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QUALITY ASSURANCE IN CONTINUING ADULT EDUCATION: FROM THE EUROPEAN TO THE NATIONAL LEVEL

Abstract: The paper is devoted to the process of formation of competences professional, social, and personal) as a component of the process of continuing adult education. The quality assurance model for this process is presented considering the international and Russian experience.

Keywords: quality in continuing adult education, formal, non-formal and informal education, model of quality, independent assessment, process approach

1. Introduction

The international and Russian practice in the area of quality assurance in continuing adult (*in the context of this study the category "adult population" includes all persons who have reached working age and have got a general secondary, secondary vocational or higher education. Continuing education for adults is off-level*) education is based on 3 main approaches which are focused on:

1) *quality of outcomes,* i.e. on a level of development of professional qualifications or personal competences which are expected by customers*;*

2) *quality of educational programs* which will assure the expected result a level of development of professional qualifications or

personal competences which are expected by customers;

3) *institutional quality* or management quality of the organization which is realizing programs of continuing adult education which will assure quality of educational programs and achievement of the expected outcomes.

The first group of quality assurance models in continuing adult education (CAE) is monitoring of compliance of outcomes which are knowledge and skills, competences and actions taken in order to reduce deviations (prevention or elimination of deviations before a specialist will be qualified).

The second group of models is designed to assure quality of educational process (compliance of programs content with the expected outcomes and conditions which are required to get a qualification or to form necessary competences). These models are designed to consider learning outcomes as well as ways and provisions enabling to

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achieve them.

Models of the third group are focused on quality management systems of organizations realizing educational or other supporting activity. Quality management systems are prerequisite for quality of educational process and, as a result, for quality of outcomes. At the national and supranational level the institutional quality is quality of system decisions on formation of educational environment and development of common standards and requirements. Systems for recognition of education quality belong to this group of models. At the heart of each model is a particular way of assessing the quality of outcomes (competences, qualifications), program, or activities of organization and its management system (Aniskina and Melnik, 2015).

2. The EU approaches to quality assurance in CAE

The continuous development of quality of adult education in the European Union is determined by its strategic vision which is to strengthen Europe through creation of the common European labor market, mobility, transparency, mutual trust and recognition.

The European Union assists cooperation in the sphere of quality assurance of education with particular focus on exchange of models and methods, on the development of common criteria and principles of quality in vocational education and training. The most common models of education quality management in the EU are based on TQM (Total Quality Management) principles.

Table 1 presents the European Union chronology of activities conducted to move towards a model of quality assurance for continuing adult education.

A quality model of continuing education which is currently under development in the EU is based on recommendations made on the basis of comparative analysis of about forty projects specifying in detail useful practices and their contribution to the key issues of the European policy on quality assurance.

Table 1. Quality in VET and Adult Learning in the EU

2000	Lisbon	The Lisbon strategy 2000 to 2010
2001		European Forum on Quality in VET (2001-2002)
2002	Copenhagen	The Copenhagen Declaration
2003		Technical Working Group on Quality in VET (2003-2004)
2004	Maastricht	Common Quality Assurance Framework CQAF
2005	Helsinki	ENQAVET - 2 work programmes (Oct. 2005-Dec. 2009)
2008	Bordeaux	EQR
2009		EQARF + ECVET Recommendation, The QALLL-Network
2010	Brugges	EQAVET (01.01.2010)
2011		Quality in the Adult Learning Sector
2012	QALLL	Final conference Nov. 2012
2013		Quality in the Adult Learning Sector – Final report
2014	VET shifts to DG Employment within the EU Commission	
201?	Revision of the EQAVET-reference framework	
20??	Quality reference framework for lifelong learning	

Among these recommendations the key one is to use the EQAVET quality circle (Figure 1) which is the Deming cycle adapted to the

education sphere. To ensure continuous development, it is necessary to ensure that the whole cycle of quality is run and to carry out training in real conditions attracting enterprises (Folkuniversitetet, 2015; *PEN Pathway from EQAVET to NQAVET*). The recommendations emphasized that quality assurance is an integral part of professionalization and staff development.

Figure 1. EQAVET Quality Cycle

Analysis of scientific literature concerning approaches to the quality of adult education, documents and EU projects, as well as data on 32 countries on the basis of research and interviews at the national level, case studies of approaches to quality assurance and discussing their results with stakeholders led to the following conclusions:

1) All studied systems of quality assurance have common characteristics: organizational quality, quality of a learning process, didactic and staff, and quality of outcomes.
2) Success factors of quality assurance systems for adult continuing education are students/clients, transparency of the system for all stakeholders; strong organizational support.

