

Experimental Process Of Developing Life Skills Educating Competency For Pedagogy Students In Vietnam

Trương Thị Hoa¹, Trinh Thuy Giang², Nguyen Thi Thanh Tra³, Le Thi Hoang Lan⁴
Vũ Lê Hoa⁵, Nguyễn Thúy Quỳnh⁶, Đào Thị Thu Trang⁷, Phí Thị Thu Trang⁸

¹ Ha Noi National University of Education, Ha Noi, Vietnam Email: truonghoa@hnue.edu.vn

²Ha Noi National University of Education, Ha Noi, Vietnam *Correspondence Author, Email: giangtt@hnue.edu.vn

³Ha Noi National University of Education, Ha Noi, Vietnam Email: tratlgd@gmail.com

⁴Ha Noi National University of Education, Ha Noi, Vietnam Email: hoanglan@hnue.edu.vn

⁵ Ha Noi National University of Education, Ha Noi, Vietnam Email: lehoa.tlgd@gmail.com

⁶ Ha Noi National University of Education, Ha Noi, Vietnam Email: quynhnt@hnue.edu.vn

⁷ Ha Noi National University of Education, Ha Noi, Vietnam Email: daothutrang.1983@gmail.com

⁸ Regional Academy of Politics 1, Ha Noi, Viet Nam Email: phitrang.hcmal@gmail.com

Cite this paper as: Trương Thị Hoa, Trinh Thuy Giang, Nguyen Thi Thanh Tra, Le Thi Hoang Lan Vũ Lê Hoa, Nguyễn Thúy Quỳnh, Đào Thị Thu Trang, Phí Thị Thu Trang (2024). Experimental Process Of Developing Life Skills Educating Competency For Pedagogy Students In Vietnam. *Frontiers in Health Informatics*, 13 (8) 3034-3043

Abstract:

Experimenting with the process of developing the life skills educating competency for students in education is the final and crucial step in our paper “Developing the life skills educating competency for students in education” in which we proposed the process of developing the life skills educating competency for students in education.

This is a gap and a weak point in Vietnamese pedagogical institutions. The proposed process is recommended for use in integrated teaching of subjects that have significant potential for developing life skills educating competencies for students in pedagogical schools. With this process, we hope to contribute an effective approach for pedagogical institutions in training their students’ capacity to educate life skills, and help them to meet requirements for educating life skills in the current context of innovating general education in Vietnam after their graduation.

The process of developing life skills educating competencies for students in education was experimentally tested by the research group during the teaching of Educational Science at Hanoi National University of Education. The results of two-round experiments were tested using T-tests, Sig. (2-tailed), and other statistical findings to validate the usefulness of the process. The experimental results were then presented and analyzed in this paper to confirm that the process can be applied in pedagogical institutions for use in training their students’ life skills educating competencies.

Keywords: Life skills, life skills educating competency, development of life skills educating competency, experiment

1. Introduction

In the context of innovating education, developing life skills educating competency for pedagogy students is now an essential requirement in vocational training at Vietnamese pedagogy institutions. This competency is mainly built by teaching professional courses in pedagogy at pedagogy schools, including Educational Science, which provides learners with fundamental knowledge and skills to organize educational activities in secondary schools. By studying this course, students can acquire and develop certain necessary educational competencies, which will help them to meet the expected learning outcomes of pedagogy institutions. However, building the process of developing life skills educating

competency in teaching Educational Science has its own characteristics, unlike other processes of developing educating competency. Based on the current situation of developing life skills educating competencies for students in Vietnamese pedagogy schools (Giang, T.T, 2019), We have proposed the process for developing life skills education competencies for pedagogy students (Giang, T.T, 2022). This article only experimentally studies the process of developing life skills education capacity for pedagogical students and is a part of the research project "Experimental research on measures to develop life skills education capacity for students of Hanoi National University of Education", Code: SPHN22-23.

2. Literature review

In the late 20th century, competency-based teaching became a popular trend in vocational education and higher education around the world. In any profession, workers must meet the requirements of their jobs, so educators and managers must pay more attention to teacher training and education. In that context, there have been many studies on competencies, educational competencies and teaching to develop competencies for learners.

