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## Organizational Capability and Evolution in China's Independent Colleges

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October, 2019



BUSINESS  
SCHOOL

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## Abstract

Independent colleges, as transitional form of higher education and spin-off organizations in the Chinese context, are inseparable from the dependence on the resources of parent organizations. Meanwhile, independent colleges' dual role comes from considering not only the public good nature of education but also the for-profit of investment returns. In view of the dual role feature and heavy dependence on external resources, this study endeavors to define the organizational capability of independent colleges and how it is formed and developed.

From the perspective of the paradox lens and taken Xinhua College as research object, this study analyzes the capability-building process of spin-off organizations and their innovative pattern. The findings are: (1) The process of organizational capability building of independent colleges can be revealed through the dynamic interactive pattern of internal replication and internal innovation. (2) The evolutionary path of the independent colleges' organizational capability is a cyclic construction process with three stages, namely, "from external to internal", "capability retention" and "from internal to external". (3) Affected by environmental pressures and opportunities, independent colleges explore balances between public welfare and commercial behaviors. Meanwhile, under the joint promotion of environmental cognition and paradox balance system, independent colleges build the internal innovation capability and complete the cyclical construction of organizational capabilities.

The main contributions are: (1) It explores the organizational capabilities of independent colleges in China and deepens the research on organizational capabilities of independent colleges; (2) After exploring the evolutionary process of organizational capabilities of independent colleges, this study concludes propositions on the evolution of organizational capability process; (3) It explores the interaction pattern between the paradox balance system and the organization's dual formation role of organizational capabilities. (4) It reveals the innovation pattern which promotes the innovative motivation of spin-off organizations.

**Keywords:** Independent colleges; Organizational capability; Resource dependence; Paradox theory

**JEL:** M1; L2



## Resumo

Os colégios independentes, enquanto formas transicionais da educação do terceiro ciclo e organizações geradas a partir de outras (spin-offs), estão dependentes dos recursos das organizações que os geraram. O papel duplo dos colégios independentes advém do facto destas instituições prestarem um serviço público (a educação) e simultaneamente estarem orientadas para o lucro. Tendo em consideração este papel duplo e a forte dependência em recursos externos, este estudo pretende analisar as capacidades organizacionais dos colégios independentes e como estas são criadas e desenvolvidas. Baseando-nos na teoria do paradoxo e tomando o Xinhua College da Universidade de Sun Yat-sen como objeto de pesquisa, esta tese analisa o processo de construção de capacidades de organizações geradas a partir de outras (spin-offs) e os seus padrões inovadores. As conclusões revelam o seguinte: (1) o processo de construção de capacidades organizacionais dos colégios independentes pode ser analisado através da interação entre a replicação interna e a inovação interna. (2) o caminho evolucionário das capacidades organizacionais dos colégios independentes é um processo de construção cíclica com três estágios, nomeadamente, “do exterior para o interior”, “retenção da capacidade” e do “interior para o exterior”. (3) sob a influência de pressões e oportunidades da envolvente, os colégios independentes exploram os equilíbrios entre o bem estar público e os comportamentos comerciais.

As contribuições principais desta tese são as seguintes: (1) explora e aprofunda as capacidades organizacionais dos colégios independentes Chineses; (2) propõe e testa proposições sobre a evolução das capacidades organizacionais; (3) explora o padrão de interação entre o sistema de equilíbrio e o papel duplo das capacidades organizacionais; (4) descreve o padrão da inovação que promove a motivação inovadora das organizações geradas a partir de outras (spin-offs).

**Palavras-chave:** Colégios independentes; Capacidades organizacionais; Dependência dos recursos; Teoria do paradoxo

**JEL:** M1; L2



## 摘要

独立学院作为中国情景下一种过渡形态的大学，衍生组织的特征决定了其对母体大学的依赖性。独立学院教育的公益性与投资回报的商业性的双元角色决定了其双元性。具有双元角色的衍生组织在对外部资源严重依赖的情况下，其组织能力是什么，以及如何形成与发展的？

本文基于悖论理论的视角，以中山大学新华学院发展历程为研究对象，探讨了具有双元角色的衍生组织的能力构建过程与内在自主性创新机理。研究发现：（1）独立学院组织能力的构建过程可以通过内部复制能力与内部创新能力的变化过程予以揭示。（2）独立学院组织能力的演化路径是一个能力“由外至内” - “能力留存” - “由内至外”的循环构建过程。（3）独立学院通过采用公益性与商业性的平衡行为应对环境压力与机会，在环境认知与悖论平衡系统的共同作用下激发与积累组织内部创新能力，驱动着组织能力的循环构建。

本文的主要贡献：（1）探索了中国情景下衍生组织的组织能力构建过程，丰富了衍生组织与组织能力的相关研究；（2）通过对独立学院组织能力演变过程的深入剖析，得到组织能力过程演化的命题；（3）探讨了组织因双元角色所形成的悖论平衡系统与组织能力发展的相互作用机理；（4）揭示了激活衍生组织内在自主性的创新机理。

**关键词：**独立学院；组织能力；资源依赖；悖论理论

**JEL:** M1; L2



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## **Chapter 1: Introduction**

### **1.1 Research background**

#### **1.1.1 Historical background**

Independent Colleges are special teaching and education organizations in China's higher education system. Its predecessors were private secondary colleges in some public institutions of higher education from 1993 – 1995. The establishment of independent colleges materialized during the process of massive expansion of enrollment in public universities in 1999 (Chen & Li, 2011). In May 2003, the Ministry of Education issued document No.8: On standardizing and strengthening the management of independent college run in new patterns and mode by institutions of higher education, thereby proposing a new concept of 'independent colleges' specifying its nature and guiding principles. Independent Colleges are formally defined as: "A new type of higher education institution established by a public university with its administration independent of the public university. This higher education institution also achieves independence from the public university by using its own human and financial resources through the contribution of private investors".

The development of Independent Colleges in China has undergone a period of rapid development. In 2004, there was an upsurge in the establishment of independent colleges in colleges and universities. According to the National list of institutions of higher education by the Ministry of Education of China in 2014, there were about 1187 private undergraduate, higher vocational and independent colleges in China out of which 283 were independent colleges. After 2008, some independent colleges opted for full independence from parent institutions into private colleges. For instance, the Wuhan Media College of Huazhong Normal University became Wuhan Media College while Sunshine College of Fuzhou University became the Sunshine College. In February 2009, the General office of the Ministry of Education issued the Notice on Compiling the Five-Year Transition Plan of Provincial Independent Colleges, which clearly stipulated that independent colleges could be converted to private colleges. In 2011, The opinions of Ministry of Education on the establishment of general colleges and universities during the 'Twelfth Five-Year Plan period formulated preferential policies for the transition time of independent colleges. "Before 2014, the

approval of the transition of independent colleges and universities could be carried out annually in accordance to the establishment requirements of higher education institutions”.

From the perspective of unified norms, the number and names of independent colleges converted to private colleges began to be included in official statistics and management. The number of independent colleges to private colleges, which were included in official statistics from 2012 to 2016 were as follows: 6 in 2012, 10 in 2013, 8 in 2014, 8 in 2015, and 9 in 2016. It is rather obvious from the relevant policy guidance issued by the state that the competent government departments actively support the conversion of qualified independent colleges into independent universities. From 2008 to 2015, the Chinese Ministry of Education approved 52 independent colleges to be converted into private undergraduate colleges. After the conversion, the independent colleges gradually realized the true independence of running schools and obtained better development conditions. The gradual transition from independent colleges to private institutions as they began to seek their own capabilities to independently build and respond to environmental changes reflects the transformation process of independent colleges.

The transformation and capability development process of independent colleges has gone through three major periods. 1) The “dependency” period of the school run by the parent school from 1993 to 2003. During this period, most of the independent colleges were “secondary colleges” under the parent school, which were strongly controlled by the parent schools in terms of administration and finance. 2) Enhancing the “independence period” of autonomy in running schools from 2003 to 2008. At this stage, the independent colleges had achieved a milestone development, mainly reflected in the concept of “independent colleges” put forward for the first time the Several Opinions, formally naming them as “independent colleges”. Moreover, under the guidance of the new pattern and the new model, independent colleges have gained larger avenues for development and have realized the expansion and sharing of higher education resources within a short period of time (Fan, Zhong, & Zhao, 2011). 3) Normatively set up as the “transitional period” of private colleges and universities from 2008 to now. In February 2008, the Ministry of Education promulgated the Measures for the establishment and management of independent colleges (referred to as the Ministry of Education Order No. 26, officially implemented on April 1, 2008). The development of independent colleges has entered into a standard school process. The "Decree No. 26" defines the nature of the independent colleges from two aspects: Firstly, it defines the "organizers" of the independent colleges as social institutions or individuals other than universities and state

institutions whose “sources of funds” are non-state financial funds. Secondly, the functions of independent colleges should be defined as “institutions of higher education that implement undergraduate education” (Wang, 2012). After three stages of development, the independent colleges from the beginning of a serious attachment to parent schools has gradually gained independence and more and more emphasis has been placed on the organization’s own ability to develop.

With the reform and maturity in China's education system, independent colleges have gradually gained competitive advantage. At the beginning of its establishment, independent colleges were a supplementary form of higher education. Most of them were limited to the third batch of undergraduate enrollment. The main purpose of enrollment was to develop students of applied majors urgently needed by the society. In recent years, small-scale pilot enrollment projects have been implemented in various provinces and cities. In September 2014, the State Council's Opinions on the implementation of deepening the reform of the enrollment system for examinations proposed that conditions should be created to gradually abolish the batches of college enrollment. From 2015 onwards, the pilot for the enrollment of batches was to be carried out in qualified provinces. After the general direction of the policy was clear, the reform combining the second and the third enrollment batches has accelerated in each province. By 2016, a total of 15 provinces including Hebei and Guangdong had merged three batches of undergraduate courses, and the original second batch and the third batch were merged into the same batch for enrollment. This means that in the higher education system, independent colleges with limited enrollment of students originally get more equity, which will undoubtedly bring new development opportunities for independent colleges.

However, independent colleges face many challenges under a large number of external opportunities. China's population growth is slowing down, and the annual enrollment will inevitably decline gradually. The independent colleges need to commit more efforts and finances in attracting teachers as compared to ordinary colleges and universities. The integration of university resources has led to the gradual withdrawal or even complete exit of some independent colleges from the higher education competition. In terms of its inherent attributes, independent colleges are regarded as a transitional form in the Chinese context, with dual roles and burdens of non-profit and for-profit. Independent colleges do not enjoy state financial subsidies; they mainly rely on the input of enterprises or third-party forces in society. They are essentially commercial investment entities and have natural profit-making

behavior. However, unlike the social recognition of Western private universities, independent colleges must embody the public good nature of education in order to gain social recognition.

The question of where the future development path in China's independent colleges in the mist of “public good” and “for-profit” nature lies arises. For independent colleges to gain competitive advantage and long-term development, their organizational capabilities and their evolution are crucial. It is therefore urgent to explore the internal laws of the independent colleges' organizational ability and its evolution in the Chinese context. It is particularly important to explore the process of innovation and autonomy of the internal organizational capabilities of independent colleges in order to promote its development.

### **1.1.2 Theoretical background**

As a spin-off organization, the independent colleges was established by its parent public university (Li et al., 2018). During the establishment period, the spin-off organization's growth depends on the resources of the parent organization. However, the derivative can grow to be independent. With advanced development, it realizes its separation from the parent organization successfully (Du, 2011). is twofold; it not only relies on the resources provided by the parent organization but also seeks the resources from outside market (Wang & Du, 2016). Wry, Cobb, and Aldrich (2013) pointed out that the current research on resource dependence lacks attention to the organization and the environment, future research should pay more attention to the complexity of the environment. Under the perspective of resource dependence, organizations in various environments usually have different interests and goals. Resource dependence theory provides a way to understand this complexity. Thus, the introduction of resource dependence perspective helps to understand the complex environment in which an independent college is located. Under the context of dynamic resource dependence and with focus placed on independent college's strategies toward resource dependence, this thesis is able to reveal how organization changes its strategies over time and what kind of results brought by these strategies (Hillman, Withers, & Collins, 2009). Independent colleges have the inherent resource dependence characteristic, which drives it to establish broad resource dependence with other organizations. The independent colleges have nature of being public good and for-profit and it carries the survival pressure and development opportunities at the same time.

The independent colleges born out of the original parent public universities have established extensive resource dependence with the outside world. They are both non-profit

and commercial, and simultaneously carry their survival pressure and development opportunities. As a newly emerging form of organization, the uniqueness of its ability to develop has attracted the attention of many scholars. At present, most of the research on the organizational capability of independent colleges focuses on discipline construction (Zhu, 2006; Liu, 2007; Wang et al., 2016), future development direction (Pan & Wu, 2004; Feng, 2006; Xu, 2006; Yang, 2010), student teaching (Zhou et al., 2004; Si et al., 2005; Dai & You, 2006) and other aspects.

In the discipline construction of independent colleges, scholars from the perspective of independent colleges believe that the construction of distinctive disciplines and professional systems is conducive to the development of independent colleges. Liu (2007) pointed out that with the development of independent colleges, the construction of its disciplines must “retain roots from the soil” and establish a discipline system with its own characteristics. On this basis, scholars have made recommendations on the discipline construction of independent colleges from their own specialties and courses. Based on the relatively poor English foundation and the uneven English proficiency of students in independent college students, Zhu (2006) carried out a one-year reform in the teaching philosophy, curriculum and teaching content for students in case schools and realized a transformation of classroom teaching from “teacher-centered” to “student-centered, teacher-led”. In view of the features of independent colleges, combined with the characteristics of an organic chemistry curriculum, Wang et al. (2016) explored the classroom teaching reform from four aspects: meticulously designing new courses, following the rules, guiding students to summarize, and diversifying teaching methods.

In terms of the future direction of independent colleges, scholars generally believe that independent colleges should gradually transition from relative independence to absolute independence. Pan et al. (2004) believe that independent colleges should make full use of the advantages they have gained and gradually incubate and create their own brands with the help of parent brands, and eventually develop into first class private universities of high quality. Feng (2006) explored the ways and paths for independent colleges to achieve “independence”. In his opinion, only when the withdrawal pattern of public universities became mature, could independent colleges truly run independently. Yang (2010) summarized the development model of independent colleges into four types: private-run, state-owned, public and mixed owned. He believed that the aforementioned development models of independent colleges should be strongly supported.

In terms of student teaching in independent colleges, scholars have proposed different teaching models from different perspectives. Dai and You (2006) divided the innovation independent college talent teaching model into four aspects: innovation of teaching objectives, innovation of teaching specifications, innovation of teaching content, and innovation of teaching process. Zhou et al. (2004) proposed a student education management model of “two-way interaction to promote learning, three-in-one strong education, multiple integration and strict management”. Si et al. (2005) took the high-quality applied innovative talents training mode of Zhejiang University City College as a case study, and carried out an empirical analysis of the cultivation models of high-quality applied innovative talents from the three structural elements: cultivation objectives, cultivation specifications and cultivation process. It is pointed out that the independent colleges should adopt an application-oriented talent-cultivation model that closely integrates the independent college's mode of operation, meet the student group's ability and knowledge characteristics, combined with special characteristics of different professions and disciplines.

Research on emerging organizations such as independent colleges is becoming more and more active. Previous researchers summarize the internal laws and future development directions of their development from different perspectives (Pan & Wu, 2004; Feng, 2006; Xu, 2006; Yang, 2010; Li et al., 2018). Though different scholars have different research starting points and perspectives, they have one thing in common. As an emerging organizational form, independent colleges have their own inherent and unique rules and their organizational capability development presents new evolutionary characteristics (Li et al., 2018). These changes will continue to bring new phenomena and inspiration to organizational capability research.

The ability of an organization stems primarily from the organizing principles (Zander & Kogut, 1995), the ability of an organization to coordinate a series of activities with organizational resources in order to achieve specific results (Helfat & Peteraf, 2003; Dixon, Meyer, & Day, 2014). This has a direct impact on the strategic decision-making and innovation of the enterprise (Wingwon, 2012). Organizational capabilities are usually defined at three levels (Collis, 1994): The first level is the activeness of basic capabilities, such as a zero-based operational capability, which explains "how we get the existing state of existence". This is a “substantial” capability (Zahra, Sapienza, & Davidsson, 2006) with the aim of efficiently utilizing existing resources and promoting efficiency. The second level is the activity of organizational dynamic development capabilities, such as the dynamic capabilities



used to gain competitive advantage (Barney, 1991; Teece, Pisano, & Shuen, 1997). This refers to the ability of an organization to purposefully create, expand or modify its basic resources (Helfat et al., 2009; Helfat & Peteraf, 2015) to adapt to environmental changes (Eisenhardt & Martin, 2000). The third level is a metaphysical and abstract strategic vision that enables enterprises to discover the intrinsic value of resources or to establish innovative competitive advantage strategies before their competitors.

The three levels of organizational capabilities distinguished by the above scholars are all related to the ability of enterprises to perform activities more effectively than competitors. It is however difficult to clearly distinguish between them in a strict sense. Some scholars choose two of them as the classification criteria for research. For instance, organizational capabilities are divided into operational capabilities and dynamic capabilities (Sharma & Vredenburg, 1998; Winter, 2003). Some scholars have also defined organizational capabilities according to the unique needs of research. For example, Collis(1994) defines organizational capabilities as a complex social convention. An obvious trend is that research on organizational capabilities, is increasingly extending and branching to specific organizational capabilities, such as dynamic capabilities and absorptive capabilities. The exploration of organizational capabilities and their dynamic development need to be reanalyzed in different situations. Independent colleges, the research focus of this study, carries a specific organizational capability scenario. It is a higher education institution and organization that transcends public good and for-profit. It has its unique internal characteristics and external environment. To explore the intertwined capability structure and capability evolution of these two attributes of independent colleges will inevitably bring to light new problems in organizational capability research, which cannot be easily curbed if left at the preliminary level of theoretical analysis. Although there are some thoughts on the dual attributes of independent colleges (Pan, 2010), existing research has not delved deeper into how public good and for-profit aid in the development and change of independent colleges and how they affect organizational capability building and evolution.

Furthermore, if we define the nature of integration of the dual roles of public good and for-profit of independent colleges as “the two conflicting but related contradictions that persists over time” (Smith & Lewis, 2011), then the theoretical perspective of this paradox can provide useful insights. The theoretical perspective aims at the persistent contradictions and conflicts in organizational management, such as competition and cooperation, efficiency and flexibility, individual and collective, centralization and decentralization. This emerging

theoretical perspective provides powerful support for explaining organizational and environmental dynamics, sustainable competitive performance and organizational capabilities evolution (Smith & Lewis, 2011).

From the perspective of paradox lens, we study the evolution process of the organizational capability of independent colleges, mainly focusing on three aspects. Firstly, the non-profit and for-profit of independent colleges are conflicting. Some scholars are of the view that public good must take precedence over for-profit (Pan, 2009) while others think that profit-making is a priority for independent colleges (Wang & Yang, 2011). Secondly, there is an interrelated and dynamic interaction between public good and for-profit. Pan (2010) believes that public good and for-profit can be achieved simultaneously. Finally, public good and for-profit exist in the long-term and become intrinsic to the nature of independent colleges over time. These three aspects are completely consistent with the perspective of paradox theory. It is therefore appropriate to choose this theoretical perspective.

It is important to further probe into the reason why this thesis is based on paradox lens (Fairhurst et al., 2016; Schad et al., 2016) rather than any other theories such as Conflict, dialectical. First of all, Conflict theory compares two completely contradictory choices, but public good and for-profit, the two attributes of independent colleges, coexist in their development (Cuganesan, 2017). At the same time, for-profit and public good cannot be categorized into Dialectic theory. Usually, new element can be created in Dialectics through integration of two contradictory objectives which disappear after the creation of the new element (Hargrave & Van de Ven, 2017). Although public good and for-profit in independent colleges have dynamics, these two attributes always coexist in mutual advancement. Therefore, choosing the Paradox theory, on one hand, enables the author to analyze the motivations that influence the development of organizational capabilities. On the other hand, it provides the basis to empirical analysis of the coexistence and mutual development of the above two contradictory elements (Ouyang et al., 2016; Ding & Wu, 2017) Furthermore, the theory also contributes to capture the dynamic pattern of complex evolution process of capabilities.

With theoretical basis of organizational capability and qualitative research method as well as scientific research process, this research demonstrates the evolution of organizational capability of independent colleges in China after the redefinition of organizational capability. Additionally, this research endeavors to analyze the new patterns and theories in the development of organizational capabilities. This study first of all describes the constitution of

organizational capability in independent colleges as a new form of educational institutions, and analyzes internal structure of its organizational capability. Then, by comprehensive description of the evolution process of organizational capabilities, it also probes into the capability innovation process of independent colleges and the independently innovation pattern of spin-off organization

## **1.2 Research question**

Based on the current theoretical research trend of organizational capability, this thesis analyzes the organizational capability building and its evolution in independent colleges with dual roles. Sun Yat-sen University Xinhua College (hereinafter referred to as Xinhua College), a representative of emerging independent colleges in the context of China, is chosen as the research object. The research focuses on the following questions.

### **Question 1: What is the organizational capacity of an independent college?**

Although independent colleges represent an important form of higher educational institution in China, scholars seldom research their organizational capability characteristics. Using qualitative research method in collecting, processing and analyzing data from in-depth interviews and questionnaires on various development stages of Xinhua College, this thesis deconstructs the organizational capability of independent colleges from a global perspective, and divides the internal organizational capability into internal replication capability and internal innovation ability. Furthermore, the construction of organizational capability in independent colleges is divided into three longitudinal stages, which lay the foundation of analyzing organizational capabilities evolution and activation process of internal innovation.

### **Question 2: How does the organizational capability of independent colleges evolve under external resource dependence?**

The independent colleges is rooted in traditional public higher education institutions. Since it depends extensively on external resources and is confronted with massive pressures and opportunities from external environment, its organizational capability development undergoes the process of “Absorption-Replication-Innovation” (Wang, 2017). Through qualitative research method, this study therefore constructs two kinds of evolutionary process and growth path of the organizational capability in independent colleges: “internal-to-external” and “external-to-internal”.

### **Question 3: How is the internal innovation capability of independent colleges**

### **activated under context of Paradox and Conflict?**

The organizational capability construction of independent colleges is affected not only by the inherent conflict of public good and for-profit but also by external pressures and development opportunities. Therefore, from the theory of Paradox, this thesis explores the construction and evolution of innovation capability in independent colleges driven by various contradictory elements. Using qualitative research method, the exploration of independent ability formation of Xinhua College was conducted under the path of “Cognition (Environmental Cognition) – Behavior (Paradox Balance System) – Results (Independent Capability)”. Confronted with both external environment pressures and opportunities, Xinhua College actively enhances its innovation vitality and internal organization capability through the coordination of non-profit and commercializes behaviors, gradually reduces the dependence on the parent organization and the market, and effectively deals with the external pressures and opportunities, thus to achieve its independent development.

### **1.3 Research significance**

The research is conducted based on the 3 questions " What is the organizational capacity of an independent college? How the organizational capability of independent colleges evolved? And how is the internal innovation capability of independent colleges activated?"

The significance of this research can be explained under the background of some popular research issues on organizational capability. First of all, the current research on independent colleges in China has mostly remained in discipline construction, future development direction and student cultivation. This thesis goes far beyond these aspects to analyze the deconstruction of organizational capability of independent colleges through the theoretical basis and metaphysical principles of organizational capability theory, while taking into account the "public good" and "for-profit" nature of such an organization.

Secondly, our deconstruction of organizational capability is under the principle of keeping organizational integrity and activity, which is different from the static deconstruction of organizational capabilities. The proposition of organizational capability evolution has thus been achieved. According to our opinion, the organizational capability of an independent college is an integrated whole, therefore its deconstruction should also be demonstrated from comprehensive and dynamic perspective. Under such perspective, external and internal capabilities, internal replication capabilities and internal innovation capabilities of

independent colleges are correlated and interdependent in their sustainable development and evolution. At the same time, the dynamic development of these organizational capabilities is carried out in connection with other resource-dependent institutions such as parent universities, other resource-seeking objectives and external demand institutions. The independent college undertakes pressures and catches opportunities in connection with other resource-dependent institutions to realize the evolution of capability

Independent colleges, as derivative organization, needs to deal with conflicts in its creation and future development. Thus the most important question faced by independent college is how to react to these conflicts. The Paradox lens introduced by this study gives strong theoretical inspiration toward our research questions. The independent college is an organization of "public good" and "for-profit" in its nature. The conflict between these two characters is inherent and continuous. This perspective of Paradox helps us to re-examine and deconstruct the evolution of the organizational capability of independent colleges. The goal of organization should be undertaking the paradox cyclical process rather than eliminate paradox or conflict. This strategy will promote the overall vitality of organizational capability and helps organizations achieve real independence. Therefore, the organizational capability evolution model under the perspective of Paradox of independent college has outstanding theoretical inspiration.

The last focus of this study is how to promote the innovation in organizational capability of a derivative organization? It is impossible to explain the innovative activity of organizational capability very well under the common perspective of "component allocation". Simply considering the redundancy or hierarchy changes in organizational capabilities is also impossible to get comprehensive understanding of such innovative "activity" of organizational capabilities. As representative derived organizations with nature of "public good" and "for-profit", independent college and the construction of its organizational innovative capability as well as its evolution provide us an opportunity to fully understand the "activity" of organizational capabilities. Previous research has proved that the "activity" of organizational capability arises from independent operation and spiral development in organizations. When such operation and development encounters external pressure or opportunity, new capabilities will be created by the innovative activity in independent operation of organizations. This is a process of "innovation" and it also shows an innovation mechanism driven by external pressure and opportunity contributing to the sustainable development of organizations. This exploration of innovative "activity" of internal organizational capability in independent

college is an interesting presentation and provides enlightenment of future theoretical research in organizational capability.

This thesis brings new ideas to the theoretical study of organizational capability and provides useful practical inspiration for the sustainable development of independent colleges in China. Its practical significance are as follows: (1) provide orientations for the managers in independent colleges to summarize and understand its development history; (2) offer references for the future strategy formulation, implementation and construction of independent colleges; (3) give advice for the future development of derived organizations with conflicted attribute of "Public good" and "for-profit"

## **1.4 Research method**

The research questions of this thesis are “What is the organizational capacity of an independent college? How the organizational capability of independent colleges evolved? And how is the internal innovation capability of independent colleges activated?” The dominant focus of this thesis is the "innovation" process of both independent college itself and the creative evolutionary of its organizational capability. First of all, the author deconstructs the organizational capability of independent college in perspective of dynamic organization. Secondly, the author investigates the dynamic cycle of organizational capability construction in dependent college under the external dependency. Finally, this thesis represents the innovative construction of organizational capability of independent college under perspective of Paradox. All the above research focuses belong to the category of phenomena analysis and case study, therefore, this thesis is essentially a case study of specific phenomena and longitudinal qualitative research method is used to explore our research problems.

Yin (2002) and Pratt (2009) pointed out that case studies are suitable for answering research questions of “how” and “why” (Yin Robert, 1994; Pratt, 2009). Since this thesis endeavors to investigate the construction of organizational capability of independent colleges, the case study is employed as the research method (Chen, Xu, & Fan, 2008). This organizational capability construction process of independent colleges provides references for the development of other derivative organizations with the feature of "public good" and "for-profit". Finally, this study explores the complex and dynamic mechanism behind the construction of organizational capability (Eisenhardt, 1989, 1991) while revealing related patterns and principles (Eisenhardt & Graebner, 2007). Vertical case studies are the

appropriate research method for both data collection and phenomenon analysis.