To assess the quality of lifelong education in terms of professional education and training (VET) in the EU 10 indicators are adopted (Table 2) and projects on expansion of this system of indicators to national levels of the countries concerned are currently implemented.

Table 2. The European indicators of quality in VET

№	European Indicator	Descriptor
1.	Relevance of quality assurance systems for VET providers	a) Share of VET providers applying internal quality assurance systems defined by law/at own initiative
		b)Share of accredited VET providers
2.	Investment in training of teachers and trainers:	a) Share of teachers and trainers participating in further training
		b) Amount of funds invested
3.	Participation rate in VET programmes:	a) Number of participants in VET programmes, according to the type of programme and the individual criteria
		b) Social criteria: in addition to the basic data by sex and age the following can be: students not completing school, migrants, disabled persons, duration of the period of unemployment, and etc.
4.	Completion rate in VET programmes	Number of persons having successfully completed/abandoned VET programmes, according to the type of programme and the individual criteria
5.	Placement rate in VET programmes	a) Destination of VET learners at a designated point in time after completion of training, according to the type of programme and the individual criteria
		b) Share of employed learners at a designated point in time after completion of training, according to the type of programme and the individual criteria

Table 2. (continued)

№	European Indicator	Descriptor
6.	Utilisation of acquired skills at the workplace	a) Information on occupation obtained by individuals after completion of training, according to type of training and individual criteria
		b) Satisfaction rate of individuals and employers with acquired skills/competences
7.	Unemployment rate according to individual criteria	The share of unemployed persons as a percentage of the total labor force. The labor force refers to the sum of the total number of employed and unemployed persons
8.	Prevalence of vulnerable groups	a) Percentage of participants in VET classified as disadvantaged groups (in a defined region or catchment area) according to age and gender
		b) Success rate of disadvantaged groups according to age and gender
9.	Mechanisms to identify VET needs in the labour market	a) Information on mechanisms set up to identify changing demands at different levels
		b) Evidence of their effectiveness
10.	Schemes used to promote better access to VET	a) Information on existing schemes at different levels
		b) Evidence of their effectiveness

The structure of the EQAVET increases transparency of VET processes; its objective is to strengthen and promote mutual trust, mobility of workers and students, as well as lifelong learning programs.

VET excellence at system level implies a strategy of continued skills development, targeting high quality learning outcomes, mobility, mutual recognition and permeability, as well as putting in place evidence based policies which improve effectiveness and efficiency of the system; it also implies cooperation and co-investment and integrating VET in the general education and training system. According to the results of the EQAVET secretariat survey, more than 20 countries have consolidated their quality assurance approaches and EQAVET has directly contributed to shape the national system in 14 countries.

3. Implementation of EQAVET at the national level

Adoption and integration of the EQAVET model structure or application of basic standards of quality assurance in different countries is on a voluntary basis.

Since December 2013, a group of 4 EU countries has been carrying out a research titled «Pathway from EQAVET to NQAVET» (Gatt, *et al.*, 2014). Russia participates also in his project. This country is represented by Pastukhov State Academy of Industrial Management and Tomsk State University. The goal of the project is to increase transparency in European VET by enhancing development of National Quality Guidelines / Recommendations and approaches for VET (NQAVET) for provider level based on EQAVET.

The aims of the project are to: Develop national Guidelines / Recommendations regarding Quality in VET based on EQAVET in 4 pilot EU countries by national and regional authorities by

a) adapting and / or developing an approach to the EQAVET Recommendation which is fit for purpose and tailored to national needs and requirements, promoting the

development of a culture of quality improvement

b) elaborating adequate operational measures to implement the EQAVET recommendation and developing national Quality Assurance Frameworks (NQAF) for VET

c) elaborate recommendation for VET authorities (national/regional) in other member states based on experiences from above pilots for supporting them in their effort for development of their own national Quality guidelines/recommendation for VET based on EQAVET.

Malta, Turkey, Sweden, Italy and Russia participated in the research. The researches within the project showed that the personnel of organizations is more aware of models and tools of quality if the state regulation is stronger. Over 80% of providers from Malta and Turkey are aware of the national policy of quality (Fig. 2). The use of policies and procedures to assure the quality of providers from Malta and Turkey is weakly associated with the use of Deming's cycle (Fig. 3). In Russia, about a half of the respondents are aware of the quality initiatives at the national level and more than 60% have found the reference to them in the policy documents. In this case, all the procedures and the quality policy of the Russian providers are associated with the Deming cycle.

