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QUALITY MANAGEMENT SYSTEM AS A TOOL OF DESIGN MANAGEMENT OF AN ADAPTED BASIC GENERAL EDUCATION PROGRAM FOR IMPLEMENTATION OF THE FSES PGE FOR CHILDREN WITH SPECIAL EDUCATIONAL NEEDS

Abstract. The article presents a description of the mechanisms of management of design of adapted basic general education programs (ABGEP) (on the example of implementation of the FSES PGE for children with special educational needs) by using a model of quality management on the basis of a series of standards of the ISO: 9000.

Keywords: design of an adapted basic general education program, quality management system, standard of organization, quality criteria of the ABGEP design.

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Each education institution may take a decision about opening a new educational program for children with special educational needs (SEN) in accordance with the special Federal State Educational Standards of General Primary Education (FSES GPE). In this case, creation of the Adapted Basic General Education Program (ABGEP) becomes one of the socalled "basic" processes (alongside with the process of realization of the educational program) because it directly influences the quality of the provided educational service, and is part of the management of the production processes (processes of the life cycle and the secondary provision

processes equivalent to them).

The ABGEP design presupposes complex interaction of a large number of people from different levels of management of the education process and with different qualification, which may significantly influence the quality of design activity. There is one more aspect to the problem: the process must be repeated annually because the basic model of the General Educational Program (GEP) should be adapted to the needs of the new student intake, which means that failures may occur not only on the stage of design of the ABGEP model, but also on the stage of annual adjustment (actualization) of some of its elements. It

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also means that huge efforts needed to work out the given document for practical application will anally need spending organization resources (human, temporal, organizational and, finally – financial); and it is desirable that these processes be put under control.

That is why education institushould create organization mechanisms of management of the quality of design of the ABGEP. We believe that a model of the quality management system (QMS) on the basis of a series of standards of the ISO: 9000 allows proper realization of this requirement [1; 2]. The given article describes the creation of the Standard of Organization (STO) "Design of the ABGEP" within the basic production processes of the QMS on the example the ABGEP of realization of the FSES of general primary education for children with severe speech disorders [3].

The purpose of the given Standard is to ensure the correspondence of the educational activity of an education institution to the requirements of the FSES GPE and the needs of concrete customers in independent design (actualization) of ABGEPs for children with SEN (including the definition of specificity of the education activity, revealing special educational needs of children with disabilities, in working out curriculum variants, etc.).

The Standard of Organization (STO) should contain the name the leader of the process who is responsible for:

- 1) working out, implementation and amendment of the given standard;
- 2) completeness of the procedures used in the standard and the re-

quirements to quality provision;

- 3) definition of the process technology;
- 4) establishment of the requirements to resources, information (necessary for the process), incoming and outgoing information for management control, ensuring interaction with other processes;
- 5) achievement of the process aims;
- 6) monitoring, control and analysis, design of adjustment and preventive actions, constant improvement of the process.

Terminological vocabulary providing a linguistic basis for cooperation of both adapted educational program creators and its prospective users is an important element of the standard of activity designed at an education institution. We can give the following examples from the terminological vocabulary of an ABGEP for children with severe speech disorders:

-individual rehabilitation program – variable part of an individual educational program, a structured program of activity of the administration, teachers, psycho-pedagogical support specialists, and the parents of students with SEN at a given stage of education (quarter, half-year);

-complex evaluation of personal, metasubject and subject outcomes of acquisition of the ABGEP – generalized data about the dynamics of the level of personal, metasubject and subject outcomes of acquisition of the ABGEP formed in the process of joint activity of pedagogues, psychologists and narrow specialists at the beginning and at the end of specially de-

fined periods of child education on the basis of indicators and data collection instruments according to the FSES GPE for two levels of development (1) 5.1 and 5.2 (second and third levels, first and second divisions); 2) 5.2 – first level);

-metasubject outcomes of acquisition of the ABGEP – include universal learning actions mastered by the students (cognitive, regulatory and communicative) which make up the foundation for learning skill, guarantee acquisition of metasubject knowledge and provide experience of cognition and execution of various kinds of activity;

-special educational needs - the need of a child with disabilities for special conditions necessary for the acquisition of an ABGEP, etc.

The so-called process description is the main element of the standard of activity to be formed. We believe that the adapted basic general education program design presents a sequential realization of a number of subprocesses which include:

- 1) study and description of special educational needs of children with disabilities;
- 2) concretization of the ABGEP aims and expected outcomes;
- 3) design of curriculum and annual academic timetable;
- 4) development of work programs in accordance with the curriculum;
- 5) development of the system of evaluation of achievement of the ABGEP pre-planned results;
- 6) description of the conditions of the ABGEP realization;
- 7) formation of individual curricula for certain categories of students;
- 8) ABGEP expertise (if necessary);
- 9) control and analysis of ABGEP customers satisfaction.

The process description presupposes the characteristics of its inputs and outputs (see the examples in Tables 1 and 2).

