. Table 4 shows the distribution of members of the experimental and control groups by levels of knowledge.

Table 4: The results of measurements of the level of knowledge in the control and experimental groups before and after the experiment

<table>
<thead>
<tr>
<th>Levels of knowledge</th>
<th>CG before the experiment</th>
<th>EG before the experiment</th>
<th>CG at the end of the experiment</th>
<th>EG at the end of the experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>34%</td>
<td>36%</td>
<td>36%</td>
<td>28%</td>
</tr>
<tr>
<td>Medium</td>
<td>56%</td>
<td>54%</td>
<td>52%</td>
<td>46%</td>
</tr>
<tr>
<td>High</td>
<td>8%</td>
<td>10%</td>
<td>12%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Source: Authors

We can see that the low level of knowledge decreased in the experimental group from 36% to 28% after the introduction of pedagogical conditions, while the high level rose from 10% to 26%. The indicators of the control group changed slightly. In order to quantify the results of the experiment, the average number of correctly completed assignments was calculated for the control and experimental groups after the experiment. So, the experiment showed that the average number of correctly completed assignments in the final test by students in the experimental group was 2.66 more than in the control group, and the variance in the number of correctly completed assignments in the experimental group as a whole was 1.76 less than in the control group.

The critical value of $\chi^2$ 0.05 for the significance level of 0.05 is in the critical values table, it equals 7.82 for L=3. In this example, L=3 (there are three levels of knowledge — “satisfactory”, “good” and “excellent”). Therefore, L−1=2. From the critical values table of $\chi^2$ we obtain L−1=2: $\chi^2$ 0.05=5.99 for the significance level $\alpha$=0.05. The results of the calculations showed that all empirical values of $\chi^2$ were less than the critical value, except for the result of $\chi^2$EMP=6.20 for the comparison of the experimental and control groups after the end of the experiment. These values are presented in Table 5.

Table 5: Empirical values of $\chi^2$

<table>
<thead>
<tr>
<th></th>
<th>CG before the experiment</th>
<th>EG before the experiment</th>
<th>CG after the experiment</th>
<th>EG after the experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG before the experiment</td>
<td>0</td>
<td>0.4</td>
<td>0.14</td>
<td>4.87</td>
</tr>
<tr>
<td>EG before the experiment</td>
<td>0.4</td>
<td>0</td>
<td>0.03</td>
<td>5.42</td>
</tr>
<tr>
<td>CG after the experiment</td>
<td>0.14</td>
<td>0.03</td>
<td>0</td>
<td>6.20</td>
</tr>
<tr>
<td>EG after the experiment</td>
<td>4.87</td>
<td>5.42</td>
<td>6.20</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Authors

We can conclude from the data in Table 4 that the characteristics of all compared samples, except for the experimental and control groups after the end of the experiment, coincide with the significance level of 0.05. Since $\chi^2$EMP=6.20>5.99=$\chi^2$ 0.05, the “significance of differences in the features of the experimental and control groups after the experiment is 95%”. Therefore, the initial values (before the experiment) of the experimental and control groups coincide, while the final values (after the experiment) differ.

In addition to the above mathematical methods of analysis of research results, an important component of the study is ensuring its validity. Validity means the substantiation and suitability of the application of research methods and results in particular conditions. There is substantive, constructive and criterion validity. Substantive validity means the degree of conformity of the content of the assignments offered in the methodology to the realities of the activity in which the feature measured in the methodology is manifested. It is provided by obvious validity —the connection between the content of the procedure for assessing personality traits and the personal plan for the study of the subject, provided with detailed comments based on psychological diagnosis methods, is obvious for students.
Table 6: The results of the application of the McNinmar’s test

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Value of the indicator</th>
<th>Critical value</th>
<th>Accepted hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value-motivational</td>
<td>32</td>
<td>26</td>
<td>H1</td>
</tr>
<tr>
<td>Cognitive-terminological</td>
<td>36</td>
<td>28</td>
<td>H1</td>
</tr>
<tr>
<td>Linguo-cultural</td>
<td>33</td>
<td>27</td>
<td>H1</td>
</tr>
<tr>
<td>Communicative and activity</td>
<td>25</td>
<td>22</td>
<td>H1</td>
</tr>
</tbody>
</table>

Source: Authors

So, we record a positive result for all items and observe the positive dynamics in the different components of linguistic education of future translators with the involvement of the research approach.

