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Research Article

Innovation of Synergistic Supply Mechanism of Basic Public Education Services*

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Abstract

The contradiction between supply and demand of Basic Public Education Services (BPES) is highlighted. Some problems need to be addressed such as undersupply, low supply efficiency and imbalanced supply structure. Inspired by the concept of synergistic governance, an effective way that tackles this challenge is to innovate the supply mechanism for BPES. From the synergetic perspective, this paper builds a collaborative supply model for BPES in favour of the diversification of BPES providers. Six synergy mechanisms are also given, based on the cycles of supply and demand of public education services. These six mechanisms, focusing on “synergy” instead of “individual unit” among plural providers, are demand expression, collaborative strategy, resource allocation, transparency, collaborative responsibility, and supervisory feedback. Here also gives the implementation path for effective operation of the synergy mechanisms.

Keywords

Public Education Service • Collaborative Supply • Mechanism Innovation

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The so-called BPES, just as its name says, refers to fundamental affairs provided mainly by the government in the education domain. As the basic premise and foundation for realizing the lifelong development of people, it features the publicity, inclusiveness, fundamentality and expansibility. By far, the education business in various countries has evolved in full swing, and the overall quality and level of public education services have been improved continuously. As we also see, the existing public education service systems in all countries, especially in developing countries, have not fully adapted to the requirements for country's economic and social development and the people's access to good education. Especially the contradictions exist between the comprehensive and rapidly growing demand for BPES and the shortage of basic public education resources in the whole society, demands for diversified public education services and the lack of resources for it and the vacancy of public education services. All these have upgraded to be the key issues that need to be resolved in the current public education service system. To hush up these contradictions and improve the level and quality of public education services, it is required to improve the public education service system with the concept of "synergistic governance" and re-contemplate the relationships between government and society, between government and market and between government and universities under the framework of the "government, market and society" triune, thus forming a BPES synergy mechanism with government as leader, participated by private sector, schools, social organizations, communities, parents and students.

Literature Review

Modern model for BPES arose in Europe since the 18th century, and gained popularity in Europe and the United States until the middle and late 19th century. The study of the supply of public education services starts relatively late. Since its inception, it has focused on the connotation of public education services. After the 1990s, the providers and supply mechanism of public education services have been investigated based on the theory of public goods supply, governance theory, new public service theory, etc. First, on the supply entities, Condorcet, Fichte, Andy Green et al. believe that education is a basic right enjoyed by everyone and should be left to the central government for centralized administration. Horace Mann believes that public education must be popularized in order to push for historical progress and social development, thus making the country great. After the economic crisis in 1929, Western governments almost monopolized the provisions of all public education according to Keynesianism correlation theory. John E. Chubb and Terry M. Mo conducted a survey on the huge mass of data and concluded the reason why the education services by the government present the low efficiency, laying a theoretical foundation for the market reform of American primary and secondary schools, thus the Western countries began the marketization of public education services. In 1992, Ray Marshall and Mark Tucker criticized the talents nurtured under the US government's public education supply mechanism and the shortage of demands for HR resources in the market. They highlighted that the provision of public education services should adapt to the demand for talents in the market. During this period, most Western scholars advocated private ownership and denied public ownership. Further, Michael Apple believes that the government and market supply mechanisms for public education services have their own defects. We should continue to explore new models to seek advancement of BPESs and find new channels other than government