Based on the following reasons and the representative principle of case study (Patton, 1987), Sun Yat-sen University Xinhua College ("Xinhua College") is selected as the research object. Xinhua College was established in 2005 and has 14 years of history. Its establishment and development history are in general similar to other independent institutions, which make it as a typical case and a good object of longitudinal qualitative study. In addition, Xinhua College has basically completed the construction of its own organizational capability and the construction process fits in the research problem of this thesis; Xinhua College ranked 6th provincially and 33rd nationally according to a rank of comprehensive strength of the independent academies in 2018. Therefore, as a top-level independent college, the research conclusion of this typical college offers development references to other independent colleges.

The data used in this thesis include primary data and secondary data. The primary data is collected by field research, interview and questionnaire. The interviewees include teachers, students as well as parents. Secondary data, such as Xinhua College Yearbook, annual work plan, annual summary, project plan, and enrollment plan, comes from some relevant websites and the help of staff in Xinhua College. Based on analysis method for qualitative data from previous case study (Eisenhardt, 1989; Gersick, 1994). The data analysis and research process include three interdependent and iterative steps: data processing, descriptive statistical analysis and conclusion verification. Data processing Miles and Huberman (1994) is a process of selecting, simplifying, extracting, and data transformation. The massive and abundant original data of Xinhua College makes data analysis difficult to conduct. Therefore, it is necessary to carry out preliminary data classification, material coding as well as data selection. Descriptive statistical analysis comes after data selection and comparing data with code. When there is still data redundancy, data selection will be implemented again. Some preliminary conclusions can be drawn from descriptive statistical analysis. The final stage is conclusion verification, testing the logic and integrity of the conclusion based on the existing theory. If the data is found to be incomplete in this stage, there is the need for supplementary material until a reasonable and innovative conclusion is reached.

## **1.5 Research framework**

This thesis includes seven chapters.

Chapter 1: Introduction. On the basis of clarifying research and theoretical background,

this research is conducted based on the 3 questions " What is the organizational capacity of an independent college? How the organizational capability of independent colleges evolved? And how is the internal innovation capability of independent colleges activated?"

Chapter 2: Literature Review. The literature review consists of resource dependency theory, organizational dynamic capability theory and Paradox theory.

Chapter 3: Research Design. This thesis employed longitudinal qualitative research methods. In this section, the case selection basis, the background of selected case, the data collection method and its analysis process are introduced.

Chapter 4: The construction of organizational capability of independent colleges. The organizational capabilities of independent colleges are divided into external capabilities, internal replication capabilities, and internal innovation capabilities in this section. The author also further displays these capabilities in stages.

Chapter 5: The evolutionary process of organizational capability of independent colleges under theory of resource dependence. As a derived organization from its parent institution, independent college deals with environmental pressures and release opportunities continually in its dependency of external resources, therefore, this section analyzes the construction process ("external-internal", "capability intention" and "internal-external") of organizational capabilities in stages.

Chapter 6: The evolutionary process of organizational capability of independent based on Paradox equilibrium. As an "intermediate organization" with feature of "public good" and "for-profit", the evolutionary process and the evolutionary pattern of independent colleges are explained in this section with a longitudinal and phased method. In particular, the innovation of this research is the revealing of innovation process as well as the "activity release" in organizational capability development of the independent college.

Chapter 7: Conclusion and Forecast. This section first clarifies the theoretical and practical significance of this research, then summarizes the conclusion and innovation and provides reference as well as forecast for future research. Figure 1-1 shows the research framework and technical route.



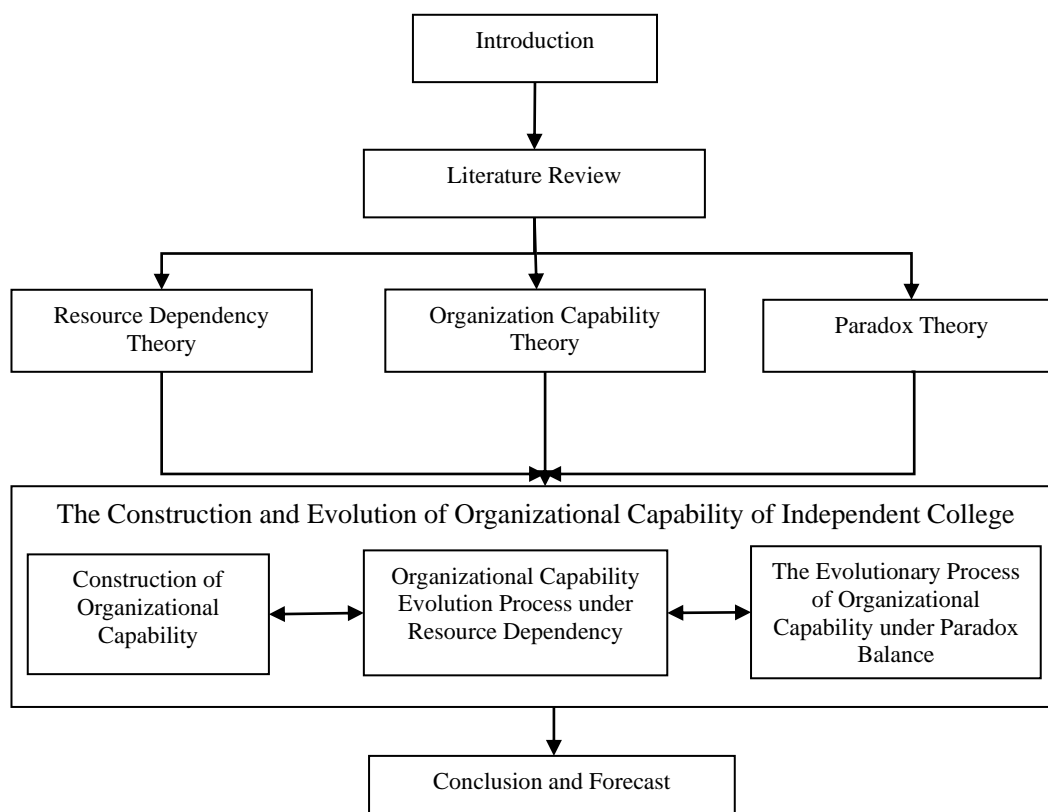


Figure 1-1 Research Frame and Technical Route



## **Chapter 2: Literature Review**

This research mainly explores the construction process of independent colleges with dual roles in the context of resource dependence. It tries to answer 3 questions, “What is the organizational capacity of an independent college? How the organizational capability of independent colleges evolved? And how is the internal innovation capability of independent colleges activated?” By so doing, this study provides ideas for the development and construction of independent colleges. It is therefore necessary to systematically review the existing research on resource dependence, organizational ability and duality of independent colleges. This is mainly based on two considerations: (1) As a spin-off organization, Independent colleges rely on the support given by the mother school and also meet the needs the social demand for talents and the demand for profit in the market. These two kinds of dependence are mutually coordinated and changing. Therefore, exploring the process of capability development of independent colleges in the context of this dual-dependence on resources can uncover the change and formation process of independent colleges' organizational capabilities from a more comprehensive and in-depth manner. (2) As a dual-role organization, the development process of an independent college must always face the developmental orientation of public good and for-profit, which are both conflicting and interrelated. In recent years, the paradox perspective has gained new recognition in explaining how organizations understand and respond to conflicts. The understanding and response to conflicts from the perspective of public opinion is conducive to both short-term performance and long-term sustainable development of the organization. This chapter will summarize the relevant research from three parts: the independent college's dual dependence on resources, the ability of independent colleges and the paradox perspective of independent colleges.

### **2.1 Resource dependence theory**

Resource dependence theory is an important theoretical genre for studying organizational change, revealing the dependence between the organization and the environment. This section reviews the theory of resource dependent, the characteristics of resource dependent of spin-off organizations and the related literature on the characteristics

of resource dependence. It summarizes and clarifies the background of resource dependence of independent colleges' capability development, which lays a foundation for future research on the co-evolution of organizational capability development and environment.

### **2.1.1 Resource dependence theory**

In the widely cited books of social sciences, the external control of organizations has always been the focus of organizational research scholars. This study introduces resource dependence theory to describe the context and external control of the organization. From the perspective of resource dependence theory (RDT), Pfeffer and Salancik (1978) explore how constraints outside the organization affect the organization and provide insights to design and management organizations to mitigate these constraints. The resource dependence perspective holds that all organizations rely on the environment to survive, and because of this dependence, external constraints and organizational behavior control are made possible. Organizations can change the environment through political means, and they can control and absorb uncertainty through inter-organizational relationships. Later, Hillman, Withers, and Collins (2009) reviewed related research on resource dependence, arguing that resource dependence theory is used to explain how organizations reduce environmental interdependence and uncertainty. Based on research by (Pfeffer & Salancik, 1978), they expanded five strategies to reduce environmental dependence: mergers/vertical integration, relationships between joint ventures and other organizations, boards of directors, political action, and administration. Drees and Heugens (2013) integrated RDT tests through meta-analysis and confirmed their main predictions: the organization responds to resources dependence by forming inter-organizational arrangements such as interlocks, alliances, joint ventures, in-sourcing arrangements, and mergers and acquisitions, while, these actions in turn make the organization more autonomous and legitimate. They expanded the RDT theory in three aspects. Firstly, they "unraveled" the theory by proving that the pattern of the relationship between the formation of organizational arrangements and organizational autonomy and legitimacy varies in different arrangements. Secondly, the study finds that autonomy positively mediates the relationship between arrangement formation and performance, while legitimacy does not. This suggests that RDT as a motivation can explain the social acceptance of organizational behavior, but not economic performance. Thirdly, it assesses whether the competition law is a boundary condition specified by the RDT.

From the perspective of resource dependence, organizations are social organizations. The three main dimensions of resource dependence are the discretion, importance and selectivity of resources. Enterprises with competitive dependence (i.e. production in the same industry) or symbiotic dependence (i.e. production in industries that provide resources for each other's production) unite to eliminate uncertainties associated with these dependencies (Pfeffer & Salancik, 1978). Pfeffer and Salancik (1978) holds that the resource-dependent perspective interprets organizational behavior through organizational social context. Firstly, the organization is a social organization and a basic unit for understanding inter-firm relations and society. Secondly, the organization is not entirely autonomous, but constrained by interdependent networks with other organizations. Thirdly, the interdependence of organizations, the uncertainty of the organization leads to the uncertainty of organizational survival and continued success; although the actions of the organization cannot guarantee complete success, they can generate new dependence models by managing external interdependent actions. Fourthly, although the actions of organizations cannot guarantee complete success, they can produce new patterns of dependence through the management of external interdependent actions. Finally, the inter-organizational dependence patterns generate inter-organizational and intra-organizational power, and rights have an impact on behavior.

The resource dependence characteristics of an organization can affect its performance. Provan (1982) analyzed the links between 46 human resource service organizations and their local United Way, and found that links with other organizations could affect the autonomy of organizational decision-making. Formal relationships with resource providers are common in human services institutions as a means of reducing uncertainty. Because organizations need to consider the needs and objectives of other organizations, their decision-making autonomy will be reduced. Newbert and Tornikoski (2013) explored the impact of embedded relationships on entrepreneurs seeking low-cost resources in the context of new organizations. The results show that the increase of dependence on external resources will lead to an increase in the cost of access to external resources. Long and Fu (2011) conducted a questionnaire survey on 500 middle and senior managers of enterprises. The effect of resource dependence on relationship risk and alliance performance in asymmetric competitive strategic alliances was studied by using structural equation model. The results showed that resource dependence positively affected alliance risk and partly negatively affected alliance performance in asymmetric competitive strategic alliances.

Enterprises can promote the realization of strategic objectives by building relationships with external enterprises. Sheng, Zhou, and Li (2011) studied the impact of corporate and political relations on corporate performance. Drawing on the theory of relationship governance and institutional theory, they put forward a contingency perspective on the relationship between Chinese enterprises and politics. Based on the survey and research of 241 Chinese enterprises, the results show that the positive impact of business relationship on performance is greater than that of political relationship, both of which depend on the system and market environment. Business relationships are more beneficial when law enforcement is inefficient and technology changes rapidly, while political relationships lead to greater performance when government support is generally weak and technology turbulence is low. These results show that Chinese enterprises should be cautious in using commercial and political relations, and adjust their relationship exploitation according to the changing system and market environment. Hillman, Zardkoohi, and Bierman (1999) found that by adopting various political strategies (such as lobbying, donation), enterprises can influence and enter the public policy process, and obtain various benefits (information, reducing uncertainty and transaction costs and influence,). Through the event study method, their results show that the company's specific interests may come from political strategy. Based on the institutional perspective and resource dependence theory, Cai, Gao, and Yang (2013) conducted an empirical study with survey data of 404 Chinese enterprises. The results show that corporate political behavior is conducive to their political legitimacy, thus promoting the original innovation of enterprises. In addition, they found that organizational redundancy positively regulates the relationship between political legitimacy and primitive innovation.

### **2.1.2 Resource dependence of derivative spin-off organizations**

In Chinese, derivative refers to the evolution of new material, which is derived from the parent material. Most scholars also believe that derivative must mean that some resources are transferred from the original organization to the new enterprise in this process. The definition of spin-off companies differs in different studies. Some scholars understand spin-off organizations from a broader and higher level. They believe that as long as new enterprises have some connection with existing enterprises, they can be understood as spin-off organizations. Some scholars define spin-off organizations in a narrow sense, and think that only new enterprises planned and established by parent enterprises can be called spin-off organizations. Lindholm (1994) points out that the so-

called spin-offs refers to the process in which founders leave a company to create their own business, in which rights, knowledge and assets may be transferred from existing legal entities to new enterprises or new legal entities. Chatterji (2009) defines the spin-off organization as a new organization formed by the parent enterprise through the way of "spawning". Its emergence is due to the difference of innovation ideas between the parent enterprise and employees. Employees are dissatisfied with the parent enterprise's unwillingness to give priority to innovation or take advantage of new opportunities, and they venture to set up new start-ups.

Derivative organizations from the perspective of resource dependence have dual characteristics. Casciaro and Piskorski (2005) argue that resource dependence theory is not a verifiable empirical basis, but an attractive metaphor, which makes the model of resource dependence ambiguous. Their research on inter-industry M&A of American listed companies from 1985 to 2000 shows that although interdependence is the key driving force of M&A, power imbalance hinders their formation. The reconstruction of resource dependence model can help realize the potential of resource dependence, which is a powerful explanation for inter-organizational action. Wry, Cobb, and Aldrich (2013) argued that resource dependence is not only a metaphor, but also an important entry point to understand environmental complexity. By assessing the historical heritage of resource dependence and its contemporary prospects as a theory of environmental complexity, they point out that resource dependence theory not only has the attribute of duality, but also provides a new perspective for the relationship of diversification of enterprises. For spin-off organizations, their initial growth depends on the resources provided by the parent company and the "main business" of the parent company, but through growth, the spin-off organizations can achieve independence and achieve "separation of the main and auxiliary" (Du, 2011). In other words, the resource dependence of spin-off organizations is dual. On one hand, it relies on the original resources provided by parent organizations. On the other hand, it relies on market demand to construct its own unique resources.

As for the motivations and behaviors of the spin-off organization and the parent organization on resource dependence and resource exchange as well as the evolution of their motivations and behaviors in various stages, based on resource dependence perspective, Pfeffer and Salancik (1978) proposed that the survival as well as the performance of an organization depends on its ability to acquire and maintain resources. The ability of a spin-off organization to get the resources of its parent organization is

beneficial to its capability development (Parhankangas & Arenius, 2003). The spin-off organizations, depending only on themselves, are difficult to get sufficient resources to promote their sustainable development. Therefore, in addition to establishing resource dependence with their parent organizations, they also establish contacts with other external organizations to obtain key resources (Parhankangas & Arenius, 2003). Organizations' motivations and behaviors that drive resource exchange have become the focus of research on resource dependence (Parhankangas & Arenius, 2003). They suggested that the motivation of resource exchange between a spin-off organization and its parent organization was affected by three factors: power, dependency, and reciprocity. In its establishment stage, a spin-off organization would have better resource endowments, faster-learning ability and less developmental resistance if it developed venture capital based on the existing capabilities of its parent organization (Helleloid & Simonin, 1994). Therefore, the higher it is connected to its parent organization's business, the more it can promote the development of its organizational capabilities (Parhankangas & Arenius, 2003). In the development process of a spin-off organization, the resource exchange between the spin-off organization and its parent organization may bring in synergetic effect due to continuous resource complementary, thus to achieve a win-win situation. However, the resource exchange may change in the other way over time (Parhankangas & Arenius, 2003) and result in the end of resource exchange (Seabright, Levinthal, & Fichman, 1992). Besides, resource dependence and resource interaction between a spin-off organization and its parent organization may also change due to national boundaries (Takahashi, 1995; Parhankangas & Arenius, 2003).

### **2.1.3 Dual dependence on resources of independent colleges**

The term "independent college" originated from the "Opinions on Regulating and Strengthening Independent Colleges in Universities with New Patterns and Models" issued by the Ministry of Education in 2003. The thesis puts forward the concept of "independent college", i.e. "public undergraduate colleges and universities use their own human resources and intangible assets, adopt private pattern, and absorb tangible investment from enterprises, institutions, social organizations or individuals outside the school, which is a new type of higher education institution independent of the parent school". As the name implies, an independent college is an undergraduate educational institution founded through the cooperation of ordinary public universities and social capital. It is a spin-off organization of ordinary public universities (Li et al., 2018).



Wry, Cobb, and Aldrich (2013) pointed out in their study that the current research on resource dependence lacks organizational and environmental attention. Thus, more attention should be paid on the complexity of environment. From the perspective of resource dependence, organizations in the environment generally have diverse interests and objectives, which brings complexity to the organization. The theory of resource dependence provides a way to understand the complexity of the environment. Therefore, by introducing the perspective of resource dependence, we can understand the complex environment of independent colleges as spin-off organizations. Taking the change of resource dependence as the background and focusing on the strategies of independent colleges to respond to the change of resource dependence can reveal how organizations adopt strategies over time (Hillman, Withers, & Collins, 2009) and the possible results of these strategies. For independent colleges, the characteristics of resource dependence are similar to those of spin-off organizations. On one hand, independent colleges depend on the resources of teachers, brands, classrooms and student dormitories provided by parent schools. On the other hand, they depend on the opportunities brought by market demand to build their own resources and capabilities.

#### **2.1.4 Summary**

Resource dependence theory describes how constraints outside the organization affect the organization. From the perspective of resource dependence, organizations are social organizations, which are interdependent and not completely autonomous. On the basis of summarizing the dual characteristics of spin-off organizations from the perspective of resource dependence, this study constructs the characteristics of resource dependence of independent colleges, which are dependent on parent schools and market demand. This dependency relationship is changing with the development of organizational capabilities. Therefore, the dynamic evolution process between the dual dependency relationship and the development of competence in independent colleges has become a very interesting research entry point.

## **2.2 Organizational capability theory**

In terms of the review of relevant research on organizational capabilities, this study summarizes four parts: the dynamic nature of organizational capabilities, the organizational capabilities of higher education institutions and the process of building the competence of

independent colleges External-to-Internal and Internal-to-External. The theory of organizational capabilities provides an important theoretical basis for this study. At the same time, the study also finds that there is a lack of research on the organizational capabilities of spin-off organizations such as independent colleges.

### **2.2.1 Dynamics of organizational capabilities**

Organizational capabilities originate from the resource-based view. In terms of how companies acquire and maintain competitive advantage, the resource-based view holds that enterprises may achieve high profits above normal returns by identifying and acquiring the critical resources that enterprises need. Resources refer to permanent assets (tangible and intangible) owned by enterprises, such as brand, internal technical knowledge, skilled employees, trade links, machinery and efficient procedures and capital (Penrose, 2009). Barney (1991) defines enterprise resources as all assets, capabilities, organizational processes, enterprise characteristics, information and knowledge that an enterprise controls and enables it to formulate and implement strategies to improve efficiency and effectiveness. However, resource advantages alone are not enough. Enterprises need special capabilities to make better use of these resources (Penrose, 2009). Amit and Schoemaker (1993) define resources as a group of available factors owned and controlled by enterprises, which are used to leverage other enterprises' assets and technologies, expertise, information systems and trust coupling pattern between managers and workers. Capabilities refer to the ability of enterprises to allocate resources to achieve specific goals. Amit and Schoemaker (1993) define competence as the unique information-based, practical or intangible process of an enterprise, which can develop with the complex role of enterprise resources.

In the resource-based theory, the organizational capability of enterprises is identified as a major source of gaining and developing competitive advantage (Wernerfelt, 1984; Barney, 1991). In describing leadership, Selznick (2004) first proposed the concept of "unique competence". Prahalad and Hamel (1997) then proposed the concept of "core competence", defined as accumulated knowledge of the organization, especially knowledge of how to coordinate diverse production skills and how to integrate multiple technological flows, and proposed that the three criteria for identifying core competence were: the ability to provide access to many product markets; the ability to provide obvious value for money to customers of end products; make it difficult for competitors to imitate.

According to Leonard - Barton (1992), core competence is knowledge collection within an enterprise, including knowledge and skills of employees, technical systems, management systems and value norms, which mainly plays the role of coordinating various production skills and integrating different technologies.

In general, most scholars believe that organizational capabilities refer to the ability of an organization to coordinate a series of activities with organizational resources in order to achieve specific results (Helfat & Peteraf, 2003), which has a direct impact on the strategic decision-making and innovation of an enterprise (Wingwon, 2012).

With the deepening of competency research, organizational capabilities have undergone a process of development and evolution from general (operational) competence, core competence to dynamic competence. Winter (2003) pointed out that organizational capabilities include operational capabilities or dynamic capabilities. Operational capability is a "substantive" capability (Newey & Zahra, 2009), which aims to make efficient use of existing resources and promote efficiency. Operational capability is a zero-based capability that can be used to explain "how do we get the existing state of existence?" In addition to operational capabilities, enterprises also need dynamic capabilities to achieve the goal of gaining competitive advantage (Barney, 1991). Dynamic capabilities refer to the ability of an organization to purposefully create, expand or modify its basic resources (Peteraf, 1993; Helfat & Peteraf, 2015), to adapt to environmental change (Eisenhardt & Martin, 2000).

Dynamic capabilities framework examines how firms integrate, construct and reconfigure internal and external resources and capabilities to generate a new capability to adapt to rapidly changing environments (Teece, Pisano, & Shuen, 1997). This framework assumes that firms with high dynamic capabilities have more advantages than those with low dynamic capabilities. The purpose of this framework is to explain how firms use dynamic capabilities to create and maintain competitive advantages over other firms in the process of responding and creating environment (Teece, 2007).

Dynamic capabilities are called "first-class" capabilities because they refer to markets that intentionally change products, production processes, standards or enterprise services (Winter, 2003). When an organization adapts to a rapidly changing environment by integrating, constructing and reconfiguring its internal and external resources and capabilities, it has high dynamic capabilities. In summary, organizational capability is the effective exploitation of existing resources, while dynamic capability is the effective exploitation and implementation of new opportunities (March, 1991). As long as the

enterprise has the lowest ability to perform a task, regardless of the effectiveness of the task, it is the enterprise's capability. Businesses do not actually need to use this capability to prove that they have it. However, in general, enterprises must use their capabilities to maintain their ability to use them. More specifically, there is a hypothesis of "either use or lose" for enterprise capability (Helfat & Peteraf, 2009).

Helfat et al. (2009) proposed that dynamic capability is "the capability of an organization to purposefully create, expand and modify its resource base" (Zollo & Winter, 2002; Macher & Mowery, 2009). The resource base of an organization includes physical, human and organizational assets. Dynamic capability is a learned and stable behavior mode through which enterprises can systematically create and adjust their operation mode, thereby improving the efficiency of enterprises (Zollo & Winter, 2002; Macher & Mowery, 2009). According to Teece (2007), the company's history and previous path help to determine its current tangible and intangible positions and asset base, which forms the organizational process. Enterprises use their perception to identify opportunities. Once these opportunities are identified, enterprises will invest in these opportunities to improve their organizational capabilities. Then, firms actually reassemble or overlap their organizational capabilities into new capabilities that are more adaptable to their environment. These new capabilities can help enterprises create new paths, which brings more sustainable competitive advantages than other enterprises.

Helfat et al. (2009) clearly stated two criteria of enterprise dynamic capabilities. They are technical (internal) adaptability and evolutionary (external) adaptability. Technical adaptability refers to the ratio of effective exploitation degree of capability to the generated cost. This measurement method implies that to some extent, it is possible for the dynamic capabilities of some companies to be connected with technology, compared to other companies. Evolutionary adaptability refers to the ability of an enterprise to survive and win out through creating, expanding and adapting its current resource base. Dynamic capability is helpful in realizing evolutionary adaptability of enterprise (Teece, 2007). Pavlou and El Sawy (2011) constructed a dynamic capability model, according to this model, companies have the following activities: (1) discover, explain, and seek opportunities from internal and external stimuli with external sensibility; (2) use learning abilities to determine which kind of organizational capability can be re-modified, rebuilt or reconfigured in order to generate new knowledge; (3) use integrated capabilities to make changes to their operational capabilities based on comprehensively understanding; (4) use

coordination capabilities to get and use reconfigured operational capabilities; (5) continue to investigate external and internal stimulation (Ettlie & Pavlou, 2006; Pavlou & El Sawy, 2006).

Different from general organizational capability being a static concept; dynamic capability is a kind of development path (Helfat & Peteraf, 2009) which explains how firms under the constrained path deal with the rigidity caused by organizational path dependence (Helfat & Peteraf, 2003; Zahra, Sapienza, & Davidsson, 2006). Dynamic capabilities can be improved over time.

Sometimes it also degenerates or even remains constant (Easterby-Smith, Lyles, & Tsang, 2008). Economic evolution theory points out that evolution is carried out along the norm rather than along the rational direction. In the face of environmental change, strategy of the subject is made based on customary and adaptability to environmental changes (Nelson, 2009). They also emphasize that inertia is rigid and has its own vitality. Convention is similar to gene. It provides a heritable substance that plays a role of natural selection in economic process. And it also reveals that the convention is rooted in evolutionary process and organization affects the evolution direction through the constraints on behavior. The cost of changing organizational management is high. Enterprises generally do not make radical changes in response to changes in the external environment. They usually make adaptive adjustment on norm. It can be understood that inertia constraints with traditional resources and capabilities directly affect the choice of enterprises in the ever-changing market environment. Enterprises tend to choose strategy that complies with conventions. This makes enterprise difficult to reform in a changing environment.

Dynamic capabilities are conventional behaviors based on organizational behavior. It is also a unique convention that can be identified. And it refers to the ability to acquire, integrate and dissociate enterprise resources in order to fit in external environment (Dosi, Nelson, & Winter, 2000). Companies gain competitive advantage by the implement of value creation strategy which cannot be imitated by competitors (Barney, 1991). In order to achieve this goal, companies must develop dynamic capabilities in addition to common operations (Teece, Pisano, & Shuen, 1997). As the environment becomes more dynamic and complex, the operational capabilities of enterprises cannot respond to environmental changes on time. This affects the sustainable competitiveness of enterprises. This results in the enterprise losing its corporate advantages and sustainable development. The continuous

investment of enterprises in dynamic capabilities can help enterprises respond to changes in the external environment. The investment in dynamic capabilities also helps enterprises promptly catch market opportunity and build up long-term competitive advantages while maintaining the company's daily operations. Besides, dynamic capabilities need to get rid of capability inertia. This requires enterprise to construct path breaking-learning abilities and to reduce its dependence on original path by establishing new capabilities and rules. Meanwhile, enterprises should fully develop the subjective activeness, actively predict, explore and response to environmental changes (Teece, 2007). Enterprises also need to actively optimize the survival environment and enhance their organization competitiveness.