In the world, there have been many studies on competencies. Some studies suggest that competencies are basic abilities based on knowledge, experience, values and inclinations of a person developed through practice (Cudominna, 1961), a set of knowledge, skills, and attitudes appropriate to a practical activity (Barnett, 1992). There are also studies that suggest that competence is a combination of behaviors that allow people to perform actions proficiently in certain circumstances (Rowland, 1999) or competence is expressed as a system of abilities, proficiency or essential skills that can help people qualify to reach a specific goal (Nakpodia, 2011). In addition, there are also studies that have affirmed that competence is the successful performance of a task or effective solution to a problem posed by real life (Bernd, 2015).

Studies on teaching competence and the development of teaching competence in Eastern European and Western countries (Cudominna, 1961). These studies refer to the competencies that need to be developed for students and the competencies that need to be developed for young teachers who have just graduated, to meet the requirements of society (Barry. K, King. L, 1993). Recently, some studies have suggested that developing competencies for students should be the goal of teacher training, because teachers are the ones who lay the foundation to help students form and develop competencies (Hortsch.H, 2003), (Hermann.S, 2004), (Glenn. M, Mary Jo Blahna, 2005).

In Vietnam, in the context of educational innovation, there are quite a few studies on teaching to develop competencies. Research on teaching to develop competencies for students of technical pedagogical universities (Chinh. D.C, 2012); Training Pedagogical skills in the direction of forming professional capacity for students in Pedagogical Universities (Dung, N.T.K, 2015); Training teaching capacity for Pedagogical University students according to the approach of practical capacity, meeting the 2018 general education program (Giang, T.T, 2019); Teaching capacity of Pedagogical University lecturers (Oanh, T.T.T & Giang, T.T, 2019); Organizing teaching and learning in the direction of developing capacity for Pedagogical Students in Educational Innovation (Tinh, N.T, 1019).

Vietnam is a developing country, life skills are one of the quite important and necessary educational contents at all levels that need to be taught to students. In that context, there are many studies on life skills (Son, H.V, 2009), life skills education at all levels (Quang, N.D, 2010), (Hue, N.T, 2012), life skills education capacity of teachers (Giang, T.T, Khanh, M.Q, Hong, N.T.T, 2021), (Giang, T.T and authors 2022), developing life skills education capacity for teachers at all levels (Binh, N.T, Ha, N.T, Giang, T.T, 2014), (Giang, T.T, 2019), developing life skills education capacity for pedagogical students (Giang, T.T, 2022), in which, research on developing life skills education capacity for pedagogical students has been quite comprehensively studied, especially the process of developing life skills education capacity. life skills for pedagogical students. However, this process has not been experimentally conducted to confirm its applicability. With the inheritance of the above studies, we continue to conduct experiments on measures to develop life skills education capacity for pedagogical students that have been proposed in the Ministry of Education and Training's science and technology project by Giang, T.T (2022) as the project leader.. In this article, we focus on finding answers to the following questions:

- Is the process of developing life skills education capacity for pedagogical students applicable? To what extent?
- If this Process is applicable, are there any conditions attached? - What should lecturers pay attention to when applying this process in developing life skills education capacity for pedagogical students?

3. Methodology

3.1. Experimental method

Description of experimental process:

- The objective of the experiment is to evaluate the usability of the proposed process of developing life skills educating competency

Experimental subjects: 172 second-year students were randomly selected without stratification from Hanoi National University of Education, including:

- + Experimental group: 87 students
- + Control group: 85 students
- Experimental content: Experimental process of developing life skills education capacity for students in teaching Pedagogy
- Independent variable: Implementing the process of developing life skills education capacity for students in the process of teaching Pedagogy
- Dependent variable: The ability to educate students' life skills is improved. –

Description of experimental process:

Step 1: Select testing group and control group

Step 2: Organize the development of life skills education capacity in the experimental class with the proposed process.

Step 3: The organization developed life skills education capacity in the control class without applying the proposed process with the same teaching content in the experimental class and the same lecturer in the experimental group.