and market supply. By the end of the 20th century, the reform of the public education supply mechanism was ushered into a new phase that guided by the governance and better governance theories. The new public service theory of the Denhardt couple also has a huge impact on the reform of supply mechanism for the public education services. The government's public education focuses more on service improvement, while refining the public education services; setting up a dialogue channel for public education services; more efficiently allocating educational resources via the market; and strengthening the function of the third sector in the provisions of public education services. (Fu, 2007) investigated from the perspectives of public product theory and public economics, and compared the efficiencies of the education services offered by government authorities and private sector, and proposed that it was imperative to diversify the education providers. (Zhou, 2010) believes that the government does not need to incorporate the roles of suppliers and producers when providing the education services, but should serve the role as the regulator for provisions of education services; the provisions of education services should be co-assumed by government, social organizations, markets, private sectors. The second is the supply mechanism. (Qu, 2006) believes that there are some factors such as price, resources, demand structure, cost, institutional policy, and social cognition that will produce an impact on the provisions of education services. He also proposed some measures to improve the supply mechanism for education services, for example, perfect the investment and education systems, take into account the education equity, and deepen and innovate the education system reform. (Zheng, 2010) analyzed the transformation of China's basic education service providers by a dual-level game model built for public service supply, and finally put forth the measures for the choice of public service providers. (Song, 2011) proposed to analyze public education service supply mechanism mainly in three ways: providers, service performance and supply mode. (Chen and Zong, 2012) conducted a study on the reform path for the rural compulsory education supply mechanism. They believe that the rural compulsory education supply mechanism reform must complete a transition to the overall urban-rural development system and all-round comprehensive reform, and achieve the jointed and synergistic development of urban and rural education. (Liang, 2012) proposed to optimize government functions and rationally allocate educational resources to achieve a fair and efficient education based on the equalization of basic public services.

After reviewing the academic scholarships on the current supply mechanism for BPES in local governments, it is found that scholars focus merely on how to increase the supply entities and realize diversified provisions, but less on how to work together to ensure maximum efficiency. "Synergy theory" was first proposed by the physicist Haken in the 1970s. It is believed that synergy is to interact with each other among all parts of the system, so that the whole system constitutes new structures and features that micro-individual does not have. In 1965, H Igor Ansoff introduced the "synergy" concept into the management community for the first time, then the concept of $2+2=5$ was expressed. Since then, Michael Porter, Yves L. Doz and C. K. Prahalad, as well as Christopher Bartlett, Andrew Campbell et al. mainly discussed how to identify synergy change and how to create synergistic effect. (Li, 2002; Yang, 2010) theoretically studied the application of synergy in public management field, and argued that Synergistic governance can effectively address social public problems through good cooperation between resources and elements. (Wang, 2015) believes that a public service model provided by government, market and social organizations should be accessed. From this perspective, this paper

makes a survey on how to innovate the supply mechanism for BPES in local governments based on synergy theory.

Establishment of synergy model for BPES

The term "Synergetics" comes from the Greek and is a science involving the competition and cooperation between various subsystems in the system. It aims to reveal the transformation law of the system from disorder to order types. The theory holds that all systems include several subsystems; the types of these systems or subsystems vary a lot, and feature in the complexity, openness, dynamics, non-equilibrium and equilibrium, synergy and cooperation. But "the structures, properties, and behaviors of all subsystems are not the simple or mechanical sum of that of their subsystems". In the transition process of system from disorder to order structures, subsystems within the system may compete with each other, but in order to achieve the common goal, the subsystems will act in concern to promote the systematic evolution of the whole system to the best effect, thus achieving the effect of "1+1>2".

Synergistic governance theory and provisions of BPES: analysis of conformity

The provision of BPESs is a complex process consistent with the operational and internal mechanisms of synergistic governance. It has the following features.

Openness. The provision of BPES is a complex open system, including demand system, providers, supply strategy, supply mode, supply supervision and evaluation system. This system requires the integration of various social resources, the exchanges of materials, energies and information with the outside world and the constant exports of different public education services.

Non-equilibrium and equilibrium. Impacted by the dual structure of urban and rural economic and social development, China's basic provision of public education service remains in a state of the non-equilibrium far from the equilibrium, which presents the supply and demand disequilibrium between the regions, between urban and rural areas, and between schools. For example, the gross supplies of BPESs in the vast rural areas and former revolutionary base areas are relatively insufficient at a relatively backward level, but ample and at a relatively high level in economically developed areas. In the supply process of BPES, all supply entities, through interest games, reach consensus by equal dialogue and negotiation in the perspective of integrity, constitute a community of shared interests, follow the rules of the identity game, share risks, and increase supply and balance it with demands in the synergy governance supply mechanism mode.

