A Model for Fostering the Successful Learning of School-Age Children by Way of Interaction between Institutions of General and Higher Learning

Un modelo para fomentar el aprendizaje exitoso de los niños en edad escolar a través de la interacción entre instituciones de educación general y superior

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ABSTRACT:
Amid the introduction of new federal state educational standards, one of the key objectives for Russia’s system of general education is a focus on helping learners become a successful person keen on self-actualization, self-improvement, and self-fulfillment. A key factor for a student’s self-fulfillment and successful development is succeeding in their key activity – learning, which imparts special relevance and fundamental significance to the issue of fostering the successful learning of school-age children. One of the possible ways to resolve the issue of fostering the successful learning of school-age children, in the authors’ view, is ensuring interaction between institutions of general and higher learning. This paper presents a model for fostering the successful learning of school-age children by way of interaction between colleges and schools. The authors’ designated method is pedagogical modeling, employed to determine the

RESUMEN:
En medio de la introducción de nuevos estándares educativos estatales federales, uno de los objetivos clave para el sistema de educación general de Rusia fue centrarse en ayudar a los alumnos a convertirse en una persona exitosa interesada en la autorrealización, la superación personal y la autorrealización. Un factor clave para la autorrealización y el desarrollo exitoso de un alumno es tener éxito en su actividad clave: el aprendizaje, que le otorga una relevancia especial y una importancia fundamental a la cuestión del fomento del aprendizaje exitoso de los niños en edad escolar. Una de las formas posibles de resolver el problema de fomentar el aprendizaje exitoso de los niños en edad escolar, en opinión de los autores, es garantizar la interacción entre las instituciones de educación general y superior. Este documento presenta un modelo para fomentar el aprendizaje exitoso de los
1. Introduction

One of the key issues related to modernizing Russia’s present-day school system is enhancing student learning and student mastery of the curriculum. In accordance with the National Doctrine for Education in the Russian Federation Through to 2025, the state needs well-educated individuals who have a capacity for interaction with others and are distinguished by mobility, dynamism, and constructiveness. The document stresses that “it is the level of success in learning that determines the pace at which one masters a craft, a specialty, or a know-how”. Under today’s conditions, the issue of fostering the successful learning of schoolchildren is of major significance to growing the nation’s human capital and ensuring its social/economic well-being. It has been established that success in learning facilitates the development of crucial personal qualities, encourages greater personal achievements, ensures a match between an adolescent’s needs and a social ideal, and galvanizes their internal resources for self-fulfillment. Researchers have found that a student who is capable of succeeding in school has a greater chance of achieving success in their future professional activity and in life as a whole.

The term ‘success in learning’ (‘successful learning’), first introduced by B.G. Anan’ev, implies the optimum combination of the pace, intensity, and individual originality (style) of educational work and the assiduity and effort demonstrated by the learner to achieve certain results (Anan’ev, 2001). Scholar V.A. Yakunin construes ‘success in learning’ as “the effectiveness of ways to manage the learning/cognitive activity of students under which you achieve optimal psychological outcomes with minimal costs (material, financial, HR, physical, psychological, etc.) (Yakunin, 2000). One could think of successful learning as successful advancement through the various stages and levels of learning, accompanied by the mastering of relevant knowledge, abilities, and skills and the development of one’s personal potential, as well as adaptation into the community based on the development of social competence and induction into professional activity (O. V. Birina, 2014).

One of the possible ways to foster the successful learning of school-age children, in the authors’ view, is ensuring interaction between institutions of general and higher learning.