But the efficiency of measures in these countries is lower. For example, in Sweden, where quality assessment is voluntary and the policy in the field of education quality is primarily regulated by the public, the independent evaluation there plays a significantly greater role (Fig.4), and measures are always being taken according to the results of this assessment, i.e. the assessment creates additional value for the organization. In Italy, the percentage of use of procedures and regulations for monitoring of the education quality is very small, and more than 50% of respondents (Fig. 3) apply the Deming's cycle in management and 100% (Fig5) performs an independent assessment. It is not about Turkey where the

state regulation of education quality is stronger, and the role of an independent assessment is significantly lower.
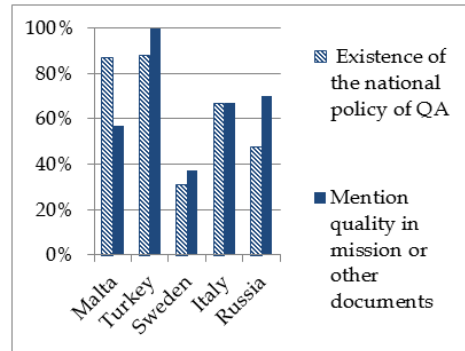

Figure 2. Frequency of reference of quality ideas at the national level across VET providers

In all countries participated in the project, except Malta, the great value is attached to the analysis of requirements of the labor market (Fig. 5). Thus activity of Sweden surpasses all others, it uses the most different methods of the analysis and all possible channels of receiving feedback from the market. In the countries where the state regulation of quality is weaker, methods of an external assessment are used as much as possible.
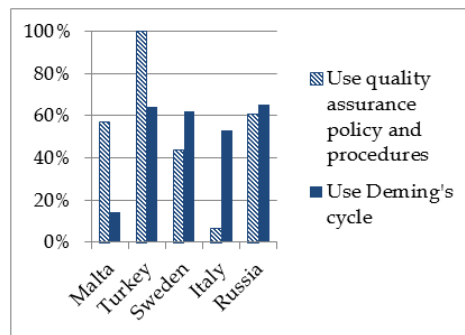

Figure 3. Frequency of use of the quality assurance procedures and the Deming's cycle across VET providers
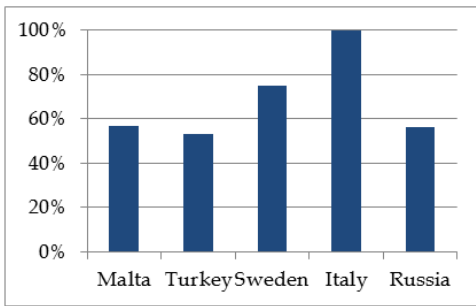
Figure 4. Frequency of use of the external assessment across VET providers
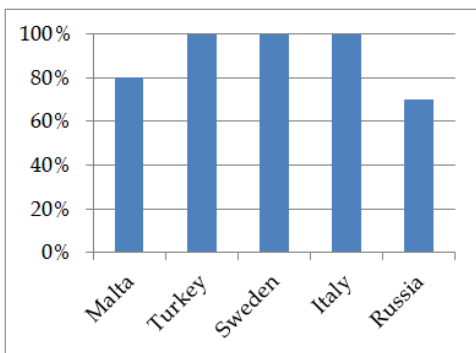

Figure 5. Availability of systems for analyses of the labor market needs

Today, there are quality standards for VET providers for the majority of national educational systems in the EU, to apply which is often a precondition for funding and accreditation.

Almost in all countries involved in the project, organizations that implement VET programs, collect data to improve the efficiency and effectiveness of their systems. To do this, they created the appropriate data collection methodology, for example, questionnaires, and defined indicators. However, this does not mean that processes are regularly reviewed and action plans to ensure changes are developed. The survey shows that approximately only one third of countries always performs regular audits and develops action plans. In most cases, countries just publish information about results of available evaluations.

Regarding use of indicators, methods differ significantly from country to country. While some indicators are applied by many states (for example, "rate of participation and completion of training under VET programs"), other indicators focused on key results (for example, "utilisation of acquired skills at the workplace" or "share of employed learners at a designated point in time after completion of training"), are used less often.

External assessment indicates difficulties in comparing national indicators of quality assurance and EQAVET criteria because the descriptions are too general and often cover the aspects characterized not by specific indicators of quality assurance, but rather, by a feature of policy in the VET sector and approaches to this policy. However, this global approach assists to move from a set of specific tools to the analysis of general culture of quality.

The high quality VET contributes to the continuous development of skills, mobility and permeability between continuing adult education and higher education. About a half of the countries state that the quality assurance in VET really helps to get access to higher education through various mechanisms.