Dynamics and harmony. Along with the development of the economy and society, based on the changes in the social structure, the public raise increasingly diversified and personalized demands for superior and fair BPESs. As there are strength and weakness of public demands and the disparities between them, the multiple supply entities in the system present a degree of correlation and the strength of the interaction with each other, as well as the speed of the movement change, all of which dominate the existence of the whole system. Thus, supplies will increase in total, and be improved in quality and at levels. In the supply network structure, each

supply entity more concerns the dynamic changes in demands, reach a consensus via communication and negotiation, make full use of inhouse resources, knowledge and technologies to complement each other, optimize the allocation of supply resources, and achieve a win-win cooperation.

Cooperation. To ensure a fair and effective supply, the communication, negotiation, coordination and cooperation between the host and the object and between the subsystems are required, so that the whole supply system operates in an orderly manner. A win-win partnership based on mutual benefit, mutual respect and mutual trust indicates a developing trend of BPESs. Each supply entity maintains a moderate tension and plays a game for power in the macro supply system.

Based on the above analysis, the provision of BPESs fits in with the concept of synergic governance, and the two have a greater conformity. For this purpose, we can draw on the theory of synergic governance to study the provision of BPESs. Under the concept of synergic governance, the provision of BPESs means a dynamic process where the government, the market, non-governmental organizations, private sector, and individual citizens constitute an open overall supply system in the development process of basic public education, in order to promote the optimal allocation of social resources, change the whole supply system from “disorder” to “ordered” modes, maximize the maintenance and realization of the public education benefits via the synergic governance of BPESs, and finally achieve the objectives as required by public education.

The synergy model for BPESs

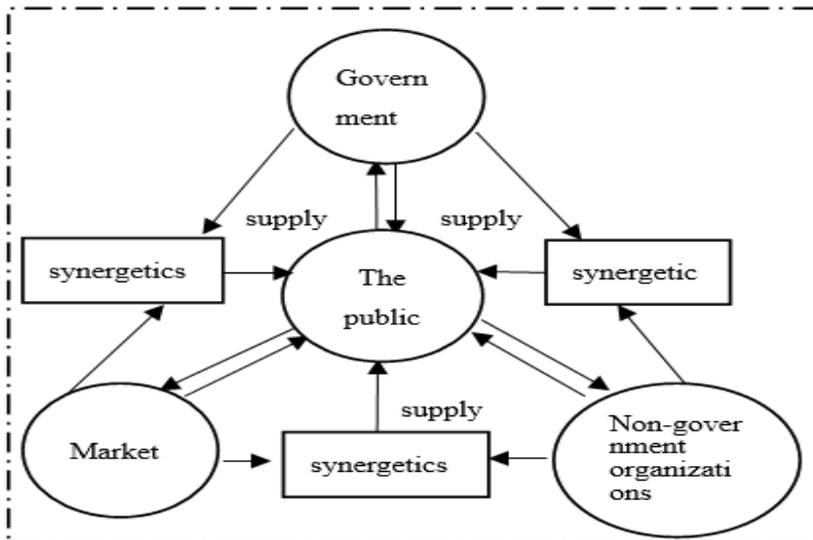


Figure 1. Multi-subject collaborative supply model for BPESs

With reference to synergy theory, synergic provision of BPESs is such a process that government authorities, market and social organizations communicate and coordinate with each other to co-offer PESs based on the

public demands, in order to realize mutual complementarity of advantages, sharing information and resources, under the guidance of certain rules. On this basis, we built a multi-entities collaborative supply model for BPESs, a “trinity” type with government as leader, social participation and market operation. The specific model is shown in Figure 1.

Establishment of synergic mechanism for BPESs

To hush up the contradiction between supply and demand of BPESs and achieve the governance goal of PESs, the fundamental action is to promote interdependent governance entities to intensify collective behaviors, and form a practical and effective governance mechanism via various effective interactions. Based on the synergic governance, we build a cycle mechanism, i.e. “demand expression-strategy-resource allocation-responsibility mechanism-transparency mechanism-evaluation feedback”, for PESs. The specific model is shown in Figure 2.