Table 1

Input characteristics of the process "ABGEP design"

Input	Provider	Consumer
The Law "On Education" and the normative acts related to the basic general education	Ministry of Education and Science of the Russian Federation	Work groups for actualization of the program for a new student
The Municipal Assignment in the sphere of special (rehabilitation) education services	Headmaster	body; organization structural units.
The Standard requirements to the Adapted	STO, information support of	
Basic General Education Program	activity	
Level of development and basic educational	Students' parents, PMPC – psy-	
needs of students	cho-medico-pedagogical council	
Expectations (demands) of the parents	STO, marketing, students' par-	
	ents	
Level of professional and project qualification of the pedagogical staff	STO, staff management	

 $\begin{tabular}{ll} \it Table~2 \\ \it Output~characteristics~of~the~process~"ABGEP~design" \\ \end{tabular}$

Output	Provider	Consumer
ABGEP	School Pedagogical Coun-	Organization structural units.
	cil, Heads of Departments	Students.
	and Teams	Students' parents.
		STO "Management of ABGEP realization".
		STO "Management of infrastructure of the school".
		STO "Management of the staff of the school".
Clinico-psycho-pedagogical	Psycho-medico-pedagogical	Students' parents.
characteristics of the students	council	STO "Management of ABGEP realization"
		STO "Information support of activity".
Description of the system of	Heads of structural units	Organization structural units.
realization conditions of	and directions of activity	STO "Management of infrastructure".
ABGEP		STO "Management of ABGEP realization".
		STO "Management of the staff".
		STO "Financial management".

An example of description of resources of the process "ABGEP design"

Resource requirements

Resource name	Resource requirements	Supplier
School infrastructure	Properly equipped work places for the work group in the ABGEP actualization for the student body. Properly equipped rooms for children examination and formation of clinico-psycho-pedagogical characteristics of the new student body. Properly equipped rooms for parents and pedagogical staff meetings. Presence of conditions for the ABGEP design in accordance with the special educational needs of students with disabilities (variability of the school educational space, academic timetable, technical means, special learning materials, computer tools, modern computer-based information resources, rehabilitation courses and psycho-medico-pedagogical support for students with SEN).	STO "Management of infrastructure". STO "Management of procurement»
Human resources	Proper staff qualification in the fields of knowledge in accordance with the school profile services: - presence of administration, pedagogical and other workers with the required level of education and qualification in accordance with the disability profile; - provision of opportunities for professional advancement, carrying out methodological work, generalization and propagation of experience of usage of modern educational technologies. Project competence of the staff. Communicability. Sense of duty.	STO "Management of the staff". Organization structural units.
Finance resources	Sufficiency of the obligatory part and the variable part of the ABGEP for design, taking into account variability of educational demands and individual peculiarities of students' development. Opportunities to acquaint the group of designers/actualizers of the ABGEP the structure and volume of expenses necessary for the realization of the ABGEP under design, as well as mechanisms of their formation.	Planning and finance school management. Accounting, financial control. STO "Management of finance".

Standardization of activity calls forth detailed characteristics of the composition of necessary resources (human, material, finance and temporal), as well as their requirements and suppliers (see Table 3).

The requirements to the input information essential for planning and

realization of the process are shown in Table 4.

An example of description of requirements to the output information necessary for planning and realization of other processes and important for external customers is given in Table 5.

Table 4

Input information of the process "ABGEP design"

Title	Requirements	Supplier
The Law "On Education", the Standard and the	Urgency, level of detail and easy access for	Headmaster/Head-
normative acts related to the basic general edu-	those interested.	mistress.
cation.		Heads of structural units
		and directions of activity.
The Municipal Assignment in the sphere of	Timeliness of formation.	Headmaster/Head-
special (rehabilitation) education services for		mistress.
children with severe speech disorders.		
Structural units' conclusions about their infor-	Urgency, level of detail, validity and timeliness	Heads of structural units
mation requirements.	of formation.	and directions of activity.
Psycho-medico-pedagogical council conclu-	Description of the disability structure in ac-	Psycho-medico-
sions.	cordance with FSES PGE for children with	pedagogical council.
	SEN (including reference to the variant of the	
	ABGEP PGE for students with SEN).	
	Enrollment not later than June 30 th of the cur-	
	rent year.	
Data about criteria of the level of manifestation	Correspondence to the modern achievements of	Deputy Headmaster for
of disability and reserve mechanisms of devel-	psycho-pedagogical science. Opportunity to be	rehabilitation programs.
opment and about instruments for information	used in the school education process.	
collection and analysis.	_	
Data about the experience of renovation of the	Provision of opportunity to achieve maximally	Heads of Methods com-
content of the ABGEP for children with severe	possible results for each student doing an	mittees.
speech disorders, and about modern educational	ABGEP course of study.	
technologies.	Presence of information about:	
	- information-communication (electronic) edu-	
	cation resources,	
	 telecommunication technologies, 	
	- corresponding technical means (flashcards,	
	wiki tools, digital videos, etc.)	
Information about staff qualification in their	Level of detail and validity of the data, objec-	Heads of structural units
design of syllabi of separate academic subjects,	tivity and reliability of the information ob-	and directions of activity.
rehabilitation courses, program of formation of	tained.	
universal learning actions, program of spiritual		
and moral development, program of formation		
of ecological culture, safe and healthy lifestyle,		
program of extracurricular activity.		D
Information about the level of satisfaction of	Timeliness, level of detail, objectivity and reli-	Deputy Headmaster for
the parents and the staff with the model of the	ability of the information obtained.	primary education.
ABGEP designed at the institution.		