The vast majority of countries (including Russia) have defined mechanisms and procedures for identifying training needs for initial VET (IVET), and many of them already have such mechanisms for continuing VET (CVET). However, a comprehensive analysis is necessary to assess effectiveness of such systems, their synergy with the EU competences framework, as this is important for development of high quality qualifications based on learning outcomes that meet the needs of the labor market.

In the UK, VET is officially divided into initial vocational education and training (IVET) and continuing vocational education and training (CVET) which includes additional professional education and

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additional education of adults. Continuing professional education and training in the UK covers a very wide range. The main purpose of CVET is providing additional opportunities for adults to gain new professional skills or make a career change. The main attention within CVET is paid to upgrading skills of employees as a prerequisite for effective development of the economy throughout the UK.CVET in the UK exists in three main forms:

- learning in groups (formal)which is funded by contributions of various social partners at the national, regional, local, and institutional levels. Employers interact directly with CVET providers. They send the employees for training in selected programs, or pay for individual courses;
- trainings for the unemployed persons and other vulnerable categories of citizens;
- outside the formal patterns through development of initiative and entrepreneurship, in collaboration with the social partners through the use of common tools for certification or accreditation of qualifications. However many employers follow the state requirements to qualifications and professional standards which lie at the heart of learning, focusing on the fact that learning can provide ensured quality, and achievements which learners acquire at the workplace could be recognized.

The system providing external quality assurance in vocational education in Spain is directly or indirectly financed by the national government. Thus one of the most important issues is whether the activities of the expert community in the field of quality assurance corresponds a rapidly changing international context? Today, quality assurance is perceived by many people as a new component of quality of professional education. The question is how to enhance the prestige of quality assurance mechanisms in order to strengthen the credibility of educational institutions?

Analysis of various methods of quality assurance by organizations providing educational services in the field of continuing adult education with a focus on external recognition, has revealed that in this case the organization's responsibility for the effective use of quality tools is not reduced. Moreover, when the organization chooses a voluntary certification system, the internal interest and responsibility of the personnel for the final performance raise.

In general, to obtain a positive effect from the use of models of continuing quality assurance of adult education a kind of cultural changes are actually required: the development of a culture of quality in education, where self-assessment becomes a part of the culture, not a formality to be performed.

In the Netherlands, an elemental structure of quality assurance was developed based on the analysis of quality management of specially selected experimental educational organizations. The structure of the quality covers the following aspects.

1) Performance data, such as competency assessment results, graduation rates.
2) The satisfaction of stakeholders. Every year, students are surveyed in order to check the level of satisfaction with the enrollment process, general satisfaction with the curriculum, the correspondence between the program and the existing (future) work, educational infrastructure, educational materials, teachers, and procedures of final certification. Partly they are conducted at the corporate level, but most of satisfaction checks are performed on the lower (operational) level.

Checks of employee and teaching staff satisfaction are also conducted regularly

(every two years). According to these surveys, teachers and staff are, in general, not always satisfied with the improvement plans in their organizations.

The focal subjects of quality assurance plans of the majority of organizations are: communication, input competence, training, accountability, accessibility, tutoring, students' rights, curriculum, mentoring, certification, learning processes, and outcomes. In this case one of the problems is to find an optimal balance between assessment/analysis and time to solve the problem (effect).

Analysis of quality systems in educational organizations in the Netherlands confirmed our findings based on the survey of providers from Malta, Turkey, Sweden and Italy, and showed that the majority of providers focused on the use of Deming's management cycle for the internal quality systems, no matter what model they use.

4. Assessment of applicability of the European experience for the Russian Federation

The use of European experience in development of different types of education and their quality is one of the main challenges and opportunities for the system of lifelong education in the Russian Federation.

Cultural and economic differences between Europe and Russia, as well as differences in their national legislation, are not an obstacle to generalization and transfer of good practices. Joint research on the quality of education undertaken under various programmes of the European Training Foundation in different countries (including Russia) allows to identify good practices and to evaluate the possibility to use this experience.

The already mentioned researches conducted within the project "Pathway from EQAVET to NQAVET" (project no. 538730 LLP-1-

2013-SE-LEONARDO-LMP) were focused on identification of opportunities to apply the EQAVET system at national level. These standards have been developed specifically to enhance mutual trust, mobility of workers and students, and to improve practices that are currently in use in the continuing adult education.

Surveys with participation of Russian VET providers conducted by the team of the "Pathway from EQAVET to NQAVET" project have revealed the following:

1) Most of the organizations whose employees were interviewed, implement quality standards. In these organizations quality requirements are recorded in internal official documents and often concern the continuous improvement of all VET processes in accordance with Russian and international ISO standards as well as improvement of competences of the teaching staff. All of these organizations set themselves the aim to achieve high quality educational activities and training of highly qualified specialists, competitive in the Russian and international markets.

