System of work with gifted children in the Leningrad region

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Forming effective system of detection, support and development of abilities and talents of children and youth, is one of the strategic objectives of the development of education as defined by the President of the Russian Federation for the period until 2024. It should be based on the principles of fairness and generality, being directed to self-determination and career guidance of students.

Therefore, support of gifted and talented young people continues to be the priority of regional educational policy, a powerful resource for social and economic development and improving the quality of life in the region.

In the Leningrad Region, each child has the opportunity to choose his development path and to show his intellectual, sports, creative, research abilities and talents.

A number of projects are being implemented in the region, which are aimed at the early identification, development and further professional support of gifted children who have shown abilities in various spheres of science and art.

I will emphasize key projects implemented in the educational system of the Leningrad Region to support talented youth:
1. Creating a regional center for identifying and supporting gifted children.

In 2017, a regional center for identifying and supporting gifted children was created on the basis of the state budgetary institution of additional education "Center "Intellect", together with St. Petersburg State University with the support of the Educational Fund "Talent and Success".

This work has begun after the signing of a cooperation agreement between the Government of the Leningrad Region and the Educational Fund "Talent and Success".

The innovative experience of the Educational Fund for work with gifted children, the unique educational research environment (modern experimental laboratories, open access classes) and the human resources potential of St. Petersburg State University made it possible in the shortest possible time:

- to create the academic infrastructure of the regional center;
- to start the immediate implementation of 7 new educational programs, based on guidelines of the Educational Center "Sirius".

Center "Intellect" is also a coordinator of network interaction with municipal centers for gifted children, which are created and successfully operate in all 18 municipal districts of the Leningrad region.

1300 students are trained annually under the educational programs for gifted children implemented by the Intellect Center, at least 4000 students – in the municipal centers for gifted children.

2. Creating a distributed tech park.
In order to significantly increase the participation of children in science, technology and engineering creativity, the infrastructure of a distributed tech park was made. Its components are:

1) Innovative sites of additional education institutions, working in the format of network interaction in 11 municipal districts of the Leningrad Region and implementing technical programs. Within the framework of this project, there were equipped 15 modern laboratories, offices and workshops, based in municipal organizations of additional education.

2) Nanotechnology Laboratory, created on the basis of the "Center "Intellect".

3) “School–tech park”. The project includes 18 educational organizations of the Leningrad region; each of one acts as a network partner of a school–tech park created in the city of Kudrovo, Vsevolozhsk district of the Leningrad region in 2016. Every year, more than 600 students are enrolled in educational programs implemented on the basis of 7 modern laboratories equipped with high-tech equipment in the areas of: "Engineering modeling and 3D-prototyping", "Geoinformation systems and ecology", "Infocommunication technologies", "Robotics", "Bionics", "Nanotechnology and Microelectronics", "Internet of Things".

3. The project "JuniorSkills" in the Leningrad region.

As part of the program of early training and career guidance of students in the Leningrad region a network of skills training centers was formed to prepare for the championship "JuniorProfi" (as a part of "JuniorSkills" competition).
It was made in collaboration with institutions of secondary and professional education (Kirovsk Polytechnic College, University "LETI").

The created infrastructure has allowed to achieve high results.

In 2019, in the IV national championship “Professionals of the Future” (by the methodics of "JuniorSkills"), the representatives of the Leningrad Region team won 2 gold medals ("Engineering Design” and “Internet of Things” skills), 2 silver medals ("Multimedia Journalism” and “Prototyping” skills) and 3 bronze medals ("Electrical Works”, “Engineering Design” and “Prototyping” skills).

4. The project "WorldSkills" in the Leningrad region.

In the Leningrad region 4 specialized skills centers for the WorldSkills standards were created on the basis of professional educational organizations:

“Kirovsk Polytechnic College”;
"Tikhvin Industrial Technology College";
"Kingisepp college of technology and service"
"Michurinsky multi-profile college"

In 2019, the team of the Leningrad Region took part in the V National Championship “Young Professionals” - Worldskills Russia and won gold, silver and bronze medals in the following skills: “Sheet Metal Processing”, “Turning Work on CNC Machines ”, “Milling Work on CNC Machines". Also students of our region won three medallions for professional skills in competencies: "Floristics", "Railway Transport Management" and "Operation of Agricultural Machines".