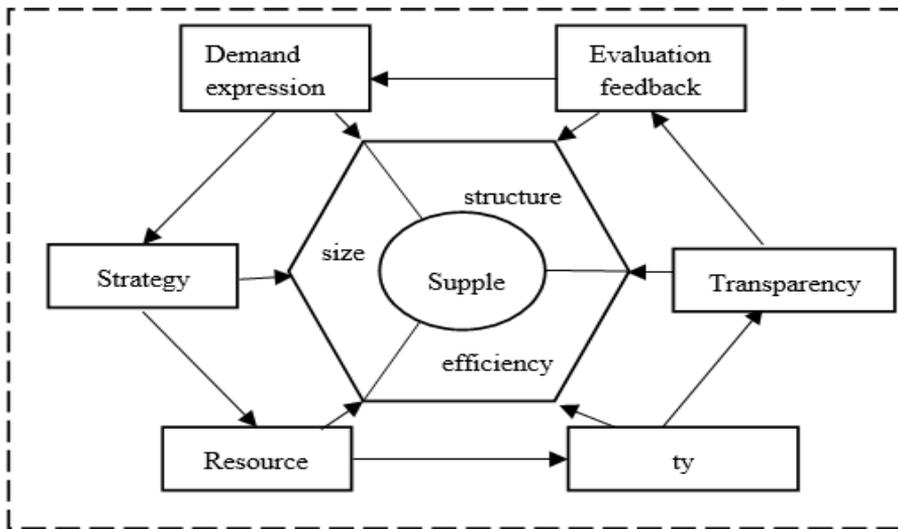


Figure 2. Synergic supply mechanism of BPESs

Demand expression mechanism

Demand expression starts from the entire “supply chain” of the BPES. PESs have multiple supply entities with partnership-type relationship, regardless of traditional command and obedience in organizational structure. This means that, during the provision of PESs, individuals, groups and organizations with different interests gather together and attempt to maximize their own interests. In this case, there must be conflicts and contradictions of interests between individuals, departments, groups and the public. Therefore, it is necessary to develop a demand expression mechanism focusing on parents and students, to establish the consensus and

cooperation, to integrate the appeals for multiple interests and independent powers to achieve good governance goals, and rationally divide the relationship, roles, functions, powers and responsibility domains between various behavioral agents, so as to realize each other's benign interactions on the basis of cooperative sharing and equal consultation.

Strategy mechanism

Strategy matters the fairness and efficiency of BPESs. It is also a game process among the government and the private sector, non-governmental organizations, communities and the public. The ultimate purpose of the innovative BPES supply mechanism is to satisfy the demands of different institutions, organizations and groups for BPESs, maximize the benefits of public education. It, therefore, must also be a process of democratic negotiation. Educational strategies about what kind of education services should be provided, who provides them, and how to meet the actual demands of multiple governance entities, representing their actual interests and appeals. In view of this, we should change the current top-down one-dimensional administrative strategy mechanism for country and government, encourage and absorb the multi-entities such as private sectors, non-governmental organizations, the public, experts and scholars to participate in strategy development, listen to their opinions and suggestions, endow and guarantee their involvement rights, vote and review, forming a bottom-up and top-down integrated strategy mechanism, so that the interests can reach an "overlapping consensus". It is also required to intensify strategy supervision, improve the efficiency and quality of strategy development.

Resource allocation mechanism

The allocation mechanism for basic public education resources in local government means that local governments rationally allocate basic public education resources. Innovated allocation mechanism for basic public education resources at the level of local governments means that the existing allocation mechanism for the education service supply activities should be broken to introduce a fairness-oriented type, and explore a more reasonable allocation mechanism. The innovated type mentioned above should start from two levels. From the national level; the state should continue to increase investment in education in the central and western areas where the economy sluggish and there is lack of resources. The financial differences from the economically developed east China should be diminished, in order to achieve an equalization of BPESs nationwide. From the local level; local governments should increase the allocation weights of BPES resources for all types of schools in rural areas in terms of hardware facilities, software equipment, faculty reserve, teaching management personnel, and welfare benefits, making efforts to narrow the gap between urban and rural areas.

