

The Bulgarian After-school Service System: Evolution, Mechanisms, and Pedagogical Implications for Global Educational Equity

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Abstract: Following nearly eight decades of systemic evolution, Bulgaria's modern after-school service framework has developed into a well-established system characterized by innovative goal integration, diversified agent synergy, reasonable content layering, and impressive spatial extension, which has demonstrated significant efficacy in enhancing educational equity and social inclusion. This study conducts a comprehensive analysis of the evolutionary trajectory, multi-dimensional operational mechanisms, and pedagogical implications of this after-school service system, drawing on an exhaustive review of governmental policy texts, national statistical databases, and peer-reviewed empirical studies. The findings offer pedagogical implications for cross-national policy adaptation in educational equity enhancement.

Keywords: Bulgaria, After-school service system, Pedagogical implications.

1. Introduction

Bulgaria is a country in Southeast Europe with rich history, diverse culture, and beautiful landscapes. Its education system is centralized, managed by the Ministry of Education and Science, which offers free and compulsory education with stages including primary, lower secondary, upper secondary, and higher education. The system emphasizes each single person's equal access to national education, yet still facing challenges like underfunding and teacher shortages. During the stay at Rousse University in Bulgaria from March to July in 2024, the authors conducted an extensive study on Bulgaria's after-school service system. Based on the data and information gained via thorough review of the official documents, authoritative statistics, and relevant research materials about this system, a comprehensive analysis of its evolutionary trajectory, multi-dimensional operational mechanisms, and finally its pedagogical implications are reported in this paper.

2. The Evolution of the Bulgarian After-School Service System

The development of modern Bulgaria's after-school service is closely intertwined with the country's educational policy reforms and social changes. This evolutionary process can be roughly divided into three key stages. The first stage is the Socialist Period ranging from 1948 to 1989. In 1946, the People's Republic of Bulgaria was proclaimed, after which the country gradually established a socialist system and integrated education into its national strategic planning framework. In 1948, the Bulgarian Communist Party became the sole ruling party and drove the state's successful socialist transformation. Subsequently, the state implemented centralized and unified management of public affairs such as education and healthcare, constructing a welfare state model covering the entire population, and the education system thus entered a phase of construction. The government attached great importance to the accessibility and equity of education and worked in close coordination with schools to actively organize students' participation in skills training and

ideological education activities with the focus anchoring at cultivating talents suited to the needs of national socialist development. By the 1970s, as Bulgaria's education system continued to mature, Учебен център (Learning Centers) emerged and gradually became an important platform for after-school services. These centers encouraged students to enthusiastically participate in various cultural, artistic, and sports activities after school, which has effectively promoted students' holistic development.

The second stage is the Economic Transition Period between 1990 and 2000. In the 1990s, as dramatic changes swept through Eastern Europe, Bulgaria entered a critical phase of profound market economy transition. This transformation unleashed a cascade of consequences: national public finances became increasingly constrained; the social welfare system was drastically downsized; and educational funding faced severe shortfalls. Against this grim backdrop, the government slashed investment in after-school services. Lacking adequate funds, numerous schools could no longer sustain their after-school programs, and the entire after-school service system suffered severely, with its functions gradually atrophying. Simultaneously, as market-oriented reforms progressed, government control over public services loosened. Private organizations, perceiving new commercial opportunities, began entering the after-school sector. However, with diminishing state support, families were increasingly forced to shoulder the financial burden themselves. This shift resulted in a marked urban concentration of after-school services, while resources in rural and remote areas grew severely depleted, rendering regional disparities in after-school service development ever more acute.

The third stage is the Modernization and Reform Period starting from 2001 till present. Entering the 21st century, propelled by the global wave of modernization reforms, Bulgaria's after-school services gradually overcame their earlier difficulties and embarked on a path to recovery. In 2007, Bulgaria successfully acceded to the European Union (EU), after which its educational policies and social welfare

services progressively aligned with and became deeply integrated into European standards. Influenced by EU education quality benchmarks, the Bulgarian government substantially increased educational investment, actively introduced EU-funded programs and related supporting policies, and made great efforts to enhance the quality of after-school services. During this period, the former Учебен център (Learning Centers) underwent a series of transformations and gradually evolved into the Центрове за личностно развитие (Centers for Personal Development). In 2015, Bulgaria promulgated the Pre-school and School Education Act, which established a service system comprising schools, Centers for Personal Development, and specialized support institutions which fully incorporated extracurricular and out-of-school activities into the unified planning framework of the educational process [1]. Subsequently, the Regulations for the Organization of School Activities (No.10), released in 2016, institutionalized *занималня/ЦОУД* (extended care) and interest-based activities within the daily school schedule, permitting schools to conduct collaborative services with Centers for Personal Development, sports associations, and other entities [2]. In 2017, the Inclusive Education Ordinance further introduced a framework of “general and additional personal development support,” specifying standards for services such as psychological counseling, resource teacher support, academic assistance, and talent development [3].

