Mechanisms of Independent Learning Quality Assurance Based on the Analysis of Demand for University Graduates at Labour Market and Recommendations on Their Practical Application

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INTRODUCTION

The Concept of the Federal Target Programme of Education Development for 2006 – 2010 approved by the RF Government Executive Order of September, 2005 № 1 340p has stated the necessity of adjustment of learning content, techniques, and methods of quality learning assessment in accordance with the requirements of modern society and development of regulation mechanisms relevant for problems of education system development [1, p.1-3]. To ensure the learning quality one needs the institutional improvement of education system on the basis of efficient interaction of educational institutions with labour market.

The modern Russian education system is characterized by lack of universities' responsibility for the final outcomes in learning activity. The independent forms and mechanisms of citizens', employers' and professional associations' participation in solving the problems of educational policy including the processes of independent public quality learning assurance has not been developed sufficiently. [1, p. 1-3].

Modernization of education system is reported to be one of the basic priorities for the government development over the long term up to 2020.

One of the main problems in modernization of education system is formation of quality assessment mechanisms and education service demand assessment with participation of consumers in international comparative investigations by means of development, including:

- clear, open information system of educational services providing complete, accessible, reliable and timely information;
- mechanisms of involving consumers and public institutions in regulation and assessment of learning quality [2, p. 4],[3, p. 7].

In this connection design and implementation of efficient learning quality assessment mechanisms at all levels of the Russian education system are urgent governmental tasks.

MODEL OF INDEPENDENT QUALITY LEARNING EVALUATION ON THE BASIS OF UNIVERSITY GRADUATES' DEMAND ANALYSIS AT THE LABOUR MARKET

Investigation made by the Employment and Practical Training Center «MADI-PROFI» in 2008 – 2009 allowed developing Russian system model for independent assessment of higher profes-

sional education quality based on analysis of demand for university graduates' at labour market called «PRO-vuz» (Fig.1).

PROvuz is aimed at the university professional learning quality assessment according to the results of educational activity. For such results demand for university graduates at labour market, their career successes are taken as indicators. The basis for the PROvuz model is the research of graduates' employment process and revealing the factors responsible for its efficiency.

University quality learning assessment by the PROvuz model includes 5 stages:
1. Preparatory stage;
2. Collection of preliminary information;
3. Processing the preliminary information;
4. Result analysis;
5. Preparation of analytical report and its submission, ranking of universities and submission the rating.

At the preparatory stage preparation and production of questionnaire as well as training of interviewers are arranged. Implementation of PROvuz programme suggests application of face-to-face poll technique i.e. at the presence of interviewer.

The given technique allows increasing in reliability of information due to the interview of all university graduates.

Collection of preliminary information by means of interview question involves completing an anonymous questionnaire containing the following set of questions:
■ Information on education;
■ Information on employment;
■ Information on learning quality in university;
■ Processing the preliminary information consists of 4 sequential operations: development of preliminary data matrix;
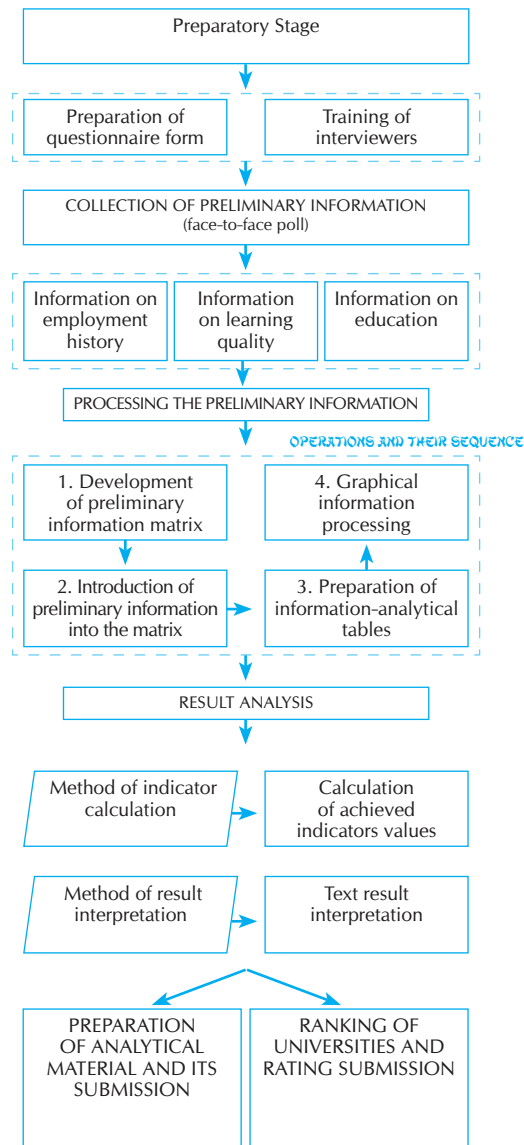

