

DEVELOPMENT OF NATIONAL EDUCATION OF UNIVERSITY STUDENTS THROUGH MEDIA TECHNOLOGIES.

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Annotation. The article acknowledges that success in the development of national education of students can be achieved only through the effective use of media technology. As noted in the article, a creative environment and advanced pedagogical experience play a special role in the development of creative abilities in students. In our study, a statistical analysis of the results obtained at the initial and final stages is presented. The experiment presents tables consisting of test results and statistical calculations.

Keywords: Fisher criterion, creative ability, statistical functions, respondent, empirical value, critical value.

In the formation of the education system of the younger generation in our country, the training of personnel in accordance with the national characteristics of our country, our people, in line with world standards depends on the integration of education.

A comparative analysis of the results of the research shows that according to the results of the initial test, the number of students with low grades is higher than the number of high and medium grades, it is possible to predict the similarity of knowledge of experimental and control groups. The results of the experiment show the opposite, that is, the level of knowledge of students in the experimental group is different. This was done using mathematical statistical methods to prove the validity of the data and the reliability and accuracy of the conclusions drawn. Issues related to the creation of educational resources in the Internet media on the basis of modern information technologies, management of the educational process through pedagogical and information and communication technologies, remote organization of the educational process U. Begimkulov, A. Abdukadirov [1; p. 232;] Taylakov is scientifically based on the research of R. Djuraev [2; p. 160;]. Theoretical analysis of the literature shows that in the national, spiritual and cultural heritage of the Uzbek people, such concepts as personality, citizenship, culture, responsibility, law, are philosophically and pedagogically based [4; 78-80-p.]. As one of the experts acknowledged, the creation and introduction of an information environment of an educational institution in preparing students for active social activity is a requirement of present day [5; 207-b.].

In our study, we conducted a statistical analysis of the results obtained at the initial and final stages based on the Fisher criterion. The following statistical functions and indicators were used.

Fisher's compliance criterion was used to perform a statistical analysis of the experimental trials. The following statistical indicators and statistical hypotheses were selected

For respondents who participated in the experimental work:

As an average value formula for the experimental groups:

$\bar{X} = \frac{1}{n} \sum_{i=1}^{n=3} n_i x_i$ formula, and as a mean value formula for control groups $\bar{Y} = \frac{1}{n} \sum_{i=1}^{n=3} n_i y_i$ from, as the

ratio of the mean value of the experimental groups to the mean values of the control groups i.e. as a coefficient of efficiency $\eta = \frac{\bar{X}}{\bar{Y}}$ calculated using formulas.

The average value of the experimental groups according to the selected mathematical-statistical criterion (Fisher's compliance criterion) X , control groups Y average value indicators $X=Y$ ёки $X<Y$ деб ва $\Phi(t_{kp}) > \Phi_{\alpha mn}$ if the condition is met H_0 the hypothesis is accepted, i.e. there is no difference in the assimilation rates of the choices (experimental and control groups). H_1 for the acceptance of the hypothesis $X>Y$ ва $\Phi(t_{kp}) < \Phi_{\alpha mn}$ and the efficiency coefficient is determined.

The critical and empirical values of Student-Fisher are also compared. $\Phi(t_{kp}) > \Phi_{\alpha mn}$ if H_0 hypothesis, otherwise H_1 the hypothesis is accepted.

Here $\Phi(t_{kp})$ $t_{kp} = \frac{1-2\alpha}{2}$ The Laplace function is a critical point for statistics t_{kp} is calculated. 0.05 when determined by the level of value $\Phi(t_{kp}) = 1.67$ is the empirical value of Fisher

$$\Phi_{\alpha mn} = \frac{\bar{X} - \bar{Y}}{\sqrt{\frac{D_m}{M} + \frac{D_n}{N}}}$$

is calculated using the formula. Relative to the above hypothesis, $X > Y$ is required. Here are the variances of the samples of the experimental and control groups:

$$D_m = \sum_{i=1}^{n=3} n_i (x_i - x)^2 / (m-1) \quad \text{ва} \quad D_n = \sum_{i=1}^{n=3} n_i (y_i - y)^2 / (n-1)$$