5. The "Abilimpix" Project in the Leningrad Region.
The Leningrad region pays constant attention on the development of the human resources of the younger generation with special educational needs.

The Leningrad Region is among the top regions of the Russian Federation for the education of children with disabilities, investing into the quality of their education, as well as into creating an accessible educational environment.

In 2018, 70 students took part in the 3rd regional championship for students with disabilities and health problems as part of the Abilimpix international movement. Also, team of 12 participants represented the region in the IV national championship "Abilimpiks" in 2018 (two of its members took 2nd and 3rd places in the competition for skills "Floristics" and "Documentation support of management and archive studies")

6. The "Olympiad" project.

The region’s traditional practice is to identify and support gifted children and talented youth through olympiads and other competitive events.

The Leningrad region over the past few years shows:

- the increasing coverage of school students with competitive events of various levels and directions. In 2018, in the education system of the Leningrad Region, 198 regional competitive events of various directions (including regional stages of all-Russian competitive events) were held with more than 26 thousand participants (in 2016 – 20 thousand participants).
the positive dynamics of students inclusion into the olympiad movement: in 2018 73,8 thousand Leningrad region students took part in the school stage of the All-Russian School Olympiad (in 2017 – 57,5 thousand students);

increased quality of the results of participation of students in the final stage of the All-Russia Olympiad: in 2019 out of 26 finalists of the Olympiad 7 students of the Leningrad region became winners and 2 students became awardees (in 2018 – 34 finalists, 2 winners, 9 awardees).

Thus, in 2019, every third member of the Olympic team of the Leningrad Region became one of the best schoolchildren in the country in informatics, technology, physics, chemistry, ecology, law, Russian and Deutsch.

Outside the framework of the All-Russian Olympiad for schoolchildren, the region also has high achievements. In 2019, schoolchildren of the Leningrad Region became the absolute winners of the All-Russian Olympiad on the basics of Orthodox culture and the winners of the All-Russian Olympiad in financial literacy, the financial market and consumer protection of financial services.

7. The project "System of rewards for gifted children and talented youth"

A regional system of encouraging gifted children and talented youth has been built in the Leningrad Region. Up to 100 students get monthly scholarships from 4 500 to 7 500 rubles, as well as annual prizes of the
Governor of the Leningrad Region to support talented youth in the amount of 25,000 rubles. These students are:

- gifted orphans and children left without parental care;
- gifted students in difficult life situations;
- winners of regional competitions and other competitive events.

In addition, in 2018, the Prizes of the Governor of the Leningrad Region were established for students and their mentors based on the results of:

- national and international championships of professional excellence according to WorldSkills standards in the amount of 150,000 rubles up to 250,000 rubles;
- national and regional championships on professional excellence among disabled people and persons with disabilities "Abilimpiks" in the amount of 40,000 rubles up to 100,000 rubles.

8. The project "Human resources potential of working with gifted children and talented youth"

The emergence of modern theories, practices and technologies for identifying and developing students' giftedness entails the need for teachers to master new competencies and skills.

Teachers are trained on the basis of leading educational institutions, including St. Petersburg State University. The peculiarity of educational programs implemented by St. Petersburg State University is team training and project preparation.

Within the framework of this project, more than 300 teachers were trained in modern technologies for teaching different subject areas.
Based on the results of developing these educational projects during training, educational organizations received grant support for the development of innovative activities.

More than 200 teachers underwent retraining and advanced training for the implementation of educational programs for gifted children and youth.

9. The project “Regional Model Center for additional education of the Leningrad Region”.

The region highly appreciates the role of institutions of additional education for children in the development of children's giftedness and talents. Institutions of additional education help to compensate the lack of academic load in the forms of various creative workshops and associations. In them, the child begins the development of special abilities, forms a special talent.

In order to identify, form and disseminate best practices for the implementation of modern, varied and relevant additional education programs of various orientations, including the program for gifted children in the Leningrad Region, the following have been created:

- Regional Model Center for additional education (based on the state educational institution "Center "Ladoga");

- a regional navigator information portal that allows families to choose educational programs corresponding to request that meets the needs, level of training and abilities of children with various educational needs and opportunities.