The concept of Learning and Knowledge is connected closely to dynamic capability. According to Levitt and March (1988), learning refers to a process in which the enterprise summarizes and creates company inertia from historical experience and guide behavior. This definition implies that learning is inertia-rooted historical-dependent and goal-oriented (Levitt & March, 1988). It is revealed by the process of “learning-execution, experience formation, knowledge sharing and coding”. From the above analysis, dynamic capability is created in the evolution of empirical learning. And it can be improved based on former learning experience (Helfat et al., 2009). Inertia is experience and wisdom acquired from past behaviors (Gavetti & Levinthal, 2000). Zollo and Winter (2002) developed a cycle of knowledge evolution. It shows that dynamic capability can create new inertia based on active organizational learning pattern, thus to fuel the evolution. Research of Macher and Mowery (2009) also indicate that deliberate learning patterns constitute dynamic capabilities. This is because the product development process is rooted in the evolutionary cycle of active learning pattern. Therefore, dynamic capabilities are derived from the co-evolution of potential experience accumulation and explicit knowledge integration.

Existing research also focused on how dynamic capability changed over time which indicates that the relationship of dynamic capability and the external environment is co-evolution (Lewin & Volberda, 1999). McKelvie and Davidsson (2009) pointed out that the acquired various resources can influence the development of enterprise dynamic capabilities. Specifically, human capital and technical knowledge obtained by enterprises are used to enhance the market share while the improvement of corporate reputation and technical resources will advance the dynamic capability of enterprises in developing new products. Similarly, the operation ability of a company, as a basic organizational capability,

will also affect the development of advanced dynamic capabilities. Newey and Zahra (2009) found that, the failure in recognizing external opportunities may also result in the disappear of a company's potential dynamic capabilities. They found that exogenous stimulation can cause dynamic changes, and internal entrepreneurship can trigger the reconstruction of dynamic capabilities (Jantunen et al., 2005; Zahra, Sapienza, & Davidsson, 2006).

The formation of dynamic capabilities relies both on successful and disappointing past learning experiences (Zollo & Winter, 2002). When dynamic capabilities screen out the optimal path based on past experience, the organization maintains this choice behavior through its own reinforcement (Zahra, Sapienza, & Davidsson, 2006). This shows the path dependence of dynamic capabilities which in nature is the attribute of dynamic capabilities (Vergne & Durand, 2011). From the perspective of evolution and learning, capability dynamic is a process in where organizations actively acquire knowledge and get it evaluated within the organization. The occurrence of dynamic capability is to solve the path dependence problem of enterprise. And it also develops capability that fit in environment changes. The inherent conflict of dynamic capabilities is showed up. To be specific, the dynamic capability has its own path dependence characteristic, but it is also used to solve the path dependence problem.

As for the evolution of dynamic capability, Helfat and Peteraf (2003) argued that the development of organizational capabilities may depend on the organization's recognized talents and its environments. Eisenhardt and Martin (2000) emphasized the commonality between companies, so dynamic capabilities can be obtained from the outside. Zahra, Sapienza, and Davidsson (2006) argued that dynamic capabilities are available both from the outside and the inside. That is to say, the organization, from the outside, can obtain dynamic capabilities by copying the capabilities of other organizations; from the inside, it acquires the dynamic capabilities through self-learning. On the basis of this, Narayanan, Colwell, and Douglas (2009) analyzed the development of dynamic capabilities with sample of large pharmaceutical companies; they focused on the cognitive orientation of key managers, the management strategy taken by these companies, and the internal and external environment of these companies. Their study revealed the important role that managers played in the development of dynamic capabilities.

Summary: organizational capabilities have evolved from general (operational) capabilities, key capabilities to dynamic capabilities. As the research on organizational capabilities goes further, more and more attentions are paid to organizations' ability of

resources accumulation, expansion and adjustment according to the environment changes, and the dynamic of organizational capabilities in respond to environmental changes gains focus from more researchers simultaneously.

### **2.2.2 Organizational capability of higher education institutions**

The higher education system can be a term used in narrow and traditional sense to refer to a collection of formal educational entities (Pietig, 1981; Clark, 1994). For example, the French higher education system is seen as a synthesis of many universities, colleges and research institutes, including the apparently formal institutions such as the Ministry of Education. However, if civilized, the concept can also refer to higher education in a broad sense, including any person engaged in post-secondary education activities, whether it is managers, organizers, workers or consumers (Clark, 1994). For example, full-time or part-time administrators, professors and students, as well as education committees of the legislature, administrative officials concerned with higher education issues, and board members exercising directors' duties are included in this broad use.

A large proportion of the talents who develop and disseminate the world's intellectual heritage are concentrated in the higher education systems of various countries. These educational institutions have played an important role in training professionals in recent centuries. Since 1960, the expansion of higher education and people's dissatisfaction with higher education have attracted great attention from the public and scholars. However, the research focuses on the immediate problems that the government and other sponsors seek to solve (Fang, 1997). Cobban, a British historian, analyzed the struggle to establish the first university in medieval Europe. The central question was why Bologna and its imitators in northern Italy survived, while earlier and equally promising efforts in Salerno disappeared (Cobban, 1975). He pointed out Saleno's main weakness is that he did not develop a protective and cohesive organization to sustain the development of his intellectual activities. Cobban concluded the history of medieval universities reinforces the view that if the opportunity for intellectual activity is not to be dissipated, institutional responses must be made quickly after academic achievements (Cobban, 1975), but long-lasting and controlled development can only be achieved through institutional frameworks.

What is the organizational capability of higher education institutions (Perrow, 1994)? According to the foregoing, organizational capability is the ability of an organization to coordinate a series of activities with organizational resources in order to achieve specific



results (Helfat & Peteraf, 2003). This study argues that the organizational capabilities of higher education institutions are the capabilities of higher education institutions to coordinate a series of activities with their resources in order to achieve specific results. The evaluation dimension of higher education institutions just reflects the actual effect of the various capabilities of the organization. Therefore, this study holds the view that the evaluation dimension of higher education institutions is closely related to the constituent elements of their organizational capabilities. On one hand, the organizational capabilities of higher education institutions can be measured according to the constituent elements of the university's competence. On the other hand, it can be measured according to the different subjects from the source of the university's competence.

From the perspective of the constituent elements of colleges and universities, some scholars believe that the measurement and construction elements of university organizational capability should be systematic and holistic. Clark (1994) analyzed the capability building of higher educational institutions by systematically detailing how higher education is organized, managed as well as improving the research level of higher education. He elaborated on three basic elements of the higher education system. The first factor is the way of expression and arrangement of work. Around the nature of knowledge, the higher education system of a country will carry out division of labor. This division of labor is highly institutionalized, and has a huge impact on the future. Regardless of the country, the work of higher education is composed of two basic modes: discipline and institution. The second essential element is belief, the main norms and values of many actors in different sectors of the system. The third basic element is rights, the distribution of legitimate rights in the whole system. Many right relations arise from working organizations and their associated beliefs. Interest groups are formed around obligations to disciplines and institutions; professors develop and apply individual and academic, mainly guild-based forms of rights; directors and university administrators have a great legal influence in some higher education systems; politicians, officials and state academic authorities have other equal legal rights in central departments. Huang and Zhang (2008) believe that the evaluation of universities should be carried out from three aspects: teaching infrastructure, learning process and teaching management. Feng (2013) research is based on the theory of system dynamics. It holds that higher education should be an ecosystem. The ability of higher education should include the comprehensive performance of teachers, teaching management, organizational quality and teaching environment.

Teaching quality is the result of interaction and interaction among various elements.

Some scholars (Prahalad & Hamel, 1997) believe that the core competence of organizations is the ability that all organizations need to achieve self-development under the competitive environment and conditions. It has the characteristics of value, heterogeneity, non-imitation and irreplaceability (Liu, 2006). Therefore, discussing the core competitiveness of a university can explain its organizational ability. Ma (2000), a scholar in China, thinks that human resources are the core competence of higher education institutions. They are mainly embodied in the number, quality, structure, rationality of the allocation of university staff, the requirement of competency, enthusiasm and division of labor cooperation and internal competition. He also analyzed the core competence of universities from seven levels, namely, school-running funds, reputation and prestige, scientific production and graduates, school-running direction and ability, teachers, internal management and executive quality. He believed that teaching ability and scientific research ability are the core competencies of university capability. Mazzarol and Norman Soutar (1999) outlined the critical factor models for higher education schools to establish and maintain sustainable competitive advantage in the international market. The author holds that education has the characteristics of invisibility, indivisibility, heterogeneity and perishability of production and consumption. It can enhance the sustainable competitive advantage of education from the aspects of brand image, marketing, strategic alliance, forward integration, organizational expertise and staff quality, customer-oriented innovative culture and effective use of information technology. Huang (2004) believes that the most direct manifestation of university competition is the competition of students. To enhance the core competence of universities is to enhance the competence of students. On this basis, Liu (1997) proposed that the key elements of core competence of universities should not only include the ability of talent cultivation, but also the academic research ability of universities. Zheng (2004) believes that the core competence of universities should be embodied in three aspects: university spirit, university system and discipline growth pattern.

Some scholars also conducted specialized research on a certain ability of a university. For example, the teaching ability, the American educational philosopher Israel Scheffler (Chen & Hao, 2008) believes that "successful teaching" have two interpretations: The first one is the interpretation with practice which means that students turn acquired theories, norms and propositions into practical actions, and the other one is the interpretation

without practice which indicates that there are no practical actions after students master theories, norms, and propositions. He further points out that "teaching" should have three judgment criteria, namely, intent-based criteria, reasonable criteria, and attitude-based criteria. The intent-based criteria implies that the teacher's teaching intention should be able to boost the student's learning motivation; the reasonable criterion represents that the teaching method adopted by teachers can achieve the expected teaching goal; the attitude-based criterion means that the teachers have enthusiastic and compassionate teaching attitude which meets specific teaching attitude requirements. Meng (1990) argued that teachers' teaching ability was composed of cognitive ability, design ability, teaching ability, organizational ability and communication ability. Shen and Wang (2000) believed that the teaching ability should include the teaching ability of specific subject, the general teaching ability and the teaching cognitive ability. Scholars have various understanding of the composition of teaching ability due to their different perspectives, but they believe commonly that intelligence is the basic component of teaching ability; and the ability of mastering student characteristics and syllabus, the ability of designing teaching program, the ability of orally presenting teaching content and the ability of passing on knowledge are all important components of teaching ability (Zeng & Li, 2003).

Scientific research ability refers to the ability of a university to conduct scientific research. Academic circles measure the scientific research ability of a school mainly through a series of performance indicators related to scientific research achievements, such as papers, monographs, patents, awards and topics published by the school. Manjarrés-Henríquez et al. (2009) uses the number of articles published by researchers at ISI to measure an organization's scientific research capability. Auranen and Nieminen (2010) used the total number of papers published in a period of time to measure the scientific research ability and level of the university. Chinese scholar Li, Ge, and Yin (2009) believes that the patents, articles, works and award-winning achievements of universities reflect their scientific research performance, and are also the criteria to measure the scientific research ability of universities. Gu, Lin, and Zhang (2009) argued that the measurement of university's scientific research ability is through the achievements of the personnel engaged in scientific research activities in a period of time, that is, the quantity of scientific research output. He also pointed out that the key point of cultivating top doctoral students in colleges and universities lies in the team of university supervisors, whose academic experience, academic status and academic guidance affect the quality of

doctoral students. Chinese universities need to cultivate more top doctoral students by improving the overall scientific research ability of the supervisors

At present, domestic and foreign scholars also explore the impact of organizational reputation on the organizational capability of universities. Rindova et al. (2005) argued that organizational reputation contains different stakeholders' perceptions on the organization and is an influential resource. The study evaluates the perceived quality and prominence of organizational reputation. It finds that perceived quality has no significant relationship with price premium, but prominence has a greater impact on price premium and has a greater economic contribution to the organization. For example, academic achievements of university teachers have an important impact on the ranking of universities. Ma (2000), a Chinese scholar, regards the popularity and reputation of universities as one of the seven levels of the organizational ability of universities. This is an important part of the organizational ability of universities and plays an important role in enhancing the competitiveness of universities. Boyd, Bergh, and Ketchen (2010) based on the theory of resource-based view, holds that organizational reputation is an intangible asset, which can distinguish organizations and play a key role in explaining why some organizations outperform others, and has an important impact on organizational performance.

The above scholars discuss the construction and measurement of the organizational ability of colleges and universities in terms of their systemic and holistic nature, their core competence or the elements of a certain kind of ability. Through summarizing these documents, we mainly include the following elements: teaching ability, scientific research ability, teachers, organizational reputation and other organizational ability elements to evaluate its quality.

In addition, some scholars regard the ability of college students and the ability of scientific and technological innovation as objects of study. For example, the goal of cultivating applied talents in Colleges and universities should include knowledge goal, professional ability goal and social ability goal (Ma & Han, 2016). Jiang et al. (2010) summarized the definition, evaluation index and method of university Science and technology innovation ability, and constructed a comprehensive, operational and comparable comprehensive evaluation index system of university science and technology innovation ability. Although the research on concepts and facts is more abundant, there are still many areas for improvement in the emerging important literature on higher education.

From the perspective of the different subjects from which the university's ability

comes, the organizational ability of the university should come from its various constituent subjects. According to Alexander Astin, the most outstanding schools should be those that exert the greatest influence on students' knowledge, personal development and teachers' academic ability, teaching ability and teaching output. The ability of colleges and universities comes from students and teachers. On the other hand, a small number of scholars have carried out a comprehensive and systematic study on the abilities of colleges and universities according to their different sources of abilities. For example, Staropoli (2003) proposed that the evaluation of institutions of higher education should include five systems: government agencies, enterprises, the public, students and schools themselves. Only through these five aspects can schools be compared. Fair and impartial evaluation of schools is also an important systematic point of view in Evaluating Colleges and universities. (The relationship between the main bodies of the evaluation system and universities is shown in Table 2-1). Chinese scholar Chen and Xiang (2014) believe that the ability of universities should be evaluated from the perspective of students' development, including the school itself, graduates and employers to evaluate the relationship between the main bodies and universities in the evaluation system of universities in Table 2-2.

Table 2-1 Response and Management of Paradox

Author	Theory
Lewis, Quinn,2000& Cameron,1988	use positive potential to prevent negative dynamic
Smith & Berg,1987	transform polarized emotions and immerse their emotions in conflict
Vince & Broussine,1996	paradox thought is helpful to reveal meaning of contradiction
Bertels & Lawrence,2016	Organization have variation in responses and managements of paradox
Van der Byl & Slawinski,2015	come up with four conflict management methods including win-win, trade-off, integrative and paradox lens
Lewis & Smith,2014	Two responses to paradox conflict; defensive responses and strategic responses
Lewis,2000; Smith&Berg,1987	when participants do not want to compromise, these strategies might lead to spiral rise and vicious circle of conflict. For example, splitting, protecting, repressing regressing and reaction.
Poole & Van de Ven,1989	Strategic responses try to deal with paradox in long run and acceptance, confrontation and transcendence are included.

Table 2-2 The Relationship between Subject and the Evaluation System of Colleges and Universities.

Main body	Medium	Mode of operation	Role it plays
Government organization	Budget, funding	Claim funds allocated	Monitoring and review
Enterprise	School-enterprise cooperation, contract	Assisted research program	Achievement Evaluation
Student	Tuition	Taught by university teachers	Satisfaction assessment of university teachers
Society	Donation	School prestige and other outcomes	University Satisfaction Assessment
University itself	Administrative staff, teachers	Provision of teaching, research and service	Interaction with other subjects

(Source: Revised according to Staropoli's (2003) study)

### 2.2.3 Absorptive capability

The construction of organizational capability starts with absorptive capability. Absorptive capability was first proposed by Cohen and Levinthal. It refers to the ability of firms to identify, absorb and exploit new external knowledge (Cohen & Levinthal, 1989). Zahra and George (2002) improved this definition. They believe that absorptive capability is a dynamic ability to acquire, absorb, transform, integrate and utilize new external knowledge. They divide absorptive capability into two dimensions, potential absorptive capability and actual absorptive capability. The potential absorptive capability includes two processes, acquisition and absorption. The actual absorptive capability includes process of transformation, integration and exploitation. Establishing exploratory relationship between organization and external environment is helpful to promote actual absorptive capability of organization (Xia & Roper, 2016) . Absorptive capability emphasizes the important role of organization's original knowledge in its process of absorbing external new knowledge (Cohen & Levinthal, 1989, 1990). It is the ability of organization to identify, internalize and utilize knowledge in organization learning, business activities and organization creativity. As subsidiary organization, the inherent attribute of independent college makes its development, strategic orientation and performance depend heavily on knowledge and resources provided by its parent organization (Kroll & Liefner, 2008; Rasmussen & Borch, 2010). The construction of its absorptive capability also relies closely on its parent organization.

There are two dimensions which can be used in analyzing the construction of organizational absorptive capability, namely knowledge depth and knowledge diversity (Eriksson & Chetty, 2003). Organizations initially have different knowledge depth and knowledge diversity with varied effect on the construction of absorptive capability (Eriksson & Chetty, 2003) and promote the interaction between internal knowledge and external knowledge (De Luca & Atuahene-Gima, 2007), so that it can generate new knowledge (Zhou & Li, 2012). Knowledge diversity and knowledge depth is in a relationship of mutual development. Knowledge depth contributes to expand or update the original knowledge base of organization. It helps organization to expand the exploration scope of knowledge and promote the absorption of diverse knowledge. In this way, the dependence of organization on existing resources is reduced and the organizational flexibility is enhanced too (Zahra & George, 2002). The original knowledge base of the enterprise not only helps the enterprise acquire and utilize new external knowledge but also helps it enhance its ability to predict future technological progress (Cohen & Levinthal, 1994). The innovation of internal knowledge is stimulated in the organization. This is essentially a process of "internal-to-external" which induces wealth into such prepared enterprises (Wang & Du, 2016).

Some researchers believe that absorptive capability is a process to internalize corporate resources (Lane, Koka, & Pathak, 2006; Sun & Anderson, 2010; Lin & Zhang, 2014). According to their opinion, absorptive capability is enterprises' ability to acquire external knowledge. From the perspective of organization learning, it is regarded as a formation pattern of learning ability (Martinkenaite & Breunig, 2016). The construction process of absorptive capability should be explored from three continuous dimensions which are exploratory learning, transformation learning and innovative learning (Lane, Koka, & Pathak, 2006). Lewin, Massini, and Peeters (2011) divided absorptive capability into internal absorptive capability and external absorptive capability. Internal absorptive capability refers to the identification and creation of knowledge within the organization while external absorptive capability refers to the organization's exploration and transformation of external knowledge (Lewin, Massini, & Peeters, 2011). They argued that the dynamic ability of balancing internal and external absorptive capability is the key to maintain organizations' sustainable competitive advantage (Zahra & George, 2002).

The internalization process of absorptive capability is especially reflected in latecomer enterprises with resource disadvantages. The shortage of resources (Lu & Sun,

2013) make enterprises have disadvantages both in market and technology (Wang & Du, 2016; Xie et al., 2017). In order to overcome the competition weakness, organizations often explore and acquire valuable knowledge or resources by building up connections to international companies with advanced technology (Mathews, 2002). Then organization link their original knowledge and resources with those absorbed resources and technology to create their unique competitive advantages and development path (Lu & Sun, 2013). This is essentially a process of absorbing capability from external-to-internal (Wang & Du, 2016).

Independent college, as a spin-off organization, will face the same situation as the latecomer enterprises in the stage of its establishment. Because it is a new built organization, its growth faces with lots of market and technology uncertainty (Zhu & Fei, 2010). The organization's strategic orientation and performance mainly depend on the support of its parent organization (Kroll & Liefner, 2008; Rasmussen & Borch, 2010). The development and formation of organizational capabilities also closely relies on its parent organization (Rasmussen & Borch, 2010; Xia & Li, 2012). The organization will actively create connection to its parent organization so that it can acquire and use the knowledge and resources of its parent organization. This serves its goal of sustainable development. For example, the secondary organization of universities often lacks legal status in its establishment period. They have to borrow the brand and reputation of the parent university to gain or enhance their legal status (Bian, Ren, & Ye, 2018). However, if the development of independent colleges rely too much on the knowledge or resource provided by parent organization, its capability growth will face a problem of path dependence (Rasmussen & Borch, 2010) which makes it lack of innovation and vitality. Therefore, in order to reduce the dependence on resource of parent organization, the secondary organization will accumulate its own knowledge and resources, integrate and utilize these resources and knowledge to create its own competitive advantage and capability development path.

How does independent college develop and build its capability? In particular, how does the capability building process of independent college transit from “external-to-internal” to “internal-to-external”? Few researches have focused on exploring the above research questions. In order to fill in the research gap, this study tries to uncover the black box of organizational capability building process and reveal the inside pattern.



#### **2.2.4 Summary**

After the analysis and summarize of concept of organizational capability, this study found out that the most representative characteristic of organizational capability is its dynamic attribute. This dynamic characteristic is, on one hand, reflected in its dynamic response to external environmental changes, on the other hand, in the dynamic organizational capability development process. This study will research on the construction process of organizational capability of independent college through the perspective of absorptive capability. Besides, resource dependence also has dynamic characteristics. Therefore, an analysis on how independent college coordinates its dynamic development of organizational capabilities with the changing process of its resource dependency will provide basis for research on capability construction of independent college.

### **2.3 Paradox theory**

As researchers gradually found out that there was always dilemma in organization management, they came up with the concept of organization ambidexterity. For example "exploration" focuses on long-term development and "exploitation" focusing on short-term performance; "progressive reform" emphasizing stable and "radical change" emphasizing transformation. In short, organization ambidexterity refers to the two contradictory and interrelated situations or tendencies faced by organization. In the research on organization ambidexterity, how to realize the coexistence of two contradictory elements is a topic that discuss by scholars. As an important perspective to understand and deal with conflicts, Paradox provides a good cut-in place for analyzing the capability construction of organization with ambidexterity. This section mainly gave a review on background and concept of organization ambidexterity and Paradox theory. This section also briefly introduced the response and management of conflicts and contradictions from the perspective of public opinion.

#### **2.3.1 The basic concept of paradox**

Organizations must have ambidextrous capability to deal with conflicts between fierce market competition and limited internal resources and ability. From the perspective of coping with changes in external environment and pursuing long-term organization performance, organization also face an urgency to possess ambidextrous ability (Wang &

Li, 2012). The ambidextrous capability here refers to the ability to innovate and to use innovation (March, 1991). An organization with ambidextrous capability is called a dual organization. The dual organization is becoming a new paradigm of organizational management. Such kind of organization can effectively balance exploration and development, progressive innovation and radical innovation as well as short-term performance and long-term survival (Wei & Du, 2013).

Previous researchers argued that organizations could succeed in only one aspect of development and exploration, but they would face failure if organizations pursued exploration and exploitation at the same time. This is because these two activities, development and exploration, have different strategy, organization structure and implementation path. The activity of exploitation means organization aims at increasing market share and client satisfaction by enhancing the quality of their products and improving the research on existing knowledge, skills and technical. At this activity, the organization pays attention to cost and operation efficiency. Its process goes through refinement, selection, product, efficiency, implementation and execution. The path is “do what we do best”. The activity of exploration aims at creating new products and gets new market through new technology and knowledge. It focuses on strategy flexibility. And its process goes through stages of search, change, risk, experiment, discovery and innovation. The path is “do different things”. When exploration and exploitation coexist in the same organization, they will compete for scarce resources (Zhou & Xue, 2009). Both exploration and exploitation have intention to increase themselves and to get the support from organization exclusively. Therefore, organization might ends up with excessive exploitation and "capability trap" or it is also possible to go into excessive exploration and vicious circle of "exploration, investment and no rewards" However, the experience of many successful companies has proved that it is possible to manage exploration and exploitation. The management of these two incompatible activities can be efficient and innovative too. More and more scholars agree that exploitation and exploration are not only contradictory but also mutually promoted, and this contradictory and mutual promotion is necessary for the organization to achieve sustainable development. For example, Colbert believed that the interaction between exploration activities and exploitation activities creates a complex capability providing an additional source of competitive advantage for the company (Colbert, 2004).

With the development of ambidexterity theory, scholars have broad their

understanding of ambidexterity and make it beyond "exploration" and "exploitation" in organizational innovation and learning. For example, in an organization's adaptation to the environment changes, there are many conflicts, which can be included in ambidexterity theory. Such as collaboration and control (Sundaramurthy & Lewis, 2003), individuals and groups (Murnighan & Conlon, 1991), flexibility and efficiency (Adler, Goldoftas & Levine, 1999). Exploration and exploitation (March, 1991; Smith & Tushman, 2005), Profit and Social Responsibility (Margolis & Walsh, 2003). Therefore, in a broad concept, organizational ambidexterity refers to contrary and interrelated needs of organization. And it is necessary for organization to maintain ambidexterity in achieving sustainable development. In the research on organization ambidexterity, how to realize the coexistence of two contradictory elements has therefore become a topic that discussed by scholars .

Compared with traditional contingency theory, as an important perspective to understand and deal with conflicts, Paradox provides a better cut-in place for analyzing the capability construction of organization with ambidexterity. The following part will review the background, content and related research on paradox theory.

As the organizational environment becomes more and more global and dynamic, the competition between organizations becomes increasingly fierce, and the need for coordinating contradictions within organizations becomes obvious. Academics and practitioners are increasingly adopting a paradox perspective in understanding and explaining these contradictory relations (Smith & Lewis, 2011). Contingency theory provides a method to deal with conflicts. The assumption of this theory is organizing system is most effective when organization is well matched with external environment. This theory provides reference on how individuals and organization make choices among conflicted or competitive demands. The contingency theory before 1960 (Waldman & Jensen, 2016) inspired decades of research on exploring how context affects the effectively chose of contradictory options. When organizations have multiple needs at a same time, paradox theory provides another way to deal with conflicts in organizations. Although temporary option made by organization on contradictory needs helps improve the short-term performance of organization, its long-term sustainable development relies on meeting diverse needs based on paradox perspective. In the early 1980s, scholars began to study and research paradox in the field of philosophy and psychology. They also introduced the concepts of paradox and conflict into the study on organizational and management phenomena.

Lewis (2000) divided paradox into learning paradox, organizational paradox, and belonging paradox. Smith and Lewis (2011) added performance paradox on this basis. During their review on literature of Paradox theory, the application of paradox theory has been divided into ten categories. The following four categories of paradox represent core activities and elements of organizations: learning (knowledge), belonging (identity/interpersonal relationships), organizing (processes), and performing (goals). These four categories are intercrossed with each other forming a paradox for the other six modules Complexity and plurality drive belonging paradoxes or tensions of identity, such as individuals or collectivity. Organizing paradoxes surface as complex systems create competing designs and processes to achieve a desired outcome. These include tensions between collaboration and competition, empowerment and direction, or routine and change. Performing paradoxes stem from the plurality of stakeholders and result in competing strategies and goals. Tensions surface between the differing, and often conflicting, demands of varied internal and external stakeholders Learning Paradox is interpreted as: efforts to adjust, renew, change, and innovate; foster tensions between building upon and destroying the past to create the future The tension between Learning and Performance can be interpreted as building capabilities for the future while ensuring success in the present. The path between Belonging and Organizing depict individuality vs. collective action. Tensions between learning and belonging reflect conflicts between the need for change and the desire to retain a developed sense of self and purpose. Tensions between learning and organizing refers to organizational routines and capabilities that seek stability, clarity, focus, and efficiency while also enabling dynamic, flexible, and agile outcomes Tensions between organizing and performing can be summarized by the interplay between means and ends or process and outcome, apparent in conflicts between meeting employee and customer demands (Gittell, 2004) and between seeking high commitment and high performance Tensions between performing and belonging means clash between identification and goals as actors negotiate individual identities with social and occupational demands Tensions studied in this study belong to the category of organizing. It refers to explorations and balances between different goals in organization's sustainable development.