standard deviations: $\tau_m = \sqrt{D_m}$, $\tau_n = \sqrt{D_n}$

indicators of variation: $\delta_m = \frac{\tau_m}{\bar{X}}$, $\delta_n = \frac{\tau_n}{\bar{Y}}$

trust deviations: in experimental groups $\Delta_m = t_\gamma \cdot \frac{D_m}{\sqrt{m}}$, in control groups $\Delta_n = t_\gamma \cdot \frac{D_n}{\sqrt{n}}$. Reliable intervals for the results obtained:

in experimental groups $\bar{X} - t_\gamma \cdot \frac{D_m}{\sqrt{m}} \leq a_x \leq \bar{X} + t_\gamma \cdot \frac{D_m}{\sqrt{m}}$,

in control groups $\bar{Y} - t_\gamma \cdot \frac{D_n}{\sqrt{n}} \leq a_y \leq \bar{Y} + t_\gamma \cdot \frac{D_n}{\sqrt{n}}$

quality indicators of research work as an evaluation value:

$$K_{yc\delta} = \frac{(\bar{X} - \Delta_m)}{(\bar{Y} + \Delta_n)} > 1;$$

as an indicator of students' level of knowledge

$$K_{\delta\delta\delta} = (\bar{X} - \Delta_m) - (\bar{Y} - \Delta_n) > 0 \quad \text{condition satisfaction values were checked}$$

In order to adapt the verification of this pedagogical hypothesis to the elements of mathematical statistics, the results obtained in the experimental groups were accepted as option 1, and the results obtained in the control groups were selected as option 2.

The data in Tables 3.1-3.3 were taken as a statistical series consisting of samples

We present tables consisting of the results of experimental tests and statistical calculations

To find out the initial level of knowledge of students at the beginning of the experiment, we present a table of statistical calculations of the identified results (based on Table 3.2)

1-table. Statistical calculation of the selections in TDPU, UZMU, KARDU

Universities	TDPU		UZMU		KARDU	
Groups	experimental group	control group	experimental group	control group	experimental group	control group
Average value	3,38	3,39	3,41	3,42	3,41	3,42
efficiency	1,00		1,00		1,00	
selection variance	0,40	0,44	0,45	0,48	0,43	0,48
quadratic deviation	0,63	0,67	0,67	0,69	0,66	0,69

indicators of variation	0,19	0,20	0,20	0,20	0,19	0,20
emprik	-0,06		-0,02		-0,06	
critical	1,67		1,67		1,67	
reliable avoidance	0,09	0,00	0,10	0,00	0,10	0,00
confidence interval	3,29	3,39	3,31	3,42	3,31	3,42
	3,48	3,39	3,52	3,42	3,51	3,42
an indicator of the effectiveness of teaching	0,97		0,97		0,97	
knowledge level assessment indicator	-0,10		-0,11		-0,11	
Conclusion	H ₀		H ₀		H ₀	

2-table. Statistical calculation of generalized results for SAMDU and all OTTs

Universities	SAMDU		total	
Groups	experimental group	control group	experimental group	control group
Average value	3,42	3,40	3,40	3,41
efficiency	1,00		1,00	
selection variance	0,44	0,40	0,42	0,44
quadratic deviation	0,66	0,63	0,65	0,67
indicators of variation	0,19	0,19	0,19	0,20
emprik	0,09		-0,03	
critical	1,67		1,67	
reliable avoidance	0,10	0,00	0,05	0,00
confidence interval	3,31	3,40	3,36	3,41
	3,52	3,40	3,45	3,41
an indicator of the effectiveness of teaching	0,97		0,99	
knowledge level assessment indicator	-0,09		-0,05	
Conclusion	H ₀		H ₀	

Thus, in the overall results, the average mastery is almost equal, Fisher's empirical value is less than the critical value, and the indicator for assessing the quality of teaching is suddenly smaller, and the N₀ hypothesis is less than zero. This leads to the conclusion that the results obtained at the beginning of the experiment are equal to each other

Now let's get acquainted with the final indicators after the experiment. Here we also provide a statistical analysis of the results of students in each educational institution on the basis of numerical values of the overall results of the assessment in the experimental and control groups.