Responsibility mechanism.

Although there are multiple entities in the governance process of PESs, they focus on the ultimate realization of educational objectives. Therefore, it is necessary to further clarify the responsibilities of different service

entities in public education by building a responsibility mechanism, and implement them into place, make a reasonable allocation for powers and interests. It is also necessary to further ensure the improvement of the quality of PESs via the responsibility mechanism, reach a rational division of responsibilities, rights and interests, and maximize the enthusiasm of multiple entities to participate in public education services, in order to ensure the realization of educational objectives. In addition, we should improve the accountability system of public education services, enhance the sense of responsibility of all entities for public education services, and investigate the responsibility of relevant entities for the education problems caused by the negative slack of them.

Transparency mechanism

In the public education service governance structure, we should establish a transparent mechanism. On the one hand, it is regard for fairness and democracy, that is, thanks to the publicity and public welfare of PESs, people express more concern about the degree of its fairness and democratization while improving the education quality; on the other hand, it has a bearing on the effective function development of the multiple entities for PESs. At this stage, due to the information asymmetry in the governance of PESs, parents, communities, social organizations, and private educational institutions cannot truly participate in PESs. Therefore, some effective measures should be taken to ensure the transparency during the allocation of public education service resources, the division of powers, the financing and use of public funds, the production and provision of PESs. Special attention must also be paid to the construction of laws, regulations, and systems that involve relevant parents, communities, students, and social organizations, ensure their rights to participate in PESs in the form of laws, and give them a discourse power and right to know. In order to increase the degree of transparency, it is also required to strengthen supervision and evaluation on the public education service system.

Evaluation feedback mechanism

In the provision process of BPESs, supervision and evaluation are indispensable components, just like “firewalls”, which concerns with the orderly advancement of the whole supply system and the realization of supply targets. First, we should develop and improve relevant laws and regulations. Based on the attributes of basic public education products, the relevant legal framework will be built, and the rights, responsibilities and obligations of each supply entity are clearly divided so as to constrain and eliminate the arbitrariness of their supply behaviors. Clarify specific regulatory contents such as market access, subject qualification, service quality, price supervision, and public finance education inputs, establish open and transparent supervision procedures, and conduct necessary administrative review and audit. Second, we should establish and improve the information disclosure system. Information disclosure is a prerequisite for effective supervision and evaluation. “The implementation of any measures that aims at preventing and resolving public disputes must stand on public masses having a well-informed.” Therefore, the scope, procedures, and feedback modes for information disclosure by each supplier should be determined; the principle of “openness is conventional, and the non-disclosure is the exception” is adhered to. Relevant information is published to the society via the main

media to make it open and transparent. Third, we should give full play to the role of the “meta-government” in the diversified supply entities, and establish a government-led, diversified, multi-dimensional supervision and evaluation mechanism; enhance the awareness of government for supervising the provision of BPESs as unshirkable responsibilities and obligations, and to a certain extent, this can compensate for market failures and improve the efficiency of resource allocation. We should also guide the public to participate in the process actively and broadly, and vigorously intensify the function of public opinion supervision (including newspapers, radio, television, electronic networks, industry associations, hearings, etc.) to form a multi-dimensional supervision and management synergy governance mechanism of “up and down linkage, internal and external synergism”. Four, we should establish and improve the performance appraisal report system and accountability mechanism for provision of BPESs, actively introduce a third-party evaluation mechanism, and release the results of the performance appraisal assessment to the public in a timely manner, so as to accept the social supervision and promote the provision of quality education services, thus forming a virtuous circle of development in education cause.