Initially, there was no clear definition of paradox and only the acceptance and management of conflicts existed. Cameron and Quinn (1988) improved the definition of paradox. They believed that Paradox was a dynamic process with positive or negative results, and the key characteristic was contradictory yet interrelated elements that exist

simultaneously. Researchers have clarified the definition of paradox in the following three perspectives. From the perspective of relationship, paradox is the phenomenon observed by human mind and paradox exists outside the individual or it exists in things that independent of the individual; from dialectical perspective, paradox is the simultaneous existence of viewpoints or things and their opposites. Because viewpoints and things are their opposites, their simultaneous existence makes paradox salient. From the perspective of interaction, paradox is constructed in society and exists in among individuals. Lewis (2000) pointed out that paradox stemmed from tensions and included the management of positive and negative cyclic processes. Smith and Lewis (2011) defined paradox as contradictory yet interrelated elements that exist simultaneously and persist over time. This definition emphasized two elements of paradox; (1) conflicts, elements seem logical when considered in isolation but irrational, inconsistent, and even absurd when juxtaposed. (2) accept and cope with conflicts actively.

As the research on paradox theory goes in depth, researchers should distinguish paradoxes from similar organizational tensions, such as dilemmas and dialectics. Although these concepts are interrelated, they are different. In a paradox, contradictory yet interrelated elements exist simultaneously and persist over time. These elements seem isolate in logic but they are irrational, inconsistent, and even absurd when juxtaposed. Duality means the relative existence of two parts in a unified whole. The external boundary integrates the overall system and highlights synergies; internal boundary creates distinction and highlights opposition. Dilemma means competitive options. Each option has its own advantage and disadvantage. In Paradox, options are contradictory and interrelated that any choice between them is temporary and tension will resurface. In dialect, contradictory elements (thesis and antithesis) resolved through integration (synthesis), which, over time, will confront new opposition. In paradox, synthesis stresses the similarities between elements. But by neglecting valued differences, this integration is short-lived.

### **2.3.2 Management Strategy of Paradox**

There are more and more paradox in organization, so the demand of managing these paradox increases (Da Cunha, Clegg, & e Cunha, 2002). Conflicts of paradox will make organization members discomfort and it also make management difficult. However, conflicts of paradox have potentials that can promote the development of individuals and organizations (Ashforth et al., 2014). Smith and Lewis (2011) pointed out that

sustainability can be fostered by coping tensions with dynamic, purposeful and continuous acceptance and management strategy (denotes integration between fragmentation and integration).

Managing paradox does not mean to eliminate paradox (Smith & Tushman, 2005; Smith & Lewis, 2011). It means to maintain conflict and use its positive potential to prevent negative dynamics (Cameron & Quinn, 1988; Lewis, 2000). To avoid a vicious circle, Smith and Berg (1987) point out those participants must reinvent the emotions that have been polarized or projected elsewhere, and immerse their emotions in conflicts. Vince and Broussine (1996) also believed that having a thought of paradox encouraged managers to discover the relationship between contradictory forces and thus help to reveal the meaning of contradictions.

Due to the difference in cognition, resource allocation and organization anticipation, organizations have various responses and management of paradox (March, 1991; Bertels & Lawrence, 2016). Van der Byl and Slawinski (2015) gave out four general approaches to how tensions are examined: Through a win-win, trade-off, integrative, or paradox lens. The win-win approach looks for opportunities to reconcile social and/or environmental goals with economic goals, thus bypassing tensions, whereas a trade-off approach views such goals as being in conflict and requires that a choice be made between them; the integrative approach brings balance to the contradictory elements. A paradox approach, which seeks to understand the nature of tensions along with how actors work through them, provides an opportunity to evaluate complex sustainability issues and generate creative approaches to them. There are two responses to paradox conflict. They are defensive responses and strategic responses (Lewis & Smith, 2014; Papachroni, Heracleous, & Paroutis, 2016). Defensive responses focus more on mediating conflict resulted from paradox in short term. These responses might lead to spiral rise and vicious circle of conflict (Eisenhardt & Martin, 2000; Smith & Lewis, 2011). For example, splitting distinguishes the opposite of contradiction; projecting transfers the attributes of the conflict to a third party; repressing prevents the consciences of experience; regressing returns to the previous conflict state; reaction creates compromise on conflict emotions (Smith & Berg, 1987; Lewis, 2000). The strategic responses attempt to address paradox in the long run. These responses mainly include: acceptance which means participants actively seek ways that lead to conflicting elements (Poole & Van de Ven, 1989; Sundaramurthy & Lewis, 2003); confrontation which refers to the direct response and resolution of conflict source; transcendence which refers

to the thinking transits from focusing on the competitive relationship between the elements of paradox to emphasizing the complex interdependence between these elements (Andriopoulos & Lewis, 2010). Table 2-1 summarizes different opinions of scholars on paradox responses and management.

### **2.3.3 Paradox in Independent Colleges**

This thesis uses the paradox theory to describe the dual role of the independent college, namely public welfare and commercial. The public welfare of education comes from talent cultivation which promotes social development. It is the natural attribute of educational activities. Commerciality means that independent colleges are different from ordinary public institutions. It is an investment in education and a profit-seeking behavior. Independent colleges do not enjoy state financial subsidies; it is run by social organizations or individuals with funds, lands and other resources. Although current research has covered the public welfare and commerciality of independent colleges (Pan, 2010), but few researchers have investigated how the public welfare and commerciality evolved with the development of independent colleges and what is their influence on the capacity building of enterprises. Paradox is defined as “contradictory yet interrelated elements coexist over time” (Smith & Lewis, 2011). It aimed at explaining a form of conflict and complementary. Paradox theory provides useful perspectives in understanding a large number of management phenomena such as competition and cooperation, efficiency and flexibility, individual and collective, centralization and decentralization. The reasons that paradox theory is widely used in research are three folded. First, public welfare and commerciality is contradictory and some scholars believe public welfare comes first than commerciality (Pan, 2009) while other researchers argued that commerciality is the main focus of independent colleges (Wang & Yang, 2011). This pointed out the conflicts between public welfare and commerciality of independent colleges. Second, public welfare and commerciality is interrelated. Pan (2010) believed that it is possible to realize commerciality and public welfare at the same time. Third, public welfare and commerciality are two inherent and co-existed natures of independent colleges over time. This is in consistent with the definition of Paradox But why does this thesis chose paradox rather than dilemma or dialects (Fairhurst et al., 2016; Schad et al., 2016)? The reason is dilemma is to compare two completely contradictory choices. However, public welfare and Commerciality, as the two natures of independent colleges, coexist in their development (Cuganesan, 2017). Commerciality and Public welfare cannot be categorized into the

theory of Dialectics. Usually, new factor can be created in Dialectics through some form of integration in two contradicting objectives which vanish after the form of new factor (Hargrave & Van de Ven, 2017). Although Public welfare and Commerciality in independent colleges have dynamics, these two natures coexist and mutually advance. Through the introduction of paradox theory, this study finds the mechanism that affects the development of the organization and analyzes it with validated elements of paradox (Ouyang et al., 2016). It is also possible to construct two suitable paradox poles for the case (Ding & Wu, 2017). Therefore, this thesis endeavors a mechanism to explain organizational capability construction process of independent college from perspective of paradox theory.

### **2.3.4 Summary**

This thesis introduces paradox theory to analyze the organizational behavior of independent colleges. It endeavors to find out the behavior pattern when independent colleges coordinate dual resource-dependent with capability development. After summarizing the basic connotation, responses and management of paradox, this thesis constructs two main paradox poles of independent college, namely, public welfare and commerciality. The analysis below will explore and analyze the organization's behavioral patterns in the dynamic development of its organizational capability based on these two main poles of the paradox.

## **2.4 Conclusion**

This thesis attempts to answer three research questions: What is the organizational capacity of an independent college? How do the organizational capabilities of independent colleges develop and evolve over time under external resource dependence? How is the internal innovation capability of independent colleges developed under context of Paradox and Conflict? The summarization of resource dependence theory, organizational capability theory and paradox theory has laid foundation of subsequent definition clarification and research carryout.

First, through a review of resource dependence theory, this thesis revealed that resource dependence has duality. For instance, organization has dependence both on market and technology at the same time. As for Independent college, its duality of resource dependence is not about market and technology. The duality of such secondary



organization is, on one hand, the dependence on parent university; on the other hand, the dependence on the demand of market. This unique resource-dependent relationship is helpful to understand the situation of the independent college and it provides a background and analysis basis for the research on organizational capability development of independent college.

Second, this thesis found out the dynamic of capability development of independent college based on dual resource dependence. For independent colleges, the dual dependence of resources as well as organizational capability development of independent college both experience dynamic changes. The absorptive capability of the independent colleges is used as a cutoff point, summarizes the development logic of dynamic capabilities, namely, "internal-to-external" and "external-to-internal". This thesis therefore explores the process and mechanism of independent college capability building.

Finally, in order to connect resource dependence dynamics with capability development dynamics, the paradox theory is introduced as an intermediary to analyze the process of independent colleges coordinating two dynamics. After summarizing the connotation, responses and management process of paradox theory, the definition of key paradox in organization is derived and introduced into the research of independent college. Independent colleges have inherent attributes of public welfare and commerciality, which is treated as the two natures of the paradox poles during the research. Through investigating the behavior of coordinating resource dependence dynamics and organizational capability development dynamics in independent colleges, this thesis explored the innovation and construction of organizational capability in independent college.



## **Chapter 3: Research Design**

### **3.1 Design ideas of this research**

The construction process of the independent college organizational ability is explored through three research questions: (1) what is the organizational capacity of an independent college? (2) how does the organizational capability of independent colleges evolved under external resource dependence? (3) how is the internal innovation capability of independent colleges activated under the context of Paradox and Conflict? The first subquestion on definition of organizational capabilities can be gradually solved from summerizing text materials with qualitative research. The second and the third subquestions are all questions on "how". According to Yin (1994) and Pratt (2009), case study is suitable for answering "how" and "why" questions (Yin, 1994; Pratt, 2009). Therefore, the research method of case study fit in our research questions (Chen, Xu, & Fan, 2008). Meanwhile, the construction process of organizational capability explored by this thesis based on independent colleges with dual nature (public welfare and commerciality) can be extended to other derivative organizations, and provide reference for their development. Finally, this study investigates the complex and dynamic mechanisms behind the phenomena (Eisenhardt, 1989, 1991) and reveals theories and patterns (Eisenhardt & Graebner, 2007). The proper data collection, processing and analyzing way should be longitudinal case study. In conclusion, the three subquestions can be researched with qualitative research method.

The definition of organizational capability, as the research basis of this thesis, should be firstly clarified. The existing literature has not formed a unified consensus on the definition of organizational capabilities of higher educational institutions. The definition is diversified by different authors from various perspective. Using qualitative research method, this thesis extracts capability-related keywords from interviews and text materials and constructs the definition and connotation of college capability. With the goal of clearly revealing the dynamic evolution of capability in the development process of organizations, this thesis will first categorize the development stages of independent college and then compare the construction of internal and external organization capability in classified development stages. Finally, though summerizing the evolution of organizational capabilities across different development stages of independent college, the construction of organizational capability and

its dynamic advancement mechanism will be demonstrated.

This thesis also analyzes the external environment of organizations with the perspective of resource dependency, and explores how the changes in independent college's resource dependence affect its organizational capacity building. Although there are enormous environmental factors that have influence on an organization, only those environmental elements identified by the organization have an effect on its behavior. Affected by the organization's dependence on its parent organization and market, the resource elements selected in this thesis that influence the organization are determined by the organization's cognition of its external environment. There is an evolutionary process resulting from the interaction between changing pressures, growing opportunities and advancing organizational capabilities of independent colleges. The analysis of the organization's resource dependence and pressure coping at different stages, reveals a dynamic evolution process of an organization's response to environmental changes and growing opportunities.

As an organization with dual nature of "public welfare" and "commerciality", the behavior characteristics of an independent college is built by the interaction of non profit-making actions and commercialize behaviors are analyzed under the paradox theory. Beginning with identifying the definition of "public welfare-making" behaviors and "commercial" actions, the characteristics of these two behaviors in different development stages of organizational capability are analyzed. By comparing the relationship of between behaviors and capabilities of independent colleges at different stages, this thesis explores the effect of "public welfare" and "commerciality" on organizational capability construction of independent colleges.

After analyzing and exploring of organizational capabilities, dynamic changes on resource dependence, and internal paradox equilibrium system (public welfare and commercial), the evolution of organizational capability in different development stages of organizations under the context of behavior and external environment changes is explained. After the combination of these three processes, this thesis will be able to solve three research questions. The above research will be carried out through the steps of research object selection, data collection and data analysis. The specific process have been described below.

## **3.2 The selection of research object**

### **3.2.1 The selecting principle of research object**

Based on principle of representativeness (Patton, 1987), the research object is chosen to be Xinhua college of Sun Yat-sen University. The three selection criterias of the research object in this thesis are as flows:

First, the establishment time and the development path of Xinhua College are consistent with other independent colleges which makes it a good representative sample. It is also located in Pearl River Delta region where there have large number of well-developed independent colleges. Xinhua College ranked sixth among Independent Colleges in Guangzhou in 2017 and ranked 29th in the country, and its rank has been on the rise for five consecutive years. Therefore, the research conclusion based on Xinhua College will provide valuable references on development of other independent colleges.

Second, Xinhua College has basically formed a paradigm in building its own organizational capabilities at current development stage, which provides good research prototype for the author of this thesis to analyze the construction process of organizational capability of independent colleges., After completing its stage of constructing organizational capability, Xinhua College is now focusing on its core development issue of achieving complete independence. Thus, this research object provides authour a well-matched example in exploring the capacity building process of independent colleges .

Third, the accessibility, integrity and accuracy of research data; The author, as a teacher of the investigated school, has access to enormous internal research material, and the interview of other teachers, students and parents is also easy to be conducted. The well-stored annual yearbooks, annual summaries and work plans of Xinhua College provide ample textual materials for the conduction of qualitative research.

### **3.2.2 Introduction of selecting research object**

The research object is Xinhua College, an independent college of Sun Yat-sen University. The development process of both independent college and Xinhua College of Sun Yat-sen University will be introduced below.

The development of independent colleges consists of three stages, namely the establishment stage (1992-2003), the rapid development stage (2003-2008) and the stage of

stable development (2008-2018). The stage characteristics are shown in Table 3-1. In the establishment stage, the independent colleges are created and put into initial expansion. The first new secondary college among higher educational institutions in China, Sichuan Film and Television University, was jointly organized by private investment and public university in Sichuan Province. This University is evolved from the former Sichuan Film and Television Arts College and is jointly organized by Sichuan Normal University and Sichuan Gongyuan Industrial Co., Ltd in 1996 with the purpose of cultivating talents on field of film and television. A large number of independent colleges have emerged in the rapid development stage of independent colleges and new models of independent colleges have been established, such as Southern College of Sun Yat-Sen University and Xinhua College of Sun Yat-sen University. Southern College is founded by Sun Yat-sen University and Guangdong Zhujiang Investment Group while Xinhua College is founded by Sun Yat-sen University and Dongbao Group. Apart from Sun Yat-Sen University, Guangzhou University also jointly established the Songda College and the Huaruan Software College with Songtian Industrial Co., Ltd in Guangdong Province. Step into the stage of stable development, the independent colleges receive numerous official regulations from local and central government which provides the criteria of promoting the standardized advancement of independent colleges. For instance, "Measures on Establishment and Management of Independent College", "National Medium- and Long-Term Outline on Education development and Reform (2010-2020)", "Law on Promoting Private Education" and so on.

The research object selected is Xinhua College of Sun Yat-sen University. It is a comprehensive full-time ordinary institutions of higher education jointly sponsored by Sun Yat-sen University and Guangdong Dongbao Group Co., Ltd. in 2005. The college has courses on arts, science, medical, architecture, economics, management, laws and so on. The college has two campuses with a total construction area of 970,859.46 square meters. The Guangzhou campus is located at the junction of Longdong Huamei Road and Guangzhao 1st Road in Tianhe District, Guangzhou. It covers an area of 256 acres and has a campus construction area of 75,117 square meters. Dongguan Campus is located in Mayong Town, Dongguan City, covering an area of 1200 acres and a campus construction area of 383,319.79 square meters. Under the support of the parent school Sun Yat-sen University, the college's first year enrollment ranked third among independent colleges in the Guangdong province and the enrollment rate has been maintained at more than 90% for many years. In 2014, it even rose up to 95%.

Table 3-1 The Development Stages of Independent Colleges

Time	Stage	Key Event and Characteristics
1992-2003	The Establishment Stage	<p>The first Independent College was established in 1996 With strong nature of "public welfare"; Characteristic of "Secondary Public College"</p> <p>High dependency on the parent university in terms of funding sources, human resources, and teaching management.</p> <p>Receiving encouragement from the Country to transfer or integrate into parent university.</p> <p>In profit distribution, certain profit goes to the parent university and the investor will also receive a part of the profit, and the college will also put some profit for the construction of independent colleges and the improvement of campus equipment to improve the enrollment rate.</p> <p>The nature of independent colleges was first clearly defined in 2003 by the Ministry of Education with an official document the "Several Opinions on Standardizing and Strengthening the establishment and management of Independent Colleges launched by universities with New Mechanisms and Models "</p> <p>The reform has been deepened in various aspects. Some localities and universities have plotted in finding new mechanism of running higher education institutions. Among them, the secondary colleges which is relatively independent run by ordinary universities with new mechanisms and models have most remarkable development.</p>
2003-2008	Rapid Development Stage	<p>Some cities have developed rapidly in economic, but the supporting higher education has indeed left behind. Therefore, the government took the lead in introducing independent colleges and cooperated with some universities in managing independent college.</p> <p>Independent colleges use the private capital from the society to achieve rapid development, and some public universities can run schools in cooperation with two independent colleges.</p> <p>In 2008, the Ministry of Education issued the "Institutions for the Establishment and Management of Independent Colleges", which clearly stipulates the basic requirements of the organizers and cooperative investors of independent colleges. Additionally, this document also claims clearly that independent colleges have statutory rights and interests and their organizers and investors have legal rights in running schools and getting a reasonable return from the profit.</p>
2008-2018	Stage of Stable Development	<p>In 2010, the Ministry of Education issued the "National Medium- and Long-Term Education Reform and Development Plan (2010-2020)", which proposed to deepen the pilot reform on the school-running system and conduct pilot reform of non-profit and profit-making among private</p>

colleges.

In 2016, the Standing Committee of the National People's Congress deliberated and approved the newly revised Law on Promoting Private Education. The above laws and regulations provide more favorable conditions for encouraging social forces to organize independent colleges and promote the development of independent colleges.

While independent colleges use the resources of the parent university, they are also constantly improving their market competitiveness.

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The college has 7 secondary schools, 12 direct departments, and recruits students nationwide. Until 2017, Xinhua College has enrolled 12 batches of students and the total enrolled students number is 21,551. There are 1219 teachers, of whom 36.64% have senior professional titles, and 77.99% have master's degree or above. The teachers are recruited from different institutions: professional teachers from market selected by the college; teachers from Sun Yat-sen University (including a few retired professionals and a small number of professional teachers); outstanding talents hired from the society; teachers with teaching experience in other universities and senior managers, professionals and technical talents with practical experience in some industries. (from Xinhua Official Website)

### **3.3 Data collection**

From the initial collection of data to the writing of this thesis, the author conducted observations, field research and interviews on Xinhua College Sun Yat-sen University, the research object, for more than two years. In the following section, the author will summarize the data collection process and describe the data of Xinhua College Sun Yat-sen University

#### **3.3.1 The data collection process**

There are three stages included in the data collection process. In the first stage, the author acquainted himself with the college and initially identified the research questions based on the discussion with current teachers of Xinhua College. On this basis, the author began to collect second-hand information and read relevant literature in the second stage. The aim is to understand Xinhua College more comprehensively and to determine the research questions. In the third stage, the author, with an aim of getting more specific research material, went deep inside of Xinhua College to interview teachers at all levels and students. Through the comparison of interview materials, secondary materials and theory, the conclusions are drawn. The data collection process of Xinhua College Sun Yat-sen University is shown in Table 3-2.



Table 3-2 Record of Research Process

Stage	Time	Method	Content
Stage one: Identify Research Questions and Research plan	20160528	Discussion	Get familiar with research object; Identify the direction of the research
	20160907	Discussion	Identify research questions, theoretical basis, research method and expected contributions; Finish research plan
	20160915	Remote Discussion	Determine the research questions, sort out research ideas and start to collect data and materials
Stage two: collection and processing of secondary materials	20161128	Data Collection	Collection of second-hand materials such as online news and public platform announcements, 2005-2011 Yearbook and other internal materials
	20170303	Remote Discussion	Discuss and process the collected secondary materials, find the supporting materials for this thesis, and identify the materials that need to be supplemented.
	20170515	Discussion	Make a field research plan in Guangzhou Province and get prepared.
	20170517	Field Research	Implement field research in Xinhua college and conduct Semi-structured interviews with representative people at all levels.
	20170601	Processing of Interview data	Organize the interview materials of Xinhua College into text and data coding is conducted .
Stage three: collection and processing of interview data and supplemented materials	20170619	Data Collection	Add other secondary materials, internal materials such as 2012-2013 yearbook, annual summary and conduct data coding with the added materials.
	20170720	Discussion	Research conclusions is discussed and identified
	20180607	Primary Analysis	Analyze the evolutionary process of organizational capabilities under resource dependence with collected data.
	20180904	Discussion	How the behavioral analysis of independent colleges helps to understand the construction process of independent college capability.
	20181019	supplemented interview	21 people including teachers, students and their parents were further interviewed
	20181127	Discussion	Discussion on framework of the whole thesis

### 3.3.2 Details of collected data

The data used in this study mainly include primary data from interviews and secondary data based on text materials. The details are shown in Table 3-3. The primary data mainly comes from interviews and semi-structured interviews covering major groups of the college. A total of 23 interviewees were selected including three interview groups, which consist of teachers, students and parents of Xinhua College. In particular, the group of teachers includes three categories, teachers with leadership experience, counselors who directly contact students, and teachers who are responsible for student employment. Among these three categories, four teachers are working in administrative department and five teachers teach at the School of

Management, one of whom is with teaching experience in a private college. Among the group of students, there are seven third-year undergraduate students, two of them are student cadres; The parent group includes seven parents. The interviews that have been completed lasted for 31 hours in total, and the text is about 273,300 words. The content of interview is mainly about the orientation, the strengths and weaknesses and the characteristics of Xinhua College as well as its development process. As for the secondary data used by this research, the content can be introduced from the following four aspects, namely: (1) Xinhua College's yearbook from year 2005 to year 2013; the yearbook has information on the college's annual plan and summary, published documents, development of various departments, enrollment and employment rate, the awards of the college and so on. (2) Website news and other online open-accessibility information collected mainly from the official website of Xinhua College, mass news websites, and the WeChat interface of Xinhua College. (3) The annual work plan, which helps to understand the construction focus and steps of Xinhua College over years (4) Other internal documents, include but not limited to System Description, Project Plan, Enrollment Plan of Xinhua College.

Table 3-3 Material Source and Code of the Research Case

Category	Source		Code	Main Content	Length of Interview (hour)	Organized Text (10 thousand Chinese characters)
	Department	Position				
	Students' affairs office	Director of Student Employment office	F1	The main attraction of Xinhua College to students; the advantages and disadvantages of its students in labor market; the main difficulties and problems faced by the school.	2.5	1.74
	Students' affairs office	Counselor	F2	The basic content of student management work; students' and teachers' opinion of Xinhua College; problems and difficulties faced by Xinhua College.	1.5	1.38
	Superintendence	Teaching Superintendency	F3	How to identify independent colleges in China; the development prospects of Xinhua College; the problems and difficulties faced by the college; how to coordinate practice and research.	1.5	1.41

Primary Data	Administration	Assistant of the Dean	F4、F5	How to identify independent colleges in China; the development prospects of Xinhua College; the problems and difficulties faced by the college; how to coordinate practice and research.	2.5	2.9
	Management School	Teacher	F6、F8	The difference between the independent colleges and the private colleges; What is the teachers opinion on the future development and the orientation of Xinhua College; how the teacher and the students interact; Is there interactions between teachers and departments of the college and how are these interactions carried out.	4	4.2
	Management School	Teacher	F7、F9	The impact of the board of directors on the College; the source and invest place of the College's capital; the future development direction of the College; the relationship between the College and Sun Yat-sen University; the Identification of the college.	3.5	3.8
	Various industries	Parents	J1-J7	Why choose Xinhua College; what advice and opinions are there for the College; how to understand private universities and Sun Yat-sen University.	4	4.2
	Management School	Student	X1-X7	The reason that Xinhua College was selected; events that give you the most impressive impression; what advice and opinions are there for the College; how to understand private universities and Sun Yat-sen University.	11.5	7.7
Secondary Data	Yearbook from 2005 to 2013		S1	documents and summary of administration work in Xinhua College; leadership institutions; teaching work; discipline construction; scientific research work; administrative	-	-

Official website of Xinhua College; News website	S2	management; campus construction; party and group work; discipline department and teaching research department work; rewards and recognition; Enrollment Plan; Introduction of New Project; Introduction on development of Xinhua College	-	-
Annual Summary from 2005 to 2017	S3	Enrollment situation of College; Development goals and characteristics; Summary on annual key events and experience; work plan of a new year	-	-
Internal file of Xinhua College	S4	System Description, project plan, enrollment plan of Xinhua College and so on.	-	-

### 3.4 Data processing

#### 3.4.1 Main concept

After data processing, there are three core concepts namely, environmental cognition, paradox equilibrium system and independent capability. Environmental cognition refers to the organization's perception of changes in the internal and the external environment. Combined with the unique characteristics of duly resource dependence (Wang & Du, 2016), independent college, as an organization, marks environmental cognition as stress or opportunity (Hambrick & Mason, 1984; Dutton & Jackson, 1987; Nadkarni & Barr, 2008). The changes of organization's perception of the environment are ascertained through the measurement of stress and opportunity. The system of paradox equilibrium refers to the core of the organization's dynamic response to environmental changes. The organization will response to the changes in environment through the interrelated and conflicting public welfare and commercial behaviors (Pan, 2010). In the process of discovering the tendency between public welfare-making behavior and commercial behaviors, the movement pattern of Paradox Equilibrium and environmental cognition is discovered. Independent capability is a new interpretation of organizational capability which is based on the uniqueness of an independent college. The independent capability of organization is the ability to achieve development in coordinating internal and external development. Based on the dual nature of independent colleges (O'Reilly III & Tushman, 2008; Rogan & Mors, 2014) independent capabilities can

be divided into internal replication capabilities with “exploration” and internal innovation capabilities with “exploitation”. Table 3-4 shows the specific definition of concepts in this thesis.