Till now, Bulgaria's after-school services have expanded beyond solely “academic tutoring” to become a multi-dimensional system encompassing fields including arts, sciences, sports, career awareness and guidance, psychological and social adaptation. This system is jointly delivered by schools and Centers for Personal Development based on annual academic plans and has been continuously optimized and refined through subsequent revisions.

3. The Multi-dimensional Mechanism of the Bulgarian After-School Service System

After long-term development, after-school services in Bulgaria have established a multi-dimensional mechanism. In this mechanism, each of the four dimensions has contributed respectively in creating a self-correcting ecosystem: goal integration provides valuable direction; diversified agents collaboration ensures resource supply; layered content meets varied needs of students' development; and spatial expansion transcends physical limits for after-school learning.

3.1 Goal Integration: Value Reconstruction from “Performance Supervision” to “Promoting Holistic Development”

3.1.1 Vertical Integration of Subject Remediation and Innovative Competency Development

Some Bulgarian schools have made efforts to achieve functional upgrades through combining subject-knowledge consolidation with fostering students' innovative qualities during after-school service time. They take after-school periods as a complete chain of “subject knowledge + project presentation + defense and evaluation.” For instance, the

Natural Science and Ecology Competition designed by Профилираната гимназия с преподаване на чужди езици „Екзарх Йосиф” [4] and the “Secret of Dinosaurs” Museum Club from 122 ИОУ „Николай Лилиев” [5] are typical examples of this type. In these activities, students can first acquire baseline concepts in the classroom, and then proceed through four successive phases of problem posing, information retrieval, experimentation/observation, and public presentation of results during the participating process of competitions or inquiry tasks, thus finally achieve a spiral practice with a continuous procedure of “known—unknow—new knowledge”. This pathway corresponds to the “retrieval—transfer—reconstruction” model in cognitive science, simultaneously improving students' subject competence while training their critical thinking and innovative abilities, thereby deepening their learning through reviewing the old to learn the new.

3.1.2 Parallel Implementation of Civi Education and Psychological Support

Bulgarian schools take both the Civi Education and Psychological Support of students into the core, creating an integrated curriculum of “cognition-emotion-behavior” that could effectively avoid the pitfalls of fragmented moral and psychological education. For example, the Art Performances Activity of Средно училище „Св. св. Кирил и Методий” [6] and the “Dream Kaleidoscope” Sports Festival [7] are designed with civic education goals such as fostering students' social responsibility, teamwork spirit, and resilience. Meanwhile, the “Hedgehog” Art Therapy Workshop of ОУ “Никола Йонков Вапцаров” [8] and Film Education Discussion Sessions of Иновативно основно училище „Иван Хаджийски”–Троян [9] focus on cultivating students' abilities in emotional management and empathy.

3.2 Diversified Synergy of Agents: An Institutionalized “School-Family-Community” Governance Network

3.2.1 Formalization of Schools' Pivotal Role

Most Bulgarian Schools have evolved from “event organizers” to “contracting parties,” gaining legal resource allocation authority in conducting cooperative projects with other organizations or entities. This transition addresses the unsustainability arising from the “voluntary” involvement of off-campus entities. For instance, the National Museum of Education in Gabrovo has signed an annual cooperation agreement with 122 ИОУ „Николай Лилиев” [5] with the content specifying teaching activities, safety responsibilities, and cost-sharing arrangements. Meanwhile, the Професионална гимназия Велизар Пеев has introduce the Podcast Project [10] in after-school service through inviting mentors from media companies to take part in the after-school service activities, in the form of paying them teaching remuneration. The project invited experienced industry experts with rich experience in media production and educational technology to be mentors who guide students throughout the process of content planning, scriptwriting, interviewing, and video editing. This project initiated by the school has helped students greatly enhance their practical skills through documenting campus life and discussing social hotspots.