2) These organizations realize the full life cycle of educational services from identifying the needs of the labor market. Organizations monitor changes in the environment, analyze the effectiveness of investments in the professional development of teachers, conduct monitoring of students' satisfaction.

3) The VET providers are not enough aware of national documents regulating the quality of this field is. As for the subjects regulating and verifying compliance with quality policy, on the contrary, a wide range of different institutions operating at the national level and at the organizational level has been

mentioned. However, none of the respondents had a direct experience of implementation of the EQAVET standard in the field of vocational education and training. At the same time, over 80% of respondents were aware of the efforts to assure quality education at the European level.

The study revealed certain national trends: actual and effective methods, tools and processes of quality assurance in the Russian system of VET are international ISO 9000 standards and monitoring, the credibility of the teaching staff as well as mutually beneficial cooperation with other organizations active in this field.

The providers of vocational education and training in different European countries which participated in the study have made recommendations on improving the system of quality assurance at the national level. For Russia, the following are relevant:

1) Continuous improvement based on the Deming's management cycle which suggests the need for planning, control, analysis, and taking corrective and preventive measures.

2) A trained team of managers and teachers, who are committed to quality and capable to management and effective communications, is required for successful implementation of the quality management project.

3) It is necessary to develop an independent assessment of VET providers and to create conditions for development of institutional accreditation;

4) All stakeholders (key stakeholders, employers, professional associations, representatives of large customers) should be involved in the development of quality management systems.

5) For a clear understanding of requirements of the regulator, an

effective interaction between associations of providers and authorities is necessary.

Quality should be considered as a management tool, but it is more important to turn it into a philosophy and way of thinking that is most challenging when using the European experience in the Russian Federation.

5. The approach to quality assurance of lifelong education in the Russian Federation

In the process of continuing adult education the emphasis is placed on specifics of the contingent (the existing practical experience, a formal education confirmed), on the specifics of the demands and learning technologies (knowledge acquisition). These are the main distinguishing features of continuing adult education. Adult education also includes the segment of social education covering certain groups of the population with their specific needs. For example, to provide migrants with legal access to the labor market, it is required to teach the Russian language as well as to provide them with or to expand professional knowledge and skills. Adults usually already have as experience of educational activities so practical skills, so their needs are more specific and pragmatic. They have a more pronounced motivation, specific requirements for the organization of training (typically, this is a tight timeframe, the proximity of training to the place they reside and work, additional requirements to the level of teaching).

The use of different methods of forming competences (formal, non-formal or informal education) is characterized by a different structure of responsibility of elements interactive in this process.

If we consider, for example, formal vocational education and training which is implemented by an educational organization as training and/or retraining to obtain certain

professional competences, the objective here is defined primarily by the needs of the labor market and the economy. The student chooses from a range of programs which will provide the desired result in the context of a purpose specified.

The identification of labor market needs, design educational path, managing the implementation of the program, including the final assessment of formed competences (qualifications) are the responsibility of the provider of educational services. International and national organizations that determine policy in the sphere of continuing adult education can affect the quality of lifelong education through the creation of conditions for its development through establishment of appropriate mechanisms and environment, including the development of systems for independent evaluation and recognition of qualifications, quality programs and activities of the organizations that implement formal educational programs. Direct quality management of educational services and outcomes is the function and responsibility of the provider.

In the field of continuing adult education the task to ensure continuity of different levels of education and multivariate educational programs, therefore quite complex configuration of educational trajectories may occur.

The process of continuing adult education can be viewed as a combination of two types of activity:

- training during which competencies (professional, social, personal) are will have been formed;
- independent assessment of qualifications, i.e. the mapping of learning outcomes with defined qualification levels, set qualification requirements, professional standards, and qualifications frameworks.

These processes may occur in conjunction or independently from each other.

The process of formation of competences can be realized in three ways:

- as formal education (FE);
- as non-formal education (NFE);
- as informal (spontaneous) education(IFE).

The result of the continuing adult education (regardless of the method of realization of educational process) is individual competencies (professional, social or personal) or a set of competencies equivalent to some professional qualification which can be certified through an independent assessment and certification.

Within the continuing adult education the *outcome of formal education* regulated by the license for educational activity and regulations, is qualifications or individual competencies supported by relevant documents of qualification or training at organizations engaged in educational activities according to educational programs with a timeframe for training and certification forms.

