Up to the Problem of Development of Local Educational Standards in Russian Teacher Education

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Abstract
The article is focused on a very special, but also substantial problem for teacher education in Russia: the development and implementation of Local Educational Standards (LES). The thing is the Federal State Educational Standards (FSES) may only regulate most common aspects of teacher education, including its quantitative and formal measure, but a great amount of problems, including the conjunction of educational and professional standards, the distribution of core and optional courses, system of attestation etc. remains apart. Thus, it is a great challenge for higher education institutions such as federal universities to develop and to implement their own LES, which would be able to solve all these problems. It’s one of the most problematic aspects is that the studies of processes of standards developing and implementing in Russian education are getting less fundamental and substantial, so we do not have any general concepts of standards and how to operate them. So, it is important question, how to design teacher LES as a tool for solving modernization problems of regional systems of general and tertiary education. By involving set of approaches, including the global management one (Agile, Scrum) and endemic (such as the Moscow Methodological Circle schematic tradition), there was a new 5-component model for LES developed. Their components are: 1) philosophical and political background, 2) normative background, 3) modular structure, 4) infrastructure of LES, 5) program and project support. This model may be implemented not only at the Southern Federal University, where it has been developed, but also at any university or institutions in the scope of teacher and post-diploma education.

Keywords. Federal state educational standards; local educational standards; development management.

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Introduction

Statement of the problem

Understanding the phenomenon of educational standards began only at the very end of the 20th century. It should be noted that in 1997–1999 several doctoral studies appeared in which basic concepts of the standard and standardization of education were formulated, which, in many respects, we still use. Major part of them was focused on the questions of standardization of general education; among them are studies by Baydenko V.I. [Baydenko V.I., 1999]; Sokolov V.M. [Sokolov V.M., 1997]; Sudakov V.V. [Sudakov V.V., 1999], Shishov S.E. [Shishov S.E., 1997] et al.

The problems of standardization of education at the turn of the centuries were getting more complex, and there are some reasons for this situation. First, in the logic of the internationalization of the Russian education sector and, above all, the entry into the Bologna Process (Berlin, 2003), relatively new and little-known standards appear in the educational space of Russia, affecting education sectors. For example, these are the standards of CDIO [Vsemirnaya initsiativa CDIO, 2011], initially used in the context of the modernization of engineering education, but later gained popularity as a universal model of the modernization of practice-oriented education.

Another example of a standard that was not originally related to educational, but had a huge impact on the entire system of educational and management practices, is the concept of Total Quality Management, and the standards of the ISO-9000 family that are closely related to it.

An important factor in problematization of the educational standard is the significant expansion and differentiation of the information and methodological base of higher education and the emergence of a large amount of educational and methodological literature, electronic resources, collections and knowledge bases, RIDs (“results of intellectual doing”) used in the education system, authentic programs and projects of various levels.

Together with the policy of modernization of education and the initiation of projects focused on Russia's entry into the top of world educational systems (for example, the “5–100” program, which means that 5 Russian universities should come into the first 100 of the world rankings of the higher education institutions), the principles of personnel policy, management of research and methodological activities have changed significantly.

All this sets a significantly different landscape of educational activities, and requires clarification of the multiple relationships between the standards of educational activities (which are based on the educational standard), the requirements for its scientific, methodological, informational, material, technical and personnel support, its current practice and educational development programs.

Third, the pace of updating standards has changed significantly; in the 2000s, there was a more or less measured rhythm: each next generation of standards was adopted for five years, while no radical innovations from generation to generation occurred, except for a certain adjustment of the range of competencies. From the middle of 2010, in fact, the updating of standards becomes permanent (taking into account the fact that federal universities have the right to develop their own standards, which, at the same time, must ensure that all the requirements of the FSES – the State Education Standard – are met).

For example, in the Southern Federal University, in 2014–2015, there is a transition from the “3rd generation” of standards to the “3+” standards; in 2016, a decision was taken to develop local educational standards in a number of areas of education (so called “Educational Standards of SFUs”, or local educational standard, LES SFU), which were adopted in 2017. However, in 2018, the FSES of the generation 3 ++ was approved, mandatory for implementation from the 2019/2020 school year, while there is a need to formulate our own standards based on 3 ++; against the background of discussions on plans for
the publication of the FSES of the 4th generation. In addition, standards 3 ++ contain the norm on the need to harmonize educational standards with relevant professional standards, which, given the heterogeneity of the terminology used and the proposed changes in the standardization system of the entire set of social and humanitarian professions (“Teacher”, “Advanced Education Teacher”, “Teacher of vocational education” and others) requires the construction of a special standardization strategy.