Table 3-4 Related Concepts and Definition

Theory Basis	Main Concept	Constructed Variable	Definition	Supporting Literature
Theory of Resource Dependency	Environment Cognition	Pressure	The recognition of organization on internal environmental weaknesses and external environmental threats.	Hambrick & Mason,1984; Dutton & Jackson,1987; Nadkarni & Barr,2008
		Opportunity	The recognition of organization on internal environmental strengths and external environmental opportunity.	Hambrick & Mason,1984; Dutton & Jackson,1987; Nadkarni & Barr,2008
		Commerciality	Organization's behavior of profit making	Pan, 2010; Wang & Yang,2011
Paradox Theory	Paradox Equilibrium System	Public Welfare	Behavior that brings economic and non-economic benefits to other members of society outside the organization.	Pan ,2010; Pan ,2009
		Internal replication capability	The organization's ability to respond to environmental changes, to explore external resources and introduce them into the organization.	Eisenhardt & Martin,2000;Barney,1991
Organization Capability Theory	Independent Cability	Internal innovation capability	The ability of an organization gained from creating, extending, or modifying its basic resources in response to environmental changes.	Peteraf,1993; Helfat et al,2015; Eisenhardt & Martin,2000
		Outside Capability	The capability outside the organization	

### 3.4.2 Data coding

This thesis analyzes the capability constructing process of Xinhua College Sun Yat-Sen University by research method of content analysis and layer-by-layer coding. The content analysis is mainly used to explore the feature changes of organizational capability in different stages, and the layer-by-layer coding method is to summarize materials and form new

concepts. The two methods are used jointly in revealing the capability construction process of independent colleges.

Before the coding of research data, it is necessary to stage the development of the independent college's capabilities. Based on the dynamic construction process of organizational capability, the development process of capability is divided into three stages with the following three cutting-off events: the formal establishment of the school, the completion of its Dongguan Campus, and the enrollment of Xinhua College outside Guangdong Province. The first stage is the external capability introduction phase from May 2005 to December 2011. The second stage is from December 2011-September 2014 and this stage is called internal capability intention stage. The third stage refers to the "internal-to-external" development stage from September 2014 to september 2018. The specific criteria and contents of stage classification are shown in Table 3-5.

Table 3-5 The Development Stage of Organizational Capability of Xinhua College Sun Yat-sen University

Period	Development Stage	Cutoff Point	Stage Characteristic
2005.5-2011.12	Stage one: The stage of introducing external capability	In May 2005, Sun Yat-Sen University's Xinhua College was formally established in response to the call of national policy.	The basic construction and operation of Xinhua College in this stage are depending on the introduction of resources from its parent school.
2011.12-2014.9	Stage two: The stage of internal capcapability retention	In December 2011, the construction of Dongguan Campus Xinhua College was completed and the College started to have official office.	After the construction of Donguan Campus, Xinhua College started to introduce exclent teachers and workers and the teaching quality was also improved
2014.9-2018.9	Stage three: Capability developemt stage from internal to external	In September 2014, Xinhua College of Sun Yat-sen University began to recruit students outside Guangdong Province.	finished the construction of basic organizational capability; started to enrollemnt students outside Guangdong Provinde; the unique characteristic of Xinhua College was built up gradually

Stage one: The stage of introducing external capability Xinhua college was jointly created by Sun Yat-sen University and Guangdong Dongbao Group Co., Ltd. At this stage, the college was in short of resources, and it's basic construction as well as operation depended largely on resource introduction from Sun Yat-sen University. The second stage is the internal capacity retention stage. In 2011, the Dongguan campus was completed and the school

entered its time of one school with two campus. The Dongguan college has its own teaching locations and office. It started to introduce teachers and improve teaching quality. The third stage: the development stage of getting capability from outside and creating its own capability Internal-to-External. After the construction of capability in the second stage, the college began to recruit students outside the province in September 2014, and it also gradually created its unique teaching methods. For example, recruiting “undergraduate transfer students”, creating “Xinhua Yixian class”, and launching “Qing Ma training class of 100 student backbone. The college started to integrate internal and external resources in transforming the absorbed capability to be its own organizational capability.

Next, the collected data was encoded by method of content analysis and layer-by-layer coding. This thesis analyzes and organizes research data with method of data coding and classification (Eisenhardt, 1989). The coding stages includes data reduction, keyword extraction, and summary classification. The first coding is conducted with data deduction, Data reduction refers to the process of selecting, simplifying, extracting and transforming qualitative texts (Miles & Huberman, 1994). Since the amount of qualitative data collected is too large, the author needs to extract research-related items from these materials. After selection, a total of 870 items are extracted, and the item library shown in Table 3-6.

Table 3-6 Process of Data Deduction and Items Extraction

Serial Number	Stage	Source	Item Description	Key Words	Primary Code
97	Stage Three	X1	One of the recruitment requirements posted online is a Ph.D. degree; compared with the requirements two years ago, it has been raised from master degree to Ph.D degree Applicants wish to have more provincial or national research projects and they desire to publish more articles in international journals and well-known publications due to the College's emphasis on these qualities during recruitment..	recruitment;Ph.D; Master	Faculty
85	Stage Three	F3	One of the recruitment requirements posted online is a Ph.D. degree; compared with the requirements two years ago, it has been raised from master degree to Ph.D degree Applicants wish to have more provincial or national research projects and they desire to publish more articles in international journals and well-known publications due to the College's emphasis on these qualities during recruitment..	Research ability; academic papers	Research Ability

The primary coding was done by three researchers using method of independent coding. The three researchers first extracted keywords from the selectable items and discussed the controversial items or keywords until they reached an agreement (see Table 3-6); then, the coders categorized the extracted keywords and generated primary coding. After the objectionable items were discussed and the repeated coding was merged, the remaining items

were all put into the item base. 827 items were kept after primary coding (See Table 3-7).

Table 3-7 Statistics of Main Concept

Main Concept	Constructed Variable	Stage one	Stage two	Stage three
Environment Cognition	Pressure	20	33	59
	Opportunity	2	6	49
Paradox Equilibrium System	Commerciality	4	29	23
	Public Welfare	37	10	26
Independent Capability	Internal replication capability	26	18	89
	Internal innovation capability	10	34	219
	Outside Capability		133	

According to the primary coding results, the source of items were judged and put into the corresponding secondary code base. After this, items were divided into corresponded stages based on their occurrence time (See Table 3-8). For example, item of "One of the recruitment requirements posted online is a Ph.D. degree; compared with the requirements two years ago, it has been raised from master degree to Ph.D degree" comes from interview of XI; The key words extracted from this item are recruitment, Ph.D degree, master degree; According to these key words, the primary code is decided to be Faculty; then the source of capability is distinguished as independent college, therefore, the capability was judged to be internal capability of independent college; in the next step, the researcher found out whether the faculty strength is borrowed from outside or it was constructed by the organization. In the above case, the faculty was recruited inside of organization, therefore the code was "internal innovation capabilities".

Table 3-8 The Process of Data Coding

Source	Item Description	Key Words	Primary Code	Secondary Code	Classification
F3	The independent colleges visited are well constructed; their campuses are very standardized, and these independent colleges face great competitive pressures.	Competitive pressures; independent college	Competitive pressures	Pressure	Environment Cognition



F6	<p>Currently, it's difficult to tell whether independent can be achieved. The new principle has his own ideas during the reform of Sun Yat-sen University; the Xinhua college has the possibility of breaking away from Sun Yat-sen University.</p> <p>Many independent colleges develops very fast now and have a desire of breaking away from parent univeristy;</p>	<p>Independent; Break Away; Reform</p>	<p>Independen t Threats</p>		
F4	<p>for example, the Zhuhai College of Beijing Normal University has set up such goal Many other independent colleges also have such goals</p>	<p>well- developed; break away; independent; ideas; goals</p>	<p>Will of being Independen t</p>	<p>Opportunit y</p>	
F1	<p>Many enterprises have desire to cooperate with colleges and universities especially small businesses</p>	<p>Enterprises; Cooperation</p>	<p>Cooperatio n between universities and enterprises</p>		
F3	<p>Cooperaiton of Enterprises and universities is made on the basis of society need and the cability as well as desire from univeristies</p>	<p>Needs from society</p>	<p>Student Cultivation</p>	<p>Public Welfare</p>	
X5	<p>The lab is opened on work days and weekend for students</p>	<p>increase opportunity</p>	<p>Caring students</p>		<p>Paradox Equilibrium System</p>
F1	<p>The hidden purpose of the parent conference is financing.</p>	<p>Financing</p>	<p>Get Financing</p>		
F2	<p>Independent in its nature is a Enterprises; Cost and Profic are determinent questions considered by independent colleges.</p>	<p>Cost; profit</p>	<p>Business Value</p>	<p>Commertia lity</p>	
X1	<p>One of the recruitment requirements posted online is a Ph.D. degree; compared with the requirements two years ago, it has been raised from master degree to Ph.D degree</p>	<p>recruitment;P h.D; Master</p>	<p>Faculty</p>	<p>Internal innovation capability</p>	
F3	<p>Applicants wish to have more provincial or national research projects and they desire to publish more articles in international journals and well-known publications due to the College's emphasis on these qualities during recruitment..</p>	<p>Research ability; academic papers</p>	<p>Research Ability</p>		<p>Independent Cability</p>

X5	Some of its leaders are retired professors or part-time professors from Sun Yat-sen University.	Part-time Job	Faculty	Internal replication capability
F4	The author graduated from Lingnan College of Sun Yat-sen University. The author also visits his supervisor in his home university very often for academic exchanges.	Academic; home university	Research Ability	
J3	Sun Yat-sen University is a famous university on the list of 985 and 211 university of China. It has professional teachers and strong faculty.	Teachers; Faculty	Faculty	Outside Capability

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### 3.4.3 Reliability and validity

The data collection and analysis is a process with characteristics of repetition and iteration. Based on four test criteria Yin (2002) of testing reliability and validity for case study, this thesis adopts different strategies at different development stages of organizational capability to improve the quality of this research (See Table 3-9 page 65). In the stage of research design, the main concepts related to the evolution of organizational capabilities are summarized on the basis of theory deduction. In the stage of data collection, reliability and validity are enhanced by establishing a database of Xinhua College and collecting evidence from various sources. In the stage of evidence analysis, the intrinsic validity of this research is improved based on the relationship construction among data and materials and the explanation of phenomenon. In the stage of report writing, the results of the preliminary analysis is repeatedly verified with the research object to improve the construction validity of the research.

### 3.5 Summary

This chapter mainly introduces design ideas, research objects, data collection process, main concepts, data processing process and the reliability and validity of the data. This chapter lays a foundation for the research of organizational capability of independent colleges.

Table 3-9 Strategy on Improving the Research Quality

Test	Content	Research Strategy of Case Study	Stage of strategy
Construct validity	Normlization of Research Design	Use research Materials from diverse sources	Data Collection
		Relationship Construct among material Connect research drafts to research object; verify the accuracy and authenticity of this research	Data Collection Write reports
Intrinsic validity	Reliability of Intrinsic logic	Attempt to explain phenonmeno Creat logical relationship between research materials	Evidence Analysis Evidence Analysis
External validity	General application of research conclusion	Research process is guided by theory	Research Design
Reliability	The scientificity and rationability of the research programme	Design and write a research draft Create a case study database	Data Collection Data Collection



## **Chapter 4: Organizational Capability Construction of Independent Colleges**

Organizational capability plays a vital role in the survival and development of enterprises. Independent colleges are different from ordinary public universities. Ordinary public universities have a long history of development and have gradually formed internal capabilities. Independent colleges have a short history of development, and at the beginning of its establishment, they depend heavily on the development of external abilities entrusted by parent schools. In the process of development, the consciousness of organizational subject is gradually strengthened, and the colleges are increasingly looking at the development of internal capabilities of reorganizing organizations. Therefore, independent colleges and ordinary public universities have completely different capability formation process. In this context, exploring the capability construction process of an independent college is of great practical significance for an independent college that is developing. Thus, based on the case of Xinhua College of Sun Yat-sen University, this chapter defines the organizational capability of an independent college.

### **4.1 Internal and external capabilities of independent colleges**

Organizational capability refers to the ability of an enterprise to adapt, coordinate, and control the internal and external environment and to successfully engage in business activities smoothly. That is to say, through the effective use of internal and external resources, an enterprise can generate new capabilities by effectively using internal and external resources to interact with each other (Zhang & Li, 2002). Organizational capability is cultivated and developed by the company in the long-term development process. It plays a vital role in the survival and development of the enterprise. It can enable the company to maintain a sustainable competitive advantage and development momentum. Current research affirms the importance of organizational capability to enterprises, but there are few studies on what organizational capability is, especially for the newly emerging independent colleges in recent years.

In order to better distinguish the external process of organizational capability building, organizational capability is initially divided into internal replication ability, external innovation ability and external organization ability. This division is based both on the

characteristic of independent college and on related concepts of organizational capability and duality. Organizational capabilities is also divided into internal replication capabilities and internal innovation capabilities to analyse the capability construction of independent colleges. This is mainly due to their duality (O'Reilly III & Tushman, 2008; Rogan & Mors, 2014), this characteristics organization can more fully describe the composition of organizational capabilities. The internal innovation capability has the characteristics of "exploitation" (March, 1991) in the duality. It is the ability of an organization gained from creating, extending, or modifying its basic resources in response to environmental changes. For example, Xinhua College uses its own resources to recruit new teachers and cultivate its own faculty, which belongs to the ability of internal innovation. The internal replication capability has the characteristics of "exploration" (March, 1991). It has feature of uncertainty and innovation. And it is the ability of organization to respond to environmental changes, explore external resources and introduce them into the organization. For example, teachers of Sun Yat-sen university become staff of Xinhua College. For these teachers, the positions offered by Xinhua College are part-time jobs. These teachers are the faculty formed by Xinhua College with the help of materials from Sun Yat-sen University, which is the ability of internal replication. Internal replication capabilities and internal innovation capabilities are mutually transformable (Helfat & Peteraf, 2015). For example, when Xinhua College was in the process of development, some of the teachers at Sun Yat-sen University chose to stay at Xinhua College, and the faculty strength gradually changed from external capabilities to internal innovation capabilities. Internal replication capabilities and internal innovation capabilities complement each other within the organization and together form an "independent capability" to promote the development of independent colleges.

#### **4.1.1 Internal replication capability of independent colleges**

The internal replication capability is defined as the ability of an organization to explore resources outside the organization in response to environmental changes and to introduce and borrow them into the organization. Since the independent college is a special teaching and educational organization in China's higher education system, it is different from Chinese public universities and private universities. It is a transitional form of university existence in China. At the beginning of the establishment of the independent college, hardware and software facilities were extremely scarce, and did not receive public recognition. Under the dual constraints of resources and environment, its development needs to be attached to the mother school. Therefore, at the beginning of the establishment of Xinhua College, it is

necessary to use the teaching equipment, teachers and management resources of Sun Yat-sen University to the run school. Its development is heavily dependent on Sun Yat-sen University. With the development of independent colleges and changes in the environment, the college has gradually expanded the organization's internal replication capabilities. Next, we will give an example to analyse the formation process of internal replication ability of independent colleges.

Our conception is mainly based on the method of qualitative material coding. We collate the interview of teachers, classmates and parents in independent colleges, and then carry out four manual codes according to the collated materials. The first encoding method is to select, focus, simplify, extract and transform the qualitative text data, and carry out preliminary classification coding and screening of the materials through data reduction. The second encoding is based on the item library obtained from the first encoding, and keywords are selected according to the measure variables of the key concepts. The third encoding is to construct corresponding capability based on items with key words. The fourth encoding is the classification of internal innovation capability or internal replication capability based on the extracted abilities and the subjects of these abilities. The conceptual process of internal replication capability is mainly described by brand effect, teacher strength and practical ability.

As for the construction process of brand effect, according to interviews with teachers, classmates and parents, we find that Xinhua College is a full-time ordinary higher education institution founded by Sun Yat-sen University and Guangdong Dongbao Group Co., Ltd. At the beginning of its establishment, the college did not have its own campus. It mainly relied on the classrooms and dormitory of Sun Yat-sen University (F4). The reason why students chose Xinhua College was because they valued the reputation of Sun Yat-Sen University, and the diploma and degree certificate of the students were also from Sun Yat-Sen University. (F1). Through the resources of Sun Yat-sen University, the college creates its own brand (F1). In these materials, we extracted keywords such as “Sun Yat-Sen University”, “Relying on”, and “Fame”. Through the keywords and information, we found that these words embody the brand effect of Sun Yat-Sen University. Therefore, we construct this ability as a brand effect. The brand effect of Sun Yat-sen University is used by the college to improve its public image in respond to environmental changes. Therefore, we categorized it into internal replication capability of organizations

. With the conceptual process of constructing research capabilities, by sorting out interview materials, we find that Xinhua College has improved its research level by

leveraging the research resources of Sun Yat-sen University. As one teacher mentioned in the interview, “The school’s library is connected to the Internet. Not only can you read the school’s books on the school’s official website, but you can also read the resources of the Sun Yat-sen University Library (F8)”. The college can also enhance its research ability through academic exchanges with the teachers of Sun Yat-sen University. In addition, faculty members will also exchange academic issues with their former alma mater (F4). In these materials, we extracted keywords such as “book and materials”, “assistance”, “academic exchanges”, and “alma mater”. Through the meaning expressed by keywords and data, we found that these reflect the scientific research level of Sun Yat-sen University or other schools. Therefore, we conceive this ability as scientific research capability. The scientific research ability of the parent school and the external school is not something that Xinhua College can master. It promotes its scientific research ability through academic exchanges with the academic masters of the parent school or other external schools.

as for the conceptual process of practical ability, through sorting out interview materials, we found that Xinhua College enhanced its ability by utilizing the resources of Sun Yat-sen University. However, with changes in the development of the colleges and the external circumstances, Xinhua College has gradually cooperated with companies such as Jingdong, Dongbao and Nansha Grand Hotel. The purpose of the cooperation is to enhance the practical ability of teachers and students. For example, it was mentioned in an interview with a teacher that, “When a student graduates, he or she has to do an internship in a company for two months”. Then, at the end of the internship, each intern makes an analysis and improvement plan for the work of the internship and presents it in a summary meeting. Managers, staff, and teachers should also participate in, comment on and select several excellent cases to give certificate reward (F3)”. . In these materials, we extracted keywords such as “enterprise” and “internship” “improvement plan”, “enterprise manager” and “teacher”. Through the keywords and information, we find that these words reflect the intention of cooperation between enterprises and schools and the support of enterprises to schools. We therefore construct this ability as practical ability. The support of the company's practical ability is not something that Xinhua College can master. The college promotes the practical ability of teachers and students by cooperating with enterprises. The main body of this ability is the enterprise, which originates from outside of the organization. We thus classify it as the internal replication capability of the organization.

The above mainly describes the concept of brand effect, scientific research ability and



practical ability in detail. In summary, the internal replication capability of an organization refers to the ability of an organization to explore resources outside the organization in order to cope with environmental changes. This ability comes from outside the organization. Internal replication ability also includes management ability and teacher strength. The framework for internal replication capabilities is shown in Table 4-1. Detailed coding procedures for internal replication capabilities are illustrated in Table 4-2.

Table 4-1 Xinhua University Organizational Capability Framework

Subject	Internal innovation capability	Subject	Internal replication capability
Board of Directors	Capital Operation, Teachers, Infrastructure, Practical Ability	Board of Directors and Partners	Capital Operation and Practical Ability
Parent School	Management Ability, Teachers' Ability, Scientific Research Ability	Maternal School/ Friends	Management Ability, Brand Effect, Scientific Research Ability, Teachers and Infrastructure
Teacher	Research Ability, Teachers and Brand Effect	Teacher's Alma Mater/ Friends	Research Ability, practical ability and teachers

Table 4-2 Coding Process of External Capability of Xinhua College

Demonstration of primitive evidence	Number of items	Key Words	Primary Code	Secondary Code
Sun Yat-sen University is a famous 985, 211 university with first-class resources and platform	35	Brand, reputation, Trademark, Support, Nominal, Famous brand	Brand effect	
Guandong Dongbao Group co-founded schools with Sun Yat-sen University	5	Joint venture, Cooperation and Funding Cap	Capital operation	
San Yat-sen University has a high level of teachers and a strong faculty	29	Instructor, Teacher, Faculty, Professors, Experts, Scholars	Faculty Strength	
Borrowing dormitory and teaching resources of Sun Yat-sen University	3	Library, Gymnasium, Facilities, Campus, Dormitory	Infrastructure	External capabilities
Most of the middle and senior leaders of the school are from Sun Yat-sen University	5	Leadership, Middle and high levels, Director, Minister, Manager	Management Ability	
Sun Yat-sen University has strong research strength and strong academic atmosphere	13	Scientific research, Academic, Thesis, Literature, CNKI	Research Ability	
There are many high quality enterprises coming to the school to hold seminars and job fairs	43	Practice, school-enterprise cooperation, Program, Scheme, Major	Practical ability	

#### **4.1.2 Internal innovation capability of independent colleges**

Internal innovation capability in this thesis is the ability of an organization to respond to environmental changes, use its existing resources, and purposefully create, extend, or modify its underlying resources. The establishment of an independent college is influenced by the external institutional environment. Its dual nature of public welfare and commerciality also means that the formation process of capabilities is different from other organizations. The independent innovation ability of the independent college is gradually formed. At the beginning of its establishment, its ability mainly came from the investment enterprises and the parent school. Its internal innovation ability was extremely weak. With the long-term development of the independent college, it gradually began to form and strengthen its own internal innovation capabilities. Next, we will analyse the formation process of the independent innovation ability of the independent college.

The method of constructing internal innovation capability is consistent with the internal replication capability, so it will not be repeated here. This section mainly introduces the construction process of capital operation ability, teacher strength and practical ability. We first discuss the process of constructing capital operation capabilities. Through interviews and second-hand data collection, we found that 90% of the working capital was from the student's tuition (X1) at the early stages of the establishment of the independent college. Due to the limited funds, the school could not provide students with a superior learning environment. With the development of schools, they began to explore how to introduce new funds to create a good learning environment for students. Due to the gradual improvement of the school's surrounding facilities, the commercial atmosphere has become increasingly strong, and the number of students is gradually increasing. The school has begun to introduce supermarkets and shops. (X7, X5, J1). Schools increase their income by raising funds and attracting corporate sponsorship (X7, X3). Additionally, as a large number of students graduated and began to move towards society, the school gradually attracted students back to their alma mater, providing sponsorship and donations to the alma mater to obtain funds (J1, J2). From the information in these interviews, we extracted keywords such as "sponsorship", "donation", "income", and "funds". From the key words and texts, we can see that this reflects the company's ability to acquire and operate capital, so we construct it as capital operation capability. In the process of organizational development and operation, the ability of capital operation is the ability of Xinhua University to grasp and utilize existing resources. Therefore, we classify this capability as the internal innovation capability of the organization.

As for the conceptual process of faculty strength; based on the compilation of the entire interview data, we revealed that the teachers hired at the beginning of the independent college mainly came from Sun Yat-sen University (F1, F3, J4). With the development of the college, it began to recruit its own teachers. Initially, the recruitment requirements for teachers were mainly master's degree. Gradually, teachers are required to have a wealth of work qualifications. Foreign language teachers are also required to have experience studying abroad (F8). In recent years, the college has increased recruitment requirements. Teachers are required to obtain a doctorate degree (X1). There has also been recruitment of new academic leaders (F3) to enhance the college's faculty. From these materials, we can see that the college's requirements for teachers are getting higher and higher. Among them, we have extracted keywords such as “academic requirements”, “teaching experience”, “overseas study experience”, “doctor”, “master” and so on. From the keywords and qualitative materials, we find that these reflect the requirements of Xinhua College for the quality of teachers, so we construct it as teaching force. Teacher strength is the kind of ability that Xinhua College can master and continuously develop in its interaction with the external environment, using existing resources and innovation. Therefore, we classify this ability as the internal innovation ability of the organization.

As for the conceptual process of practical ability, based on the collation of the entire interview data, we confirmed the at the beginning of the establishment of Xinhua University, the enterprised mainly focused its teaching objectives on theory. Due to the influence of the national policy environment and the demand for applied talents from the transformation and upgrading of enterprises, the college has adjusted its talent-training program. The School of Management of Xinhua College of Sun Yat-sen University signed a contract with Jingdong Logistics to establish the “Intelligent Logistics Unmanned Distribution Vehicle Research Base” (S4). The research base has been established on campus by Jingdong Logistics investing in scientific and technical personnel, unmanned delivery vehicles and their supporting equipment. It has taken the Beijing East Campus as the carrier to carry out daily operations, combining the theoretical research and school practice of the university to achieve "school-enterprise cooperation, industry-university Win-win" (F7). This year, the college has signed cooperation agreements with more and more companies, assigning students to enterprises for inspections and internships, and writing corporate diagnostic reports (F3, F5) to encourage students to participate in social practice (J1, J3), and adding practical exercises to the curriculum instead of teaching theoretical knowledge alone (F5, J7). From these

materials, we extract keywords of “school-enterprise cooperation”, “production-university research base”, “theoretical knowledge”, “actual operation” and “practice”. From the extracted keywords and qualitative materials, we found that they all reflect the requirements of Xinhua College for the practical ability of students and teachers, so we construct it as a practical ability. Xinhua College began with a simple transition from theoretical knowledge teaching to a combination of theory and practice, cultivating students' ability to combine theory with practice, which has been recognized by students, parents and society at large. Practical ability is an ability that Xinhua College can master, develop and innovate continuously in the interaction between its existing resources and external environment. Therefore, we classify this ability as the internal innovation capability of the organization.

The above describes in detail the conceptual process of capital operation capability, teacher strength and practical ability. In short, the internal innovation capability of an organization refers to the endogenous ability of an organization to fully develop, innovate, and improve exploitation of existing resources. It is within the organization’s grasp and is internal to the organization. The internal capability also includes management capabilities, brand appeal, scientific research capabilities and infrastructure. The framework for internal innovation capabilities is shown in Table 4-1 and detailed coding process of internal innovation capabilities is illustrated in Table 4-3.

