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RESEARCH OF FORMING PROFESSIONAL COMPETENCE PROCESS OF THE WOULD-BE TEACHERS OF TECHNOLOGIES IN THE SPHERE OF FOLK CRAFTS

BADANIE PROCESU KRZTAŁTOWANIA ZAWODOWYCH UMIEJĘTNOŚCI PRZYSZŁYCH NAUCZYCIELI TECHNOLOGII W DZIEDZINIE SZTUKI LUDOWEJ

Problem arising. Scientific research acts as the form of pedagogical science development that is learning of psycho-pedagogical phenomenon and processes with the help of scientific methods, influence analysis of various factors and circumstances on them and interaction clarification between phenomena to get convincingly proven decisions and useful for theory and decision practice that have maximum possible educational and evolving effect. It is known that experimental investigation is the process and result of scientific work, directed at new knowledge acquiring about regularities, structure, mechanisms functioning of inquiring object and also content, principles, methods and organizational forms of activities³. A lot of famous scientists investigated the problems of methodology of pedagogical researches: Y. Babanskyi¹, S. Honcharenko², V. Zagvyazynskyi³, V. Kraevskyi⁴, V. Sydorenko⁵ and others. We have elaborated the investigation program to solve pedagogical problem of professional competence formation of would-be teachers of technologies in the sphere of folk crafts, subsoil of which composes systematic approach with the consideration of up-to-date methodology achievements and results of the previous investigation in the sphere of psycho-pedagogical sciences.

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² Honcharenko S. U., *Pedagogical investigation: methodological advice for beginner scientists* / S.U. Honcharenko. – K.: [b.v.], 1995. – 45 p.

³ Zagvyazynskyi V. I., *Methodology and methods of psycho-pedagogical investigation*: educ. book [for establishments of specialty 050706 „Pedagogy and psychology”] / V. I. Zagvyazynskyi, R. Atahanov. – 5th correct.publ. – M.: Academy, 2008. – 206 p.

⁴ Kraevskyi V. V., *Pedagogy methodology*: book [for teachers-researchers] / V. V. Kraevskyi.. – Cheboksary: Chuvash, Univ., 2001. – 244 p.

⁵ Sydorenko V. K., *The basis of scientific investigation*: educ.book for high school pedagogical establishments / V. K. Sydorenko, P. V. Dmytrenko. – K.: RNNC „DINIT”, 2000. – 154 p.

The aim of the article is the illumination of pedagogical experiment stages and results representation of professional competence level of would-be teachers of technologies in the sphere of folk crafts.

Presentation of the main material. Firstly we should indicate that experimental investigation of the forming professional competence formation of would-be teachers of technologies in the sphere of folk crafts apprehended comprehensive learning with the help of scientific methods this professional and pedagogical phenomenon to get the most effective results that are convincingly proved and useful for pedagogical science and generalization practice and conclusion. That's why the program was elaborated playing central role in investigation, regulating stages, preparation phases, organizations\ and experiment research work conducting, predetermined its content and semantic value and provided quality and reliability of received results.

The program of experimental investigation of the professional competence formation of the would-be teachers of technologies in the sphere of folk crafts anticipated: a consecutive realization of the following tasks:

- 1) analysis of the program and regulatory documents and previous psycho-pedagogical researches, real state defining of professional competence formation of the would-be teachers of technologies in the sphere of folk crafts, scientific problem formulation;
- 2) aim, tasks defining and also the ways of their realization according to chosen methods (observation, conversations, interview, survey, rating, testing, measuring methods of pedagogical work – diagnostic control works and tests, self-assessment, educational documentation analysis and art and employment students' work);
- 3) structure and functional model working of professional competence formation of the would-be teachers of technologies in the learning process of folk crafts;
- 4) content foundation of professional and pedagogical preparation would-be teachers of technologies in the sphere of folk crafts and learning technologies;
- 5) experimental checking of pedagogical conditions effectiveness of content and technologies of teaching students of folk crafts, projected on the basis of competence approach;
- 6) received research results generalization, theoretical conclusion formulation, working out of practical proposal and methodological recommendations towards professional and pedagogical preparation of the would-be teachers of technologies in the sphere of folk crafts.