The outcome of non-formal education within lifelong education is to meet personal educational needs (knowledge, skills, abilities) regardless of the place of training, timeframe and forms of education, not subject to regulatory requirements and supported by final documents, and government regulatory actions. Quality management of non-formal as well as of formal education can be executed both at the stage of formation of competences, and at the stage of their independent assessment.

The outcome of informal or spontaneous education which is realized due to the own activity of the individual in the cultural and educational environment, has no certain structure. Measurement and structuring of the outcome takes place only at the stage of the independent assessment of qualifications (competencies).

With the development of non-formal and informal education an independent assessment of quality of education is beginning to take on growing significance. In the Russian Federation there is an active

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process of forming of the National Qualifications System which is mainly focuses on an independent assessment of professional qualifications of workers.

In the system of independent assessment of qualifications in the Russian Federation, the main task is the coordination of demand and supply of labor force due to the clear orientation of employees on the requirements of employers. The solution to this problem is possible by introducing an objective, recognized by the entire professional community, assessment of compliance of workers' qualifications with the requirements of production and business, with set appropriate professional standards, and confirmation of the entitlement of workers to perform specific activities regardless of place, time and method of obtaining the qualification.

An independent assessment of qualifications provides the possibility of recognition of non-formal training received at the workplace, in everyday life. It can assist to remove the barrier of mistrust that exists between education and business in terms of quality of training of graduates and recognition of certificates with which they enter the labor market.

Along with this, the Federal law "On education in Russian Federation" of December 29, 2012, № 273 introduced the following two types of independent assessment and recognition of the quality of professional education:

- professional and public accreditation of educational programs;
- accreditation of the organizations that realize professional educational programs.

Public organizations and professional associations are central in all these types of assessment and recognition of education quality.

The creation of a System of independent assessment of quality across the state is the most important task of the present time. It implies the following (Aniskina, 2015):

- establishment of common procedures and test materials for assessment and certification of qualifications, development of regulations and organizational and methodical documents in the field of assessment and certification of qualifications, etc.;
- formation of complex structures in order to organize and conduct the assessment and certification of qualifications. All this should ensure the objectivity and reliability of certification results and their recognition by the professional community (employers).

6. The advantages and disadvantages of models of quality in education

Analysis of the advantages and disadvantages of models of quality assurance that is used at different levels (European, national, institutional, individual program level) was conducted based on the review of documents, literature and interviews with representatives of organizations engaged in educational activities in the field of vocational education and training.

The most well-known approaches and systems to quality assurance in education is a system of international standards ISO which is successfully applied by organizations of all legal forms. The ISO 29990 standard is less known; it is also based on the process approach and quality management principles and is specifically designed to manage the quality of non-formal education. Attempts are made to adapt the higher education quality model ENQA to VET (ENQAVET model).

In recent years, there were various initiatives and different standards (models, tools) have been developed to assure quality of education, transparency and mutual recognition of certificates at the European

level. In the VET sector, examples include the European uniform criteria of quality assurance in vocational education and training (EQAVET model), the European Requirements to qualifications for lifelong learning and the European system of credits for vocational education and training (ECVET), the quality assurance framework CQAF. In Russia, these systems are virtually unknown.

At the institutional level the most widespread within the group of business excellence models is the model of self-assessment according to the criteria of quality awards. The award "European quality" is the most prestigious among others, but it places high demands on the participants. The prize of the government of the Russian Federation as a financial component is difficult to receive by small VET organizations. The prize of the Ministry of Education and Science of the Russian Federation does not cover the sphere of continuing vocational education and training (CVET).

The advantages and disadvantages of the most well-known models suitable for the system of vocational education and training are presented in Table 3.

Many educational organizations which apply the international quality standards, note that the negative aspect in this process is the large number of documents that must be made both in development and implementation of the system and its operation.

Table 3. The advantages and disadvantages of quality assurance model which are applied in VET

Model	Advantages	Disadvantages
ISO Standards	1 Complete system. There are management standards for all levels, both institutional level and the level of system interaction (requirements to the quality system of organizations, to organizations that perform external audits, requirements to experts, and general regulations and procedure of audits); 2 Wide popularity among consumers of educational services; 3 Good infrastructure	1 High degree of generality, specific educational activities are not considered; 2 The vast majority of experts are industry experts
EQAVET	1 Focused on the VET; 2 Based on Deming's cycle; 3 Has common European criteria for quality in VET	1 Not known among providers; 2 The use of this model is associated with a large number of documents
European Requirements to qualifications for lifelong learning	1 Good for non-formal and informal learning	1 Not developed enough; 2 Not known among providers; 3 Not already used in Russia

