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Portfolio technology in the process of students' professional-personal development in high school

Tecnología del portafolio en el proceso del desarrollo profesional y personal de los estudiantes de centros de enseñanza superior

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ABSTRACT:
The paper relevance is conditioned by the need to train specialists who are focused on solving not only professional problems but also personal ones. It examines the advantages of using the portfolio technology for diagnosing the students' professional and personal achievements in the higher education system. The modular structure of the university student professional-personal portfolio is presented as a technological toolkit that provides an individual professional and personal educational path of development.
Keywords portfolio, professional-personal development, achievements diagnostics, technological toolkit, modular structure

RESUMEN:
La relevancia del artículo está determinada por la necesidad de capacitación de especialistas que se dediquen a resolución de los problemas tanto profesionales como personales. El artículo examina las ventajas de aplicación de la tecnología de portafolio para el diagnóstico de los avances profesionales y personales de los estudiantes en el sistema de enseñanza superior. Se representa la estructura modular del portafolio profesional y personal del estudiante de un centro de enseñanza superior como un instrumental tecnológico, que ofrece una ruta educativa individual del desarrollo profesional y personal.
Palabras clave: portafolio, desarrollo profesional y personal, diagnóstico de avances, instrumental tecnológico, estructura modular

1. Introduction

Discussion of the subjects matter is the portfolio creation and its use in the university which

relies on such mutually determining trends in the Russian education development as: the forming of a post-industrial market type society in which education becomes a key condition for the formation of a "professional and personal knowledge society" based on the primacy of the intellectual product "production"; inclusion of the Russian higher education system in the Bologna process; technologies development for personally oriented educational process organization; search for new forms and methods for the comprehensive evaluation of students professional and personal achievements in the competence approach logic; search for ways to develop the qualities which are necessary for personalities' creative self-organization and self-presentation of their competencies in the labor market and in the pursuit of career growth (Polonsky, 2007; Zair-Beck, Zagashev & Mariko, 2007; Kamyshev, 2012; Klarin, 2014; Galushkin, 2015; Lisitzina et al., 2015; Cao, Kurbanova & Salikhova, 2017; Cai et al., 2017; Song et al., 2017; Shen et al., 2017; Masalimova & Chibakov, 2016; Shcherbakov et al., 2017).

Therefore, the strategic tasks for the development of the university educational system are related to the solution of such problems as: ineffectiveness of the existing administrative systems for monitoring and evaluating the quality of education, indicators of reliability and maximum effectiveness of the educational process; the difficulties of graduates entering the labor market. At the same time, administrative systems for monitoring the students' educational activity and teachers' business activity are not completely denied, but new methods for assessing achievements, rating and monitoring activities are supposed to be used (Zakirova & Koletvinova, 2014; Kamalova & Zakirova, 2014; Goreva & Osipova, 2015; Shaidullina et al., 2015a,b; Zakirova & Purik, 2016; Khuziakhmetov & Nasibullov, 2016; Khuziakhmetov & Gabdralhmanova, 2016; Levina, 2017; Masalimova et al., 2017; Khrulyova & Sakhieva, 2017; Gorbunova & Mokeyeva, 2017; Kong, Kayumova & Zakirova, 2017).

As such new methods, portfolio technology is presented, which has become quite widespread in Russian universities, both in the bachelor and magistracy programs. There are many definitions of the portfolio. T.G. Novikova (2006), I. A. Fateeva (2011) and others interpret the model of the multipurpose portfolio as a tool for increasing the level of the teacher and student subjectivity in educational activities, the student's achievements self-evaluation, and also as a tool for demonstrating the educational product. A number of Russian scientists consider the "Student Portfolio" to be a new technology that breaks its way into life. This is the opinion of E.S. Polat et al. (2005) who consider the "Student Portfolio" to be primarily, means of professional-personal self-estimation teaching . "The student portfolio" is a self-assessment tool for the student's own cognitive and creative work. It is a teaching method and the organizing form of independent student learning activities, being undoubtedly a means of forming the necessary skills for reflecting their one's own activity, i.e., introspection, reflection.

Some foreign researchers and teachers, including S. Peregoi & O. Boyle (2007) and others, also view the Portfolio as one of the alternative forms of assessing the students' professional and personal activities, their progress in teaching.