DISCUSSION

There is a social need for qualified translators who provide intercultural and interlingual communication. Therefore, there are certain requirements of educational standards and qualifications for professional translation competence. This necessitated the development of theoretical and methodological foundations for effective teaching translation subjects in the modern system of higher linguistic education. Povidaychyk (2019) also noted that. In recent decades, an independent scientific field of integrative type has been formed and is actively developing in pedagogy — methods of teaching translation, where the object of study is a holistic and open system of linguistic (translation) education. The subject of this direction is the process of acquiring professional translation competence in the course of the student’s professionalization. Povidaychyk et al. (2021) dealt with the development of this research area. The search for the latest technologies to improve the level of professional competencies of future translators is of particular importance, as Pavlenko et al. (2018) emphasized. At the same time, Lyntvar (2021) underlined the great effectiveness of traditional teaching methods. The concept of teaching translation, created within the general teaching methodology, is represented by a set of methodological, regulatory, theoretical and methodological components. The research approach has been chosen as the leading instrumental approach that provides the unity of the methodological background of the concept. The research approach allows ensuring the integrity and continuity of education at all stages and levels of higher linguistic education, guided by the principles of anthropocentric orientation, consistency, scientific interdisciplinarity, multimodality, discursiveness. The development of professional translation competence as the translator’s ability to deliver quality translation is considered as a strategic goal of education, which is guided by the regulatory component of the concept. The idea of the need to determine the research background, which ensures the integrity and continuity of the development of translation competence, was guided by the logic of the research approach. Liashyna (2019) noted the need for such a step. It is proposed to consider a way to overcome the dominant difficulties of a particular type of translation as a basis. Alvstad et al. (2017) and Liashyna (2019) mention the solution of didactic problems by improving the teaching methodology. Baker and Saldanha (2019) and Bancroft (2017) write, however, about increasing the internal motivation of students as an incentive to acquire professional competencies. The translator as a subject of translation activity is considered from the perspective of the theory of linguistic personality. The professional linguistic personality of a translator is characterized by such properties as multilingualism, multiculturalism, sociocentrism, tolerance, elitism, stability of attitudes and assessments. In their works, O’Mathúna et al. (2020) and Van Rijt et al. (2020) consider the development and openness of the system of extralinguistic knowledge, knowledge of translation terminology, thesaurus of translation discourse and translation worldview. The development of a professional linguistic personality is correlated with the pedagogical goal of professional development of future translators. Choi and Chiu (2021) and De la Iglesia (2017) noted the need to develop those qualities in future specialists.

The reliability and validity of the research results are ensured by the scientific argumentation of the initial theoretical positions, the adequacy of the methods used to the objectives of the study. The correct experimental work, evaluation of the results of the experiment through the methods of mathematical statistics, a duration of the experiment leave no doubt about the objectivity of the study. The main limitations of the study include the difficulties of identifying the results of the study due to the limited sample of students. The development and use of modern multimedia technologies, the adequacy of the methods used to the research objectives, taking into account the needs of modern education also represent certain difficulties. The quarantine restrictions imposed by COVID-19 pandemic made it difficult to test the research materials in the real educational process. The reliability and validity of the results obtained is ensured by: taking
into account the previous number of factors influencing the solution of the problem; using source data obtained from practice; reasonable choice of basic assumptions and limitations. A combination of theoretical and experimental research accepted as a starting point in setting research objectives also played a significant role.

CONCLUSIONS

The research topicality is determined by the need to find an effective way of teaching future translators. A research approach was chosen among all the innovative and progressive methods, which is aimed at acquiring research competencies by students.

In accordance with the objectives outlined in the article, the research was based on the development of the educational process through using a research approach in teaching future translators. The methodological analysis of the research problem revealed contradictions in the educational process in higher educational institutions when using the research approach in professional training. The factors influencing the quality of the educational process which was based on the research approach were identified. Models of professional training with the use of research approach were substantiated and developed. The results obtained after the introduction of pedagogical conditions indicate the effectiveness of the proposed method for improving the professional competencies of students. The research results can be applied in the introduction of a research approach in teaching a foreign language to both translation specialists and students of other majors.

The further research may deal with the ways to improve and develop opportunities for education and training through a research approach. They should be aimed, in particular, at the search for new pedagogical approaches and technologies in volumes that will allow establishing optimal pedagogical conditions. New technologies may allow for pedagogical design of learning and development of individual learning trajectories for successful socialization, taking into account the student’s qualities and specific features. This will result in selecting pedagogical technologies that are optimal not only in terms of forms of studying certain topics of particular subjects, but also taking into account the factors of students’ self-study. This will require psychological and pedagogical substantiation for the situation where information technology in education is implemented everywhere and there is a need to harmoniously take into account the needs of the individual, society and state.

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REFERENCES


15. Lyntvar, O. M. (2021). Training of translators in the educational institutions of Ukraine under the conditions of pandemic. Electronic Institutional Repository of the National Aviation University of Ukraine. Retrieved from https://er.nau.edu.ua/bitstream/NAU/50089/1/%d0%9b%d0%92%d0%9e%d0%a2%d0%92%d0%9d%d0%a2%d0%94%d0%a0%20%d0%a0%20%d0%9e.%d0%9c._Italy.pdf