A separate and growing influence on the training system is provided by the Worldskills contests. At the time of its inception (1947) it was an international competition of blue-collar workers. However, over the past 10–15 years, this movement has covered a large part of the developed world and now consists of many formats, including youth championships, a system of demonstration exams, etc. (www.worldskills.ru); the set of contests is constantly updated and expanded, which today includes such pedagogical competences as: “Preschool education”, “Teaching music at school”, “Teaching in elementary grades”; there is a process of active institutionalization of the competition of teachers of secondary schools.

In connection with the above, a paradox looks like the fact that, already since 2000, the level of fundamental research in educational standards is reduced; and most of the research is done at the candidate level and touches on the significant but secondary aspects of standardization. Among them are: historical-pedagogical and comparative studies of the standards models that have been formed in different traditions, international cooperation and the reception of educational standards, etc. such as, for example, the studies of Bessarabova O.N. [Bessarabova O.N., 2006], Kuzmenko N.V. [Kuzmenko N.V., 2009], Razumova E.V. [Razumova E.V., 2009]. Within the framework of the emerging trend, in the 2010s, even more special issues of introducing professional standards become the subjects of research, with scientific articles becoming the dominant format of research (Semenov AA and others [Semenov A.A. et al, 2017]; Magasumova G.F. and Koptelov A.V. [Magasumova G.F. and Koptelov A.V., 2016]; Zatsepin V.A. [Zacepin V.A., 2013]).

Thus, there is an objective contradiction between the growing diversity and complexity of the system of norms of vocational education and professional pedagogical activity, on the one hand, and the decreasing quantity and quality of scientific understanding of this phenomenon.

Under these conditions, the legal right of federal universities to establish and implement their own (local) educational standards (LES’s) may be the only way out of management collapse, but this requires a new understanding of the educational standard as an integrated means of transition to an innovative development trajectory.

The purpose of the research: the creation of the LES model of the university as an integrated means of solving the following tasks:

- Orientation of LES’s to the main consumer groups (students, teachers, educational program developers, employers) and increase of the professional value of teacher training.
- Stimulation of joint activities with university and external partners for psychological and pedagogical research and projects.
- System integration of the requirements of educational, vocational and competitive (Worldskills) standards for the teaching profession.
- Creating a sustainable focus on the development and implementation of innovative educational practices in the system of teacher education.
- Implementation of the personal orientation of the educational program due to the variability of disciplines, forms of training and a unified assessment system.
- Transfer of the university's educational system to sustainable development.
Research methods

It should be noted that the study has a pronounced design character. At the same time, we can distinguish three equivalent circles of ideas that set the prospect of achieving the goal. The traditional approach to marketing in an educational environment is not fundamentally different from the marketing approaches in other areas of commerce. Most often, it is noted that the educational service is very specific in terms of the need for a much higher level of trust between the producer and the buyer; the personal nature of consumption, the duration of the relationship, but the basic categories of "seller" and "customer" and special marketing activities to promote educational services are usually not questioned [Shemyatikhina L.Yu., 2007].

Meanwhile, the problem of marketing in education is associated primarily with the fact that ideas about the market nature of the choice and consumption of educational services are extremely far from reality. A huge role in educational practice is played by non-economic incentives associated with the formation and development of professional communities; objectives of human development, testing new social practices. Thus, in addition to “horizontal” marketing, focused on the quantitative increments of profitability, marketing in education requires the inclusion of a “vertical” component that addresses the semantic, symbolic, and social-communicative layers. It is the combination of the two components that leads us to an integral marketing methodology, orienting the educational organization to achieve a more complete and meaningful integration into the socio-cultural context of the region.

The next group of methods is determined by the triune understanding of the objects of analysis and management: first, the study of global and all-Russian development trends [Analisi mirovykh tendenciy, 2006], the development of interdisciplinary and inter-institutional development programs and the formation on this basis of activity projects [Animitsa E.G. et al, 2008]. In recent years, this vision has been recognized as a process-project approach [Vinogradova O.S., 2018].

Most significantly, the process (or trend) is not fixed in time and space, characterized by a penetrating attitude to what is happening at all levels; the program records the strategic goals, activities and interactions of large institutional actors, while projects are forms for organizing operational and targeted efforts to achieve specific results.

