

# Innovative Practice of the "School-Elderly Care Integration" Model from the Perspective of a Cross-Strait Community of Elderly Care Services

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**Abstract:** Considering the rapid population aging, dilemmas exist on the supply of elderly care services such as structural imbalance between supply and demand, fragmentation of resources, and lack of professional capacity; traditional supply models can not cope with the increasingly differentiated care needs. As a fulcrum which plays the role of producing knowledge, accumulating human capital, and providing social services, educational resources has become an important lever to leverage the transformation of elderly care service supply. Based on the analysis from the perspective of the cross-Strait elderly care service community in China, this paper constructs the theoretical framework of the "school-elderly care integration" model based on the foundation of resource integration, structural characteristics of the model, and cross-Strait adaptation mechanism. The result shows that "school-elderly care integration" activates the service potential of educational resources through bidirectional embedding of industry and education and compounding of spatial functions, and the heterogeneous complementarity of cross-Strait educational resources provides incremental space for model innovation. Adaptation mechanisms should be established in terms of standard alignment, quality assurance, and collaborative innovation so as to iteratively upgrade the model via vertical extension and horizontal expansion of the service chain in order to sustainably operate the model.

**Keywords:** school-elderly care integration; elderly care service supply; industry-education integration; cross-Strait community; resource integration

## Introduction

Quality and effect of elderly care service supply will affect the quality of life of the elderly. As the population age structure changes, the increase in the scale and the differentiation in the level of care need puts dual pressure on the existing supply system. For years traditional supply pathway relies on capacity building in the industry, revealing many problems such as human resource reserve, technical support and continuous care. Relying only on improving its own capacity cannot overcome the bottleneck of supply. Educational resources plays various role such as producing knowledge, cultivating talents, extending social services by unique endowment intervening into the field of elderly care services. Combination between the educational institution system and elderly care services become one kind of organization innovation form worthy of being paid attention to. Both sides of the Taiwan Strait have accumulated different resource characteristics during the evolution of elderly care service systems. Mainland has clear advantage in construction of large facilities and application of information technology while Taiwan has abundant experience in establishment of community care network and refinement of quality control; their structural difference exactly provides the basis for complementarity. We focus on key issues like how to embed educational resources, organize cross-sector integration, transform cross-Strait heterogeneity etc., aiming at giving theoretical explanation and model constructions for transforming elderly care service supply, clarifying the internal mechanism and development direction of the new supply form of school-elderly care integration.

## **1. Theoretical Basis for the Transformation of Elderly Care Service Supply and Cross-Domain Resource Integration**

### ***1.1 The Internal Logic and Breakthrough Direction of the Structural Imbalance between Supply and Demand in Elderly Care Services***

Not only in terms of quantity, there exists an inherent conflict between the logic of the supply system and the structure on the demand side. Heterogeneity of the elderly population continues to increase. Different elderly people with various degrees of disability and family support status require different kinds and intensity of care services, which cannot be satisfied by the standardized production method of traditional supply. Long absence linkage among the three main sectors: institutions, community, and home care results in fragmented supply pattern. Confined elderly care services into a narrow industry scope that did not take full advantage of the potential supply capacity from other social subsystems are deep-rooted causes. We need to re-think the logical basis of resource acquisition and organization production, search new ways for cross-domain resource integration and break excessive dependence on enhancing capacity within one industry<sup>[1]</sup> to break through this supply dilemma.

Two assumptions underlie the basis of Cross-domain resource integration, Core production factors needed for elderly care services are scattered among various social sectors instead of being monopolized by one industry; Flow of resources between different industries could be achieved via organization design but cannot be naturally restricted by industry barriers. All three functions – knowledge production, human capital accumulation and social services which meet the needs of improving elderly care service quality – the technical support, talent supply and field extension exist in Educational institution system. In comparison with just enhancing capacity within an industry, the cross-domain inflow of educational resources can relieve deficiency of professional capacity and service capacity within a certain period. We should make adaptive transformations based on elderly care service needs, coupling the operational logic of educational institutions and the actual laws of care together.