The various aspects of the issue of fostering success in learning have found reflection at different times in the works of Russian and foreign scholars. For instance, the development of techniques for assessing academic achievements has been explored by M.A. Choshanov (2013), G. Saudabaeva, S, Kolumbaeva, A. Tymbolova, R. Aitzhanova, and M. Bodeev (2016), the development of criteria for assessing success in learning – by T. Kurapova (2011), factors influencing success in learning – by S.Yu. Klyuchnikov (2002), H.D. Brown, (1994), and G.D. Alba (2001), and technology for fostering success in higher learning – by O.V. Akulova, S.A. Pisareva, E.V. Piskunova, and A.P. Tryapitsyna (2005), G. Townes (1992), and E.N. Walker (2006). At the same time, it must be acknowledged that there is a lack of research into the issue of fostering the successful learning of schoolchildren by way of interaction between colleges and schools, which explains the authors’ special interest in exploring the issue in question.

2. Methods
The object of this study is developing and implementing a model fostering the successful learning of school-age children based on interaction between institutions of general and higher learning. The study was conducted between 2016 and 2017 at the Evsev'ev Mordovian State Pedagogical Institute by way of the Academy of Success research and educational center. To resolve their research objectives, the authors drew upon the following methods: forecasting, employed based on the belief that implementing such areas as creating a system of identifying children who are motivated about learning and scholarly creativity, developing a system of instructional support for students at all levels of education, integrating entities engaged in educational activity with a view to providing support for talented youth, and setting up a regional center for identifying and supporting children gifted in the arts, sports, science, and education will be instrumental in fostering the successful learning of schoolchildren; design, involving the creation of a system of instructional and psychological/pedagogical support for fostering the successful learning of schoolchildren by way of interaction between institutions of general and higher learning; pedagogical modeling, which enables determining the conceptual/processual foundations of fostering the successful learning of schoolchildren and identifying a set of ways of, means of, and conditions for organizing the process.

3. Results
Currently, there are sufficient sociocultural, psychological/pedagogical, and practical preconditions for fostering the successful learning of schoolchildren. As part of a set of experimental activities, the Evsev'ev Mordovian State Pedagogical Institute has put together a system of network interaction among entities within the regional system of education. The institute has created an innovative infrastructure for productive partnerships. The college now houses a research and educational complex which incorporates, apart from the pedagogical institute itself, 7 pre-school educational institutions, 48 institutions of general learning, 4 special (remedial) schools and boarding schools, 6 institutions of vocational education, 9 institutions of additional education, and 5 centers and limited liability companies. The innovative establishments operating at the institute include the Minor School Academy and the Academy of Success research and educational center for support for gifted children.

When it comes to characterizing the essence of this kind of interaction, the authors have established such components thereof as its goal, objectives, focus areas, and activity outcomes.

The goal is to work out and implement a set of activities aimed at enhancing the system of instructional and psychological/pedagogical support for fostering the successful learning of schoolchildren by way of interaction between institutions of general and higher learning. This goal has been achieved through resolving the following objectives: fostering the interaction of the Minor School Academy and the Academy of Success research and educational center with institutions of general learning within the Republic of Mordovia aimed at identifying children motivated about learning and scholarly creativity and attracting them into colleges; ensuring instructional support on organizing additional student learning at the institute; ensuring post-program support for schoolchildren.

The interaction of institutions of general and higher learning is grounded in the following key approaches:
1) approaching a network partnership as an educational environment that is facilitative of boosts in the successful learning of students and their self-determination and self-fulfillment;
2) approaching the successful learning of schoolchildren as the fundamental objective of education;
3) ensuring the continuing development of schoolchildren both vertically (ensuring a match between the content of learning and methods of work and students’ individual characteristics at the various age stages of development) and horizontally (integrating the various types of learning with a view to boosting the level of students’ educational preparation);
4) creating an information space that is facilitative of students making a choice of what they...
are willing to pursue, what its content will be, and how they are going to do it. Based on the goals and objectives set and approaches adopted, the institute has been implementing the following areas of activity for fostering the successful learning of school-age children.

1. Putting in a place a system of identifying children motivated about learning and scholarly creativity, which involves: organizing the operation of the Academy of Success research and educational center as a regional resource center for implementing special programs for advanced study of school subjects; identifying motivated and brighter children via a system of olympiads, research-to-practice conferences, and research-and-development contests; developing programs for targeted monitoring of the dynamics of schoolchildren’s achievements.

