# METHODOLOGICAL FRAMEWORK DEVELOPMENT FOR ADAPTABLE CAREER GUIDANCE PROCESS IN VET SYSTEMS

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#### **Abstract**

Article describes interdisciplinary approach focused primarily on an individual that in basis for innovative framework for an adaptable career guidance. The designed approach provides correlation between pupils and students' personal and vocational attainments and a forecast of socioeconomic region development through vocational education. The approach would help to improve the balance on the labour market.

Keywords: VET, career guidance, skills.

#### 1 INTRODUCTION

Occupation and qualification imbalance in the sphere of employment presents one of the most urgent problems today. On the one hand, the problem could be solved by establishing demand-and-supply equilibrium on the labor market. On the other hand, such equilibrium could not be achieved either theoretically or practically. Thus the only remedy is to increase the level of labor market balance, i.e. to reduce the discrepancy between demand and supply. Otherwise the society would face such adverse consequences of labor market imbalance as lower salary, decreased workforce productivity, poor returns on investments in skills development, extra expenditure on workforce retraining, unemployment payments, and loss of a person's / company's / region's / country's competitive ability [1].

European countries solve this problem by labor market needs evaluation and skills forecast and then by wide distribution of the gathered information about in-demand skills [2]. It takes 3-5 years to train a specialist with in-demand skills so the demand for such skills and occupations should be predicted and this forecast should be used both to form professional curricula and to organize career guidance process for school pupils, college applicants and students.

Career guidance is given enough consideration both in the Russian Federation and in European countries. But it is worth noting that traditionally these activities are focused on schoolchildren's guidance. Other social groups including students earning their vocational diplomas are not involved into this process. In an unstable socio-economic situation an individual should be ready not only to update his vocational skills on a regular basis but to gain new ones and to switch to another vocational area [3]. Therefore the range of respondents and agents broadens significantly. Vocational institutions gain more significance taking new functions in organizing public career guidance activities. Thus approaches to career guidance processes organization should be modified due to new target groups' involvement, quality variation of the subject and new influence agents of the career guidance process.

Reliable tools to forecast labor market parameters including predicting in-demand occupations and skills have been created in the developed countries. However, the collected information is provided mainly for departments of labor and employment. So it could be problematic to use the official forecasts either for personal occupational self-determination or in the vocational training system. At present developed countries deal with the problem of wide distribution of the information about labor market perspectives in an intelligible and clear form.

The abovementioned factors prevent person-centered progression and fulfillment in changing conditions of dynamically developing economy.

Therefore one of the ways to solve the problem of providing flexible tools to facilitate personal self-determination and successful employment is to develop an adaptable career guiding framework in VET systems. To achieve this goal it is necessary to develop scientific and methodological approaches to innovative model designing; to create techniques for regional medium- and long-term forecasting of in-demand occupations; to develop scenarios and techniques to correlate social and personal needs on basis of an in-demand occupations map for medium- and long-term perspectives.

#### 2 SPECIAL FEATURES OF THE APPROACH

The problem of schoolchildren and students' career guidance and strategy of their behavior in the labor market is investigated in France, Great Britain, USA, Finland and some other countries. Special centers, national programs / frameworks / systems of public career guidance are established in these countries. The analysis of the existing models and scientific tasks areas enables us to conclude that the social-economical aspects of the career guidance processes are thoroughly explored; the models are focused on the labor market needs and workforce customization.

The novelty of the proposed framework consists in implementation of an interdisciplinary approach focused primarily on an individual as an economic agent, on well-balanced consideration of personal abilities, needs and socioeconomic situation; on educational tools facilitating individual's informed choice of his vocational area and successful career as the final result. This universal model is supposed to be tested in VET system; this will allow us to highlight and describe the conditions and factors of the model implementation in the system of colleges and higher education institutions. Integration of modern information and communication technologies resources into the scenario of the developed model implementation will permit us to open up complex labor market forecasts for various social groups.