### ***1.2 Theoretical Approaches and Functional Positioning of Educational Resources Serving the Elderly Care Sector***

There are two intertwined ways in extending educational resources into the field of elderly care services theoretically: one is originated from human capital theory stressing that educational institutions provide continuous qualified practitioners for the elderly care industry via systematic professional education and on-the-job training; focusing on matching curriculum design and industry standards and the efficiency of turning teaching content practical; the other originates from the sociology of knowledge where educational institutions function as producers and repository of professional knowledge; their knowledge output shows up as scientific improvement of service processes, assessment tools and intervention plans, transforming services from experience-oriented to evidence-based. Both approaches intertwine with each other – human capital accumulation goes hand-in-hand with knowledge transfer and application while knowledge production depends on talent cultivation as a carrier; both are the basic channels of educational resources entering the elderly care field.

Functional position perspective, Educational institutions can adopt different intervention types based on its resource endowment: one is direct providing elderly care services by their affiliated facilities or practical training bases that offer day care and health management services to surrounding elderly population (similar functions like service nodes embedded in communities); other is indirect enabling improvement of operation quality of existing service institutions via technology R&D, standard formulation and personnel training but not intervene in terminal delivery; both rely on the type and disciplinary layout of the educational institution, research universities are better at technological empowerment whereas applied institutions has more space for direct services. No matter what positioning they adopt, injecting educational resources brings a professionalized quality dimension into elderly care services<sup>[2]</sup>.

### ***1.3 Theoretical Examination and Foundation for Integration of the Complementarity of Cross-Straight Elderly Care Service Resources***

The structural difference in cross-strait elderly care service resources is the basic condition for

complementarity cooperation: summarizing it by the aspects of institutional architecture, service models and talent cultivation. A relatively complete community care network and care management mechanism regarding long-term care have been built up in the Taiwan region, where the continuity and coordination of services are institutionally guaranteed; the mainland has accumulated rich experiences about large-scale construction of elderly care service infrastructure, having clear advantages both in construction volume and coverage. Small-scale multifunctional community care in Taiwan stresses its flexible service and individualized responses, emphasizing the integration of care support in familiar environment while the mainland has made relative rapid progress in technology innovations such as smart elderly care and remote care, the depth of application of informatization means in service management is relatively prominent. Training system in Taiwan emphasizes humanistic care literacy and service communication skills but elderly care nursing education on the mainland has developed relatively systematic training module in clinical care skills and risk management.

The activation of complementary advantage depends on the full recognition of each other's resource characteristics through proper arrangements. Deep foundation of cross-strait elderly care service community is built on the common response to the challenge of aging and the common concern for improving the quality of life of the elderly in both sides. Flow of educational resources across domains has its own bridging effect; cooperation and exchange between educational institutions can bypass the difference of institution at the level of service operations, go straightly at the level of knowledge sharing and joint talent cultivation, accumulating a foundation of mutual trust towards deeper learning from service models. Complementary integration does not mean just summing up their respective advantages but we need to examine the resource characteristics under an integration framework, find out the connecting parts that can create incrementing value via combinatorial innovation so that the scattered elderly care educational resources of the two sides will achieve synergistic effects within a common cooperative framework<sup>[3]</sup>.

## **2. Structural Characteristics and Operating Mechanism of the "school-elderly care integration" Model**

### ***2.1 Conceptual Construction and Typological Analysis of the "school-elderly care integration" Model***

The School-elderly care integration refers to that according to their own educational resource endowment, educational institutions participate into the production and delivery process of elderly care services through a organized channel with unique hybrid features in terms of organization attribute, resource foundation and service logic which differs from pure commercial elderly care operation path. Its essence lies in grafted the three functions (knowledge production, talent cultivation and social services) of educational institutions onto the real operational needs of elderly care services at the organizational level so as to make the output of educational activities directly serving the terminal links of elderly care, and elderly care service scenarios becoming practical field and source of problem for teaching and research.

Depending on the degree and form of involvement of educational institutions in elderly care services, "school-elderly care integration" has several ideal types such as in practice-teaching-oriented embedded participation (educational institutions use elderly care service scenarios as carrier for students' practical training and faculty's research; here service is subordinate to teaching goals), in service-output-oriented self-operation type (educational institutions directly establish or be entrusted with operating elderly care service entities; here service becomes an independent function); in technology-support-oriented platform empowerment type (educational institutions indirectly affect improvement of elderly care services through knowledge products and technical tools). They usually interpenetrate each other and evolve in superposition in practice but the significance of typology is to expose various forms of "school-elderly care integration", and the condition boundary of its application<sup>[4]</sup>.