3.2.2 Resocialization of Parents' Professional Capacity

At Профилирана езикова гимназия “Екзарх Йосиф I” Ловеч [11], parents and school psychologist Ivanka Dragneva are collaborating closely. Parents seek her advice on parent-child relationships and adolescent development. She, in turn, uses their insights to better understand students' needs. Together, they develop targeted interventions to safeguard students' mental health. In this model, the roles of parents have shifted from “emotional supporters” to “information providers” plus “intervention collaborators” to psychologist. The child observation notes provided by them have become formal psychological assessment files which could offer valuable information for the psychologist teachers to care their children more precisely. This “Parent-Psychologist” joint mechanism could activate parents' “latent professional capital”, thus alleviating the school's shortage of psychological teachers to some extent.

3.2.3 Symmetrization of Industry Organizations' Benefits and Responsibilities

The after-school podcast project at Професионална гимназия Велизар Пеев [10] is a model of deep integration between school education and industry organizations. This project has been highly praised by Bulgarian Ministry of Education and Science as it is a successful case of symmetrizing both the benefits and responsibilities of industry organizations in education endeavor. In this podcast project, media companies gained brand exposure and a potential talent reservoir, while schools obtain technical mentors and real-world work environments for students. This collaboration has achieved a “win-win” situation between “education and industry”. The predictability of benefits encourages continuous industry participation, moving away from the traditional one-off lectures.

3.3 Content Layering: An Academic-Art-Technology Tiered System

3.3.1 Academic Extension Layer: The “Curriculum-based” Integration of Museums and Schools

The 122 ИОУ „Николай Лилиев” teams up with the National Natural History Museum to run a “Secrets of Dinosaurs” club [5] during after-school hours. Students visit the museum for fossil-based activities. This club, an extension of the “Humans and Nature” course, helps students grasp the link between historical evolution and cultural inheritance. It also broadens their knowledge and sharpens their analytical and innovative thinking. The “Secrets of Dinosaurs” club transforms the museum's fossil collection into a research-based task list. Students complete a three-stage report on “stratum age estimation, ancient ecosystem restoration, and scientific drawing” and defend it in front of the museum researchers. This design makes after-school content go beyond in-school curriculum standards, forming an extension layer of “subject + scientific research methods”.

3.3.2 Art Therapy Layer: A Creation-Performance-Reflection Loop

Many Bulgarian schools rely on using art to help students ease

psychological pressure. At 2 СУ „Акад. Емилиян Станев” [12], instrumental concerts, vocal contests, and dance shows are held after school. These activities strengthen students' sense of collective belonging and psychological security through artistic exposure. Иновативно основно училище „Иван Хаджийски”–Троян makes use of film education in an innovative way [9]. It selects thought-provoking films and organizes regular film appreciation activities during after-school time. After films appreciation, group discussions are organized, in which students are encouraged to express their personal reflections, delve into the film's themes and character dynamics, and reflect on how the film relates to real-world issues. This approach is designed to boost their social skills and cultivate their empathy. In this film-discussion education, students quantify emotional changes using an “Emotion Thermometer” during sharing sessions. In general, the novel way of using music, drama, and film courses, usually following a four-step cycle of “creation-public performance-peer review-self-reflection”, has established a Creation-Performance-Reflection loop. As an effective way of art therapy, it links artistic experiences with psychological intervention to cure people.

3.3.3 Technological Innovation Layer: Cross-Grade and Cross-Platform Gradient

“Сава Доброплодни” integrates the Scratch visual programming platform and 3D virtual experimentation platform into its after-school services through its in-house “STEM Centre for Natural Sciences, Research and Innovation”. Students use Scratch to program LEGO Education Robots to solve real-world problems, developing computational and innovation skills [13]. Meanwhile, the 3D virtual experimentation platform allows for safe simulation of physics and chemistry phenomena, which is of great help for enhancing students' understanding of abstract scientific concepts. ОУ „Васил Левски” meets the after-school needs of younger students by introducing lightweight interactive platforms like LearningApps and Wordwall [14]. These platforms transform basic knowledge in geography and literacy into contextualized learning tasks such as puzzles, matching games, and map recognition, showing unique advantages in making early literacy and numeracy teaching fun and enjoyable. To sum up, the model of Scratch and LEGO robots for primary students, 3D virtual experimental platforms for middle school students, and WriteReader digital writing loops for higher-grade students, has formed a progressively advanced technological chain from “visual programming to virtual simulation to digital storytelling.” This guarantees a spiraling reappearance of the same theme across different cognitive stages.