Experimental and research work was conducted on the base of Ivan Franko Drohobych State Pedagogical university and Taras Shevchenko Kremenets Regional Humanitarian-Pedagogical Academy Content and particular technology components of teaching folk craft students specified at Rivne State Humanitarian University and Pavlo Tychyna Uman' State Pedagogical University. During 2008–2013 326 students, would-be teachers of technologies, 48 teachers of technological education faculties,

36 teachers of secondary schools and 17 headmen of applied workshops and studios of out-of-school educational institutions of Lviv, Ternopil and Volyn Region took part at various stages of experimental investigation.

Separately, let's stop at the pedagogical experiment, in which 157 students took part: 52 – in control and 105 – in experimental groups. We should take into account that the students of experimental groups were taught according to the systematic and structured content of aesthetic, project-technological and pedagogical preparation, mastered various types of folk crafts, methods of their teaching in the terms of author special course „Folk crafts and methods of their teaching; the learning process was conducted according to that technology, built on competence approach”.

The diagnosis of the initial level of students' preparation to the further creative work was made for change defining in the process of professional qualities development and for the further use of subject competences in this sphere. The level of such preparation was determined stage by stage from different, relatively independent information sources and with the help of various methods:

- 1) self-assessment students' mark of art and labor preparation was being studied with the help of survey;
- 2) written checking of knowledge of history, morphology, ornament science, technology peculiarities of folk craft was conducted with the help of testing and practical display of special skills and habits of decorative items production;
- 3) expert mark was taking into account by the teachers of the level of students' practical preparation in the sphere of folk crafts.

During approbation of content integration component of professional teaching students (didactic complex of invariant and variant discipline and special course) and technologies of studying a phased checking of readiness level of the future teachers was made to the organization of art and labor pupils' work in the terms of school and out-of-school educational establishment.

On the basis of statistic calculation of index change readiness several appropriate levels that made possible to assess objectively motivation orientation on creative activity in the sphere of folk crafts, knowledge and personal practical experience of creative project-technological activity and methods of its organization at school workshops, and the most important – reflexive students' ability to assess their own creative art and labor work and pedagogical abilities.

Certifying stage of pedagogical experiment anticipated the analysis of actual problems of theory and practice of technology teachers' preparation, the search of informational sources towards traditional folk art revival and folk crafts in Ukraine, learning of professional competence formulation conditions, up-to-date demands laid in State Branch Standard and educational professional program of the course „Technological education”, current methods of teaching disciplines of aesthetic, project-technological

and pedagogical cycles, the level of initial students' preparation to organization and creative art and labor work conducting and also their professional career directions.

Thus, detailed analysis of educational plans and programs of disciplines, conversation with teachers, survey and testing made possible to find out main reasons of low indicators of students' readiness to folk craft investigation.

In addition to this, we must notice that students' adaptation on the first grade greatly depends on quantity and quality of consultation that are conducted by the teacher of complex speciality disciplines. According to „Temporal thesis about learning process organization in credit and modular system of specialist preparation”⁶, correlation of obligatory (auditory) and individual students' work amounts 5:5 on junior courses and 4:6 – during last semesters of bachelor studios. That's why 52,4 pct. of first-year students admit that systematic intercommunication with teachers, helped them to adapt to learning circumstances at High School Establishments and to master complex educational disciplines. And only 16,4 pct. of respondents suppose that are able to study alone without additional consultation. The answer analysis of the survey gives a reason to state that accessible methods and reinforces teachers' demands, systemic additional consultation have helped students in specialty disciplines mastering more than own ability to organize individual work. In return, the majority of students of senior courses suppose that the ability to organize individual learning of educational material was intrinsic for them from the first semester.

The solution of tasks of certifying stage of investigation provided synthesis of scientific knowledge (philosophical, sociological, cultural, ethnographic, psycho-pedagogical, project-technological and others) analysis of educational and scientific methodological literature, law documents, program materials towards professional and pedagogical preparation of teachers of technologies and the most important – a thorough learning of state of would-be teachers' readiness to organization of creative art and labor work of pupils (conversation, polls, interview, survey and others).

During search stage, according to the investigation program and on the basis of competence approach, we have elaborated structure and functional model; pedagogical conditions of professional competence formation of the would-be teachers in the process of folk craft learning were revealed; the content of educational disciplines of aesthetic, project-technological and pedagogical preparation; interdisciplinary connections in the logic of integration approach were established; technologies of learning students folk crafts were clarified; content structuring and selection of special course „Folk art crafts and methods of their teaching”; methodological recommendations towards its introduction and effective realization was elaborated.