The proposed approach is important for Russian regions and national economy development and for the country as a whole, because it creates opportunities to solve a complex of interdisciplinary theoretical and practical problems concerning personal choice of an individual's vocational area and his career; improvement of human capital assets; regional labor markets upgrading; and reduction of social tension.

Thus, the basic novelty of the study lies in the integration of socioeconomic, psychological and pedagogical knowledge in terms of information and communication technologies aimed at providing occupational guidance succession in the system "an individual – vocational education – labor market".

#### 3 PRINCIPLES OF THE FRAMEWORK DEVELOPMENT

The complexity of current processes in modern economy conditions the necessity of multilevel career guidance system development which should be adjusted to ever-evolving labor market with regard to the underlying logic of a student's individual progression. This system will allow us to create and consistently apply in educational institutions flexible socio-pedagogical tools to form the fundamentals of successful personal career progress.

The developed model is based on the following principles:

- 1. Model's 'adaptability'. This presupposes dynamic adjustment of the career guidance processes to real and predicted expectations in the modern labor market. Adaptability also means orientation on a modern man (steps, means, forms, ways of occupational self-determination) and on the opportunities for career guidance provision in VET system.
- 2. Forecast orientation enables taking account of the economy and labor market development perspectives in the career guidance process.
- 3. Personal orientation permits prospective labor market players to make an informed choice of their individualized vocational education program on basis of forecasting knowledge.
- 4. Tools versatility (techniques, regulations) is conditioned by ICT utilizing and permits the model application for career guidance activities in educational and socioeconomic institutions at local municipal, regional and federal levels taking into account both personal interests and capabilities and perspective economic situation and regional / country labor market.
- 5. Targeting means orientation on students and course participants in "school vocational training" system.

### 4 BRIEF DESCRIPTION OF THE FRAMEWORK

Methodological framework development for adaptable career guidance process in VET system is based on the following approaches: an interdisciplinary approach (integration of pedagogical, economic, psychological and social knowledge); a system approach (at the level of system consideration); a synergetic approach ("grasping" spontaneous tendencies of the labor market development, identification of bifurcation points); a learner-centered approach (when studying

subjective prerequisites for vocation choice); a technological approach (when developing a mechanism of social and personal needs correlation); an information-motivation approach (when building an innovative model of career guidance); an agent-oriented approach (when building an innovative model of career guidance).

Innovative framework for an adaptable career guidance process is built upon forecasting interdisciplinary design of a career guidance process. The framework encompasses the following modules:

- Formalization of the career guidance process goals and outcomes in terms of educational directions / specializations / occupations taking account of existing vocations classifications, occupational standards, federal state educational standards of special and higher education (regulatory framework);
- 2. Catalogue of criteria and indices for qualitative evaluation of dynamics of personal orientation on an occupation in the system "school tertiary institution –labor market";
- 3. Mechanisms for adaptable correlation of social and personal needs based on the in-demand occupations maps for medium- and long-term perspectives;
- 4. Forecasting techniques of in-demand occupations in the region for medium- and long-term perspectives; composed lists of in-demand occupations;
- 5. Information analysis system to maintain forecast-oriented career guidance process;
- 6. Methods of career guidance in VET system;
- 7. Guidance documents and regulations to provide the framework implementation in the regional system of vocational education.

#### 5 LOGIC OF ADAPTABLE CAREER GUIDANCE PROCESS

#### 5.1 School

Institutions of general education do not conduct pronounced career guidance activities. The main goal of school is to provide high quality and available general education for schoolchildren aged 6 to 17 years; the task of career guidance is of a secondary priority. The analysis of annual plans of schools performance for last 5 years proves this assumption: the task of career guidance delivery is in the bottom of their hierarchy of objectives.

However, it is important to note that the context of general education itself; knowledge accumulation; general intellectual, moral and labor development; schoolchildren's preferences for subjects and directions in the course of their profiling, project and research activities (as the mandatory part of new federal state educational standards) create the conditions for child's career guidance and self-determination during school time.

Specialized schools (linguistic, mathematical, physical, etc) are involved in the career guidance system to more extent because the educational process there creates the situation of multiple choices of future vocational activities for schoolchildren.