Implementation path for the cooperative supply mechanism of BPES

Establish a concept of Synergistic governance and innovative Synergistic governance mechanism for supply

For the current contradiction between supply and demand of BPES, it means that we should set up a concept of synergistic governance and make a breakthrough in the supply mechanism of BPES. In essence, governance is just a way to coordinate the providers who holds different concepts and interests to reach a consensus that a collective action be made. The governance is actually a process where a consensus can be reached. For this purpose, social consensus acts as the premise for the innovation of BPES mechanisms. There are supply entities, and their cognitions, all of which are diversified. Supply entities should improve their rational cognitions to fully recognize how important the BPESs are, enhance their sense of identity, cultivate the concept and spirit of synergistic governance, and create a good social atmosphere of mutual participation and synergistic governance. The concept and spirit of Synergistic governance means that all supply entities should not only concern their own interests, but also take into account the public interest, actively integrate into the public society as a “social person”, participate in public education affairs, share governance responsibility; on the principle of credit and commitment, co-build a new public culture to stimulate and enhance the public spirit. Robert D. Putnam believes: “The public spirit refers to political idea, ethical pursuit and philosophy of life the people hold in favor of the people's survival and development, such as, people present a concern for public affairs, and are willing to work on the improvement of public life and the construction of public order”. In addition, synergistic governance advocates rational thinking, to form common norms and values, create the governance network organizations and common interests, and develop a community of interests. “The government’s actions depend on formal authority and the police’s strength. What the governance depends on is just an initiative spirit that reflects common goal”, while creating a social atmosphere of tolerance, harmony and integrity, since “in a community, the higher the integrity level, the greater the possibility of cooperation”. In this way, it is possible

to realize the cooperation and win-win situation for non-zero-sum games between the government and the supply entities.

Cultivate and develop social organizations and optimize Synergistic governance

Synergistic governance focuses on the involvement of social power and underlines the transfer of public management functions from the government to social organizations. It means that the BPESs should be supplied based on the power of certain social organizations. Non-governmental organization has the natures of non-government, non-profit, voluntariness, autonomy and public welfare. Its emergence and development have broken the dual opposition pattern between the government and the market, helping to make up for "government failure" and "market failure" and increase the supply. "The state power "orderly exits" from various fields such as economy, society and politics, while non-governmental organizations with social, civil and intermediary natures undertake part of management functions of public affairs divested and transferred from government organizations, in order to quickly fill the space freed up by the state power". The government should vigorously cultivate and develop non-governmental organizations. On the one hand, it is required to create a good institutional environment for its independent operation. First, further establish and improve relevant laws and regulations to ensure their legal status, legal rights and interests. Second, clarify the rights and functions of the government and non-governmental organizations, establish a partnership of win-win cooperation, and truly play the governance function of the "minimal government, great society". On the other hand, strengthen the self-construction of NGOs. First, give full play to its self-discipline management function and establish a self-disciplined operation mechanism. Second, strengthen the education and training of employees and continuously improve their qualifications and competences to participate in the synergistic governance of public education. In the end, establish third-party oversight, evaluation and accountability mechanisms for NGOs to prevent their alienation.

Develop and improve laws and regulations for public education services

Regardless of the governance tool, as long as the ultimate success is made, supporting systems are required. As a great nation, the *Basic Law on Public Services* should be issued as soon as possible, while continuously intensifying the construction of government regulations, clarifying the relationship between the government authorities, and between governments at all levels. Nevertheless, the boundaries between the government and the third-party government should be defined. The government rationally allocates the rights and interests, and then makes the best use of legislation, while adopting appropriate measures, if necessary, to implement correct guidance, finally achieving the establishment of a cooperative win-win relationship. In order to avoid the occurrence of such cases that the public education services are not in place during the supply period, and the rights and interests of the masses are infringed, we have to stipulate the provision of public education services, and the state should bear the liability of guarantee payment. While for BPES, the state should make a direct payment, delegate it to governments at all levels, so that they can bear certain direct payment responsibilities, undertaken in detail by governments at all levels for better accountability.

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