We will continue to further implement these presented projects and fill them with new directions.
Other projects will also be implemented, such as:

1) **Development of regional center for identifying and supporting gifted children.**

   In 2019, the Leningrad Region successfully participated in the selection of regions of the Russian Federation to provide subsidies from the Federal budget for co-financing expenditure obligations related to the implementation of different events of the national projects “Education” and “Demography”. This allowed us to attract more than 1.5 billion rubles from the federal budget to the region.

   In particular, in 2021 the region will receive more than 200 million rubles for the purchase of high-tech equipment to equip the regional center for identifying and supporting gifted children.

2) **The creation of the Governor's Lyceum - a general educational institution of a boarding type for gifted children.**

   The practice of successful participation of regions in the All-Russian Olympiad for schoolchildren shows the feasibility of creating in the Leningrad Region a general education institution of the boarding type for gifted children - the Governor's Lyceum.

   An Agreement of cooperation was signed between St. Petersburg State University and the Government of the Leningrad Region. The agreement presupposes new areas of cooperation in the implementation of educational, research and career guidance projects for gifted children, raising the professional skills of teachers.

   Currently, the transfer of one of the buildings of St. Petersburg State University to the ownership of the Leningrad Region is underway. In the
new building, conditions will be created for the simultaneous training and residence of 300 children.

The planned system of measures will allow creating an educational environment for children and youth in the Governor's Lyceum in the context of the educational request of the 21st century.

3) Creating Children tech parks "Quantorium" and the center of professional skills.

As part of the implementation of the regional project “Every Child’s Success”, by the end of 2019 in the Leningrad Region will be opened 2 Children tech parks "Quantorium" based on:


Quantoriums will become modern high-tech facilities, equipped with the appropriate equipment for the training on additional education programs of natural science and technology.

Until 2024, it is planned to create the Children tech parks "Quantorium" in Sosnovy Bor, Vyborg, Gatchina and Kingisepp.

Also until 2024 in the Leningrad region will be at least three mobile Quantoriums that will perform field work in rural areas and small towns, thereby ensuring the availability of high-quality additional education within the framework of advanced industries in remote areas of the region.
At the same time, it is planned that Quantorium will be created in Kingisepp with significant attraction of the funds of a private investor - EuroChem-North-West JSC, and the children technology park in Gatchina will be included into the structure of the Center of Professional skills being created in the region.

The students will have the opportunity to study here under the additional programs of technical education using innovative equipment and software. This will facilitate early career guidance of students, stimulate interest in the field of innovation, high technology and the popularization of engineering professions.

In addition to the children industrial park “Quantorium”, the structure of the Center of professional skills will include:

- **design and methodical office**, whose task will be to develop and replicate the best practices, programs and teaching methods for educational organizations, as well as the implementation of new models of early career guidance;

- **training ground**, where will be organized such activities as internships, demonstration exams and training sessions for the team of the Leningrad Region to participate in Worldskills Russia championships;

- **training center**, which will provide retraining and advanced training of teachers of the system of vocational education of the Leningrad region, employees of industrial enterprises in the region, as well as an independent evaluation and certification of personnel.
At the same time, the Center for professional skills, which is being created in Gatchina, will be one of the most modern in the Russian Federation.

4) **Application of advanced techniques and innovative approaches to the education of gifted children and talented youth.**

In 2018, 30 employees of the Leningrad Region underwent competitive training and internships under the new comprehensive retraining program for teachers and managers for the identification and support systems for gifted children and youth “Big Challenges”. It was held in the federal center for gifted children “Sirius” on a competitive basis.

This training allowed to form a project team of teachers capable of developing and implementing interdisciplinary programs and projects for working with gifted children, as well as providing the broadcast of experience to the entire Leningrad region with the involvement of the maximum number of teachers.

On behalf of the Governor of the Leningrad Region, a regional law “On measures of state support for gifted children and talented youth of the Leningrad Region” was developed and passed.

This law is very important for the implementation of an effective model of interagency cooperation in order to support gifted children and talented youth in the region.

We hope that the implementation of these promising areas will provide the necessary level of support for gifted children and talented youth and will contribute to their earlier inclusion in the regional labor market in the field of culture, science and technology.