Therefore, at the regional level schools play the leading role in the sphere of career guidance support assisting in primary self-determination and fulfilling functions of harmonic and comprehensive development of an individual. This work may become better balanced if schools receive updated information on modern occupations on basis of predicted labor market characteristics. This information will become the foundation for maintenance of schoolchildren's labor motivation development in general and for acquiring specific skills in particular.

Awareness of forecasting features of the modern labor market will allow school to find new forms and methods of career guidance support, to customize it, and to strengthen the links with institutions of vocational training and enterprises. Comprehension of economic predictions concerning the labor market will allow school to build new technologies of schoolchildren guidance on basis of roadmaps for their vocational and personal progression including recommendations for their personal development (skills and competences development) and for choice of their vocational career (catalogue of vocational education institutions; catalogue of employers).

#### 5.2 Vocational education

Unlike schools, vocational education institutions are directly aimed at career guidance activities conditioned by the specific curricula in the institution [4]. It is this institution's insularity that sometimes leads to neglecting purposeful students' career guidance support as they are considered to have already made their choice when they selected the educational program. However, either labor market dynamics or the emergence of new labor functions and professional areas that could attract future graduates are not taken into consideration. One more important function is not implemented either: vocational education and training should prepare students to search for job positions and to be ready for fast retraining to get adjusted on the labor market. They should be ready for life-long learning to be able to solve professional problems in their workplaces.

To sum up, vocational education institutions should build their educational process to provide students' personal and professional development taking account of specific curricula, individual features, socioeconomic reality, and forecasting demand in the region / country. A vocational educational institution which possesses information about vocational areas may serve as a platform for career guidance of various target groups.

## 5.3 Regional authorities

Here we assume that regional authorities are interested in fostering the economy and creating congenial social environment in the region.

One of the ways to achieve the set goals is to explore the opportunities and to perform career guidance activities necessary for the region.

It is the regional authorities that are supposed to be sharing impartial knowledge on current and perspective socioeconomic realities.

Consequently regional authorities coordinate activities in the system "educational institutions – region". To fulfill this role they have to provide practitioners in career guidance with updated information on occupational preferences of the target groups (schoolchildren / college applicants / students).

The coordination center receives the updated information from educational institutions that submit impersonal data on occupational preferences of individuals who study in these institutions.

These data are collated with the current and forecast socioeconomic priorities of the region development and are used in scientific decision making for career guidance support (targeted support of educational institutions, social advertizing, vocational competitions, etc).

Educational institutions, in their turn, elicit individuals' vocational preferences applying internal functional of software and special methods.

#### 6 CONCLUSIONS

The designed approach provides coherence between pupils and students' personal and vocational attainments and a forecast of socioeconomic region development through vocational education. As the result, this will allow training in-demand staff in the region / country.

Implementation of the proposed framework will result in better balanced labor market, higher rates of graduates' employment, lower tension in the labor market, higher personal incomes, and higher quality of human capital assets.

Besides, revealing new in-demand vocations in the regional labor market will allow timely adjustment of curricula in VET system in line with the labor market dynamics.

The novelty of the proposed investigation from the perspectives of world science consists in implementation of an interdisciplinary approach focused primarily on an individual. The proposed system is definitely a humanitarian one. This is a two-way process: "incorporation" of a person into future economic development which depends on this person's potential and abilities; and "incorporation" of economy (knowledge about economic development of a region / country) in the perspective plan of this person's development.

It is important that the developed methodological framework creates the foundation for significant progress in the following directions:

- Implementation of the career guidance process as a forecasting and learner-centered component of continuous education which corresponds to world trends;
- Producing mechanisms for education content adjustment (at the level of curricula) in accordance with labor market dynamics and individual progression;
- Development of career guidance tuning (current adjustment) of multilevel education in accordance with realities of the regional labor market;
- Extension of age range of people provided with career guidance support through attracting adults and elementary school pupils thus creating extra opportunities for the lifelong learning concept implementation on basis of a regional university.

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