⁶ About pedagogical experiment conducting of credit-modular system of learning process organization / Decree of Ministry of education and science № 48 from 23.01.2004. [Electronic version]. – Internet access: http://www.mon.gov.ua/images/files/osvita/Evrointehracyia/mon_48.doc.

In the process of content working and methods of formulation of would-be teachers of technologies of professional competence in the sphere of folk art crafts various methods of theoretical projecting of learning process (abstraction, specification, analogy, theoretical modeling and others) were used; the expertise of integration connections between the disciplines' topics of aesthetic, project-technological, pedagogical preparation students and special course; didactic selection of learning technologies was conducted. On this stage of investigation we have assembled and generalized independent characteristics of learning achievements and creative students' achievements, practical teachers' activity was being analyzed towards the rise of the process effectiveness of professional competence formation of would-be teachers of technology in the sphere of folk crafts; curriculum, syllabus products of creative art and labor work of students were being learnt (creative projects, realized in the material; author curriculum of workshops and studios of folk, arts and crafts, master-classes scenarios, competitions, Olympiads, celebrations and others).

Assuming, that the level of educational achievements is, firstly, the result indicator of work effectiveness of the staff of teachers and effectiveness of didactic environment created in pedagogical high school establishment, on the search stage we have learned the formation level of the would-be teachers of technologies pedagogical skills and habits in organization of creative art and labor work in the context of school or out-of-school educational establishment that is the level of students' knowledge about history and morphology of types of folk crafts practical skills and habits of projecting, production and decoration is revealed and considering the local traditions of folk art and possibility to be in charge of technologies teachers or headman of children's creative associations.

System of interdependent and complementary methods that are adequate to the aim of search stage of investigation was used for the solution of the arising tasks and opening thesis check, in particular the analysis of academic registers, grade books, information papers and products of creative art and labor students' work; direct observation of the process of practical teaching students various folk crafts; conversation with students on the basis of special questionnaires; analysis of results of technological practices and organization of creative art and labor work of pupils during pedagogical practices; qualitative and quantitative processing of empirical data and also authenticity confirmation of statistic methods of analysis of experimental data.

During the last, forming stage of research and experimental work criteria, indicators and levels of professional competence of the would-be teachers in the sphere of folk art crafts were defined; the preparation of experimental base of investigation was conducted. Formulating stage passing was defined according to the logic of integration connections realization of education disciplines of aesthetic, project-technological and pedagogical preparation, technologies of teaching students' folk crafts

and methods of organization of art and labor process at secondary and out-of-the school educational establishments.

This stage anticipated diagnostic work conducting, directed on character display and formation level of professional competence in the sphere of folk crafts in the conditions of traditional (Ivan Franko Drohobych State Pedagogical University) and experimental didactic environment (Taras Shevchenko Kremenets Regional Humanitarian-Pedagogical Academy); organization of individual and group conversation with students and teachers; self-assessment marks generalization and pedagogical marks of experts towards students' readiness of control and experiment group to organization of creative art and labor work of pupils; methodological recommendations were elaborated towards improvement of teaching process of various types of folk art crafts etc; adequacy of criteria and indicators of levels of professional students' competence was checked; methods of its measurement were worked out; previous conclusions and recommendations that are partially implemented in the educational process of other pedagogical high school establishments were coordinated (Rivne State Humanitarian University and Pavlo Tychyna Uman' State Pedagogical University).

The solution of tasks of forming stage of investigation was made with the use of the following methods: pedagogical experiment, quality monitoring of educational achievements quality and results of creative art and labor work of students, conservation, interview, survey, control works, testing, and mathematic statistics. Directly at Taras Shevchenko Kremenets Regional Humanitarian-Pedagogical Academy experimental checking of structure and content of author special course „Folk art crafts and methods of their teaching” and also technologies of learning students folk art crafts, projected on the basis of competence approach was made.

Simultaneously, survey and testing students was conducted according to which the dynamics of component development of professional competence were conducted. In the context of mentioned above, we should notice that actuality of competence approach use made possible:

- 1) display by students formed competence components in real art and labor and pedagogical work (e.g. during projecting of the forms and ornaments of arts and crafts, working out of master-classes program, scenarios, competitions of creative proficiency etc.);
- 2) reflection by the would-be teachers personal professional development, adequate estimating of the own abilities in learning situation or creative process;
- 3) motivation accounting in learning and personal students' attitude to the process of their professional competence forming;
- 4) orientation of the process of forming the professional competence on future with its simultaneous display at present.