Table 5

Description of output information of the process "ABGEP design"

Title	Requirements	Supplier
Full text of the ABGEP.	Timeliness of formation.	Deputy Headmaster
	Adoption by the pedagogical council.	for primary educa-
	Harmonization with the parents.	tion.
	Readiness to publish on the boarding school site.	
Program of formation of uni-	Compliance with the requirements of the FSES (paragraph 2.9.4 of	Head of the Meth-
versal learning actions (ULA)	the Standard, Standard supplements # 1-8), satisfaction of internal	ods Department.
	customers (students, students' parents, pedagogues).	
	It should contain:	
	- description of value-based benchmarks of the education content	
	while getting general primary education;	
	- characteristics of personal, regulatory, cognitive, communicative	
	universal learning actions;	
	- typical tasks of formation of personal, regulatory, cognitive, com-	
	municative universal learning actions;	
	- description of the program succession at transition from preschool	
	to primary general education;	
	– description of the procedure of formation of the universal learning	
	actions at the final stage of education;	
	- program of formation of basic learning actions (in case there is the	
	corresponding student body).	

The description of the algorithm and the process matrix and constituent sub-processes is done according to the following scheme:

- -algorithm step,
- -person responsible,
- -performer,
- -document regulating the action,
- -entry confirming the execution of an action.

Special attention should be paid to the development of criteria and indicators of the process quality. We recommend that the following criteria of the process effectiveness be used:

1) taking into account mistakes, failures and process defects;

- 2) time and timeliness of the process execution,
- 3) process effectiveness (output volume),
- 4) process efficiency (correlation of inputs and outputs),
- 5) internal characteristics of the process,
- 6) disclaimers and claims of customers and supervisory authorities,
- 7) product parameters (ABGEP).

The distribution of indicators of effectiveness of the process "ABGEP design" according to the identified groups is presented in Table 6.

Table 6
An example of description of the quality of the process "ABGEP design"
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Criterion	Measured indicator
Taking into account mistakes, failures and process defects.	 average score of points in evaluation of the proposed ABGEP at the stage of harmonization and adoption; average score of points of satisfaction of the ABGEP customers (separately in each category of participants of education relationships, including assessment of the worked out documentation by its direct users according to the criteria of laconism,
	clarity of language, completeness, etc.)
Time and timeliness of the process execution	 economy of time spent on design/actualization of the ABGEP; timeliness (before September 1st) of preparation of the ABGEP and its constituent elements in accordance with the requirements.
Process effectiveness (output volume)	 percentage of students studying individual educational programs specially designed for them; number of methodological teaching aids in the basic elements of the ABGEP.
Process efficiency (correlation of inputs and outputs)	 number of the ABGEP elements accepted and adopted by expert groups (pedagogical council) with absolute independence of performers (designers); coefficient of the process reproduction; absence of excessive expenditure due to the process inefficiency or non-conformity (mistakes, remakes, etc.).
Internal characteristics of the process	 evaluation (in points) of application of the mechanism of school and network interaction of specialists of different profiles; evaluation (in points) of distribution of responsibility zones between pedagogues and specialists; expert assessment of full authority of participation of teachers, parents and students in the ABGEP design; improvement of processes traceability; reducing the time required for training project activity personnel; data entry delay; automation of the procedures of design of some elements of the ABGEP.
Disclaimers and claims of customers and supervisory authorities	 number of consumer disclaimers for the proposed ABGEP (percentage of failures); absence of non-conformities of the ABGEP to the FSES GPE requirements during internal and external auditing.
Product parameters (ABGEP)	 current assessment of the process by its administrator; expert evaluation of the ABGEP (in points) including: 1) the goals block reflects both general didactic and special principles (principles of special pedagogy); 2) the ABGEP contains mechanisms of compensation for the primary and propedeutics of the secondary disorders; 3) the expected results have a differentiated character; 4) the expected results reflect: peculiarities of acquisition of the basic educational program; individual development of the personality of a student; individual achievements in academic subjects; acquisition of general learning skills taking into account personal abilities; 5) there are evaluation tool in all groups of expected results; emergence of potential risks for other processes.

It is important to formulate the description of the tools for monitoring, analysis (assessment) of the process effectiveness and define the parameters of improvement of the process functioning.

Now let us make some conclusions. Special Federal State Educational Standards offered to education institutions presuppose the necessity of high level of management. QMS tools make a considerable contribution to the achievement of high quality with careful attitude to the consumed resources by means of high quality reflection of what is happening and what is desired, clear orientation basis of activity, regular prevention of failures both at the stage of design and realization of the process. At the same time, design and implementation of the QMS is a complex and long-term process which demands special supporting conditions (in the first place - information ones) for its introduction and realization.

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