Table 3. (continued)

Model	Advantages	Disadvantages
ECVET	1 Good for non-formal and informal learning	1 Not developed enough; 2 Not already used in Russia
Quality management model according to the ISO 29900	1 Takes into account the specificities of VET and non-formal learning; 2 Good for certification of organizations	1 Not well-known among the consumers of educational services and the authorities
CQAF	1 Adapted to VET; 2 Well-developed system of determining indicators; 3 Does not require large financial costs	1 Less known; 2 Not used for independent assessment

As a result of the General revision of the ISO standards in 2015, the right to set the required extent of documentation of the quality system is transferred to the organizational level. A common requirement of standards to documentation of the quality system remains the responsibility of the management of the organizations for determining the policies and strategic goals, and the following deployment of them across management levels (including creating a system of indicators); there is also a responsibility of the personnel for measurement of processes and recording these measurements.

7. Development of quality assurance model for continuing adult education

To improve the quality of VET and to identify by means of a system the criteria and indicators for dependencies between the resources, the conditions of teaching and its results, we developed a model of quality assurance for continuing adult education.

7.1. Tasks to be solved

Model of quality assurance for continuing adult education allow us to solve the following tasks.

1) To provide a framework for the management of the process of meeting the requirements of a consumer, a customer, and society (the maximum possible conformity of the results to the stakeholders' needs).
2) To evaluate the potential of the continuing adult education system and the resources available.
3) To make all stakeholders understand how important for quality assurance of continuing adult education is to identify the requirements of a consumer, a customer and society and to track them continuously and timely.
4) To increase the objectivity of the monitoring and assessment of educational organizations to obtain objective information about the status of quality of educational activity and the reasons influencing its level.
5) To increase the awareness of consumers of educational services.
6) To create conditions to determine the effectiveness and efficiency of educational process on the basis of actual and comparable data.

7) To detect deviations in the quality of the educational process in a proper time and to identify their drivers.
8) To prevent negative trends in the educational process.
9) To assess the completeness and adequacy of methodological support of educational process.

When considering the process of continuing adult education at different system levels, it is evident that his purposes and, accordingly, modeling problems change in the transition from one level to another. At the international level, for example, the main purpose of the process may be "creation of conditions for development of continuing adult education as an open cross-border process accessible to all." The European Education Commission has assumed responsibility for this process (a function of its owner), but the main consumer of the results of this process are the national or regional educational management structures. Specific educational organizations and students here are not direct consumers, they get results indirectly.

At the level of satisfying needs for continuing education of individuals we use criteria of effectiveness and efficiency to manage the process, in relation to the formation of competencies (professional, social, personal) of these people. In the CAE model at this level, students are consumers, and the education authorities or public associations are other stakeholders. Also organizations that implement educational programs can take different roles depending on the form of the educational process.

Principles of quality assurance for continuing adult education despite differences of CAE models of various management levels, they are based on common quality principles which were formulated based on the ISO principles of quality management and UNESCO guidelines on the recognition, certification and accreditation results of non-formal and informal learning (UNESCO Institute for Lifelong Learning, 2012) as follows.

1) Focus on customer requirements, targeting against the results of the learning process;
2) Leadership (initiative and responsibility) of the management of organizations engaged in educational activities in relation to the dissemination of the philosophy and tools quality;
3) Involvement in the quality management processes of the entire staff of organizations involved in implementation of programs for continuing adult education and independent assessment of qualifications;
4) Use of the process approach for management of lifelong education quality;
5) Focus on continuous quality improvement;
6) Mutually beneficial relationships of all participants in the process of continuing adult education;
7) Openness, fairness, validity and reliability of assessment of the quality of continuing adult education, clarity of criteria according to which an assessment is executed.

7.2. *CAE process management*

In order to manage quality of CAE, we used a process approach to describe the structure of its elements. The process approach allows providing continuing adult education as a system of interrelated and interacting processes. The process model of educational activity looks different depending on the level of hierarchy in the management system. When building a model of satisfying the needs for continuing education of individuals, general description of activities then specifies the processes associated directly with the provision of educational services (life cycle), management processes

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and providing resources or supporting processes.

For each process it is important to specify a focal *objective*, identify *consumers* of results of the process, their basic requirements and a possible level of satisfaction of these requirements. Description of a process (regardless of its hierarchical level) may include identifying the *owner* of the process and area of his responsibility (*process boundaries*), required *inputs* and expected *outputs*, *rules* governing the process and the necessary *resources*. To assess quality of processes, *criteria* (indication on the basis of which an assessment is executed) and *indicators* (quantitative and/or qualitative parameters characterizing the process and its result) should be defined.