Step 4: Organize tests and evaluate students' life skills education capacity in both experimental and control groups with the same test.

Step 5: Conclusion on experimental results

- Processing experimental results: Experimental results are processed with the following parameters:

- Mean: $\bar{X} = \frac{\sum N_i X_i}{N}$ (1)

- Variance: $S^2 = \frac{\sum N_i (X_i - \bar{X})^2}{N}$ (2)

- Standard deviation: $S = \sqrt{\frac{\sum N_i (X_i - \bar{X})^2}{N}}$ (3)

- Coefficient of variation: $V = \frac{\bar{X}}{S}$ (4)

- Value of T: $T = \left(\bar{X}_{TN} - \bar{X}_{DC} \right) \sqrt{\frac{2N}{S_{TN}^2 + S_{DC}^2}}$ (5)

In which: X_i is score value

N_i is the frequency of X_i

\bar{X}_{TN} is the mean of class TN

\bar{X}_{DC} is the mean of class DC

S_{TN} is the standard deviation of class TN

S_{DC} is the standard deviation of class DC

T is the test quantity

+/- Mean: Characterizes the concentration of data to compare the average learning level of students in two groups of testing and control groups.

+/- Variance and standard deviation: Are the parameters that measure the dispersion of the data around the mean. The standard deviation reflects the deviation or variability of the data around the mean. The smaller the deviation, the less the student's learning results are scattered around the mean and vice versa.

+/- Coefficient of variation: As a parameter comparing the dispersion of the data, the smaller this coefficient shows that the data is quite concentrated and vice versa.

Inferential statistics are used to test the hypothesis. The T (Student) test is used to compare the mean values. The type of T test used is the Paired-Sample T Test. This test is used to test whether the mean of two related observations is equal or not.

- Performing this test operation, the results are shown in three tables: Paired-Sample Statistics, Paired-Sample Correlation and Paired-Sample T Test tables.). In which, Pair is the pair of observations that are compared; Mean in the Paired-Sample Statistics table is the mean of the pair; Mean in the Paired-Sample T-Test table is the difference in the average score; N is the number of observations; Sig is the one-tailed test significance level; Std. Deviation is the standard deviation (standard deviation of comparison between two ranges of distributions).

- The series with the smaller standard deviation, is considered to be more homogeneous, the dispersion is smaller and vice versa); Std. Error Mean is the mean of the standard error; Correlation is the correlation coefficient. The correlation coefficient between groups of observations (0-1). The larger the correlation coefficient, the more significant the pair observations (the tighter).

* Processing testing results in terms of qualitative approach:

- In addition to the quantitative assessment and analysis, we also analyze the completion of the questions given in the student's test to assess the quality of the implementation of those requirements, thereby evaluating Quality price performance of the required skills.

3.2. Some other research methods

The methods of analyzing and synthesizing were used to study scientific works on life skills education and life skills education capacity development, on that basis, to create a scientific basis for developing life skills education capacity for pedagogical students.

Interviewing was used to discuss with experts about the issues necessary for the experimental process of developing life skills education capacity for pedagogical students.

Pedagogical observations were used to observe the activities of lecturers and students during the experiment, thereby promptly detecting students' problems and promptly adjusting the activities of lecturers.

Educational experience summarizing was used to study the experiences of lecturers in developing professional capacity for students, thereby drawing lessons for developing life skills education capacity for pedagogical students.

4. Content

4.1. Related concepts

Life skills are psychosocial competencies that reflect an individual's effective coping abilities with the demands and challenges of life (Son, H.V, 2009).

Life skills education is a purposeful and planned process of teachers that aims to equip learners with knowledge, attitudes, and actions, and help them gain necessary life skills that fit their age, socio-economic conditions, and living environments, in order to cope with situations in modern life (Binh, N.T, Ha, N.T, Giang, T.T, 2014), (Quang, N.D, 2010).

Life skills educating competency is the responsible and effective implementation of life skills educating activities or resolution of tasks and issues related to life skills in various educational situations based on understandings, skills, and experience in life

skills education (Giang, T.T, 2019), (Giang, T.T, 2022).