3.4 Spatial Expansion: A Physically-Virtually Coupled Learning Ecosystem

3.4.1 Contextualizing Tasks in Institutional Venues

Many Bulgarian schools partner with social institutions like museums, libraries, and science centers to conduct after-school activities such as scientific exploration, cultural arts, and community-based practice. 122 ИОУ „Николай Лилиев” and the National Museum of Education in Gabrovo collaborate on cross-curricular teaching and

science-popularization activities [5], effectively broadening students' learning horizons and enriching their experiences. Another example is that Профилирана езикова гимназия "Екзарх Йосиф I" Ловеч teams up with local environmental protection organizations at community venues for "community environmental protection projects" [15]. This enhances students' focus on environmental issues and motivates them to present innovative solutions, enabling them to contribute to environmental protection. To sum up, some institutions function as venues for Bulgarian students gaining "context-based knowledge" through performing real-world tasks.

3.4.2 The "Immediate Interactivity" of Digital Platforms

To meet the after-school needs of younger students, ОУ „Васил Левски“ has introduced interactive platforms like LearningApps and Wordwall [14]. These platforms transform basic knowledge in geography and literacy into contextualized learning tasks such as puzzles, matching games, and map-recognition activities, embodying the principle of "learning through playing". They have unique advantages in early literacy and numeracy education. The platforms offer instant feedback on accuracy and time-on-task, while teacher dashboards generate real-time "heat maps". The immediate feedback model and interactive design can greatly boost student engagement and alleviate the boredom of mechanic and repetitive learning. Simply put, this innovative learning model eliminates the shortcomings of traditional after-school services while sparking student interest and initiative in learning.

4. Education Implications of Bulgarian After-School Service System

Through the multi-dimensional mechanism of after-school service system summarized in the previous section, many Bulgarian schools have performed well in fostering students' comprehensive competencies. Some valuable education insights can be drawn from this system that other countries can use as a reference to improve their after-school services.

4.1 Enhance Quality Education Through Integrated and Diversified Goals

Bulgaria's after-school service system, with its rich and varied activities, has effectively strengthened students' overall growth. It works well in boosting their academic performance, nurturing their personal interests, and fostering their civic responsibility. With regard to expanding students' subject knowledge, some Bulgarian schools have actively implemented innovative models, for example, by organizing fun competitions and project presentations to deepen students' subject knowledge and develop their critical thinking abilities. To cultivate students' artistic literacy, many Bulgarian schools organize diverse art activities like music, drama, and dance. These activities holistically address students' developmental needs in way of cultivating their artistic literacy and communication skills, unlocking their creative potential, and helping them building teamwork competencies. What's more, citizen education is also a key part of after-school service. Bulgarian schools make effort to develop students' sense of social responsibility through diverse

activities like volunteer work and social practice. Schools can make the most of after-school hours by organizing activities like environmental protection, community service, and charity work. These activities immerse students in social work, which is helpful in fostering both their social responsibility and civic awareness, and thus get them better prepared for being conscientious citizens in the future.

4.2 Integrate Resources to Institutionalize School-family-community Cooperation

In modern education, substantial collaboration among families, schools, and communities creates a powerful synergy that drives positive educational outcomes. Through teamwork, students can boost their academic growth, nurture diverse interests, sharpen real-world skills, and strengthen civic engagement and psychological well-being, thus laying a solid foundation for their holistic development. However, a sustainable attainment of these outcomes needs the continuing efforts from all the three parties. First, schools, as the core facilitators of school-family-community collaboration, should fully utilize their organizational, guiding, and coordinating functions. For instance, schools should create an open and inclusive campus culture to support school-family-community cooperation. Schools could create opportunities for exchanges among teachers, parents and communities through holding regular parent meetings or educational seminars, thus enhance their mutual understanding and trust. Second, within the framework of school-family-community collaboration, parents should be encouraged to shift from playing a "passive response" to an "active provision" role. This change promotes their deep integration into their children's educational ecosystem. Parents can, for example, leverage their professional expertise and resources to support school activities. As in the "School Vegetable Garden" project of Bulgaria's CY "Свети Седмочисленици" [16], families are key resource suppliers. Moreover, parents must forge stronger communication channels with schools. They need to collaborate closely with school staff and counselors to support student mental health. For example, they can actively participate in school-hosted platforms (parent portals, apps, newsletters) and join parent advisory committees to stay informed and visible in the school community. Third, societal organizations are crucial third force in driving education forward. They enrich school-family cooperation by supplying ample resources and professional guidance. Some societal institutions engage in school-family-community collaboration with a strong sense of duty to respond to governmental calls. These institutions leverage their expertise and resources to advance high-quality education in partnership with schools and families. Institutions can offer professional development workshops for teachers, sharing industry-specific knowledge and innovative pedagogical methods that connect classroom learning to real-world applications. They can also facilitate family engagement initiatives by organizing community events, creating mentorship networks, or hosting parent education seminars that strengthen the home-school connection and create a unified support system for students. Some organizations can even provide specialized resources such as research facilities, technology labs, or funding for enrichment programs that schools might otherwise be unable to afford. All these cooperations guarantee seamless activity

implementation and successful achievement of set goals.