3-table. Statistical analysis of the final stage results of students of TDPU and UZMU

Universities	TDPU	UZMU
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Groups	experimental group	control group	experimental group	control group
Average value	3,98	3,45	3,94	3,47
efficiency	1,15		1,14	
selection variance	0,41	0,45	0,5	0,52
quadratic deviation	0,64	0,67	0,7	0,72
indicators of variation	0,16	0,19	0,18	0,21
emprik	4,09		3,35	
critical	1,67		1,67	
reliable avoidance	0,1	0	0,12	0
confidence interval	3,89	3,45	3,83	3,47
	4,08	3,45	4,06	3,47
an indicator of the effectiveness of teaching	1,13		1,1	
knowledge level assessment indicator	0,43		0,35	
Conclusion	H1		H1	

4-table. Statistical analysis of the final stage results of KARDU and SAMDU students

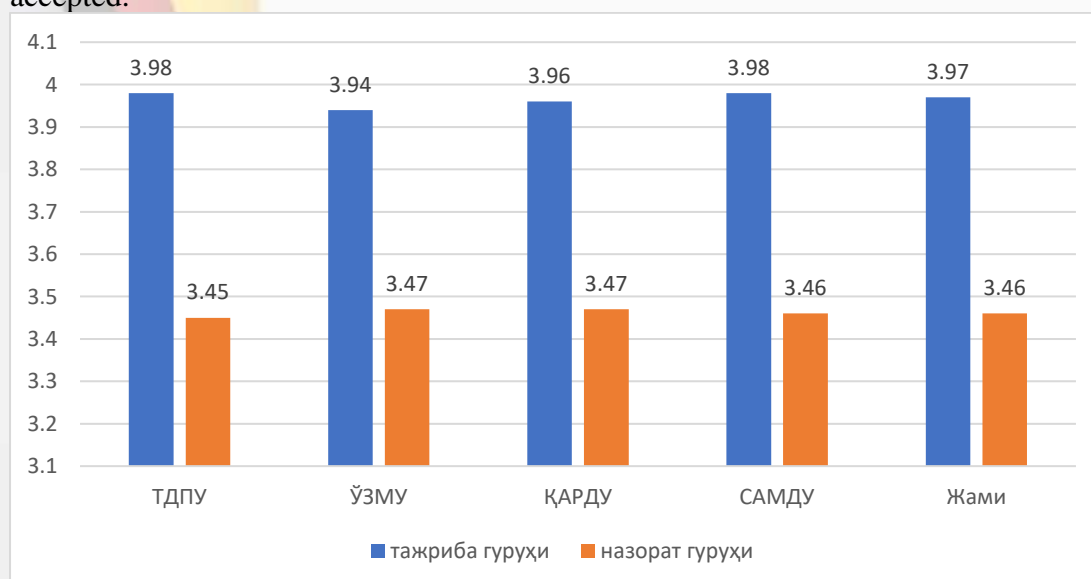
Universities	QARDU		SAMDU	
Groups	experimental group	control group	experimental group	control group
Average value	3,96	3,47	3,98	3,46
efficiency	1,14		1,15	
selection variance	0,49	0,48	0,44	0,45
quadratic deviation	0,7	0,7	0,66	0,67
indicators of variation	0,18	0,2	0,17	0,19
emprik	3,64		3,99	
critical	1,67		1,67	
reliable avoidance	0,11	0	0,1	0
confidence interval	3,85	3,47	3,88	3,46
	4,07	3,47	4,08	3,46
an indicator of the effectiveness of teaching	1,11		1,12	
knowledge level assessment indicator	0,38		0,42	
Conclusion	H1		H1	

5- table. Statistical analysis of the final stage results of all respondents who participated in the experimental trial