Developing competency is the process of expanding and enhancing an individual's system of necessary competencies to effectively carry out activities according to set objectives. This process aims to transform the individual's competency system in a positive direction, form new competencies, and increase the level of existing competencies. Developing life skills educating competency is the process of transforming the system of life skills educating competencies from a lower to higher level (Rothwel, W.J. and Lindholm, J.E, 1999), (Minh, H.D, 2015).

The process of developing life skills educating competency is a sequence of steps that will make impact on learners, transforming their system of life skills education competencies from lower to higher levels (Minh, H.D, 2015), (Oanh, T.T.T, 2019), (Giang, T.T, 2022).

4.2. Process for developing life skills educating competency for pedagogy students in teaching Educational Science

Pedagogy is an important professional subject in teacher training programs at teacher training colleges. This subject has many advantages to develop life skills education capacity for students. However, not all the contents of Educational Science have these advantages. By teaching the advantageous contents of this subject according to a specific process, life skills educating competencies for students can be developed. The proposed process is as follows (Giang, T.T, 2022):

Step 1: Analyze and identify the contents of the Pedagogy program to integrate the KNS educational competencies that need to be formed and trained for students

Step 2: Design a lesson plan integrated with developing life skills educating competency for students

Step 3: Have students to study about the standards of knowledge, skills, and attitudes of life skills educating competency during in classroom teaching

Step 4: Have students apply the knowledge of life skills education in organizing life skills educational activities for their students in hypothetical situations

Step 5: Provide opportunities for students to practice the formed life skills educating competencies in new situations

Step 6: Organize self-assessment and self-reflection for students.

With the process above, the following life skills education competencies of students will be developed:

- Competency of identifying and selecting life skills education topics
- Competency of designing plans of life skills educational activities by topic
- Competency of implementing the plans of life skills educational activities
- Competency of evaluating the result of life skills education.

4.3. Analysis of experimental results

Assessing the initial proficiency level of students before the teaching experiment

We conducted a pre-test for the students to assess their initial proficiency level before the teaching experiment.

After processing the collected data, we summarized the results using a frequency distribution table of pre-test scores before the teaching experiment in Table 1 below:

The results in Table 1 indicate that the average test scores for the two pairs of experimental and control groups are equivalent:

The average score of the experimental group is 6.62, while that of the control group is 6.63; the difference is only 0.01, and the frequency distribution of scores is also equivalent.

Table 1: Frequency distribution table of pre-test scores for the experimental and control groups before the teaching experiment

| Group | N | Score | | | | | | | | \bar{X} |
|--------------------|----|-------|---|----|----|----|----|---|----|-----------|
| | | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| Experimental group | 87 | 0 | 4 | 14 | 20 | 22 | 27 | 0 | 0 | 6,62 |
| Control group | 85 | 0 | 4 | 12 | 21 | 22 | 26 | 0 | 0 | 6,63 |

From table 1, we have table 2.

Table 2: Classification of pre-teaching practice test results for the experimental and control groups.

| Group | Number of tests | Result of the test before the pedagogical experiment | | | | | | | |
|--------------------|-----------------|--|-----|----------|------|----------|------|-----------|---|
| | | Weak | | Average | | Good | | Excellent | |
| | | Quantity | % | Quantity | % | Quantity | % | Quantity | % |
| Experimental group | 87 | 4 | 4,6 | 34 | 39,1 | 49 | 56,3 | 0 | 0 |
| Control group | 85 | 4 | 4,7 | 33 | 38,8 | 48 | 56,5 | 0 | 0 |

Looking at the classification of the results according to levels: Excellent, Good, Average, Weak, statistical analysis in table 2 shows that these levels in the experimental and control groups are also equivalent: From table 2, it is easy to see that the proportion of students who achieved the levels of Good, Average, Weak, Poor in both the experimental and control groups is equivalent, and the degree of difference is negligible. Specifically:

Excellent level: Neither the experimental nor the control group achieved any excellent score.

Good level: The experimental group is 56.3%, the control group is 56.5%; the difference is 0.2%.