Table 4-3 Coding Processes of Internal Replication Capability and Internal Innovation Capability of Independent Colleges

Source	Demonstration of primitive evidence	Key Words	Primary Code	Secondary Code
F1	Operation funds are mainly raised from tuition money. The group is also responsible for its own financing with no state subsidies.	Funds		
X7	Sponsorship, shop rent, tuition were initially tuition-based, but has now has opened up to a variety of ways	Sponsorship, tuition, rent	Capital operation ability	
X5	From the initial joint venture and tuition fees obtained from the school, we have now also the rent of supermarkets, canteens and other shops, etc.	Rent		Internal innovation capability
F8	Most of the teachers in our school have graduate degrees, are highly educated, and also have rich working experience. All foreign language teachers have study abroad experience.	Educational background	Faculty Strength	
F3	There has been new recruitment of professional directors and subject leaders	New recruitment		

X1	Recruitment requirements were not very high two years ago. A masters degree or above was acceptable. Currently, a doctorate degree is required based on the requirements I saw online.	Education, recruitment	
F3	From the first two years of our strategic management, the students went to the company to examine the internal and external environment of the enterprise, make a diagnosis for the enterprise, and write a strategic plan for the enterprise.	Program	Practical ability
X4	In 2012, the "Dongbao Cup planning competition " was organized in collaboration with Dongbao Group.	Cooperation	
F5	Instead of only teaching theoretical knowledge, practical links have also been added to the curriculum.	Practical Operations	
F9	The internal management procedures for school teaching are more organized.	Management	
F4	Teaching reform, supervision and multiplication plan. Experts and scholars are also invited to give speeches.	Supervise	Management Ability
X4	Cancellation of examination, strict attendance and the requirement that grade points should be above 2.0 for bachelors degree each year.	Check on attendance	
F1	There is the need to have media coverage during recruitment fairs every year.	Influence	
F4	specially since 2014, the four years I have been working have changed a lot. Firstly, the external, social and economic environment as well as the appearance of Ma Yong town is also improving. The enrolment scores of Xinhua College have also improved. The influence of social awareness are also highlighted in both scientific research and teaching.	Reputation	Brand appeal
F6	You see that the current ranking is also going forward year after year.	Ranking Paper	
F6	Originally, teachers couldn't send papers.		
F2	We must not only become practical talents, but also focus on academics and on fostering an academic atmosphere.	Research ability	Research Ability
F6	I feel that the direction of the school is to attach importance to scientific research. You see, we recently have several doctoral projects.	Research	
F1	Lack of hardware facilities, no gymnasium, no library	Gymnasium, library	
F9	The computer room facilities are equipped with a variety of software, and there are different classrooms for different majors and different courses.	Facility	Infrastructure
X5	There are several library rooms in the Dongguan campus, which can meet the daily	Library	

	learning needs of the students.			
F1	At the beginning of the founding of the school, the students were interested in the fame of the parent school. They could also get the graduation certificate and degree certificate of the parent school.	Fame	Brand effect	
J1	I think the brand appeal comes always from Sun Yat-sen University	Brands		
F4	It is more influential to be affiliation of Sun Yat-sen University	Affiliated		
X6	There are abundant electronic resources, including electronic libraries of universities and some foreign universities and well known learning websites such as CNKI, Cursive course, Superstar. the content of book resources cover a wide range of knowledge, but the types of books in each knowledge area are yet to be added to the library.	Electronic Resources		
F4	Natural scientific research advantages, closer to the 985 parent school, easier to access academic masters, effective academic exchanges, just like I graduated from Zhongda Lingnan College. I frequently return to my alma mater to find my mentor for academic exchanges.	Research ability	Research Ability	
F8	The school's library is connected to the Internet. Not only can you read the school's books on the school's official website, but you can also read the resources of the Sun Yat-sen University Library. The school has purchased a large number of papers, and students can view it on the Chinese website.	Books and Materials		Internal replication capability
X5	Some professional leaders are retired or part-time teachers of Sun Yat Sen University.	Part-time Job		
F1	The main teachers of the school are mainly from Sun Yat-sen University, and the teachers' resources are also relatively dependent.	Sun Yat-sen University	Faculty Strength	
J2	You can get assistance from Sun Yat-Sen University, and you can easily get resources that other schools don't have.	Assist		
F3	From the view of its stuff component, Xinhua College did not entirely recruit from its own community. They asked Sun Yat-sen University to send middle level and top-level managers, ministers and head of department. Some of the professors especially those with senior titles have retired while some have not yet retired.	Designate	Management Ability	
F1	The middle and senior leaders of Xinhua College were also hired from Sun Yat-sen University.	Hire		
F6	Like independent colleges, middle and high-level leaders are from parent schools. In the	Mother School		

	completely private type, the middle and high level are retired teachers.		
F1	Guandong Dongbao Group co-founded schools with Sun Yat-sen University	Cooperation	
F3	The main feature of an independent college is that the owner pays money and private funds are raised.	Financing	Cooperation Assets
F3	Independent colleges use private funds and corporate funds to build schools.	Funds	
F3	When our tourism major started to have cooperation with Nansha Hotel in the past few years, all the teachers in major of tourism went to have internships during the summer vacation.	Practice	
X6	Double Degree and cooperation with foreign schools to schools have brought more opportunities for students. It has also brought more innovative aspects and more development opportunities for school.	Cooperation	Practical ability
F3 X2	E-commerce major, engage in practice base, and work with Jingdong to teach orientation classes	Practice	

#### 4.1.3 External capability of independent colleges

The external ability in this thesis refers to the ability that exists outside the organization, and it is an ability that the organization cannot grasp. Due to the constraints of resources at the beginning of the establishment of independent colleges such as lack of internal knowledge and lack of internal capabilities, enterprise development is inseparable from the dependence on external capabilities. The external ability of the college has always existed. With the gradual development of the independent capability of the independent college, its dependence on external capabilities will also change. For example, the parent university outside Xinhua University has strong scientific research ability, teacher strength as well as brand effect. In the initial stages of development, Xinhua College relied on the ability of the parent university to achieve capability construction within the organization. The components of Xinhua College's external capabilities are consistent with internal replication capabilities and internal innovation capabilities, with seven aspects: branding, research capabilities, management capabilities, infrastructure, capital operations, practical capabilities, and faculty. Since the construction process is consistent with internal replication capability and internal innovation capability this will not be repeated here. The external capability coding process is shown in Table 4-2.

In order to better define the organizational capabilities of Xinhua College is divided into internal innovation capabilities and internal replication capabilities, as well as external

capabilities closely related to them. This section mainly elaborates on the definition of internal innovation ability, internal reproduction ability and external ability, and lays a foundation for the development of the following text. Next, we will explore the possible construction of Xinhua College at different stages of development.

## **4.2 Construction of organizational capability of Xinhua College at different stages**

This thesis divides the capability construction of Xinhua University into three phases. The first stage is the introduction of external organizational capabilities (2005-2011). Xinhua College was formally established in 2005. In this stage, the characteristics of capability construction are that the organization needs to explore and introduce new knowledge, resources or capabilities from outside the organization in order to complete the basic application. With the completion of the Dongguan campus of Xinhua College in 2011, the school began to have formal office locations. The two campuses “formally formed” mark a new starting point for the capability construction of Xinhua College. The second stage is the retention of organizational capability (2011-2014). In order to enhance competitiveness, Xinhua College began to recruit its own teachers and train students’ practical ability, gradually reducing the dependence on external resources and retaining the internal ability of the organization. This phase lasted until 2014. Xinhua College began to recruit students from outside Guangdong Province, indicating that the construction of its organizational capabilities will move toward a new journey. The third phase is the development phase of organizational capabilities from internal to the external (2014-present). The ability construction characteristics at this stage are mainly embodied in the organization's efforts to enhance external competitiveness, expand ranks teachers and student, improve teacher remuneration and college management capabilities, cultivate students' practical ability, increase scientific research, and enhance the influence of school brands. The following article will elaborate on each stage of capability building.

### **4.2.1 Stage one: Introducing external capabilities**

The first stage of the capability construction of Xinhua College is the external capability introduction stage. At this stage, the main task of Xinhua College is to explore the knowledge, resources and capabilities outside the organization, introduce or copy them into the organization, and complete the basic operation and basic capability construction of the



organization. For example, at the beginning of the establishment of Xinhua College, the college did not have its own student dormitories, libraries, and classrooms. It only relied on the infrastructure of Sun Yat-sen University (F1, F2, X1, and F4); the teachers of Xinhua College mainly came from Sun Yat-Sen University (F1, F3, J4); the student's diploma and degree certificate were issued by Sun Yat-sen University (F1, F4, F9, J1). When the school was established, there was no management team, teaching guidance committee and party committee. Sun Yat-Sen University assigned some resources to guide the capability construction of Xinhua College. At this stage, Xinhua College only had capital injection funds from the board of directors and students. There were fewer items about the internal innovation capability of the organization, mainly including capital operation capability and infrastructure. The other capabilities built within the organization were mainly based on the resources and capabilities of Sun Yat-sen University, and by transferring these resources or capabilities into the organization to form internal replication capabilities, enabled the organization to operate quickly. The internal replication capabilities mainly include brand effects, capital operations, faculty and management capabilities. At this stage, the organization has strong dependence on external resources and capabilities. The capability coding process and the capability composition in the first stage of Xinhua College are shown in Table 4-4 and Figure 4-1 respectively.

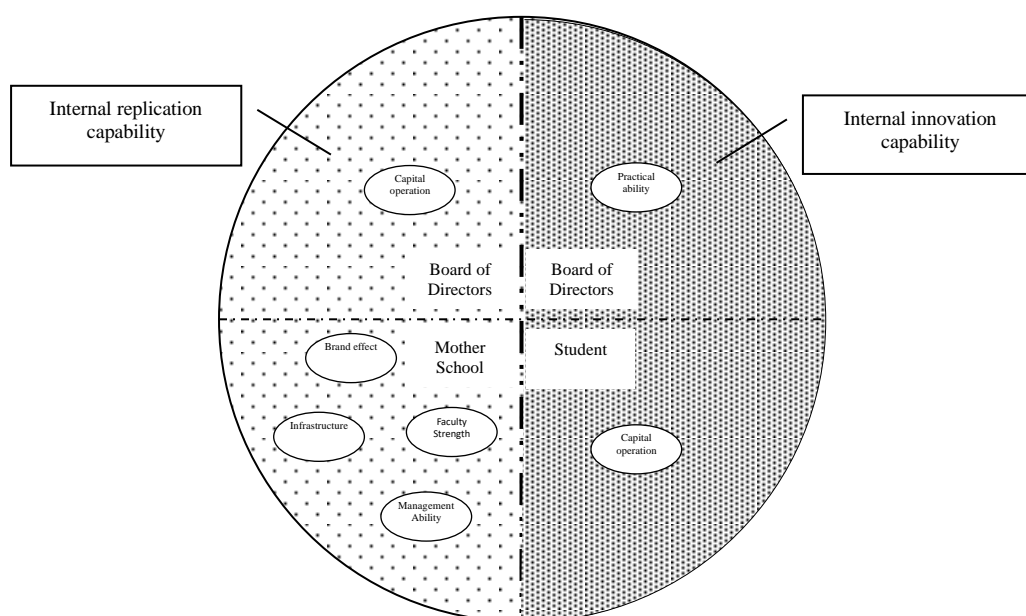


Figure 4-1 First Stage Capability Composition chart of Xinhua College

Table 4-4 Xinhua College's Capability Coding Process

Stage	Demonstration of primitive evidence	Number of items	Key Words	Primary Code	Secondary Code	
Stage one	College funds mainly come from shareholder' investment funds and students' tuition fees	6	Tuition, funds, subsidies, financing	Cooperation Assets	Internal innovation capability	
	Hardware facilities were scarce in the early days of the College's establishment	4	Library, Gymnasium, Facilities, Campus, Dormitory	Infrastructure		
	We need to use the brand of Sun Yat-sen University to enhance the influence of our school.	9	Need, name, brand name, fame, brand	Brand effect		
	Guandong Dongbao Group co-founded schools with Sun Yat-sen University	5	Joint venture, Cooperation and Funding Cap	Capital operation		
	Lecturer and professor were hired from Sun Yat-sen University to teach	6	Part-time, assistance, support, hire, instructor, professor, teacher	Faculty Strength		Internal replication capability
	The need to use the student dormitory and classroom of Sun Yat-sen University	3	Borrow, temporary residence	Infrastructure		
	At the time of the establishment of Xinhua College, Sun Yat-sen University sent middle and senior management personnel, teachers and professors to the school for management and teaching.	3	Hiring, assigning, concurrently, Sun Yat-sen University	Management Ability		
	The College's funds is no longer based on tuition fees but have rather developed a variety of ways such as sponsorships, and store rents,..	3	Tuition, funds, subsidies, financing, rent	Capital operation		
Stage two	The school began to recruit new professional teachers	8	Recruitment, new tactics, external, teachers, teacher	Faculty Strength	Internal innovation capability	
	Cooperated with Dongbao Group in 2012 to organize the "Dongbao Cup planning competition.	11	Professional, program, practice, practice, business, cooperation	Practical ability		
	Internal management of schools more structured than before	2	Experience, supervision, management	Management Ability		

	in recruitment fair, invite more media publicity, enhance the influence of school	2	Brand, influence, position, reputation, fame	Brand appeal	
	The computer room facilities are equipped with a variety of software, and there are different classrooms for different majors and different courses.	8	Classrooms, facilities, library, gymnasium, dormitories, football field	Infrastructure	
	Relying on the parent school Sun Yar-sen University, to access first-class platform and resources	5	Relying on, reputation, brand	Brand effect	
	Some Xinhua College teachers come from Sun Yat-sen University	3	Part-time, assistance, support	Faculty Strength	
	Being situated near Sun Yat-sen University and sharing the academic resources of the 985 school helps to better carry out academic exchanges	3	Research, academic, books, rely on, mather school	Research Ability	Internal replication capability
	Using corporate resources, to establish mechanisms for students to engage in internships.	7	Depend on, rely on, internships, school-enterprise cooperation, practice, programs, majors	Practical ability	
	The college encourages college students to start their own businesses and set up alumni associations with the hope of giving back to their alma mater.	16	Tuition, funds, subsidies, financing, sponsorship, rent	Capital operation	
	Previously, the college required the teacher to have master's degree but now they are required to have a doctoral degree.	38	Recruitment, new tactics, external, teachers, teacher	Faculty Strength	
Stage three	The previous two years of the beginning of strategic management courses, students were required to go to the enterprise to conduct surveys, come up with a diagnosis write a strategic plan for the enterprise.	65	Professional, program, practice, practice, business, cooperation	Practical ability	Internal innovation capability
	Teaching reform, supervision and multiplication plan, and experts and scholars	13	Experience, supervision, management	Management Ability	
	Xinhua college's rankings is gradually taking an upward trend	24	Brand, influence, position, reputation, fame	Brand appeal	

We must not only become a practical talent, but also focus on academics and focus on fostering an academic atmosphere.	25	Scientific research, Academic, papers	Research Ability	
The dormitory environment (Dongguan Campus) is the top in the province. It contains facilities such as air conditioning, elevator, separate toilet and bathroom,.	38	Classrooms, facilities, library, gymnasium, dormitories, football field	Infrastructure	
Xinhua College has more resources from Sun Yat-sen University, which is beyond the reach of other independent colleges.	21	Relying on, reputation, brand	Brand effect	
Some professional leaders are retired or part-time teachers of Sun Yat Sen University.	21	Part-time, assistance, support	Faculty Strength	
The author graduated from Lingnan College of Sun Yat-sen University. The author also visits his supervisor in his home university very often for academic exchanges.	11	Research, academic, books, rely on, mother school	Research Ability	Internal replication capability
Currently has more than 500 school-enterprise cooperation units	34	Practice, school-enterprise cooperation, Program, Scheme, Major	Practical ability	
Retired professors will be hired serve as our department head and professional directors.	2	Part-time	Management Ability	

#### 4.2.2 Stage two: Internal capability intention

The second stage of the capability construction of Xinhua College is the internal capability retention phase. At this stage, the main work of Xinhua College includes two aspects: on one hand, it continues to explore the knowledge, resources and capabilities outside the organization, and copies it into the organization to ensure the smooth operation of the organization; on the other hand, it makes use of the knowledge, resources and capabilities acquired by innovation to complete the internal capability construction of the organization. For example, the College continues to employ professors from Sun Yat-sen University to teach (J4, X3); establish more extensive contacts with enterprises to provide internships or learning platforms for students and teachers (F3, J1, F4, X4). Also establishing a teaching mechanism, hiring Dr. Yuan Chiping as one of the first batch of professors (S1); recruiting teachers for Xinhua College (F3, J2, J3, F5); expanding the source of funds (X3, X4, X5);

constructionnew infrastructure such as football stadiums, gymnasiums (F4), F9, X4) and so on. The internal replication capabilities at this stage include branding, faculty, scientific research ability and practical skills. Internal innovation capabilities include capital operations, faculty, practical and infrastructure constructioncapabilities. Compared with the first stage, the number of internal innovation capability items in this phase is more, and the number of internal replication capability items is relatively less. This shows that Xinhua College slowly digests and utilizes the external ability while replicating and introducing it and retains and builds the internal innovation ability of the organization, which gradually weakens the dependence on external resources or capabilities. The second stage of the Xinhua College's capability coding process and capability composition are shown in Table 4-4 and Figure 4-2 respectively.

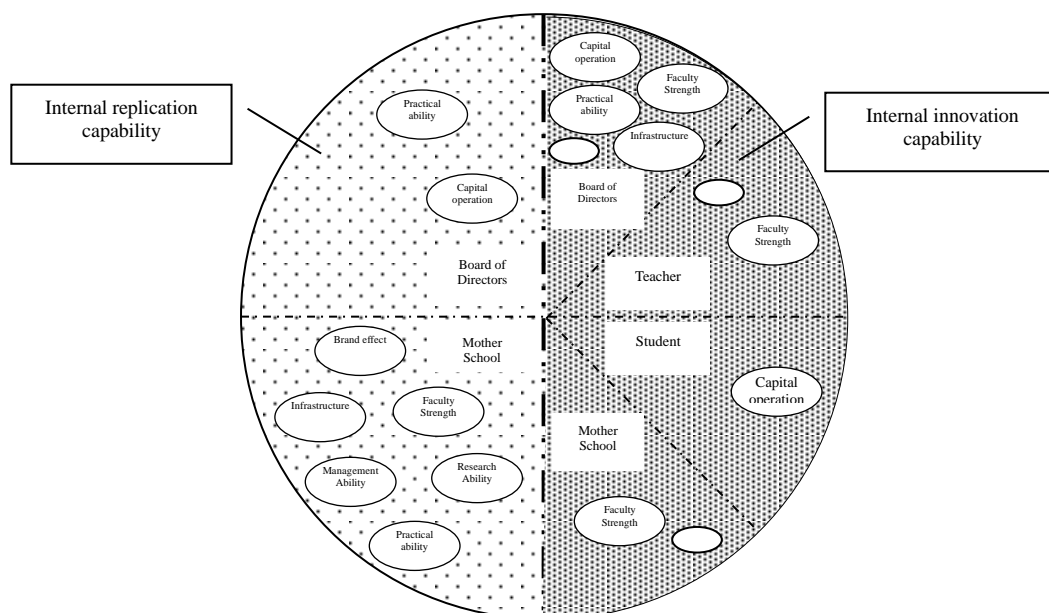


Figure 4-2 Second Stage Capability Composition Chart of Xinhua College

#### 4.2.3 Stage three: Internal-to-External development stage of organizational capabilities

The third stage of capability construction in Xinhua College is "Internal-to-external" development stage. At this stage, Xinhua College has basically realized the construction of "independent ability". Its main work includes two aspects: Firstly, to continue to explore the knowledge, resources and capabilities outside the organization, to establish a broader resource link, and to copy the external resources into the organization; secondly, to utilize, integrate and innovate the acquired knowledge, resources and capabilities so as to form internal

innovation capabilities of the organization. In terms of internal replication capability, Xinhua College will continue to expand its links with external resources, explore broader resources and reduce its dependence on one or more subjects. Xinhua College continues to rely on the resources of Sun Yat-sen University to build their own brand influence (F3, J2, J4). They also hire retired professors of Sun Yat-sen University to serve as professional subject leaders (F5, F7); encourage teachers to return to their alma mater for academic exchanges (F4); hire retired professors from other universities to serve as professional directors and department directors (F3). Additionally, they rely on the relationship between the board of directors and more than 500 companies to carry out school-enterprise cooperation (F1); through the holding of parent meetings, alumni associations and linking their resources to improve the recruitment rate of students (F8, F9, J2).

Xinhua University's internal innovation capability consists of linking broader resources, integrating and innovating resources, construction of the internal ability of the organization, the construction of internal innovation ability and enhancing the organization's brand influence. In terms of capital operation, in addition to the previous pavement rent, sponsorship and tuition fees, students are encouraged to start businesses and attract students to give feedback to the school (J1, J2, F8, F9); teachers are enrolled to improve the incentive mechanism for teachers (F7, F8); the board of directors have also gradually joined the daily management of the college (F9); and the ranking of Xinhua College is also increasing year by year (F2, F6). The improvement of internal innovation ability is mainly embodied in capital operation, teaching staff, practical ability, brand effect, management ability, scientific research ability and infrastructure. From the results of coding, we can see that compared with the previous stage, Xinhua College's internal innovation ability and internal replication ability are gradually spiraling upward compared with the previous stage, and the internal innovation capability has increased. The growth of the organization in innovation ability is also more prominent. The third stage capability coding process and capability composition of Xinhua College are shown in Table 4-4, and Figure 4-3 (see page 85).

### **4.3 Summary**

This chapter is mainly based on the case study of Xinhua College of Sun Yat-sen University; mainly probing into the organizational ability of independent colleges. In this thesis, we divide the organizational ability of independent colleges into internal innovation ability and internal replication ability. We elaborate on the internal innovation ability and

internal replication ability of independent colleges through collating and coding qualitative materials. The question of how the ability of independent colleges evolves and its process path arises. In the next chapter, we will explore the capability evolution path of Xinhua College from the perspective of resource dependence.

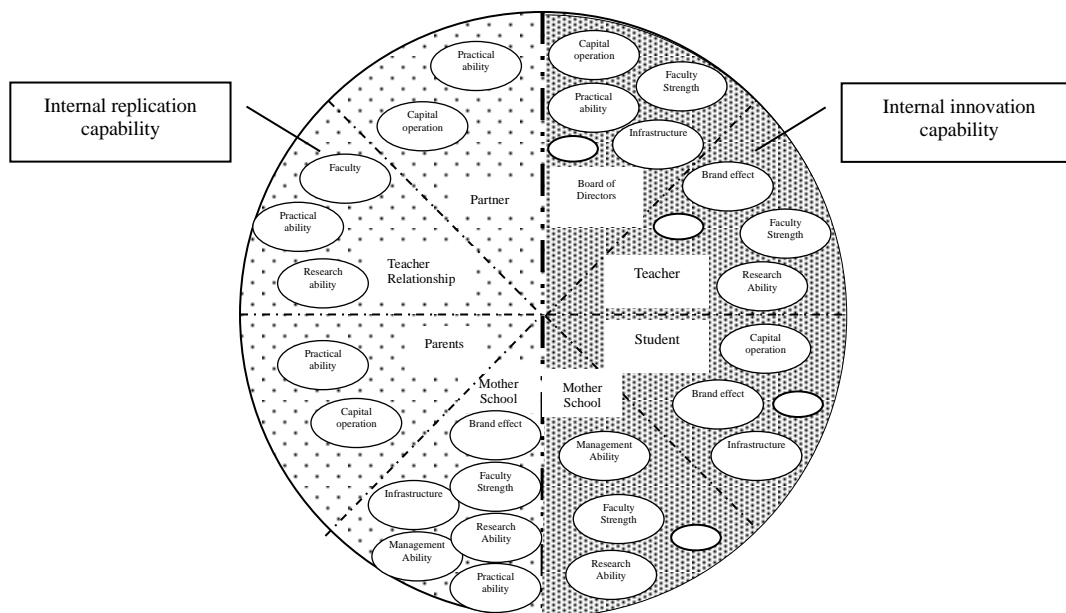


Figure 4-3 Third Stage Capability Composition Chart of Xinhua College





## **Chapter 5: Organizational Capability Evolutionary Process of Independent Colleges under Dual Resource dependence**

In social organizations, one kind of enterprises is generated by their parent enterprises. Their survival is closely depending on other enterprises as well as their parent organizations. Such enterprises are called “derived organizations” or “derivatives” (Chatterji, 2009). Produced by its parent university, independent college, as a special and transitional school-running system in China, has its advantages and weaknesses due to its new establishment as an organization. Independent college thus is at a disadvantage in resources seeking and market share expanding (Zhu & Fei, 2010). Its survival depends on its ability to obtain key resources from the external environment (Pfeffer & Salancik, 2003). Independent colleges have a short development history which they have disadvantage in resources seeking. They also have weaknesses in knowledge, resources and school-running experiences accumulation. Its acquisition of knowledge and resources depends on the support of its parent organization (Kroll & Liefner, 2008; Rasmussen & Borch, 2010). For example, at the initial development stage of independent college, its resources are extremely scarce; therefore, the basic operations are based on resources getting from its parent university. Secondly, in market share expanding, independent college is private education institution. Their ability and legitimacy are doubted by the public. In student enrollment, it also faces huge challenges and pressures. Market demand has greater uncertainty and it needs the support of its parent organization to solve the unstable market demand. The organizational legitimacy of university-derived organizations in the stage of initial establishment faces great challenges, and in order to get social recognition, they often need to rely on their parent organizations’ brand and reputation (Bian, Ren, & Ye, 2018). In this way, they could also meet market demand. Since the development of independent college needs to depend on parent organization and external market due to its weakness in resources and market, the independent college is therefore different from public universities and other private colleges. And it is very necessary to explore its capability evolutionary process. This section is based on perspective of dual resource dependence. Through describing and analyzing the development process of capability of Xinhua College, the author revealed the unique development and evolution of organizational capability of independent college.

## **5.1 Pressures and opportunities under dual resource dependence**

Resource dependence theory argues that the survival of organizations survival depends on their ability to obtain critical resources from the external environment (Pfeffer & Salancik, 2003). As derivative organization, the development of independent college depends on the key resources it obtained from external environment. That is to say, its development relies on key resources acquired from parent organization and market. According to research of Hambrick and Mason (1984), the cognition of organization on environmental change can be a pressure or an opportunity. Therefore, in this section, we divided environment cognition of organizations into pressures and opportunities. This chapter is aimed at exploring and discussing the organizational capability evolutionary mechanism of Xinhua College under dual resource dependence of its parent organization and market. By analyzing the cognition changes (ie, stress and opportunity) toward external environment at each stage, this chapter explores the interaction between environment cognition and capability development. And the characteristics of organizational capability evolution in each stage are summarized and comparison has also been made. In this way, this chapter lays basis for revealing the capability evolution path in independent college.

### **5.1.1 Pressures under dual resource dependence**

Pressure in the context of this thesis refers to the environmental cognition of organizations in the development of their organizational capabilities under the internal disadvantages and external threats. Under the background of dual resource dependence, namely, the dependence on the parent organization and the market, independent college under external pressures turns to explore the knowledge and resources of its parent organization and gets its key resources in this way. For example, when Xinhua College was initially established, it had limited knowledge, resource and capability. It cognizes the situation to be pressure. In order to alleviate the pressure, Xinhua College acquired valuable knowledge and key resources from its parent organization Sun Yat-sen University. With knowledge and resources from Sun Yat-sen University on management idea, management human resource, teachers and so on, Xinhua College can complete its own organizational capability construction.

The construction of pressure in this thesis is based on encoding of qualitative materials. The coding method is the same as coding method of internal replication capability, internal innovation capability and external capability in chapter four; therefore, it is not repeated here. By coding the qualitative materials of independent colleges, the author concluded that the

pressure exerted by the environment on the organization is mainly reflected in social demand, profit demand, competitive pressure, campus construction, policy restrictions, and independent threats. The author introduced the following two specific examples here to explain the coding process. For example, a teacher in interview mentioned that "the independent colleges we visited are well constructed; their campuses are very standardized, and these independent colleges face great competitive pressures (F3)". Keys words "Independent college, competitive pressure" were extracted from this answer and the primary code is "competitive pressure" which reveals a threat of organization from external competitive environment. Therefore, we encoded "competitive pressure" into "pressure" which is an environmental cognition of organization. The author also extracted keywords "Subsidies, Country, Difficult" and " Independent, Break Away, Reform" from interview content "It is difficult for independent college to get fiscal subsidies from the Country like public university (F1)" and "Currently, it's difficult to tell whether independent can be achieved. The new principle has his own ideas during the reform of Sun Yat-sen University; the Xinhua college has the possibility of breaking away from Sun Yat-sen University (F6)". The primary code is policy restrictions and independent threats. This reveals a threat exerted by external environment on organization. Therefore, we encoded it into "pressure" which is an environmental cognition of organization.

Though coding of qualitative materials, the author obtained 112 items that reveal "pressure". The coding process started with extracting key words from primary date and ended with classified them to Pressure. Table 5-1 shows the specific coding process of pressure.