### ***2.2 Bidirectional Embedding of Elderly Care Talent Cultivation and the Service System from the Perspective of Industry-Education Integration***

Fundamental Operation Mechanism of "School-Elderly Care Integration" Model is based on bidirectional embedding process between two main systems of talent cultivation and elderly care services: There is a time lag and mismatch between talent cultivation in educational institutions and

staffing needs of elderly care institutions with a gap between classroom teaching content and job practice standards lowering the efficiency of converting human capital into service effectiveness; Bidirectional embedding achieves spatiotemporal overlapping of theoretical instruction and practical training enabling students to confront and adapt themselves to professional situations when studying, shortening the capacity conversion cycle. The elderly care service system obtains professional support through injection of education resources (faculty from educational institutions are involved in optimization of service processes and control of service quality) which converts academic achievements into useful service improvement plans.

The profound significance of bidirectional embedding lies on breaking the linearity of cultivate then use: there is a symbiosis of "cultivate while serve", a virtuous cycle of immediate response and constant interaction between knowledge production at educational institutions and problem solving in elderly care services. The problems emerging from teaching activities will feedback to service links, and practical experience gained through the service process feeds back to update teaching content. Such cyclic relationship depends on supporting design such as class hour arrangement, credit recognition and workload accounting which transform the rigidity of dividing teaching and service into flexibility for interconnection so that the operating rhythm of educational institutions can coordinate with the continuous care needs of elderly care services.

### ***2.3 Spatial Reconstruction and Service Extension: Cross-Boundary Flow of Educational Institution Resources into the Elderly Care Field***

Cross-boundary flow of resources of educational institution for the elderly care field means that there exists a joint reconstruction of physical and social space; while one is focusing on knowledge transmission and academic production (educational institution), other focus on life care and health maintenance (elderly care service) – they have great difference in spatial scale, facilities configuration and service circulation route. Functional compounding and spatial sharing between teaching and practical training venue with elderly care service venue can be realized by cross-boundary flow as an implementation path: affiliated practical training bases of educational institutions open service function for community-dwelling elderly people, or set up teaching unit inside elderly care institutions for intensive resource utilization considering the parallel demands from two kinds of activities in architectural design, facility provision, and circulation route planning.<sup>[5]</sup>

In terms of social space: School-elderly care integration changes the interactive relationship and role perception of members inside educational institutions and elderly group. Teachers and students change their identity from knowledge acquirer to knowledge applier when participating in the service process, test and hone their professional skills on real situation; the elderly change from passive recipient of service to participate and provide feedback for teaching activities, their life experiences become part of teaching resources; educational institutions change from relatively closed academic community to open social service institution, expand its social function boundary. Essence of spatial reconstruction is activating the service potential of educational resources through breaking down institutional boundaries and psychological boundaries between education institutions and the elderly care field, endow elderly care services with the feature of a learning organization, make the whole care process as a carrier of generating knowledge and accumulating experience.

## **3 Adaptation Mechanisms and Optimization Paths of the "school-elderly care integration" Model within the Cross-Strait Community**

### ***3.1 Heterogeneous Characteristics of Cross-Strait Elderly Care Education Resources and Dissolution of Integration Barriers***

There exists great heterogeneity of cross-strait elderly care education resources regarding their institution architecture, curriculum system, faculty structure and teaching method: The mainland stresses the teaching of medical and nursing skills when establishing elderly care related majors; its curriculum system centers on clinical care, and the majority of the faculty are professionals in medicine or nursing. Conversely, the Taiwan region tends to focus on the concept of holistic care from the perspective of social work which covers multidimensional content such as psychological care, community building, and rights protection, with a higher ratio of social work and gerontology specialties among the faculty. Different knowledge tradition and training model will cause cognitive dissonance between both sides referring to each other, making it easy for difference in understanding

training goals and quality standards to be friction at the cooperation level.

We need a mutually recognized qualification framework and a credit transfer mechanism in order to dissolve integration barriers. Cross-Strait educational institutions have space to work on the mutual recognition of courses, the equivalent conversion of internship experience, and design joint training programs. Identify the common modules and complementary modules between the two sides' curriculum systems; use the first one for mutual recognition and the second one as the growth point for joint training. Develop a modular curriculum system that incorporates the educational genes of both sides without losing their own teaching characteristics rather than eradicating it: turn heterogeneity from an obstacle to cooperation into a resource for innovation. Respect each side's education tradition, gradually adjusting with restructuring, build up integration based upon adequate understanding and mutual trust.