The launch of the Academy of Success has helped create in the region a unique educational community where schoolchildren can acquire extensive social experience as part of the learning process. The Academy of Success is facilitating the development of project and research competencies in children and adolescents, enriching their knowledge of the curriculum, and boosting their motivation for engaging in scholarly and scientific/technical creative activity. The implementation of this project has helped meet the social demand for boosts in the quality and systemicity of additional education in the region. A priority form of providing additional services at the Academy of Success is arranging specialized research/educational sessions, including during the vacation period, and providing further support for children’s project activity via distance learning. The specialized research/educational sessions are implemented using proprietary programs which factor in the latest achievements in the exact and natural sciences and the humanities.

A benefit from having the Academy of Success center in place is providing learners with easy access to high-quality educational services and enabling them to study not only via a specialized session but also throughout the school year via individual counseling by the institute’s top instructors – candidates and doctors of science.

The center’s operation has been funded through federal support based on the results of a grant competition held as part of ‘The 2016–2020 Federal Special-Purpose Program for the Development of Education’.

2. Developing a system of instructional support for students at all levels of education via: designing a variative system of learning routes for talented youth, including using distance learning technology; developing additional learning programs that will meet the exclusive educational needs of learners; providing pedagogical support for a child’s choice of learning route and their further development up until a stage of professional self-actualization; ensuring wide access to the system of additional education in a college; putting together a reserve for school leavers enrolling in a college.

As part of implementing this focus area, there has been successfully operating the Minor School Academy, an innovative structural unit set up at the institute to ensure the implementation of educational programs of additional general secondary education on science and humanities (social science and linguistic) subjects.

The Minor School Academy is intended to ensure the field-specific training of high school students planning to enter the Mordovian State Pedagogical Institute or other institutions of higher learning through helping them acquire humanities and science knowledge, driving their intellectual development, cultivating their creative potential, research competencies, and scholarly worldview, and creating the conditions for them to be able to harness their potential in full. The academy’s major types of activity are: organizing and holding classes aimed at advanced subject training of learners; organizing and holding research/methodological seminars, workshops, and various qualification enhancing activities for instructors of schools, lyceums, gymnasiums, and community colleges teaching subjects of general secondary (comprehensive) learning; organizing and holding various-level subject-specific olympiads for gifted and talented learners; organizing and holding contests devoted to scholarly student activity; developing and publishing instructional products for students at the Minor School Academy (study guides, textbooks, learning aids, problem
books, testing and assessment materials, electronic aids, etc.); organizing advertising/information and career guidance activities (Maksimkina & Kiseleva, 2012).

3. Integrating entities engaged in educational activity with a view to providing support for talented youth by way of inter-institutional interaction. This interaction can be grounded in the following integration mechanisms: setting up at institutions of general learning specialized subject-specific departments with a view to implementing in the learning process various types of enriching learning, research and project methods, and various forms of interaction with relevant college instructors, including by way of tutoring; holding training camps, olympiads, research-to-practice conferences at the college; developing a regulatory and legal framework that will enable factoring in the achievements of talented applicants in entering a college (Lapshina & Kulebyakina, 2017).

4. Setting up the Regional Center for Identifying and Supporting Children Gifted in the Arts, Sports, Science, and Education. The center operates based on a bilateral agreement between the Republic of Mordovia and the Talent and Success educational foundation. Its activity is aimed at putting in place and operating a system of identifying gifted children residing in the Republic of Mordovia, providing them with support, and monitoring their further development using the latest methods and technology; consolidating federal and regional scientific, educational, financial, and human resources required for putting together and implementing educational programs for children and youth, as well as programs related to subsequent support for them (Kadakin, Shukshina, & Zamkin, 2017).