Table 5-1 Coding Process of Pressure and Opportunity of Xinhua College

Source	Demonstration of primitive evidence	Key Words	Primary Code	Secondary Code
F1	Environment has changed rapidly, so enterprises have higher requirements on students' quality	Students, Enterprises, Requirements	Social Demand	
F1	Enterprises start to believe the college has potential of profit making, so their involvement increases	Profit-Making, Involvement	Demand of Profit	
F3	The independent colleges visited are well constructed; their campuses are very standardized, and these independent colleges face great competitive pressures.	Competitive pressures; independent college	Competitive pressures	Pressure
F2	Students want to have a library first so they could have a place to study	Library, Study	Campus Construction	
F1	It is difficult for independent college to	Fiscal	Policy	

	get fiscal subsidies from the Country like public university	subsidies, Country, Difficult	Restrictions	
F3	The college required every school to create characteristic subjects	Characteristics, Subjects, Requirements	Leaders' Requirements	
F3	Students hope the school could hire highly specialized teachers Currently, it's difficult to tell whether independent can be achieved. The new principle has his own ideas during the reform of Sun Yat-sen University; the Xinhua college has the possibility of breaking away from Sun Yat-sen University.	Teachers, Students	Student need	
F6	The Ministry of Education will assess education quality of all subjects	Independent; Break Away; Reform	Independent Threats	
F1	The college is located in Mayong Town, Dongguan City. This place will be planned into a new area called "Shuixiang" by local government in the future. It will be a demonstration place of industrial transformation and upgrading. The government will increase investment and focus on developing tourism industry of this place. These changes will bring economic development and environment improvement to this place. And as a college located in this place and have a goal of servicing local economic development, these changes provides the college with opportunity.	Quality, Assessment	Education quality assessment	
F4	Many independent colleges develops very fast now and have a desire of breaking away from parent university; for example, the Zhuhai College of Beijing Normal University has set up such goal Many other independent colleges also have such goals and ideas	Policy, Change	Policy Environment	
F4	Currently, Xinhua College not only cooperate with Sun Yat-sen University but also work with other universities	well-developed; break away; independent; ideas; goals	Will of being Independent	Opportunity
F1	Board of directors also brings in a lot of resource, for example, recruitment fair	University, Cooperation, Combined Training, Exchange Board of Directors, Dongbao Group, Investment	Cooperation between Universities	
F1	Because the college has high tuition fees, students who could afford to study in this college usually have an family with good economic background Therefore, many students rely on their own family to be	Students' Parents, Excellent, Employment, Investment	Management Resource	
F1			Parent Resource	

	employed after graduation. A former dean of our apartment was asked whether he belonged to Sun Yat-sen University when he lead student to have internship in a hotel. He said he has retired and did not belong to Sun Yat-sen University The company did not distinguish his current college. Xinhua College, with his former university which is Sun Yat-sen University. When those professors reidentified them as member of Xinhua College instead of Sun Yat-sen University, they have changed and got a new identification	Exchange, Mather School, Teacher, Identification	Teacher Resource
F2			
F3	The new dean focuses more on research ability	Dean, Leader	Leaders' desire Cooperation between universities and enterprises
F7			
F1	Many enterprises have desire to cooperate with colleges and universities especially small businesses	Enterprises; Cooperation	

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### 5.1.2 Opportunities under dual resource dependence

Opportunity in this thesis refers to the environmental cognition of organizations in the development of their organizational capabilities under the internal advantages and external opportunity. Under the background of dual resource dependence, namely, the dependence both on parent organization and market, independent college explores the knowledge and resources of its parent organization and obtains key resources from the parent organization when they cognizes opportunities. It accumulates basic knowledge and capability to catch the opportunity from market. For example, The Country issued national policy to expand enrollment creating market needs and environments for independent colleges, and organizations recognize this environment as an opportunity. In order to catch the opportunity, Xinhua College acquires valuable knowledge and key resources from its parent organization Sun Yat-sen University. For example, with brand effect and reputation of Sun Yat-sen University, Xinhua College can increase its organizational legality and construct its organizational capability.

The construction of opportunity in this thesis is based on encoding of qualitative materials. The coding method is the same as coding method of pressure, internal replication capability, internal innovation capability and external capability; therefore, it is not repeated here. By coding the qualitative materials of independent colleges, the author concluded that the opportunity offered by the environment to the organization is mainly from aspects of social demand, policy environment, university-enterprise cooperation, cooperation within

universities, will of being independent, parents resource and so on. The author introduced the following two specific examples here to explain the coding process. For example, a teacher in interview mentioned that "Because of our college's special nature, the tuition fee of our college is high, therefore, those students who could afford to study here usually have a family with strong economic background"(F1), the author extracted keywords "Students' parents, Excellent, Employment, Investment" from the above F1. And the corresponding code is "parent resource". This reveals an opportunity for the college to get resource from students' parents. Therefore, the author encoded it to be "opportunity" coming from cognition of organization on environment. The author also extracted keywords "Well-developed, Break away, Independent, Ideas, Goals" and "Enterprises, Cooperation" from interview content of "Many independent colleges develop very fast now and have a desire of breaking away from parent university, for example, the Zhuhai College of Beijing Normal; Many other independent colleges also have such goals (F4)" and "Enterprises also need to be involved in colleges and universities, especially those small enterprises(F1)". The primary code is "Desire to be independent" and "University-enterprises Cooperation". The organization recognizes the aforementioned to be an opportunity for it to increase organizational capability and realize independent through cooperation with other universities. Therefore, the author encoded it to be "opportunity" coming from cognition of an organization on external environment.

Though coding of qualitative materials, the author obtained 57 items that reveal "opportunity". The coding process started with extracting key words from primary data and ended with classifying them to opportunity. Table 5-1 shows the specific coding process of pressure.

## **5.2 Organizational capability construction process of independent colleges under dual resource dependence**

### **5.2.1 Stage one: Introducing external capability**

In this stage, the main behavior of the college is to introduce external capability and complete its basic construction. Since the Ministry of Education issued an official document the "Several Opinions on Standardizing and Strengthening the establishment and management of Independent Colleges launched by universities with New Mechanisms and Models" in May 2013. The concept of "independent college" was first used and universities started to have their secondary college, Xinhua College of Sun Yat-sen University was born under this trend.

Xinhua College was jointly created by Sun Yat-sen University and Guangdong Dongbao Group Co., Ltd in 2005. According to the coding of the qualitative materials (see Table 5-2), the author revealed that Xinhua College at this stage faces disadvantages both from resources and market. On the one hand, Xinhua College only has funds from Dongbao Group and tuition fees from its students. It lacks resources in aspects of teachers, teaching facilities and it also needs to improve its management capabilities. On the other hand, there are strong social needs outside the organization. The college is able to meet these social needs because it offers those students who could only go to junior colleges an opportunity to get bachelor degree, but the college's legitimacy is rarely recognized by the society. Therefore, under the disadvantages in resources and market, the capability construction of Xinhua College depends on support of Sun Yat-sen University. The support comes from aspects of teacher strength, management ability, operation assets, infrastructure, and brand effect and so on.

Table 5-2 Constructed Items and Typical Examples of Xinhua College

Stage	Demonstration of primitive evidence	Number of items	Key Words	Primary Code	Secondary Code	Category
	The living and study condition of student is tough; the college has not its own campus.	8	School, Campus, Tough, Need, Library, Teaching Building, Football field	School facilities are in need		
	The source of school-running capital is investment and tuition fees; The college has no government subsidies	4	Financing, Subsidies, Tuition Fees	Lack Funding		
Stage one	Operation funds are mainly raised from tuition fees. The group is also responsible for its own financing.	3	Profit and loss, Profit-making, Profit	Profit-making needs	Pressure	Environment Cognition
	The college still has to have its own management method in daily operation	3	Management, Operation	Operation demand		
	Before, there were no good policies and regulations	1	Without, Policies, Regulations	The policies were not good		
	The Ministry of Education will assess education quality of all subjects	1	Quality, Assessment	Education quality assessment		

<p>There are large numbers of students who are not able to be admitted into undergraduate program by public universities. And they do not want to go to junior college, so Independent colleges of Public universities can meet their needs</p> <p>In May 2013, the Ministry of Education issued an official document the "Several Opinions on Standardizing and Strengthening the establishment and management of Independent Colleges launched by universities with New Mechanisms and Models ". The concept of "independent college" was first used.</p>	1	Society, Needs	Needs from society		
<p>College funds mainly come from shareholder' investment funds and students' tuition fees</p>	6	Tuition, funds, subsidies, financing	Cooperation Assets	Internal innovation capability	
<p>Hardware facilities were scarce in the early days of the College's establishment</p>	4	Library, Gymnasium, Facilities, Campus, Dormitory	Infrastructure		
<p>We need to use the brand of Sun Yat-sen University to enhance the influence of our school.</p>	9	Need, name, brand name, fame, brand	Brand effect		
<p>Guandong Dongbao Group co-founded schools with Sun Yat-sen University</p>	5	Joint venture, Cooperation and Funding Cap	Capital operation		Independent Capability
<p>Lecturer and professor were hired from Sun Yat-sen University to teach</p>	6	Part-time, assistance, support, hire, instructor, professor, teacher	Faculty Strength	Internal replication capability	
<p>The need to use the student dormitory and classroom of Sun Yat-sen University</p>	3	Borrow, temporary residence	Infrastructure		
<p>At the time of the establishment of Xinhua College, Sun Yat-sen University sent middle and senior management</p>	3	Hiring, assigning, concurrently, Sun Yat-sen University	Management Ability		



	personnel, teachers and professors to the school for management and teaching.					
	The college has no fiscal subsidies; Its funding mainly comes from enterprise	6	Fiscal subsidies, Subsidies, Financing, Tuition fees	Lack Funding		
	Shareholders want profit from college operation	10	Profit and loss, Profit-making, Profit	Profit-making needs		
	There are many independent colleges in Pearl River Delta; the competition is fierce	4	Competition, Independent college	Competitive pressures		
	The college need to keep on constructing its hardware facilities to meet demands	5	School, Campus, Tough, Need, Library, Teaching Building, Football field	Campus Construction	Pressure	
Stage two	The construction and development of independent colleges in some places needs support from government	2	Without, Policies, Regulations	Policy Restrictions	Environment Cognition	
	The college required every school to create characteristic subjects	4	Characteristics, Subjects, Requirements	Leaders' Requirements		
	The Ministry of Education will assess education quality of all subjects	2	Quality, Assessment	Education quality assessment		
	There are large numbers of students who are not able to be admitted into undergraduate program by public universities. And they do not want to go to junior college, so Independent colleges of Public universities can meet their needs	1	Society, Needs	Needs from society		Opportunity
	Recent years, the Country issued policy to promote student enrollment; Xinhua college increased its student enrollment in responding to this policy	3	Policy, Student enrollment	Policy Support		

At that time, the college had an urgent demand on land because the limited campus area of Guangzhou Campus has limited its development. However, the college got land from government easily	2	Land, Country Support	Policy Guidance	
The College's funds are no longer based on tuition fees but have rather developed a variety of ways such as sponsorships and store rents.	3	Tuition, funds, subsidies, financing, rent	Capital operation	
The school began to recruit new professional teachers	8	Recruitment, new tactics, external, teachers, teacher Professional,	Faculty Strength	
Cooperated with Dongbao Group in 2012 to organize the "Dongbao Cup planning competition.	11	program, practice, practice, business, cooperation	Practical ability	Internal innovation capability
Internal management of schools more structured than before	2	Experience, supervision, management	Management Ability	
in recruitment fair, invite more media publicity, enhance the influence of school	2	Brand, influence, position, reputation, fame	Brand appeal	Independent Capability
The computer room facilities are equipped with a variety of software, and there are different classrooms for different majors and different courses.	8	Classrooms, facilities, library, gymnasium, dormitories, football field	Infrastructure	
Relying on the parent school Sun Yat-sen University, to access first-class platform and resources	5	Relying on, reputation, brand	Brand effect	
Some Xinhua College teachers come from Sun Yat-sen University	3	Part-time, assistance, support	Faculty Strength	Internal replication capability
Being situated near Sun Yat-sen University and sharing the academic resources of the 985 school helps to better carry out academic exchanges	3	Research, academic, books, rely on, mother school	Research Ability	
Using corporate resources, to establish mechanisms for students to engage in	7	Depend on, rely on, internships,	Practical ability	

	internships.		school-enterprise cooperation, practice, programs, majors			
	Environment has changed rapidly, so enterprises have higher requirements on students' quality	3	Student, Requirement, Enterprises	Social Demand		
	Enterprises start to believe the college has potential of profit making, so their involvement in school management increases	15	Profit and loss, Profit-making, Profit	Profit-making needs		
	The independent colleges visited are well constructed; their campuses are very standardized, and these independent colleges face great competitive pressures.	7	Competition, Independent college	Competitive pressures		
	Students want to have a library first so they could have a place to study	10	School, Campus, Tough, Need, Library, Teaching Building, Football field	Campus Construction		
Stage three	It is difficult for independent college to get fiscal subsidies from the Country like public university	5	Policy, Regulation, capital, Country, Application	Policy Restrictions	Pressure	Environment Cognition
	The college required every school to create characteristic subjects	5	Characteristics, Subjects, Requirements	Leaders' Requirements		
	Students hope the school could hire highly specialized teachers	3	Teachers, Students	Student need		
	Currently, it's difficult to tell whether independent can be achieved. The new principle has his own ideas during the reform of Sun Yat-sen University; the Xinhua college has the possibility of breaking away from Sun Yat-sen University.	9	Break Away, Reform, Independent, Threats	Independent Threats		
	The Ministry of Education will assess education quality of all subjects	2	Quality, Assessment	Education quality assessment		

<p>The college is located in Mayong Town, Dongguan City. This place will be planned into a new area called “Shuixiang” by local government in the future. It will be a demonstration place of industrial transformation and upgrading. The government will increase investment and focus on developing tourism industry of this place. These changes will bring economic development and environment improvement to this place. And as a college located in this place and have a goal of servicing local economic development, these changes provides the college with opportunity.</p>	10	Policy, Change	Policy Environment	
<p>Many independent colleges develops very fast now and have a desire of breaking away from parent university; for example, the Zhuhai College of Beijing Normal University has set up such goal Many other independent colleges also have such goals and ideas</p>	8	well-developed; break away; independent; ideas; goals	Will of being Independent	Opportunity
<p>Currently, Xinhua College not only cooperates with Sun Yat-sen University but also work with other universities</p>	5	University, Cooperation, Combined Training, Exchange	Cooperation between Universities	
<p>Board of directors also brings in a lot of resource, for example, recruitment fair</p>	5	Board of Directors, Dongbao Group, Investment	Management Resource	
<p>Because the college has high tuition fees, students who could afford to study in this college usually have an family with good economic background Therefore, many students rely on their own family to be employed after graduation.</p>	6	Students' Parents, Excellent, Employment, Investment	Parent Resource	
<p>A former dean of our apartment was asked whether he belonged to Sun</p>	6	Exchange, Mather School,	Teacher Resource	

<p>Yat-sen University when he lead student to have internship in a hotel. He said he has retired and did not belong to Sun Yat-sen University The company did not distinguish his current college. Xinhua College, with his former university which is Sun Yat-sen University. When those professors identified them as member of Xinhua College instead of Sun Yat-sen University, they have changed and got a new identification</p>		Teacher, Identification			
<p>The new dean focuses more on research ability</p>	5	Dean, Leader	Leaders' desire		
<p>Many enterprises have desire to cooperate with colleges and universities especially small businesses</p>	4	Enterprises; Cooperation	Cooperation between universities and enterprises		
<p>The college encourages college students to start their own businesses and set up alumni associations with the hope of giving back to their alma mater.</p>	16	Tuition, funds, subsidies, financing, sponsorship, rent	Capital operation		
<p>Previously, the college required the teacher to have master's degree but now they are required to have a doctoral degree.</p>	38	Recruitment, new tactics, external, teachers, teacher	Faculty Strength		
<p>The previous two years of the beginning of strategic management courses, students were required to go to the enterprise to conduct surveys, come up with a diagnosis write a strategic plan for the enterprise.</p>	65	Professional, program, practice, practice, business, cooperation	Practical ability	Internal innovation capability	Independent Capability
<p>Teaching reform, supervision and multiplication plan, and experts and scholars</p>	13	Experience, supervision, management	Management Ability		
<p>Xinhua college's rankings is gradually taking an upward trend</p>	24	Brand, influence, position, reputation, fame	Brand appeal		

We must not only focus on cultivating practical talents, but also focus on developing academics and fostering an academic atmosphere.	25	Scientific research, Academic, papers	Research Ability	
The dormitory environment (Dongguan Campus) is the top in the province. It contains facilities such as air conditioning, elevator, separate toilet and bathroom.	38	Classrooms, facilities, library, gymnasium, dormitories, football field	Infrastructure	
Xinhua College has more resources from Sun Yat-sen University, which is beyond the reach of other independent colleges.	21	Relying on, reputation, brand	Brand effect	
Some professional leaders are retired or part-time teachers of Sun Yat Sen University.	21	Part-time, assistance, support	Faculty Strength	
The author graduated from Lingnan College of Sun Yat-sen University. The author also visits his supervisor in his home university very often for academic exchanges.	11	Research, academic, books, rely on, mother school	Research Ability	Internal replication capability
Currently has more than 500 school-enterprise cooperation units	34	Practice, school-enterprise cooperation, Program, Scheme, Major	Practical ability	
Retired professors will be hired serve as our department head and professional directors.	2	Part-time	Management Ability	

The cognition of independent college on environment is shown in two aspects, pressure and opportunity. At the establishment stage of Xinhua College, it did not have enough resources and well-constructed capability. The organization recognized this disadvantage as a kind of pressure. As a private education institution, Xinhua College, although initially did not get legitimacy recognition from society, is able to meet needs of many students who cannot be admitted into undergraduate program of public universities. It offers them an opportunity to get bachelor degree instead of going to junior college. The college identified those students' needs as a kind of opportunity. Under the drive of pressure and opportunity, Xinhua College obtained key resources and learned capability from Sun Yat-sen University and thus it

constructed its basic operation capabilities. From interview content "The school lacks teaching facilities. It has no dormitory, no gymnasium and no library. The school uses facilities of Sun Yat-sen University(F1、 F2、 X1、 F4)" 、 "The environment of this college is not good. It is surround by a forest of plantain, so the students need to wear masks when they go outside(F2), we can get that the college needs improvement in infrastructure and it needs to seek resources from Sun Yat-sen University; from interview content "Most teachers of this college come from Sun Yat-sen University which is an attraction to students(F1、 F3、 J4)", "Students are attracted by the reputation of Sun Yat-sen University, and when they graduate, they get degree and diploma from Sun Yat-sen University(F1、 F4、 F9、 J1)", we can see that its students enrollment needs to depend on brand effect of Sun Yat-sen University. And the fact of its teachers coming from Sun Yat-sen University also contributes to the student enrollment of Xinhua College. Additionally, the college does not have its own management stuff, Party committee, Teaching Supervise Committee, Student Problem-solving Committee. The construction of its basic organizational capabilities depends on the resources of Sun Yat-sen University.

At this stage, Xinhua College, driven by environmental pressures and opportunities, tends to establish contact with its parent school Sun Yat-sen University and to search and obtain certain resources from this university so that it can overcome its competitive weakness and complete the basic construction of its organizational capability. The process of getting valuable and critical knowledge, resources and capabilities from Sun Yat-sen University is called a process introducing external capability into the derived organization. The key resources introduced include brand effect, teacher resource and infrastructure. And the capabilities borrowed from parent organization include management capabilities, capital operation capabilities and so on.

Xinhua College turns itself into normal operation stage by coping, transforming and utilizing all of these resources and capabilities. However, in this stage, Xinhua College did not form its internal innovative organization capability. In this stage, the college was in a establishment stage. It did not have basic knowledge and skill in aspects like teaching and management. It survived by coping, transforming and utilizing the knowledge, resources and capabilities acquired from outside. During the process of utilizing these borrowed resources, the college accumulated its own knowledge and experience in aspect of teaching and management. Although organizations were not able to form internal innovative capability merely based on these knowledge and resources, they formed the basis of constructing

innovative capability with these knowledge and resources(See Figure 5-1). In conclusion, Xinhua College at this stage depends mainly on outside knowledge, resources and capabilities. The college realizes basic operation by integrating these into the organization's internal capability. Therefore, this thesis got the first proposition.

*Proposition 1: Under dual resource dependence, cognition of pressure from external environment drives independent college to introduce external capability into organization and to form internal replication capability. The "External-to-Internal" capability construction process is thus realized.*

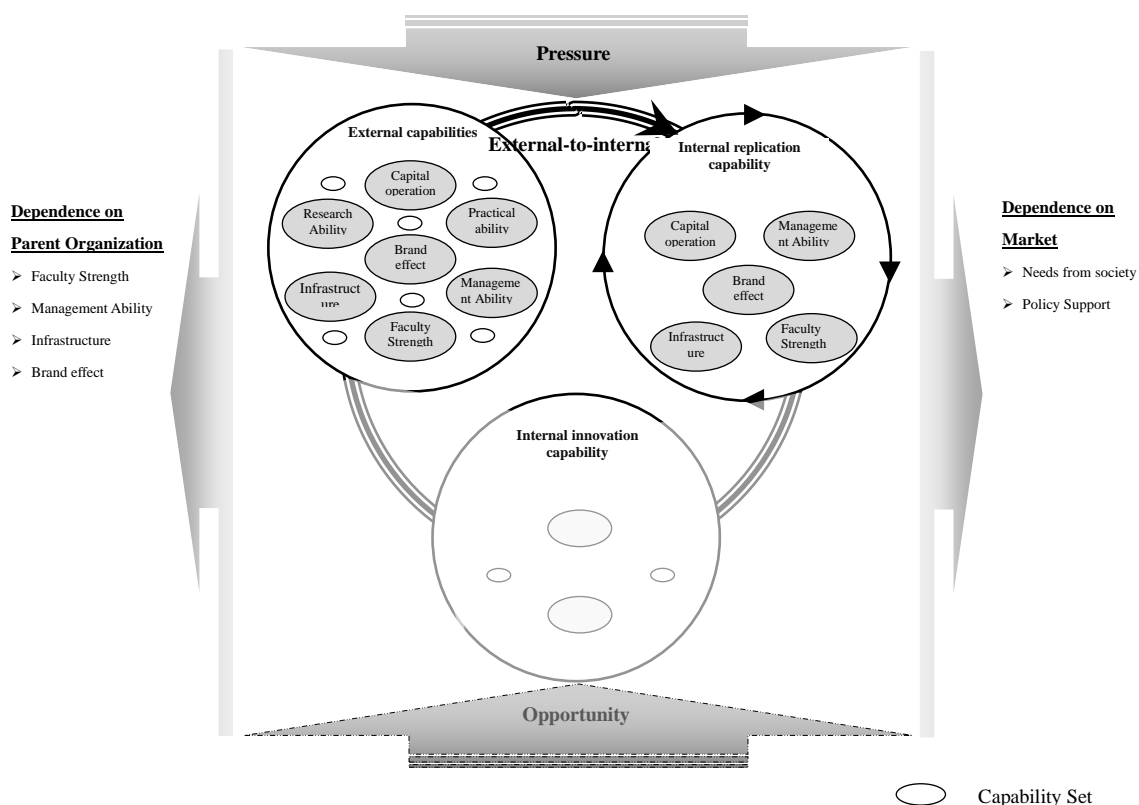


Figure 5-1 Stage One: "External-To-Internal" Construction Process of Capability of Xinhua College

### 5.2.2 Stage two: the stage of internal capability retention

In this second stage, the main activity of Xinhua College is to realize internal capability retention. In December 2011, the construction of Dongguan Campus Xinhua College was completed and the College started to have official office. This provides physical basis for the later development of the college. However, Xinhua College at this stage still faced disadvantages both from resources and market. On one hand, Xinhua College had limited resource in aspects of school-running financing, teacher strength building, teaching facilities



improvement, management capability enhancement and so on. Besides, Xinhua College had encountered more competitors. Apart from public universities, other independent colleges, which had same organizational form, also became its competitors. The competition had become more intense. On the other hand, the Country started to issue policy to encourage student enrollment, which made independent colleges have more student candidates. Although there was strong demand coming from outside, Xinhua college was not able to meet the demand with its limited organization capability and insufficient knowledge accumulation. Therefore, under resource dependence both on its parent organization and outside market, Xinhua College, with the goal of winning a place in education market and improving its organizational capabilities, needs to maintain close contact with its parent university and get more key resources from external environment.

In this stage, the environment cognition of Xinhua College is still divided into pressure and opportunity. The college recognizes the shortage of school funds, teacher resources, teaching facilities, management capabilities, and the fierce competition as the environment's pressure; it recognizes the country's policy of encouraging student enrollment and increasing social needs as environment's opportunity. In order to cope with external pressure and catch the opportunity, Xinhua college, on one hand, keeps on contacting with its parent university and getting valuable resources, knowledge and capabilities from Sun Yat-sen University; on the other hand, it expands its vision to search more resources from outside and builds its own internal innovative capabilities. Xinhua College kept these capabilities and completed the construction of internal organization capabilities. The construction of internal capability of Xinhua College is unfolded from aspects of infrastructure, capital operation, teacher strength, practical ability, management ability, brand effect and so on.

Table 5-2, the coding result of qualitative materials, shows that Xinhua college has made a breakthrough in building internal innovative capability. In aspect of infrastructure, the College has increased its investment in improving current infrastructure, for example" The school has newly built football stadiums, gymnasiums and student dormitories (X2, J4, F9, X3), "The school increased its hardware facilities and software equipment and it has provided different classrooms for different majors and courses (F9)"; in aspect of capital operation, the college has got more financing sources, for example" The college's funding comes from the sponsorship of other companies, the rent of school shops, the tuition of students, no longer based on the initial tuition fees, and now expands a variety of ways (J4, X4)"; in aspect of faculty, the college not only hires teachers from Sun Yat-sen University, but also gradually

introduces talents from foreign countries or other universities, such as establishing a professor mechanism and hiring Dr. Yuan Chiping and Dr. Li Zhenghua as professors; in aspect of practical ability, the college established contacts with outside enterprises and introduced resources from these companies and provided employment and practical opportunities for students; For example, “cooperation with Nansha Hotel” (F3) , the "Dongbao Cup planning competition “organized in collaboration with Dongbao Group (X4) and so on”. The efforts of the college have been rewarded. From 2010 to 2011, the number of internship bases has increased from 50 to 80. Students now have more places to intern which is helpful to improve students' practical ability. In aspects of management ability, managers of the college have greatly improved daily school management and teaching management. For example, “assign class leader and hire academic leader (F3), "teaching management, and party management are more organized (F9,X4) and so on; in aspect of brand effect, the college tried to improve its brand effect through various methods, for example,“Invite the media to come to the recruitment fair in this college (F1)” The college made great efforts to increase its internal organization capability and provide basis for its independent development.