### ***3.2 Construction of Standard Alignment and Quality Assurance Mechanisms in Cross-Domain Service Supply***

To run this "school-elderly care integration" model under the framework of the cross-Strait community, we should establish a system of alignment for both sides' service standards: Regarding elderly care services, both sides have established relatively complete yet incompatible standards and regulations on such as service process, care assessment, risk prevention and control, and effect evaluation; they differ in definitions, indicator systems, and judgment thresholds in their standard texts. The non-uniformity of standards hinders the transferability and comparability of cooperative projects and increases the coordination cost and operational risks in operation management. Alignment of standards is not equivalent to establishing uniform mandatory norms, instead, it means respect towards each side's institutional environment and service traditions through identifying the common core indicators with mutually accepted evaluation methods<sup>[6]</sup>.

In order to advance the quality assurance mechanism, it should be moving towards two directions: process monitoring and outcome evaluation. For the former, we need to create a quality management system involving standardization of service records, verification of key nodes and reporting of abnormal events to make the service process traceable and auditable; for the latter, we need to construct an evaluation indicator system including the maintenance of elderly health status, level of satisfaction, degree of service quality improvement based on assessment tools and data collection standards recognized by both sides. The construction of the quality assurance mechanism needs to take account for different service philosophies between the two sides, integrating the two evaluation traditions of "quality-of-life orientation" and "clinical safety orientation", establishing a unified evaluation framework, ensuring true standard alignment serving the substantive improvement of service quality instead of merely uniformity.

### ***3.3 Conditions for Sustained Operation and Directions of Model Iteration under the Logic of Symbiosis***

In order for the "school-elderly care integration" model to become continuously operating according to the framework of the cross-Strait community, there is need to find an evolution way with resilience and adaptability under the logic of symbiosis. The precondition for the sustainable operation of this model includes: shifting the driving mechanisms for educational institutions' participation in elderly care services from external drivers to internal needs to form a deep interlocking relationship rather than superficial grafting between service activities and the teaching and research missions of educational institutions; Reasonable anticipation of the balance between resource input and output which can be institutionalized to avoid doubt about its sustainability because of lack of significant short-term benefits; Constantly deepen the knowledge-sharing mechanism in cross-strait cooperation from experience exchange to joint research and development and collaborative innovation. To fulfill these conditions, we should have a clear consensus among the participating educational institutions on both sides at the beginning stage of cooperation concerning their respective goal expectations, upper limit of resource input, and method of outcome distribution.

For model iteration in direction: we must expand vertically (from basic life care to higher level services such as rehabilitation assistance, cognitive training and hospice care); horizontally (one educational institution island style exploration to many-to-many collaboration among educational institution cluster with elderly care service network), that matches the gradient change of the health of the elderly population; the matching relationship between educational resource and elderly care service

need upgrade from point-to-point connection to networked allocation. For every iteration, we should make diagnostic evaluation based upon the accumulated operational data within the previous stage, find out the bottlenecks constraining the effectiveness of this model, adjust the operation strategy or organization design properly so that the model can constantly be approaching to a better operating state.

## Conclusion

From the dilemma of transformation of elderly care service supply, this study analyses theoretically, structurally and adaptively the "school-elderly care integration" model according to the perspective of the cross-Strait community. Holding that the imbalance between supply and demand in elderly care services results from the tension between the closed logic of the supply system and the heterogeneity on the demand side, cross-domain resource integration is an approach to break out of the dilemma, and the composite function of educational resources has unique value there. As a hybrid organization, "school-elderly care integration", can transform educational resources into the elderly care field through bidirectional embedding of industry and education and the compounding of spatial functions. Superimposed evolution of these three ideal types reveals the dynamic process of the model evolving from exploration to maturity. Structural difference of cross-Strait educational resources becomes not just barrier but potential for innovation for integration. Establishing adaptation mechanisms such as standard alignment, quality assurance and knowledge sharing are prerequisites for the sustainable operation of the model. Development directions: extending the service chain from basic care to higher level needs (e.g., rehabilitation assistance and hospice care); expanding forms of cooperation from individual exploration to many-to-many network collaboration; advancing cross-Strait interaction from experience exchange to joint research and development and jointly develop service standards until approaching a more mature operating state which is being continuously adjusted.

## Fund Projects

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