In this regard during the last stage of experimental investigation several statements were found out:

- 1) levels of formation of knowledge, habits and skills in the sphere of folk art crafts and in organization of creative art and labor work of pupils with the help of multi-leveled checking (tests, programming survey, modular control works, estimating art projects and decorative items);
- 2) prevailing motives and main difficulties during learning disciplines of aesthetic, project-technological and pedagogical cycles and also special course „Folk art crafts and methods of their teaching“;
- 3) assessment by the students their own professional and pedagogical qualities, which they have already had, including abilities to communication and self-organization;
- 4) assessment of emotional attitude of respondents to the process of learning the folk art crafts and professional career intentions, that are being changed during the studying at pedagogical high educational establishment (attitude as to the chosen profession of the teacher of technology and also as to the creative art and labor work in general);
- 5) accessibility of information technologies use and their influence on component forming of professional competence of students while making projects of decorative items;
- 6) professional experience display, attained by students during pedagogical practices, due to professional competence, formed in the process of learning folk art crafts.

In the end of forming experiment, its analysis and adjustment, generalization of experimental data were made, conclusions were formulated and methodological recommendations towards professional competence forming of would-be teachers of technology in the sphere of folk art crafts were elaborated, approbation and publication of received results and literature design of the manuscript were held and general conclusion implementing and recommendations of investigation into practice of educational process of pedagogical high school establishments.

Thus, the results of forming stage of pedagogical experiment confirm the fact that in order to overcome difficulties in acquiring the disciplines of aesthetic, project-technological, pedagogical cycles and special course, motivation strengthening to creative art and labor work, selected content and proposed technology of folk crafts learning on the basis of competence approach play a vital role. They stimulate professional interest that enables them to cope with students' doubts of experimental groups in the necessity of learning these disciplines, promote experience acquiring as projecting and production of decorative items and organization of creative art and labor pupils' work with the help of professional competence formed in the process of learning.

As it is seen from the investigated material, the level of theoretical knowledge in experimental groups has risen to 16,8 pct., personal practical experience of creative art and labor work – almost to 17,5 pct. and motivation to learning folk art crafts to 13,8 pct. 66,7 pct. of students have

acquired learning material included to research experimental checking with „excellent” and „good” marks. 74,4 pct. of students have demonstrated high level of skills forming of projecting and technology of decorative items production and also methods of organization of creative art and labor work of pupils in general.

On the whole, the level of creative art and labor and pedagogical preparation of students of experimental groups was rather higher than in control groups (sufficient indicator – to 11,2 pct., high – to 7,4 pct.), and totally – to 18,6 pct..

General analysis of the results of the conducted experiment confirmed the hypothesis that suggested didactic mechanism and factors promote the effective forming of professional competence of would-be teacher of technology. Professional competence forming of students of experiment groups is made more effectively because the development level of this phenomenon is higher than in students of control group (on the average 13,6 pct.). It is confirmed that renewed content and sequence of various types of folk art crafts learning, technology learning introduction, built in the logic of competence approach, a wide use of modern computer devices while projecting decorative items promotes increase of quantity of students from experimental groups that are sure in the appropriateness of their choice as the profession of the teacher of technology.

LITERATURE

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SUMMARY

The article analyzes and reveals the stages of pedagogical experiment, the main results of diagnosing the levels of professional competence, each of which is defined with indicators that characterize individual and professional quality and level of artistic and creative work and pedagogical training of future teachers of technology in folk arts and crafts, are presented. The results pedagogical experiment confirming the validity of the proposed pedagogical conditions, implementation of which has contributed not only to enhancing student motivation sphere as for the future profession, but also create opportunities for the development of individual and professional qualities necessary for artistic and creative work.

Keywords: pedohohichny experiment, folk crafts, professional competence, the teacher of technologies, art-work, creativity, decorative and applied products, design and technological activities.

STRESZCZENIE

W artykule prześlędzono etapy eksperymentu pedagogicznego i podano rezultaty testowania u studentów poziomu osiągnięcia umiejętności w dziedzinie sztuki ludowej, podano główne rezultaty monitorowania poziomów ukształtowanej zawodowej kompetencji, z których każdy oznaczony jest wskaźnikami dotyczącymi indywidualno-zawodowej jakości poziomu twórczego pedagogicznego przygotowania nauczycieli technologii w dziedzinie sztuki ludowej.

Słowa kluczowe: eksperyment pedagogiczny, sztuka ludowa, umiejętności profesjonalne, nauczyciel technologii.

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