Average level: The experimental group is 39.1%, the control group is 38.8%; the difference is 0.3%.

Weak level: The experimental group is 4.6%, the control group is 4.7%; the difference is 0.1%. It can be concluded that the level of pre-teaching practice of the experimental and control groups is equivalent. These groups can be used for teaching practice. The chart below represents the results of the first pre-teaching practice test of the experimental and control groups:

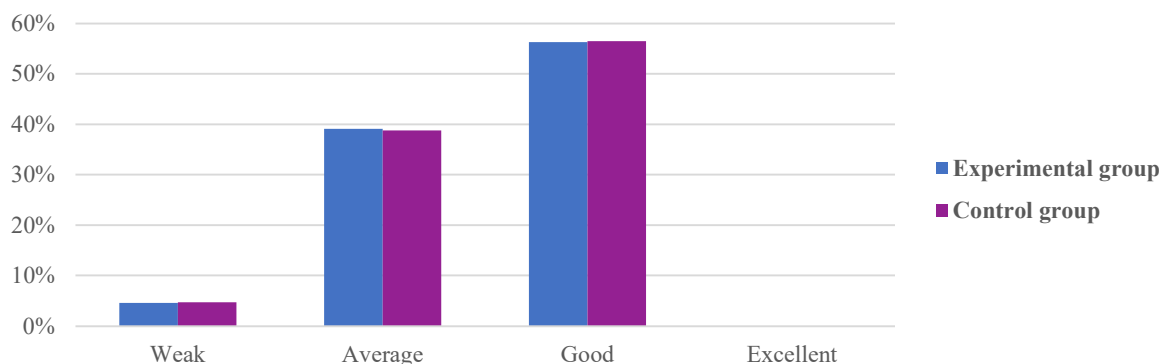


Chart 1: Classification of pre-teaching practice test results of students in two groups: experimental and control

Analysis of student's academic performance after teaching practice After measuring the initial proficiency level of students before teaching practice, we carried out teaching practice in two groups, experimental and control.

Table 3: Frequency distribution table of test scores after teaching practice of experimental and control classes

| Group | | Score Xi | | | | | | | \bar{X} |
|--------------------------|----|----------|------|------|------|------|-----|-----|-----------|
| | | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| Experimental group 87 | Ni | 0 | 9 | 15 | 27 | 33 | 3 | 0 | 7,06 |
| | Fi | 0,0 | 10,3 | 17,2 | 31,0 | 37,9 | 3,4 | 0,0 | |
| Experimental group 85 | Ni | 4 | 9 | 22 | 24 | 26 | 0 | 0 | 6,69 |
| | Fi | 4,7 | 10,6 | 25,9 | 28,2 | 30,6 | 0,0 | 0,0 | |

Looking at table 3, it can be seen that the mean score of the experiment group is higher than the mean score of the control

group ($7.04 > 6.69$). The frequency distribution of the scores is shown in the cumulative frequency line graph (*chart 2*). From table 3, we have table 4 to classify the test results of the experiment and control groups after teaching practice as follows:

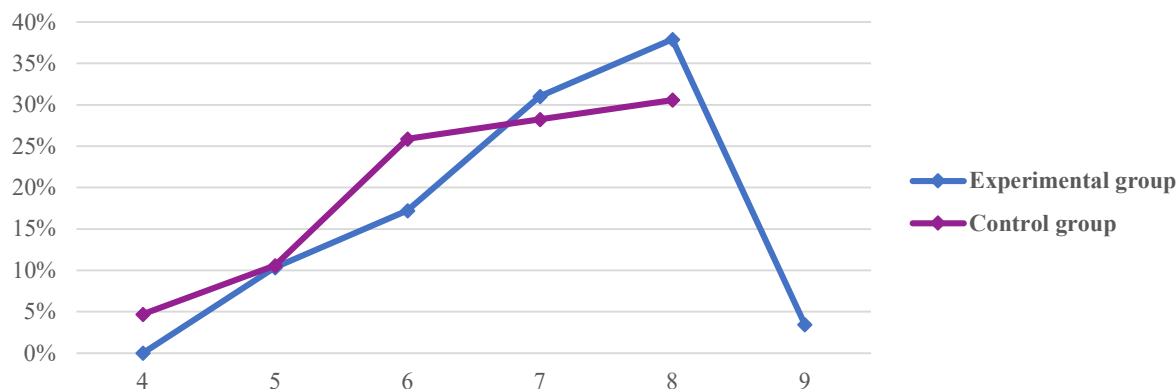


Chart 2: Cumulative frequency distribution line graph of the test scores of students in the experiment and control groups after teaching practice