In modern Russian pedagogy, some scientists, for example, V.B. Uspensky & A.P. Chernyavskaya (2006) consider Portfolio to be a method of instruction designed to systematize the accumulated experience, knowledge, and more clearly determine the direction of their professional and personal development. Since there are many definitions of portfolio, it is necessary to introduce a basic distinction of the concept "portfolio", which is used in two positions: 1) portfolio technology - modern educational technology, which is based on the method of authentic assessment of educational and professional activities' results; 2) portfolio product - translated from Italian means "folder with documents", "specialist folder".

In our opinion, as a means of introducing and expanding personally-oriented and individualized education in higher education, it is possible to develop a technique for Student Learning Educational Activities' Portfolio formation (LEAP) (or the Learning Educational Activities Packet = LEAP) based on modular structuring. We define the *professional and personal development portfolio* as a systematic and specially organized collection of evidence that serves as a method for systemic personal reflection on one's own activity and presentation its results in one or

more areas for entering the labor market.

The portfolio main *purpose* is to connect the subjects' internal personal resources to motivate them to create, cultivate and use their professional uniqueness and competitiveness in the development process.

The portfolio purpose in this case is professional and personal characteristics cognition with the aim to improve them in a certain direction. The developmental portfolio is the steps fixation towards the selected benchmarks implementation for professional-personal growth. This is the private results' obtaining, which form a holistic evidence of a person's legal capacity, the legitimacy of claims to recognize him in a new age and social status. Ultimately, the portfolio of professional and personal development serves the purpose of confirming the person's and his or her unique way importance to achieve individual peaks.

The difference between the professional and personal portfolio and the external achievements portfolio is that the subject of systematization is not evidence of success in study (assessments, diplomas for participation in subject Olympiads) and extracurricular activities (certificates of participation in competitions, creative products' photocopies and photographs), but the materialized results in the dynamics of one's personality development in its various manifestations (character, ability, communication, etc.) (Khuziakhmetov et al., 2016). This is not a collection of disparate facts. This is a study by the trainee of his personality features in the system of social relations and planned work on their improvement to achieve the subject new qualities.

Why it is to do in a professional school? The answer to this question was suggested by E. Fromm in his famous work "To have or to be." "Man," he asserted, "must learn to face reality boldly. If he realizes that he has nothing to rely on but his own strength, he will learn to use them properly." "The main conclusion, to which a mature person comes, can be expressed by the formula:" I have myself, and I will not be lost" (Fromm, 2014). A professional school, addressed to the individual interests of a young person, can contribute to the successful beginning of one's personality mastering process as a tool for building its economic and simply human well-being.

The study practical significance is that it is possible to use the portfolio two-sided nature: on the one hand, teachers and university students are interested in it, on the other hand - potential employers.

Students and teachers receive the following opportunities:

- discussion of the training results with fellow students and teachers;
- reflection by students of their educational activities;
- demonstration of the individual style of the students' education, the characteristics of their intellect and culture;
- self-definition of the theme for the portfolio;
- establishing a connection between the previous and the new knowledge;
- students inclusion in the process of their competencies developing;
- formalized evaluation of their intermediate achievements.

Potential employers receive opportunities for:

- full participation in the students special competencies formation, which are in-demand by the company;
- the final assessment of students' academic achievements.

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2. Methodology

The initial methodological provisions that conceptually provide for the design and construction of professional and personal development portfolio are the *module-competent, culturally*

competent and personally oriented approaches.

The modular-competence approach (Raven, 2002; Zimnyaya, 2004; Khutorskoy, 2011) is a theoretical and methodological strategy for structuring the portfolio, the purpose of which is professional-personal development; and as a means of achieving it - a modular structure and content.

Culturally competence approach (Gilmeeva et all, 2011; Gilmeeva, Tikhonova & Mukhametzyanova, 2012) defines the strategy of a specialist professional training organization in the logic of the educational process globalization, ensuring the effectiveness of personality's professional cultural self-identification as a full member of the world community.

A person-centered approach ensures the conditions creation for the student's integral personality development, that is, the readiness formation for professional self-determination. Personally oriented education lays the foundations for self-realization, self-development, and self-regulation (Belukhin, 2006; Troshagin, 2008; Leontiev, 2004;. Rubinshtein, 2008).