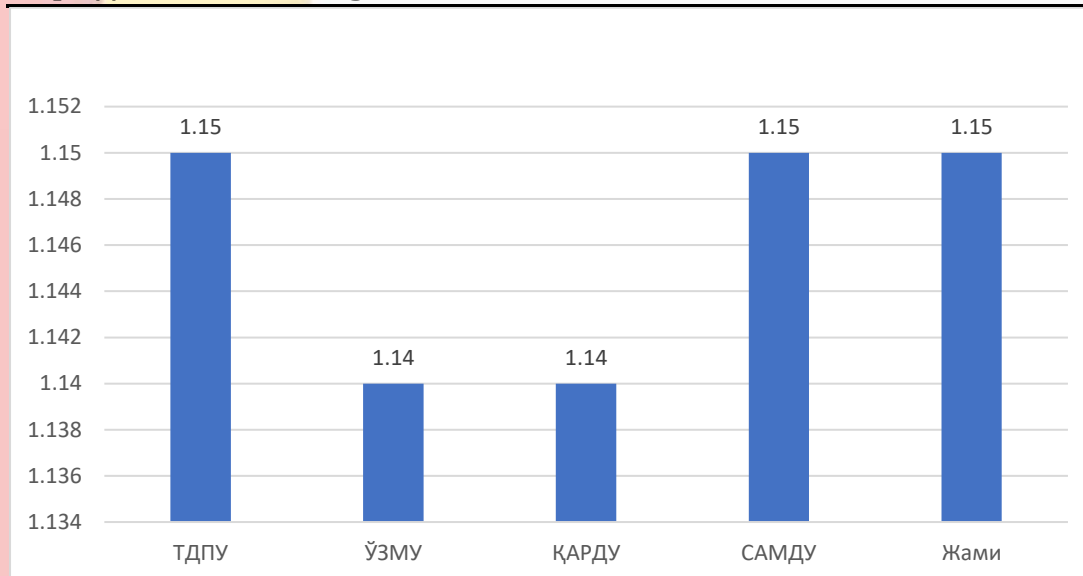
Universities	Total	
	experimental group	control group
Average value	3,97	3,46
efficiency	1,15	
selection variance	0,45	0,47
quadratic deviation	0,67	0,69
indicators of variation	0,17	0,2
emprik	7,57	
critical	1,67	
reliable avoidance	0,05	0
confidence interval	3,91	3,46
	4,02	3,46
an indicator of the effectiveness of teaching	1,13	
knowledge level assessment indicator	0,45	
Conclusion	H1	

The results of statistical analysis show that the efficiency indicators for experimental and control groups are 1.15 times higher in TDPU, 1.14 times higher in UZMU, 1.14 times higher in QARDU and 1.15 times higher in SAMDU and 1.14 times higher in general.

Fisher's empirical value was greater than the critical value, the confidence intervals did not overlap with each other, and the students' learning effectiveness assessment rate was greater than zero, the difference in students' knowledge levels in the experimental groups, and the N0 hypothesis was rejected and the N1 hypothesis was accepted.



6- picture. Average mastering value indicators of students who participated in the experimental tests



7-picture. Performance indicators of students who participated in the experimental work

Statistical analysis has shown that the efficiency of the research conducted on the average value of mastery and efficiency indicators is higher than the average by 14% (1.14 times).

From the results obtained, the level of development of knowledge of national education in students showed a sudden magnitude of the assessment criteria and a criterion for assessing the effectiveness of special methods from zero. This fact fully confirms the effectiveness of the experimental work. Thus, a comparative study and statistical analysis of the results of experimental work to determine the development of knowledge of national education among students through the use of media technology has shown the effectiveness of special methods.

The analysis of different approaches showed that the student period is characterized by self-affirmation of the individual, diversity in life experience, the formation of value orientation, the formation of worldviews. At the same time, the increase in social activity, professional self-awareness and creativity in this age group is of particular importance. G.S. Altshuller argues that creativity can be formed at any age through a free and creative learning environment focused on solving the right research tasks [3; 400-b.].

Observations and practical experience have shown that students are not given enough information on the concept of national education.

Success in the development of national education of students can be achieved only through the effective use of media technology. Creative environment and advanced pedagogical experience play a special role in the development of creative abilities of students.

Students are required to rely on certain criteria in determining the level of development of creative abilities. The results obtained during the final experimental work allowed to substantiate the correctness of the research hypothesis.

CONCLUSION

Based on the results of research on the development of national education through media technologies, students of higher education institutions were offered the following recommendations:

- 1) wider use of scientific and methodological support of teaching on the basis of media technologies for the development and promotion of national education among students studying in higher education institutions;
- 2) development of scientific and methodological software for teaching through media technologies based on the scientific findings of this study, as well as the introduction of software that increases the intensity of their teaching and is rich in new opportunities;
- 3) It is expedient to establish media education centers in higher education institutions and the use of modern media technologies, increase the number of materials on national education and improve media literacy of students

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