Table 4: Classification of test results of the experiment and control groups after teaching practice

| Group | The number of tests | Result of the test after the pedagogical experiment | | | | | | | |
|--------------------|---------------------|---|-----|----------|------|----------|------|-----------|-----|
| | | Weak | | Average | | Good | | Excellent | |
| | | Quantity | % | Quantity | % | Quantity | % | Quantity | % |
| Experimental group | 87 | 0 | 0,0 | 24 | 27,5 | 60 | 68,9 | 3 | 3,4 |
| Control group | 85 | 4 | 4,7 | 31 | 36,5 | 50 | 58,8 | 0 | 0,0 |

Table 4 shows that the test results of the experiment group are higher than those of the control group:

Excellent grade: 3.4% of the experiment group, none of the control group.

Good grade: 68.9% of the experiment group, 58.8% of the control group.

Average grade: 27.5% of the experiment group, 36.5% of the control group.

Poor grade: None of the experiment group, 4.7% of the control group. If we consider each pair of classes participating in the experiment separately, the proportion of students achieving each grade level in the experiment classes is also higher than that in the control classes. Specifically: Chart 2 below clearly shows these test score results. To compare the scores of the experimental and control groups based on the values of the parameters, we further processed the experimental results using SPSS and the results can be collected in Table 5.

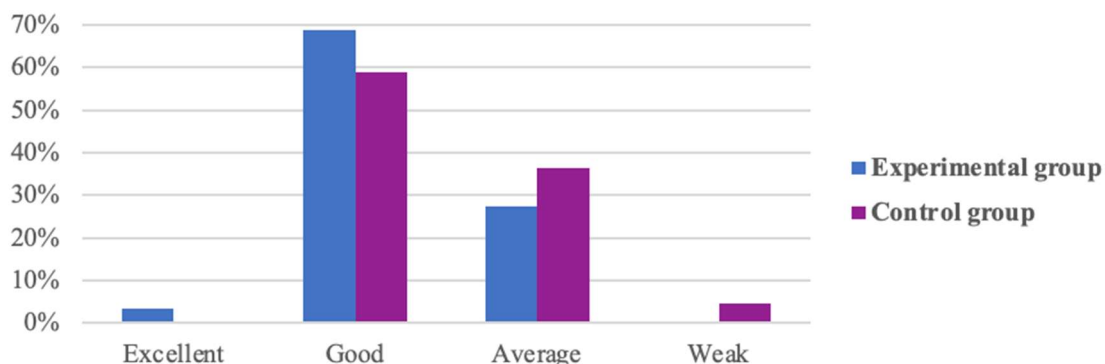


Chart 3: Classification of test results for students in the experimental and control groups after the teaching practice

phase 1

Table 5: Statistical parameter table of the test results for the experimental and control groups after the teaching practice.

| Group | Mean | Std Deviation | Std Error of Mean | Variance | Coefficient of variation |
|----------------------|-------|---------------|-------------------|----------|--------------------------|
| Experimental group 1 | 7,069 | 1,054 | 0,113 | 1,111 | 14,91 |
| Control group 1 | 6,694 | 1,154 | 0,125 | 1,333 | 17,23 |

Looking at table 5, it is clear that the average score of the experimental group after the pedagogical experiment is higher than the average score of the control group by 0.41 points. Specifically, $(7.069 > 6.694)$.

The standard deviation S and variance S^2 of the experimental groups are lower than those of the control group. This indicates that the scores of the experimental group are less dispersed around the mean compared to those of the control group. Specifically, $+/- S_{TN} < S_{DC}$ ($1.054 < 1.154$).