The cumulative integrity of these approaches provides a transitive change in the content of the portfolio technology that creates the educational sphere for the students as future specialists in the realization of themselves as persons with a basic level of competence (knowledge, abilities, skills, qualities, experience, socio-cultural, social and professional mobility and adaptability).

Portfolio functions:

- diagnostic one - captures changes and professional-personal growth of the student for a certain period of time;

- goal-setting - supports the goals of professional and personal development;

- motivational one - encourages professional and personal achievements of students;

contextual - reveals the whole range of works performed;

- developmental - ensures the continuity of students professional-personal formation process from year to year;

- rating - shows the professional-personal range of skills and abilities.

When developing criteria for the diagnosis of portfolio materials, three basic principles must be adhered to:

1. Ensuring the comprehensiveness (completeness) of the assessment:

- evaluation parameters and criteria are developed on the basis of already existing in the culture of ideas about the portfolio product quality and the participants' creative contribution in the portfolio's creating necessary for evaluation completeness;

- the more unique portfolio-product is created, the greater will be the participants’ own contribution in its creation to the development of evaluation criteria.

2. Reliability in the process of joint activities - the development of the evaluation system (procedures and evaluation criteria) should be built in the process of joint discussion by all parties and participants in terested in successful results of using portfolio technology.

3. Continuity (cyclic nature) of activities: joint activity on the evaluation criteria development is cyclically built into two measures of portfolio technology, a test for the creation and use of the portfolio and the assessment of the work itself. In this case, the evaluation criteria development can both accompany each of the two measures, and anticipate them.

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3. Results and Discussions

The total integrity of the methodological guidelines for developing the portfolio opens up new perspectives: each student can choose a personal "long-term training plan" that is ideally adapted to the learner's habits and represents, in effect, a continuous study of successive modules. Changes can be made during the training, depending on the level of the educational

program, the nature of the individual's work activity and the choice of his or her future career.

The authors developed a modular structure of a professional-personal portfolio of students' development, consisting of the following interrelated modules:

Module 1 "General Information";

Module 2 "Folio";

Module 3 "Diagnostic Toolkit";

Module 4 "Recommendations";

Module 5 "Schematics and Algorithm";

Module 6 "Collector of professional ideas";

Module 7 "Language Matryoshka";

Module 8 "Communication and Action";

Module 9 "Monitoring and Evaluation";

Module 10 "My Professional Find";

Module 11 "Reflexive Self";

Module 12 "Result".

The portfolio content is of a variable nature and its two types are distinguished:

- training type portfolio (TTP);
- learning type portfolio (LTP).

The author's version of the portfolio is a set of materials included in the modules, which may be mandatory and optional. Mandatory modules are the material that is important and must be mastered (TTP) and developed by the student (LTP). Optional ones are freely selectable and allow individualization of the learning process (Table 1).

Table 1
Algorithm of the teacher and student activity in the framework of the modular approach in the portfolio

TTP	LTP
Module 1 "General Information"	
The characteristic of the basic school is given, a set of documents for reporting is provided. Various forms of the "personal assistant" type are offered. The conditions for passing the practice are listed.	Based on the characteristics presented in the TTP and their own impressions, the basic school is characterized. The schedule of work is made. Professional biography is described in free form.
Module 2 "Folio"	
Contains materials of scientific and practical nature, which the future specialist offers for reading and self-note. List of works of foreign authors and Internet portals is included	The student reports on the literature read in the form of mini-conclusions, abstracts, presents his or her own scientific articles
Module 3 "Diagnostic Toolkit"	

The teacher provides various diagnostic techniques by which the students determine their own professional level and examine children	The students systematize the results of diagnostic studies on foreign communicative competence, which are included in special tables and graphs. A qualitative analysis is carried out and the results of various diagnostics are interpreted
Module 4 "Recommendations"	
The teacher makes lists of psychological and pedagogical recommendations of different kind, for example, for an excursion.	The students use the recommendations suggested by the teacher, then amplify them or makes new lists based on their own experience
Module 5 " Schematics and Algorithm "	
The teacher assembles into one unit the schemes, the algorithms by which it is supposed to analyze any segment of professional practice. There are algorithms and plans for group discussions, project activities and independent work	Observation results are provided according to the proposed TTP schemes. The students analyze communicative situations according to the proposed scheme. The plans for conducting disputes are being studied
Module 6 "Collector of professional ideas"	
Includes any information related to the portfolio subject	In free form, the students creatively analyze on the materials of the TTP collector, the "bank of ideas" is accumulated
Module 7 "Language Matryoshka"	
In this section, the teacher presents the most successfully performed works. The most striking episodes of students' language activity are shown	The module's topics allow the students to present themselves in a more creative way. The students choose and include in this module what can demonstrate the professional image of the future specialist
Module 8 "Communication and Activities"	
In this part of the portfolio, the teacher instructs the group about the algorithm for starting various business games, Brainstorming and trainings	The students set out a monologue in written form combining two topics: "My professional credo" and "The questions which are left unanswered." Their own professional position is provided, reflecting the implementation plan for problems solutions that determine the essence of a game (training, exercise, activator)
Module 9 "Monitoring and Evaluation"	
The teacher offers self-assessment sheets, protocols for mutual certification	The result of the work on this module is the completed and commented self-assessment