4.3 Enrich the Means of Psychological Support

Bulgarian schools are active in exploring innovative approaches in after-school services to provide robust support for students' mental well-being. Some schools focus on using art activities to help students relieve and manage psychological stress. 2 СУ „Акад. Емилиян Станев“ recognizes the therapeutic power of art and frequently organizes activities like instrumental concerts, vocal competitions, and dance performances in fostering students' inner psychological strength and has applied them widely during its after-school periods. These activities help strengthen students' sense of belonging and psychological security through artistic exposure. ОУ “Никола Йонков Вапцаров” makes full use of “Hedgehog” Art Therapy. The “Hedgehog” Art Therapy Workshop serves as a dual-function space for students, integrating both creative expression and therapeutic support. It's a creative haven where they can freely express themselves artistically, and also a safe platform where they can find effective psychological support. When immersed in this environment, students engage in emotional exploration and artistic self-expression, fostering the natural development of their emotional regulation and interpersonal skills. The workshop prioritizes nonviolent communication and self-acceptance as core principles. Through this holistic framework, students develop an inclusive worldview, construct a positive self-identity, and foster enduring psychological resilience.

Providing professional psychological counseling and conducting interactive mental health activities are the other ways to enrich the means of psychological support. For example, the Профилирана езикова гимназия “Екзарх Йосиф I” Ловеч in Bulgaria is equipped with a well-equipped psychological counseling room and advanced assessment tools. These provide solid infrastructure for in-depth communication between psychological teachers and students, facilitating professional evaluations. They enable continuous monitoring of students' psychological states, offering robust scientific support for subsequent counseling. 2 СУ „Акад. Емилиян Станев“ launches an innovative after-school program that fuses psychology and drama. Drawing on drama's “psychological distance” effect, the program helps students externalize emotions while developing self-awareness and emotion regulation through immersive experiences. The “psychological distance” and “as-if” phenomena in drama promote students' wholehearted engagement and cognitive restructuring. This aligns with embodied cognition theory, helping students deepen self-awareness, promote mind-body integration, and cultivate positive psychological qualities.

4.4 Elevate the Appeal Through Optimizing Learning Experiences

Digital learning platforms can transform the education goals from mere knowledge consolidation to fostering comprehensive literacy. ОУ „Васил Левски“ uses gamified platforms like LearningApps and Wordwall, which can help turn learning into an immersive and enjoyable experience. This model eliminates learning boredom, boosts students'

interest and participation, and improves the effectiveness of afterschool service. Other countries can benefit from this model by designing inquiry-based interactive tasks, introducing game-inspired assessment systems, and creating diverse “learning through play” scenarios in after-school activities. These strategies can enhance students' learning engagement and motivation greatly.

Organizing volunteer and social practice activities for students during after-school programs can also significantly enhance their appeal. For example, when designing its after-class activities, СУ „Георги Измирлиев“, гр. Горна Оряховица rejects abstract ideological instruction and prioritizes experiential learning, transforming social issues into actionable educational experiences for students [17]. The school implements experiential learning through student-led projects, such as designing ocean-themed board and constructing mini basketball hoops using recycled materials (e.g., yogurt containers, bottle caps), thereby fostering environmental literacy and resource conservation awareness. Students engage in service-learning through three kinds of activities: (1) creating handcrafted greeting cards for community-dwelling seniors, (2) conducting virtual poetry recitals for elderly residents, and (3) participating in municipal governance simulations as mayor role-players. These experiential activities cultivate students' socio-emotional competence and civic-mindedness. Similarly, СУ „Георги Измирлиев“, гр. Горна Оряховица implements a holiday-themed service-learning project by orchestrating a Christmas charity bazaar, wherein students engage in product design, marketing, and sales operations [17]. All net proceeds are systematically donated to local welfare organizations. This activity facilitates students' development of civic-mindedness through experiential reflection on societal interdependence.

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