The coefficient of variation of the data obtained in the experimental group is lower than the coefficient of variation of the data in the control group. Specifically, $+/- V_{TN} < V_{DC}$ ($14.91 < 17.23$).

On the other hand, the average deviation of the mean (TBC) of the experimental groups is smaller than that of the control group. Therefore, based on the above results, we can initially conclude that after the Pedagogical Experiment, the scores of the experimental groups are better than those of the control group. These results may be due to the application of the life skills education capacity development process.

To test the hypothesis, the T-test for paired observations was used. The T-test was used with the assumption that there was no difference in the mean between the scores before and after the Pedagogical Experiment. The paired observations here are the results of the test taken by students before and after the experiment. Through the T-test, we obtained the results in Table 3.6 below: Analyzing the data in Table 3.6, we can see that:

The standard deviation (1.12501) and the standard mean error (0.6269) of the scores after the experiment are smaller than the standard deviation (1.21042) and the standard mean error (0.6745) of the scores before the Pedagogical Experiment.

The correlation coefficient of the pair is 0.846, indicating a strong correlation between the scores before and after the Pedagogical Experiment.

The Sig and Sig (2-tailed) of the pair are both 0.00, indicating a very high level of significance of the test.

The T-value of the paired data before and after the experiment is $T = -8.532$. With 172 degrees of freedom and a significance level of 95%, consulting the student's table, we obtain the critical T-value (T-critical) of 1.6487. Therefore, $T = |-8.532| > T\text{-critical} = 1.6487$, and the null hypothesis that there is no significant difference in the mean scores before and after the experiment is rejected. The mean difference is significant.

Table 6 A: Correlation coefficient test table.

| Score | Sample size | Standard deviation | Standard error of the mean | Correlation coefficient | Sig |
|------------------------------|-------------|--------------------|----------------------------|-------------------------|-------|
| Pre-teaching practicum test | 172 | 1,21042 | 0,6745 | 0,846 | 0,000 |
| Post-teaching practicum test | 172 | 1,12501 | 0,6269 | | |

Table 6 B: Paired Samples Test

| | | | | |
|--|--------------------|--|----|----------|
| | Paired Differences | | Df | Sig. (2- |
|--|--------------------|--|----|----------|

| | | | | | | | T | | tailed) |
|--------|---|--------|----------------|-----------------|---|--------|--------|-----|---------|
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | | Lower | Upper | | | |
| Pair 1 | Pre-teaching practice test score Post-teaching practice test score | -.3106 | .65316 | .03640 | -.3822 | -.2389 | -8.532 | 321 | .000 |

The difference between the scores before and after the experiment falls within the range of -0.3822 and -0.2389 with a 95% confidence level.

Based on the T-test results analyzed above, it can be concluded that the initial results show that the learning outcomes of students after the Pedagogical Experiment are higher than before due to the use the Process

5. Conclusion

The experimental results of the process of developing life skills education capacity for students show that this process is feasible and can improve life skills education capacity for students. Lecturers of Pedagogy in particular and pedagogical subjects in general can apply this process to the teaching process to develop life skills education capacity for students. This process can be transferred to lecturers teaching professional subjects at Hanoi Pedagogical University to use to develop life skills education capacity for students in an integrated manner, contributing to improving the quality of current teacher training in pedagogical schools, meeting the requirements of general education reform in Vietnam.

6. Future research

The process of developing life skills education capacity for pedagogical students can continue to be researched and implemented at teacher training universities to confirm that it can develop life skills education capacity for students according to the wishes of these educational institutions.

In the next few years, this process can be transferred to pedagogical universities for use in the process of pedagogical training for students, contributing to improving the quality of training and the quality of general education in Vietnam.