7.3. CAE models for formal and non formal education

The process of formal education is aimed at formation of professional competencies that meet the requirements of employers and certain standard or professional qualification requirements. It is decomposed into components, each of which is implemented under the control of specific officials. The activity run under each process is directed on meeting requirements of another process which is its internal user, or an external user. The process of formation of competences is regulated by legislative and normative acts, internal regulatory documents of the organizations. Requirements to implementation (to the process support) in Russia are defined in the course of licensing of this type of educational activities. The resources of the process are: necessary infrastructure, personnel and methodological support, information and financial support of activities, etc.
To ensure quality of formal education the following most common *institutional models* (models of quality management of the organization activities) can be used:
- the ISO 9001 model and versions of it;

- the EFQM Business Excellence model and versions of it;

and *quality assurance models for educational programs*:
- the CQAF model for quality assurance in vocational education and training;
- the model of professional-public accreditation of educational programs;
- the EOQ Harmonized Scheme.

The process of independent assessment of qualifications is carried out by the special organization and is governed by its own rules. The organization is vested with power to conduct an independent assessment by the councils established by public organizations and/or professional associations. The authorized organization shall comply with the requirements of the system for independent assessment, among which are:
- the certified quality management system;
- availability of the minimum required number of accredited experts;
- developed and approved documents regulating the process of independent assessment, appeals procedure, the register keeping procedure, the guidelines for the use of the system sign, and etc.

To ensure quality of the independent assessment process in accordance with international standards (ISO 17021) a quality management model based on the ISO 9001 is used.

In contrast to the formal education the non-formal education is not regulated by the place, the terms and form of training, regulatory requirements to supporting and final documents, government regulatory actions. In the framework of non-formal education students can form a set of competencies corresponding to some qualification which can later be confirmed through independent assessment and certification. But this set of competences is

not the result of a specific educational program implemented by an organization or a network specially established to achieve this result. A student himself bears a responsibility for setting goals, for the formation of the required set of competencies and management of the trajectory to the planned result.

Quality assurance of non-formal education is carried out by students selecting training providers to fit their needs based on availability of quality management evidence. A provider of non-formal education assures quality of it by means of the use of a quality management model. Institutional models can be considered in relation to each individual sub process. The overall quality of the process of obtaining qualifications through non-formal education will be determined by the quality of all components of the sub processes.

Various ways to implement the process of formation of competences (formal, non-formal or informal education) is characterized by a different structure of responsibility for the elements of continuing adult education interactive in the process. (Table 4).

Table 4. Types of assessment and recognition of quality for different methods of implementation of continuing adult education

	Certification of qualifications	Public accreditation	Professional - public accreditation
Formal education	+	+	+
Non-formal education	+	+	-
Informal education	+	-	-

The comparison of assessment of the process quality and the recognition of result of continuing adult education with the methods of education (table 4) shows that the certification of qualifications can be applied regardless of the method of implementation of continuing adult education. The indirect recognition of quality of results (public accreditation of organizations, and professional-public accreditation of programs) is applied only with certain methods of implementation of continuing adult education.

8. Conclusions

The model of quality assurance for continuing adult education developed on the basis of analysis of the international and the Russian practice is designed for organizations engaged in educational activities and authorities conducting an independent assessment of the CAE results. It has the following purposes:

- to provide a uniform control procedure based on the regulations

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and developed forms of organizational documents, and control and measuring materials, and accordingly to increase the objectivity of the monitoring and assessment of educational institutions; to create a common system that assists to identify factors and timely detect changes affecting the quality of education; to obtain objective information about the state of education quality, the trends, and the causes that influence the its level –for executive authority bodies of subjects of the Russian Federation, including the authorities exercising supervision in the sphere of education, Federal executive authority bodies, and the State as a whole;

- to facilitate independent assessment of qualifications professional-public accreditation of programs, and public accreditation of organizations;
- to determine effectiveness and efficiency of the educational process;

- to detect changes within the educational process, to identify the associated factors and to prevent negative trends;
- to assess completeness and adequacy of methodological support of educational process;
- to ensure consistency of supply and demand in the labor market.

Application of the quality assurance model for continuing education will enhance the competitiveness and sustainability of organizations in the educational services market, will contribute to increase of their financial performance, to continuous improvement of educational activities, to improvement of education quality through the integration of educational process with science and industry, the development of international cooperation.

The proposed model is fully consistent with the European Training Foundation goals of development of CAE quality assurance system that focus on development and quality assurance at the level of providers with clear links with the system level of management of education.

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