	sheets, the conclusion about the quality of the various works in the form of feedback, summary tables, reviews
Module 10 "My Professional Find"	
The teacher describes the signs of a professional find. The criteria for assessing the quality of a professional find are listed	The students present their own find, characterizing it. Includes Information that surprised especially, and the patterns that are set independently are included.
Module 11 " My reflexive Self "	
This part of the portfolio includes a self-analysis sheet, questionnaires such as "forecast of future activities"	The students carry out a reflection of their own activity, fill in an analytical reference on the work results as a specialist in the socio-cultural sphere, and write a mini-essay on the topic "What will happen if...: the bank of hypotheses". The results of their own activities in three areas are presented in the form of tables: educational, poly-cultural, research activities
Module 12 "Result"	
The teacher directs the students to write a review of the work with the portfolio, lists the key positions that one need to pay attention to when writing such a work	The students present their own opinion and impression about the work with the portfolio

The technology of working with the portfolio offers a step-by-step implementation of modules, the sequence of activities of the teacher and student within each module represented by the portfolio.

The LTP assessment mechanism functions by the following way:

- only the process and nature of work on the portfolio is assessed;
- only certain parts of the portfolio are evaluated according to the specified criteria;
- the final version of the portfolio is evaluated according to predetermined criteria;
- not only the portfolio itself is evaluated, but also the quality of its presentation.

The following ones are considered as criteria for LTP:

- presence of conclusions;
- the use of work research methods, the projective nature of the portfolio;
- combinatorics of the material presentation style: scientific prose together with reflections in a creative manner and free form;
- content personal binding;
- analysis of the portfolio usefulness for the student;
- quality of the file document presentation.

Designing of provision of students' professional training in the form of a portfolio of two types: "teaching - learning" enriches its didactic resources and provides a sufficient level of student informative nature. The author's experience with the portfolio allows us to conclude that the

student professional training who has completed such an individual training route qualitatively improves. A system of professionally-guided procedures accompanied by a portfolio creatively prepares the student for real professional activities.

4. Conclusions

1. The educational technology of the "portfolio" assumes a reflexive comprehension of the points of their professional and personal growth by the student and allows to fix the peculiarities of the movement in activity relatively to the expected results and through the awareness of the received practice to transfer it into an experience that can be used in the future; draw conclusions and timely adjust subsequent activities, making it more effective.

2. The algorithm of *student step-by-step activity in the process of working with a professional-personal portfolio* is revealed: motivation and goal-setting for the creation of a portfolio; development of portfolio materials structure; planning activities on the collection, processing and preparation of materials for the presentation; collection and processing of materials; trying in the presentation of the portfolio; presentation within the purpose of creation and use; evaluation of the activities results on the design and use of portfolio materials.

3. The detailed study of the "portfolio" phenomenon has made it possible to clarify the scientific concept on the content of its notion as a systematic and specially organized collection of evidence that serves as a method of systematic personal reflection on one's own activity and the results presentation in one or more areas for entering the labor market. The main *purpose* of the portfolio is to connect the internal personal resources of the subject to motivate him or her to create, cultivate and use their professional uniqueness and competitiveness in the development process.

In the future, it is planned to enrich the portfolio technology as an educational innovation that provides a professional-personal trajectory for the student development. The criterion and assessment toolkit's further clarification for the effectiveness in using portfolio technology as a technology for the current and final control of the student professional and personal development is necessary in a system of multi-level higher education in conditions of a study time shortage in the process of professional and personal development of university students.

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