REFERENCES

1. Bernd, M., & Cuong, N. V. (2015). *Modern teaching theory*. Hanoi Pedagogical University Publishing House.
2. Barnett, R. (1992). (Ed.). *Learning to effect*. The Society for Research into Higher Education & Open University Press.
3. Barry, K., & King, L. (1993). *Beginning teaching* (2nd ed.). Social Science Press Australia.
4. Cudominna, N. V. (1961). *Forming pedagogical competencies*. Lenin Grat General Publishing House.
5. Chinh, D. C. (2012). *Teaching according to the competency-based approach in Technical Pedagogical Universities* (PhD thesis). Hanoi Pedagogical University.
6. Binh, N. T., Ha, N. T., & Giang, T. T. (2014). *Life skills education curriculum*. Hanoi National University of Education Publishing House.

7. Dung, N. T. K. (Ed.). (2015). *Pedagogical training towards the formation of professional competence for students in pedagogical universities*. National University of Education Publishing House.
8. European Commission, Education and Training. (2013). *Supporting teacher competence development*. Thematic Working Group 'Teacher Professional Development'.
9. Giang, T. T. (Ed.). (2019). *Life skills education capacity of teachers in preschools*. Science and Technology Publishing House, Hanoi.
10. Giang, T. T. (Ed.). (2022). *Developing life skills education capacity for pedagogical students*. Science and Technology Publishing House, Hanoi.
11. Giang, T. T. (2019). Training teaching capacity for pedagogical university students according to the implementation capacity approach, meeting the 2018 general education program. *Vietnam Journal of Educational Sciences*, (22), 34–39.
12. Giang, T. T., Khanh, M. Q., & Hong, N. T. T. (2021). The structure of life skills education capacity of general education teachers in the context of general education innovation. *Journal of Educational Equipment*, Special Issue 12/2021.
13. Giang, T. T., & Khanh, M. Q. (2022). The current status of life skills education capacity training programs for students in pedagogical colleges. *Journal of Educational Equipment*, 265(2), May 2022.
14. Giang, T. T., & Authors. (2022). Designing skills for life skills education plan of pedagogical students in Vietnam. *International Research Journal of Management, IT & Social Sciences*, 9(4), 421–429.
15. Giang, T. T. (2022). *Developing life skills education capacity for students in the pedagogical sector*. Science and Technology Project, Ministry of Education and Training, Hanoi.
16. Glenn, M., & Blahna, M. J. (2005). A competency-based model for developing human resource professionals.
17. Harris, R., Guthrie, H., Hobart, B., & Lundberg, D. (1995). *Competency-Based Education and Training: Between a Rock and a Whirlpool*. Macmillan Education Australia.
18. Hortch, H. (2003). *Didaktik der Berufsbildung*. Hochschulschriften Universitaet Dresden.
19. Hue, N. T. (2012). *Life skills of secondary school students* (PhD thesis). Hanoi National University of Education.
20. Valmonte, L. D. (2007). Competency-based training (CBT) in Technical and Vocational Education and Training (TVET) Institutions: Few Nature, Context, and Issues.
21. Nakpodia, E. D. (2011). A critique of the methods of evaluating the competency of lecturers in Nigerian tertiary institutions. *African Journal of Education and Technology*, 1(1), 53–59.
22. Minh, H. D. (2015). *Training materials on life skills, environmental education, and social issues*. Hanoi National University Publishing House.
23. Oanh, T. T. T. (Ed.), & Giang, T. T. (2019). *Teaching competency of university lecturers in education*. Science and Technology Publishing House, Hanoi.
24. Quang, N. D. (2010). *Guidelines for Life Skills Education for High School Students*. Hanoi National University Publishing House.
25. Rowland, S. (1999). The role of theory in a pedagogical model for lecturers in higher education. *Studies in Higher Education*, 24, 303–314.
26. Rothwell, W. J., & Lindholm, J. E. (1999). Competency identification, modeling, and assessment in the USA. *International Journal of Training and Development*.
27. Son, H. V. (2009). *Introduction to Life Skills Science*. Education Publishing House, Hanoi.
28. Steig, M. (2006). *Handlungskompetenz, Kompetenzmodell in der paedagogischen Praxis* (1st ed.). Libbri Books on Demand.
29. Tinh, N. T. (2019). Organizing teaching and learning according to the orientation of developing competencies for pedagogical students in current educational innovation. *Vietnam Journal of Educational Sciences*, (21), 34–38.