This scheme allows you to first track the general background values associated with the increase, decrease or qualitative change in certain aspects of education; identify common goals and strategies to achieve them (the program), as well as - form a package of projects that ensure the implementation of these goals (projects). In particular, this model provides an effective separation of strategic management based on tools such as SWOT analysis, Porter’s 5 forces and others, and operational design in the context of Agile, Kanban, Scrum, and other “flexible methodologies”.

The third group of methods involves the use of schematization methods for the image and assembly of various processes and phenomena occurring in the same space and time. As a rule, Mindmaps are mentioned here, which have become part of generally accepted practices of graphical presentation and analysis of any phenomena, but one should not forget about the presence of a very specific and fruitful tradition of the Moscow Methodological Circle, which developed its graphic culture [Zinchenko A.P., 2004].

Within the framework of this approach, there is a rather definite differentiation into morphological graphs (representations of structural elements and connections) and procedural models, which make it possible to see the change of stages (phases) in activity and interaction. Accordingly, the local educational standard is presented both as a systemic set of certain norms, requirements, concepts, and a set of development, adaptation and implementation processes in real educational practice.
Results and discussion

The main result of the study is the idea that the standardization of higher education can and should be simultaneously considered as:

- global and local tendency, which is determined by changes in the labor market and educational services, complication and presentation of new requirements for professional activities, etc.;
- a national-state and regional program that ensures the transfer of federal and regional educational systems to a new level of development and quality assurance through the systemic identification and recording of employers' requests; formation of a unified information model, etc.;
- a set of projects, each of which is implemented by a certain professional and educational community to achieve the demanded quality of general, vocational and additional vocational education, as well as the development of human and human potential in a particular field of professional activity.

The most successful means of implementing the consolidated view of these three levels is the 5-component model of the local educational standard, which fully complies with the requirements of the FSES 3 ++, however, the different components of the model are autonomous and can be improved at a different pace. Briefly present each of the 5 components.

1 level. Philosophical and political background

According to recent studies, the use of standards in vocational education is associated with some very typical problems. For example, in Australia, as well as in many other countries (including Russia), the use of standards to assess the quality of teacher training causes their resistance and alertness, and therefore, researchers recommend making the standards more “stimulating” than “evaluating” [Bourke T., 2018]. In this connection, the question is being discussed whether the professional standards of teachers should be directly implemented as some kind of law, or whether they should direct the activity of teachers to improve them professionally [Talbot D., 2016]. Another set of problems is associated with the constant “oscillation of the pendulum” between the federal and regional levels of education management in their attempts to formulate some integral policy in the field of teacher training [Bales B.L., 2006].

It is quite obvious that none of these issues has a single and universal solution, but requires the development of a certain political position. Here we can add questions specific to the Russian educational situation about the relationship between local educational standards for various levels of higher education (bachelor and master), between educational, professional standards and the standards of the Worldskills family; development processes and implementation of educational standards at the regional level.

2nd level. Normative background

The key concept for the second section of the LES is the definition of competencies understood in accordance with the requirements of the “National Qualifications Framework” (NQF) as a complex unit specifying a certain level of authority, responsibility, complexity and knowledge intensity of activities. In other words, the formulation of competence, in its full form, includes value, communication, functional, infrastructure, diagnostic and other aspects.

It should be borne in mind that the current “National Qualifications Framework” establishes sufficiently high requirements for the levels of qualifications of graduates of undergraduate (the 6th level of NQF) and magistracy (the 7th level of NQF).

According to the description, a graduate of a bachelor degree must be prepared for “independent professional activity, which implies setting goals for his own work and / or subordinates; ensuring the interaction of staff and related units; responsible for the performance of work at the level of the department
or organization". The requirements to a graduate master is even more complex, they imply each master to participate in "determining strategy, managing processes and activities (including innovation) with decision-making at the level of large institutional structures and their divisions."

All this requires a systematic definition of competencies, at least at three levels: a generalized formulation, a set of indicators and the corresponding descriptors. In particular, in order to solve this problem, a working group was created at the Southern Federal University to design professional competencies and indicators of general professional and professional competences in accordance with the Federal State Educational Standard 3 ++ under the Department of Education and Science 44.00.00 Education and Pedagogical Sciences (team leader - Director of the Academy of Psychology and Pedagogy V.A. Kirik; coordinator for the bachelor's degree - head of the department of primary education I.E. Kulikovskaya, coordinator for the level of magistracy - head of the department of education and pedagogical science A.G.Bermus). All the heads of pedagogical departments and heads of educational programs for recruitment in 2018–2019 took part in the group’s work, and one of the most important results of their work was understanding of competences as comprehensive descriptions of abilities or aspects of readiness to solve a wide range of problems in various situations; indicators - as specific activities to solve these problems, and finally, descriptors - descriptions of specific knowledge, skills, abilities and attitudes necessary for the successful implementation of each activity.