For the purposes of encouraging creative activity among children and youth, fostering in them the foundations of scientific/technical literacy, boosting their engineering/creative thinking skills, cultivating their competence in the area of cutting-edge information technology, as well as providing career guidance for and boosting the motivation of schoolchildren for pursuing technical specialties, there is now a special institution in place at the Mordovian State Pedagogical Institute – the MIR-3D Center for Youth-Led Innovative Activity. The center's target audience is school-age children and students pursuing secondary-level and higher education. The facility's team of professional instructors teaches students programming, 3-D modeling, and the basic skills of working with relevant equipment to carry one's ideas into practical effect. Working with children is both individual and through project groups via support for projects and project teams based on specific interests, with students also provided with an opportunity to study the basics of project management and entrepreneurial activity.

4. Discussion

Some of the crucial objectives in implementing the proposed model include ensuring further post-program support for learners and fostering their professional self-determination. It has become customary to conduct the following activities at the Mordovian State Pedagogical Institute: webinars, free-of-charge consultations on preparation for olympiads and contests, the ‘School Saturday’ project, and fall and spring sessions at the Minor School Academy. An example of this kind of activities is the organization and holding of an open Evsev'ev Olympiad for 7–11th graders. The olympiad’s intramural stage, which was held based on a pre-established schedule from February 10, 2017 to March 18, 2017, featured 1,609 schoolchildren from the Republic of Mordovia and a number of neighboring regions. The intramural stage was preceded by the qualifier (extramural) stage, which featured 2,406 schoolchildren. Another example is the staging of 7 specialized research/educational sessions at the Academy of Success research and educational center aimed at fostering research and project activity among schoolchildren. From November 2016 to June 2017, these specialized research/educational sessions featured as many as 680 7–10th graders from the Republic of Mordovia and Orenburg Oblast, with the students representing all institutions of general learning in the urban district of Saransk, the republic's 12 municipal districts, and 4 schools in the city of Buguruslan of Orenburg Oblast. All in all, in the 2016–2017 school year as many as 10,000 schoolchildren were reached as participants in educational projects undertaken at the Mordovian State Pedagogical Institute.

Some of the key forms of working with schoolchildren include popular science lectures,
workshops at creative and scientific labs, solving olympiad problems, and foreign language communication classes. The participating children were offered a total of 9 specialized research/educational sessions: A Biological Mosaic, Exciting Chemistry, Real-Life and Simulation Experiments in the Study of Physics, Effective Methods for Solving Math Problems, History Mysteries, Discover Our Society in Fun Ways, English as an Art, The Country of Russian, and A Session of Literature Studies. The Evsev'ev Mordovian State Pedagogical Institute served as the venue for summer specialized research/educational sessions provided by the Academy of Success center.

Instructors at the Academy of Success have been working out a curriculum and learning materials for further support for students, which involves arranging year-round webinars on general academic subjects, conducting free-of-charge consultations, holding specialized research/educational sessions, staging the all-Russian project and research work contest ‘First Step to Success’, holding the Fall and Spring sessions, staging the Open Evsev'ev Olympiad for Schoolchildren, etc.

5. Conclusion
The testing of the various forms of and areas for interaction between institutions of general and higher learning has been aimed at fostering the successful learning of school-age children. The resulting innovative infrastructure for productive partnerships has facilitated the putting in place a system of instructional and psychological/pedagogical support for fostering the successful learning of schoolchildren by way of interaction between institutions of general and higher learning. Positive outcomes in boosting the successful learning of schoolchildren have been achieved via fostering interactivity and dialogizing the educational/nurturing process by way of network interaction among educational organizations; organizing specialized research/educational sessions, developing the olympiad movement, and organizing project and research activity. The areas of activity implemented as part of the operation of the Academy of Success research and educational center, the Minor School Academy, and the Regional Center for Identifying and Supporting Children Gifted in the Arts, Sports, Science, and Education, and the MIR-3D Center for Youth-Led Innovative Activity are testimony to a number of improvements in the way of success in the learning of school-age children and that there are bright prospects for the further study of the issue under review.

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