Fig. 1. Model of Independent Learning Quality Evaluation «Provuz»

The article states the necessity for development of independent quality assurance mechanisms. The description of independent university learning quality assessment model is presented on the basis of demand analysis model «Provuz» for university graduates. The indicators of university quality assessment and factors responsible for graduates' employment efficiency are given. The examples of application of university quality assessment results are shown.

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- Introduction of preliminary information into the data matrix;
- Preparation of analytical tables, graphical information processing.

As processing of such significant data volume requires software, at the stage of processing of preliminary information it is necessary to «convert» the questionnaire data into electronic form – matrix. The matrix cannot be completely unified, since different universities train in different specializations and present different structures of subdivisions (departments). This fact implies the necessity of matrix development for every university individually.

Introduction of preliminary information into the data matrix may be done either by interviewers with special software or graduates autonomously with special electronic forms (questionnaires).

The preparation of information-analytical tables is followed by the operation of data graphical processing. Structure and content of information-analytical tables are defined by:

- the structure of professional training in a university including the number of specialities;
- the scheme of preliminary information processing.

Graphical processing is necessary for the subsequent analysis of assessment results and suggests their visualization in the form of graphs, charts, and histograms.

It is possible to simplify the procedure of preliminary information processing by development of special programme for data processing.

The result analysis includes calculation of reached indicator values, text interpretation of evaluative results which is made on the basis of calculation techniques of indicators and   result interpretation. The reached indicator values are included into the indicator chart that contains indicating items and units of measurement; the reached indicating value; the list of factors influencing the indicator values.

Text interpretation of the researched results is presented in the form of report that contains the analysis for influence of educational activity process on demand for graduates' at labour market. Such conditions could include:

I.   Learning process – actions aimed at the increase in graduates' demand at labour market:

- practical training and probation (compulsive actions included in curriculum) as an assistance in employment;
- conditions for combination of work with studies as well as their efficiency (schedule of class attendance, information about vacancies on terms of part-time etc.);
- university system of quality management for students' learning the subjects included in curriculum.

II. Career guidance in university – a set of actions aimed at formation and development of students' patriotic attitude to the chosen job, their ability to analyze the conditions and main trends in labour market development, skills of independent job search. Open classes «Introduction to speciality», courses of additional professional training, conferences and workshops on employment problems etc. could be taken as such measures.

III. Arrangement of university interaction with employers – a system of special actions taken by university together with engaged employers to increase the level of demand for university graduates at labour market. The following measures can be considered in this case:

- target contract training;
- graduates' employment on request of employers;
- recruitment actions (career fairs, company presentations, etc.);
- students' construction gangs.

INDICATORS OF LEARNING QUALITY ASSURANCE BASED ON THE ANALYSIS OF DEMAND FOR UNIVERSITY GRADUATES AT LABOUR MARKET

University graduates' employment efficiency is characterized by the following indicators:

1. The level of demand for graduates (LDG) by which the number of graduates having a job and (or) job experience at the date of graduation from university of the total number of graduates is meant.

2. The level of professional demand (LPD) by which the number of graduates having a job in speciality and (or) partly in speciality trained in the university of the total number of graduates employed at the date of graduation from university is meant.

3. The level of salary (LS) by which the average salary of graduates employed at the date of graduation from university is meant.