Accordingly, each of the competencies is defined by the terms “ability” or “readiness”. Indicators are defined through the processes of “goal setting”, “development”, “design”, “application”, “organization”, etc. And the descriptors, as already noted, are represented by "knowledge", "skills", "possession" and "value relation".

Level 3 Modular structure

At this level, the requirements and structure of the educational content are defined, that is, a comprehensive ("modular") description of educational practice, including the names of the module, categories (groups) of general professional competencies, labor actions, knowledge and understanding; criteria for evaluating the effectiveness of the program, as well as the systematic of disciplines and infrastructure requirements. Depending on the values and objectives of the educational policy, there are possible various compositions of compulsory disciplines (their study is compulsory for the whole area or the Federal Educational Standards), variable disciplines (their choice may be due to both the ideas of the program manager and the students) and practices. At the same time, the combination of various components optimizes the ability to acquire target competencies by all students in all forms of education.

For example, when comparing the Australian Professional Standard of Teachers [Australian Institute, 2011] with the Chinese Professional Standard of Teachers of General Education Schools [Ministry of Education, 2012], both the general characteristics and the fundamental differences in the content of teacher training become apparent. For example, while the module (the standards use the term area, area) of professional knowledge is quite universal, the models of professional self-awareness differ significantly: if Australia has a focus on the involvement of a young teacher in a social environment (socio-centric model of professional training), then for China - the focus is on the formation of professional beliefs and ethics, that is, we are dealing with a culture-centric model. Developed in Thailand in recent years, the standard for assessing the professionalism of students of pedagogical departments [Khuanwanga W. et al, 2016] focuses on purely innovative aspects of training, in particular, organizing research activity in the classroom and focusing on self-development and professional progress. Undoubtedly, each of the standard variants will generate its own set of educational modules.
4 section. Infrastructure of LES

The content of the fourth section is an integrated image of the aspects (requirements) to the resource base of the implementation of the standard, namely: material, information, methodological and staffing.

5 section. Program and project support

The greatest differences between LES and FSES 3 ++ are concluded in the fifth section and are determined by the requirements for the order of execution and updating of the standard. As already noted, for various reasons, the time required to bring the entire local regulatory framework into compliance with the requirements of the standard turns out to be comparable (and sometimes superior) from the previous version of the standard to the next.

Under these conditions, we need to talk about some internal logic and coordination of processes at various levels and directions in the regional system: from the vocational guidance and profiling, through the system of vocationally-oriented higher education to the implementation of modular programs of additional vocational education of all levels and types. In turn, the leading directions of coordination can be:

1. Development and adoption of a framework document at the regional level, defining the status and registry of the main educational organizations, employers, the principles of their relationship, information and other conditions of innovative educational activities;
2. Creation of working groups of university teachers and institutions of additional vocational education, teachers of general education schools, with the participation and coordinating functions of the regional ministry of general and vocational education for creating the program-methodical and information resource of individual modules and training disciplines.
3. Development of a model and recommendations for the use of network information resources both for updating the content and technologies of training teachers, and for the system of additional professional education;
4. Formation of a unified regional classifier of topics and areas of experimental, research and project activities in the field of education as a basis for conducting comprehensive regional and interregional research and implementation of innovative projects in the field of education;
5. Modernization of the system of project activities and pedagogical practices based on the creation of an educational portal providing access to the best educational, social, educational and managerial practices; Bank of cases on topical issues of the regional education system; necessary infrastructure to ensure the networking of various educational institutions and organizations, etc.
6. Establishment of a line of grant competitions for the creation and development of competence centers (based on individual educational institutions or their associations), teachers and students.

Of course, we cannot now completely define the list and specific content of all programs and projects related to the development and implementation of individual components of the educational standard, however this is not necessary: all of these documents have the status of appendixes to the local educational standard, and can be created and approved when the need arises.

Conclusions and recommendations

We are at the very beginning of the development of local educational standards for pedagogical education, but now not only the prospects, but also the possibilities of the cumulative effect of this activity
are clear. Among them: modernization and optimization of the management system of educational programs, stimulation of philosophical and scientific reflection of the training processes for the education system, development of the regional scientific and pedagogical community.

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