4. The level of professional self-identification (LPS) by which the number of graduates planning to work in speciality and (or) partly in speciality trained in the university in the mid-term out of the total number of graduates employed at the date of graduation from university is meant.

5. The level of employee'expected income (EEI) by which the average salary of graduates employed at the date of graduation from university, offer of which by employer serves as a reason for job change is meant.

6. The level of applicants'expected income (AEI) by which the average salary of graduates not employed at the date of graduation from university the offer of which by employee serves as a reason for graduate's employment.

7. The level of career support (LCS) by which is meant the number of graduates out the number of employed graduates who got a vacancy in one of the following way:

■ Obtaining information via mass media of university (site, advertisement etc);

■ Obtaining information via mass media of university (site, advertisement etc);

■ As a result of target contract training completion;

■ According to the results of internship (training, field, pre-degree practice);

■ According to the results of participation in career fairs, career days arranged by university;

■ By means of application to the university employment centre;

■ On recommendation of a teacher.

LCS shows the degree of university assistance in building the graduates' successful career, namely: quality of university interaction with field-specific employee including quality of task-oriented work in employment assistance.

8. Efficiency of career support (hCb) by which is meant the graduates' average salary of the number of employed ones at the date of graduation from university who got the vacancy by one of the tollowing way:

■ Obtaining information via mass media of university (site, advertisement etc);

■ As a result of target contract training completion;

■ According to the results of internship (training, field, pre-degree practice);

■ According to the results of participation in career fairs, career days arranged by university;

■ By means of application to the university employment centre;

■ On recommendation of a teacher.

9. Correlation of professional requirements (CPR) by which the character of demand for graduate dependence on academic progress during the course of study is meant. CPR allows estimation of relationship of requirements for students' learning made by university to the requirements for professional training made by an employer.

As the factors influencing the efficiency of graduates' employment in the course of research are taken:

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- Graduates working experience got within the period of study;
- Graduates' salary;
- Academic progress in the course of study (estimated in average score of diploma assessment sheet);
- Ways of employment (obtaining information about vacancies) used by the graduates in the employment process.

IV. Application of learning quality assurance results based on analysis of demand for university graduates at labour market.

The results of assessment may be presented in the form of analytical report or universities' rating. University learning quality assessment results derived from PROvuz model application allow:

1. For consumers (potential consumers) of educational services – to choose a university to enter, the degree to get (bachelor, specialist, master) and course to be taught consciously and reasonably on the basis of employment data (demand) on graduates of the particular university, speciality, department etc.

2. For employers – to arrange the interaction with universities taking into account the university's real results in demand for its graduates at labour market, to determine the possible directions in investments of educational process including target contract training.

3. For executive government bodies, management education units, founders of universities – to make an administrative decision aimed at:

- optimization in the network of higher education institutions depending on the results of their educational activity;
- correction of target figures for enrollment of students depending on the demand for graduates at labour market;
- making personnel decisions;
- improvement of education content of some university curricula;
- development and realization of employment programmes based on the results of young specialists' employment.

For rectors of universities – to use the designed system for in-university monitoring of current condition in bachelors', specialists', masters' training quality including assessment of units' (faculties, departments etc.) efforts in communication with field-specific employers.

Thus, the system of independent university learning quality assurance based on PROvuz analysis model of demand for university graduates at labour market makes possible to meet all education service consumers' requirements in acquiring reliable information on the quality of higher education in every university and to become in demand in universities as an element of in-university system of learning quality monitoring increasing the potential of self-assessment in this way.

REFERENCES (ALL TITLES ARE ONLY IN RUSSIAN)
1. The Concept of the Federal Target Programme of Education Development for 2006 – 2010 (adt. By RF Government Executive Order of September, 3 2005 r. № 1 340-р)
2. RF Government Executive Order of 17.11.2008 №1662-р «The Concept of the Longterm Social-economical Development of the Russian Federation for the Period up to 2020».
3. RF Government Executive Order of 29.12.2001 №1756-р «The Concept of the Russian Education Modernization for the Period up to 2010».