Under the resource dependence both on parent organization and market, Xinhua College needs to rely on its parent organization's resources to cope with the fierce competition and external environment pressure. The dependence on its parent organization helps it to seize market opportunities and realize its own capability construction. In particular, it needs the reputation of Sun Yat-sen University to get students and expand its student enrollment. And it also needs to rely on the faculty of Sun Yat-sen University in students teaching and research level improvement. The improvement of students' practical ability is closely related to organization's acquisition and exploitation of external resources, and the increase of funding sources is also tightly correlated with external sponsorship. Therefore, in this stage, the formation path of independent college's capability is as follows, it still needs to introduce external resources into the organization; but it starts to replicate external capabilities in the process of utilizing external resources, then, the organization enhances its internal operation and gradually accumulates its own internal capabilities. In this way, the organization forms its internal innovation capability. For example, when Xinhua College was established, its teachers came mainly from Sun Yat-sen University. With the accumulation of its own capabilities, the college started to recruit its own teachers. Still, some teachers of Sun Yat-sen University chose to stay in Xinhua College and became the organization's internal teacher strength. Such kind of internal capability retention can help organization to build its own

internal organization capability and accumulate knowledge and resources. This retention stage also stimulates the organization to make innovation on internal capability and promotes organization to establish broader resource linkages with external institutions. Thus, the organization is able to gradually reduce reliance on external resource and create basic conditions for the organization to realize independent development (See Figure 5-2). Therefore, this thesis puts up with the second proposition

*Proposition 2: In order to cope with environment pressures and catch opportunities, the capability development of independent college experiences a process from internal to external. In this process, internal innovation capability is formed through "capability intention"*

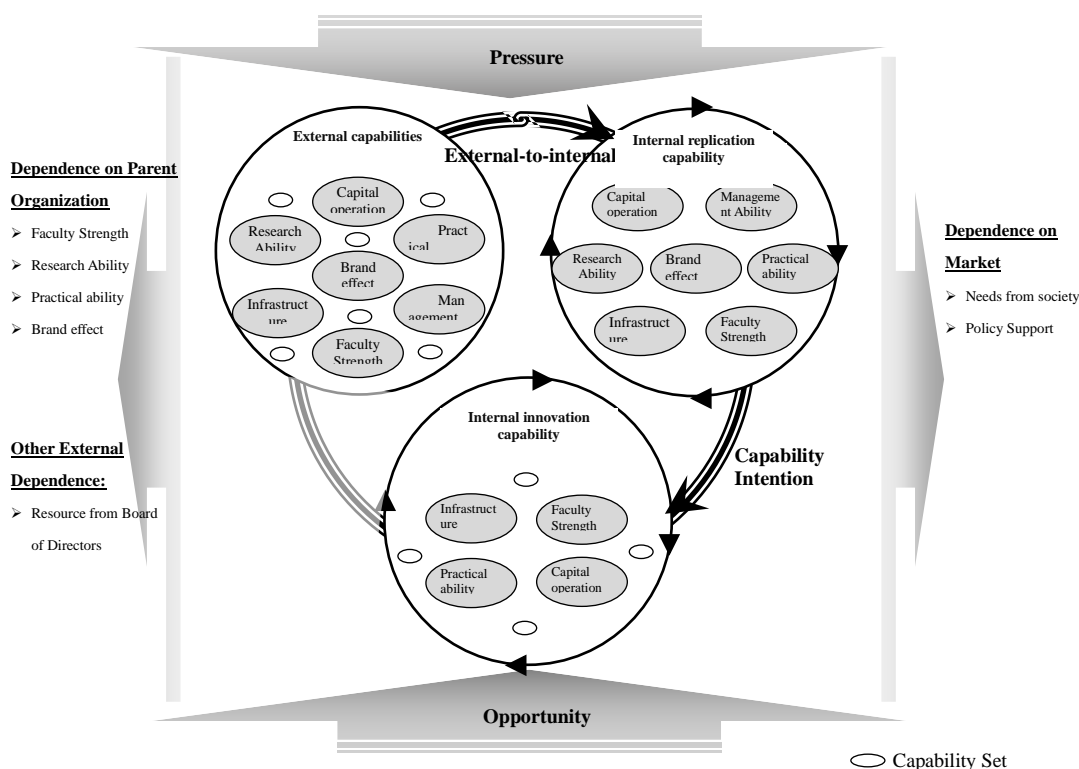


Figure 5-2 Stage Two: The Process of Internal Capability Intention of Independent College

### 5.2.3 Stage three: Capability development stage from internal to external

The main behavior of Xinhua College at this stage is aimed at realizing the "internal-to-external" development process of its organizational capabilities. In the second stage, Xinhua College has retained some organization capabilities and to some extent it also got ability to deal with external environmental pressures. However, Xinhua College also faces problems that often occur in private colleges, such as the control of the board of directors, the frequent turnover of teachers, the shortage of teachers, and the mismatch between student supply and

social demand. Besides, at the second stage, independent college also faces the threat of being separated with parent organization. Organization cognizes this kind of environment as pressure; on the other hand, there are also many opportunities outside Xinhua College. The accumulated knowledge and resources could help organization identify and catch these opportunities so that organization can beat environment pressure and improve its organization capability construction. According to words of one interviewee, “The environment faced by the college becomes more complex (F3)”; therefore, in respond to the changeable external environment, Xinhua College has changed its internal organization structure. Its development changed gradually from depending on resources of its parent university to enhancing its construction on internal organization capability. Internal construction of Xinhua College has been strengthen mainly in aspects of teacher strength, infrastructure, research capabilities, management capabilities, brand effect, practical capabilities and capital operations.

According to the coding results of qualitative materials in Table 5-2, the capacity construction of the college in the third stage is mainly reflected in several aspects: in aspect of teacher team, the college has redefined teachers' salary composition to solve the problem of frequent teacher turnover. Meanwhile, it also improved the college's requirements on the quality of teachers, for example, "The recruitment requirement of teachers has been improved to doctor degree. (X1, F5, F8)", “encourage teachers to do investigate and survey in the enterprises worked with the college (F3)”. These adjustments meet requirements of students, parents and society on teachers; in aspect of practical ability, the college continuously establishes relationships with external companies to solve the problem of mismatch between students' quality and social needs. It also make efforts to enhance students' social practice ability, such as “work with JD company on targeted-talent cultivation and “self-drive” project (X5, F5, F4) ”, the project cooperated with JD requires students to complete the project improvement plan before they graduate, and invites company manager to evaluate and rate the plan, so students' study becomes more targeted; in aspect of capital operation, the college encourages its students to start their own businesses and find jobs, and establish “creative shops” for students. It increases students' ability to start a business or to be employed. Meanwhile, the college holds regular parent conferences to explore valuable knowledge and resources from students' parents, and to increase financing sources of the school and employment opportunity of student. In aspect of management capability, the board of directors goes further from investment to daily management of the college. The board has enhanced teaching management and implements teaching reform. As for students, it improves

student management and creates platforms for employment guidance. As for scientific research capability, the college encourages teachers to carry out scientific research, provide research funding, and adjust assessment standard of teachers. It rewards teachers who publish academic papers. In addition, the college also invites professionals and scholars from other universities to do academic exchange and it encourages new-hired teachers to do academic exchange with their mother school (F4). In aspect of brand effect, the college has improved its ranks in the Country through the improvement in teacher team, practical ability, and scientific research capability. It has gradually been recognized by the society, students and parents.

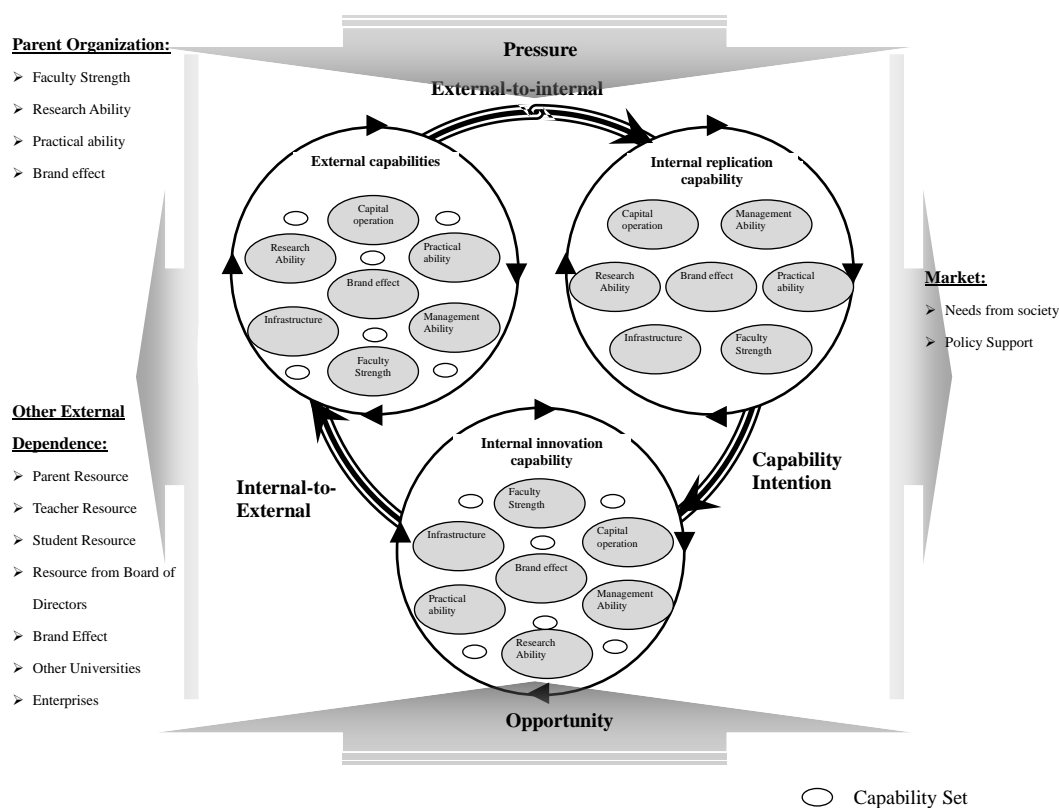


Figure 5-3 Stage Three: The "Internal-to-External" Development Process of Organization Capability

At stage three, Xinhua College, on one hand, faces the pressure of survival and development; for example, limitations from aspects of student enrollment, employment, profit making, independent threats and so on; on the other hand, it has accumulated large amount of resources and knowledge which help it to better cognize opportunities in external environment. For example, Xinhua College is able to identify various resources behind its teachers, managers, board of directors, students and so on. It can also cognize a more fair competition environment created by the reform in Chinese education system. Under pressures and opportunities, Xinhua College keeps on exploring external knowledge, valuable resources

and capabilities. After digestion, exploitation and integration, it has also activated the vitality of organizational innovation. The development of its internal innovation capability has reduced its resource dependence on parent organization and the market. And construction of organizational capabilities is in this way constructed. Xinhua College extends its resource exploration from parent university to outside related resources, from students to parents and alumni associations, from teachers to teachers' alma mater, tutors, friends and other connections. It also extends the resource exploration from the board of directors to companies, partners, and government relations. The College, in this way, extensively establishes contacts with external organizations to explore and acquire new and valuable knowledge and resources, to utilize and integrate the capabilities within the organization, and to retain capabilities gradually. Through mechanism of capability retention, the organization accumulates enterprise's current knowledge and capabilities and lays its foundation to better identify, digest and utilize external knowledge and resources. And under the influence of environmental pressures and opportunities, the organization continues to increase innovation vitality. Ultimately, it promotes its ranks in independent colleges and attracts more enterprise-university cooperation's which bring profit to the enterprise(Cohen & Levinthal, 1994). This is organization's capability development "from internal to external" (See Figure 5-3 page 107). This thesis put up with the third proposition

*Proposition 3: Under joint influence of pressures and opportunities, innovation capability of independent college is constantly promoted, and its dependence on parent organization is gradually reduced, It realizes the construction process of organizational capability with three sequential stages, namely, "External-to-Internal", "Capability Intention" and "Internal-to-External".*

#### **5.2.4 The evolutionary process of organizational capability of independent colleges under dual resource dependence**

Based on perspective of dual resource dependence, this section divides organization capability into internal replication capability and internal innovation capability. According to this division, this section further explores the evolutionary process of organizational capability of independent college. Through in-depth analysis and research on qualitative materials, the findings reveal thesis found the evolutionary process of independent capability in independent college is a process with three sequential stages, namely, "External-to-Internal", "Capability Intention" and "Internal-to-External".

At stage one, Xinhua College, as a full-time ordinary higher education institution, was jointly established by Sun Yat-sen University and Guangdong Dongbao Group Co., Ltd. It's born by its parent university (Chatterji, 2009). At this establishment stage, Xinhua College had weaknesses in accumulation of knowledge, resource and school-running experience. Government had no fiscal subsidies for this new-established college. Therefore, its knowledge and resources came from its parent organization Sun Yat-sen University (Kroll & Liefner, 2008; Rasmussen & Borch, 2010). This university guaranteed the basic operation of Xinhua College in aspects of campus construction, teachers and management resource obtain, brand effect setup and student enrollment. Xinhua College, at this stage, faced with disadvantages both in resources and market (Wang & Du, 2016). The organization itself had scarce knowledge and resources, but there was strong demand from external market at the same time. It cannot be accepted by the public because of its legitimacy at this stage. Therefore, it is impossible for this college at this stage to complete the basic operation without the help of its parent university Sun Yat-sen University. Xinhua College recognized its disadvantages in resources and market as environmental pressures and opportunities. Under the pressure and opportunity, Xinhua College explored knowledge, resources and capabilities of Sun Yat-sen University and copy these factors into the organization so that it realized basic operation and can be quickly accepted by the public. The evolution of capability in this first stage actually undergo a process of "External-to-Internal"

In the second stage, as the construction of Dongguan campus was completed, Xinhua College officially has its teaching place and own offices, which laid basis for further development of the college. At this second stage, organization's cognition on external environment was still labeled as pressures and opportunities (Hambrick & Mason, 1984; Dutton & Jackson, 1987; Nadkarni & Barr, 2008). At this stage, Xinhua College still has insufficient resources. Besides, as more and more independent colleges are established, the development of Xinhua College is now in a fierce competitive environment. Xinhua College recognizes this kind of environment as pressures; however, the government in this stage issued policies to expand student enrollment nationally. So even the problem of its low recognition has not been fully resolved, the College now was provided with a broader market demand because the number of student candidates increased. country's expanded enrollment policy has continued to Xinhua College identified this kind of environment as an opportunity. Driven by pressures and opportunities, Xinhua College, on one hand, kept on seeking valuable resources and capabilities from its parent organization Sun Yat-sen University,

copied these resources and capabilities into the organization and realized basic operation. On the other hand, through external capability replication and internal capability intention, Xinhua College laid foundation for its construction of internal innovation capability. At the same time, based on its current basic knowledge, Xinhua College began to get connected with more outside resources. For example, it has gradually expanded its network of contacts, built its own team of teachers, and improved infrastructure. It started to cultivate its internal organization capabilities and created internal innovation capability through integration, exploitation, and innovation on existing resources and capabilities. Second, in the "external-to-internal" capability construction process, the organization formed internal replication capability through way of "capability retention". This laid foundation for building internal innovation capability.

At the third stage, although Xinhua College successfully built some internal innovation abilities in former stage, it still faced with some universal problems, such as the mismatch between social requirements and student qualities, frequent turnover of teachers, the weak management ability of board of directors, threats of being broke away from parent organization and so on. Xinhua College identifies these issues as pressures coming from its environment. Meanwhile, there were large amount of opportunities outside the College, for example, In September 2014, the State Council's "Opinions on the implementation of deepening the Reform of the Enrollment System for Examinations" proposed that conditions should be created to gradually abolish the batches of college enrollment. From 2015 onwards, the pilot for the enrollment of batches were to be carried out in qualified provinces(S1), "School can get more resources from the connections of teachers(F4)". The original knowledge base of organization had an important role in its process of absorbing external new knowledge (Cohen & Levinthal, 1989, 1990). It is the ability of organization to identify, internalize and utilize knowledge in organization learning, business activities and organization creativity. This ability get the enterprise be prepared for the incoming opportunity to make a fortune. The ability development is from internal to external (Wang & Du, 2016). The accumulated knowledge and resources could help organization identify and catch these opportunities so that organization can beat environment pressure and improve its organization capability construction. Driven by pressures and opportunities, the College first enhanced its accumulation of basic knowledge with dependence on resources from Parent University and exploration of external resources. Then, during the process of obtaining and accumulating these external resources and knowledge, it improved its ability to discover and identify



opportunities and to stimulate organizational innovation. Specifically, Xinhua College extends its resource exploration from parent university to outside related resources, from students to parents and alumni associations, from teachers to teachers' alma mater, tutors, friends and other connections. It also extends the resource exploration from the board of directors to companies, partners, and government relations. These actions enable the organization to get more knowledge, resources and capabilities. Besides, these efforts contribute to increase its basic knowledge accumulation and lower its dependence on parent organization. Apart from extending its resource acquisition, the college also improved its ability to identify and catch opportunities. For example, employ experts and professors as academic leaders through its current teachers; improve the scientific research ability of the organization; establish enterprise-university cooperation with various forms to offer students more opportunities to improve practical ability; adjust salary composition, assessment and motivation method of teachers and reduce teacher turnover. These measures have improved the school's ranking and built its own brand influence. The college also got more cooperation with companies which laid a foundation for its independent development. Therefore, at this stage, the internal innovation capability of independent college has been improved and the college lowered its dependence on parent organization. The external capability activity was stimulated and it promoted the cycle of transforming external capability to internal capability through the path of "external-to-internal", "capacity retention" and "internal-external".

### **5.3 Summary**

This chapter mainly explores the organizational capability construction process of independent college and the underlying driven mechanism of this process. This chapter concludes that the independent capability construction process of Xinhua College Sun Yat-sen University is actually an evolutionary process with three stages, namely, "External-to-Internal", "Capability Intention" and "Internal-to-External". Under dependence both on resources of parent organization and the external market, Xinhua College recognizes pressures and opportunities from the environment. Driven by pressures and opportunities, the college explores outside knowledge, resources and capabilities, copies these into the organization and formed its internal replication capability. The activity of internal replication capability will push the organization to build internal innovation capability through the path of capability retention. The internal innovation capability will be further enhanced with the organization continuously coping with external pressures and opportunities. Finally the

organization will improve its brand influence and its ranking among other organizations.

Although this chapter explored the capability development process and the underlying driven mechanism, there are still some questions remaining, for example, how the environmental pressures and opportunities drive the organization to improve its internal innovation ability, how the activity of organization in capability construction is stimulated and what makes the organization keep on innovating and finally complete the independent development? This is closely related to the inherent nature of independent college, namely, the nature of "commerciality" and "public welfare". Next chapter, the author will explore how environment cognition helps independent college, an organization with dual nature, to promote its organization capability development.

## **Chapter 6: Evolution of Organizational Capability of Independent Colleges Based on the Paradox Theory**

### **6.1 Duality of independent colleges**

Independent colleges are different from public universities and private universities in China. They are a transitional form of university existence in the Chinese context, with dual roles of public welfare and commerciality. As an institution of higher education, independent colleges must embody the public welfare of education if they want to develop. Unlike private universities, which tend to be commercial, their infrastructure, teachers and management need to be solved independently. Independent colleges can acquire some teachers and management power from public undergraduate universities, which tend to be public welfare. At the same time, because independent colleges do not enjoy the state financial subsidy, but the investment of enterprises or third-party forces in society, it is essentially an investment in education with profit-making behavior, and different from the donation behavior of some private universities in the west. If investors of some independent colleges find it difficult to balance the long-term development of the college with short-term investment income behavior, it is not conducive to the establishment and development of organizational capabilities.

#### **6.1.1 Public welfare**

The public welfare of education originates from the cultivation of educated talents and the benefits brought to social development by educating people. It is the natural attribute of educational activities. There is no substantial difference between for-profit schools and non-profit schools in terms of moral objectives, political objectives, relevant educational contents and methods of personnel training. To a certain extent, it can also make up for the shortcomings of public schools. Profit-making education is an educational activity conducive for social development, because they can bring economic and non-economic benefits to other members of society other than organizations (Pan, 2009; Pan, 2010). Although public welfare is an inherent attribute of educational activities, when publicity is different, its public welfare is either large or small, and its public role is also either strong or weak.

By encoding the data from different sources of Xinhua College of Sun Yat-sen University, the public welfare of the independent college can be identified in stages. According to the

connotation definition of public welfare of education, keywords are summarized and identified from each data, and the corresponding practices and events directly affecting the effect of talent education are classified. Continuous classification, primary coding of teacher team building, campus environment construction, infrastructural investment, student quality training, and student care mainly marks the public welfare characteristics of each stage of the independent college. The construction of the teaching team directly affects the quality of teaching and scientific research in schools, students' training, and long-term and overall social effects. The construction and investment of campus environment and infrastructure will optimize students' learning and living environment; provide better conditions for students' learning. Additionally, the construction of recreational stadiums and gymnasiums will be directly conducive to the development of students' comprehensive quality, affect students' life and create social benefits when they go to work. Student care reflects the school's concern for students' physical and mental health. Investing in learning and work provides protection.

Through coding, the research identified a total of 73 “public welfare” data. Table 6-1 shows the coding process of the public welfare concept, from the original data to the keyword recognition and summary, and finally to the public welfare concept.

Table 6-1 Demonstration of Public Welfare and Commercial Coding for Independent Colleges

Source	Demonstration of primitive evidence	Key Words	Primary Code	Secondary Code
F1	One of the attractions for students is the teachers from Sun Yat-sen University	Teacher	Construction of Teacher	
F2	Salary structure adjustment in 2014 to improve the outflow of teachers	Resources to retain teachers		
X3	Later, they built gymnasiums and tennis courts	Gymnasium, tennis courts		
X2	Improved transport, increased bus lines, there is a change in dormitory	Transportation, public transportation, dormitory	Infrastructure construction	
F3	This is because the school thinks that society needs it, and we also have the power to request the Ministry of Education for new majors every year.	Social needs		Public Welfare
X5	Square near the school can provide more opportunities for entrepreneurial opportunities for students.	Entrepreneurship, learning opportunities	Student Cultivation	
F3	Independent colleges actually use private funds to expand enrollment and citizen education.	Social benefits		

F1	Schools have many evaluations every year, such as psychological assessment.	Psychological Education	Caring students	
X5	The lab is opened on work days and weekend for students	Increase opportunity		
F1	The hidden purpose of the parent conference is financing.	Financing		
F1	Founded the alumni association is also a way of financing for the construction of school	Financing	Get Financing	
X1	There is no independent library; there is no gymnasium, only three teaching buildings, dormitory and dining hall.	Inadequate facilities	Inadequate investment in the construction of facilities	
X2	Some of the new master's degree courses offered by the school are mostly based on textbooks.	Scripted		
X1	There is no air conditioning in the classroom, and it's hot like a furnace in the summer.	Poor condition		Commerciality
F1	The head of the college has shares in the school and tends to be a little more businesslike in his thinking	Commerciality	Increase organizational control	
F1	Investors gradually put their own people into the leadership team	Investment		
F1	The board of directors has 60% of the shares, and Sun Yat-sen University has 40%, of which 20% of the board of directors is used for school construction.	Shares accounted for	Business Value	
F2	Independent in its nature is a business therefore the problem of cost and profit are directly considered.	Cost; profit		

### 6.1.2 Commerciality

Unlike ordinary public institutions, independent colleges do not enjoy the state financial subsidy, but social organizations or individuals mainly use funds, physical objects, land use rights and other participation in running schools, which is essentially an investment in education and a profitable behavior. Independent colleges are actually more like an educational enterprise, which operates for profit by providing educational services (Pan, 2010; Wang & Yang, 2011). Taking most independent colleges in Guangdong Province as an example, in the process of running independent colleges, ordinary colleges and universities mainly provide great support in the initial stage of running schools, such as the application for the establishment of schools, the use of school names, the provision teachers and managers. They also help to build teaching and management systems and provide their land; school buildings and teaching facilities to independent colleges while required funds are provided by

the investors. Undoubtedly, in the process of running independent colleges, although financial support, subsidies and social donations have been accumulated, a vast majority of the tangible assets of independent colleges are accrued through investors' investment. This means that the development of independent colleges is not only to provide educational services, but also to recover costs and earn profits for investors.

By encoding the data from various sources of Xinhua College of Sun Yat-sen University, the relevant behaviors of investors in the development of independent colleges for the purpose of organizing profits is summarized. For example, "In order to save investments, colleges cut down on the investment of facilities that schools should have, such as independent libraries, gymnasiums and only invest in three teaching buildings, dormitories and dining halls. For example, students account that air conditioning is insufficient in classrooms, especially in the summer; the floors above the fourth floor are like a stove (X1). In the early stage of the College's development, there was insufficient investment in the introduction of teachers, leading to students' dissatisfaction. For example, "some of the new master's students in the school are taught according to the textbook (X2)". The implicit purpose of holding the parent meetings is to solicit for funds; investors appoint themselves into leadership roles while the assistant principal has close ties with the chairman, and some of the assistant leaders of college.

Through coding, the research identified a total of 56 "commercial" data. Table 6-1 shows the coding process of commercial concepts, from raw data to keyword recognition and finally to commercial concepts.

### **6.1.3 Duality and paradox balance**

Due to the limitation of resources, there is a certain conflict between public welfare and commerciality. As a product of the reform of higher education system in China, the vigorous development of independent colleges has made important contributions to alleviating the financial pressure of the state, meeting the diverse educational needs of the people, cultivating applied talents needed of the economy and society, and promoting the popularization of higher education. However, with the rapid development of independent colleges, there are also many problems. In particular, some independent colleges invested by enterprises have strong profit-making purposes. They profit from running schools through various means, resulting in low quality of independent colleges, lack of professional settings, imbalances in internal management, and confusion in enrollment management. The public welfare of

independent colleges has been paid more and more attention by all walks of life.

In reality, many independent colleges have achieved higher income than expenditure through a variety of ways, and have a surplus in running schools. In order to save costs, most independent colleges offer short-term majors and liberal arts majors, while there are few science and engineering majors that require high experimental and practical training conditions and large investment. A large number of parent university teachers, retired teachers and low-level part-time teachers are hired, saving a lot of personnel expenses. Considering the large demand of undergraduate education market, some investors often choose to expand the scale of enrollment in order to shorten the investment cycle, and even exhibit fraudulent behavior or vague information propaganda in enrollment. In this research case, Xinhua College of Sun Yat-sen University sacrificed public welfare to some extent while pursuing commerciality. For example a respondent stated that, "The most ridiculous thing I've ever heard is that one of my classmates who entered a high-level provincial debate contest wasn't even reimbursed for cost incurred." (X1); "We feel that the school has developed very fast, from thousands of people in the past to 230,000 people now, the school has collected a lot of funds, but they have not been invested. So far, neither the library nor the gymnasium has been built. For example, recently there has been a big banning of takeout. Students want to eat takeout however, for the sake of relevant interests, investors forbid takeout into schools. The contradiction between the two sides has arisen (F1).

In fact, public welfare and commerciality are not always mutually antagonistic and incompatible with each other. Public welfare and commerciality are the paradoxes of the paradoxical balance system. On one hand, the investment of enterprises directly affects the quality of education and the cultivation of students; on the other hand, the improvement of the quality of school education and good educational efficiency greatly enhance the reputation of the school. This increases student resources and thus promotes better profitability of the school. In order to achieve sustainable development, independent colleges must focus on coordinating the relationship between public welfare and commerciality. Only in such a balanced process can independent colleges gradually cultivate organizational ability and achieve real independence.

## **6.2 Process analysis of organizational capability under paradox balance**

Based on the division of capability development stages of Independent Colleges in the previous chapter, this chapter will analyze the process of building "independent capability" of

Xinhua University from the universal logic of "cognition (environmental cognition) - behavior (paradox balance system) - result (independent capability)", and explore the process mechanism of activating the formation of internal innovation capability of organizations.

### **6.2.1 Stage one: External capability introduction phase**

Xinhua College's first stage of organizational capacity building i.e., the introduction of external capabilities was from 2005 to 2011. At this stage, due of the newness of the organization and the weakness of the internal ability of the organization, it relied on the resources of the parent organization and the market for its development. The resources of parent organization include the faculty, managers, management concepts and infrastructure of Sun Yat-sen University. In the market, the public had not recognized the organization, and the development of the college needed to depend heavily on market demand. Therefore, it also needed to enhance legitimacy by using the brand effect of Sun Yat-sen University. Based on the interviews, we discovered that " Sun Yat-sen University assigned middle and senior managers to Xinhua College for guidance (F1, F3)", "Sun Yat-sen University helped Xinhua College to set up teaching steering committee, party committee and student declaration committee. (F1)", " In the two years since Xinhua College was founded, the student's diploma and degree certificate were issued by Sun Yat-sen University (F1, F4, F9, J1). "Teachers of Xinhua College are mainly from Sun Yat-sen University (F1, F3, J4)", etc. At this stage, the main organizational ability and resources of Xinhua College came from Sun Yat-sen University, its parent school, while its ability building process was a logic of "outside to inside."

As shown in Tables 6-2 and 6-3, the change of environment in Xinhua College at this stage is mainly identified as a kind of pressure due to its weak organizational ability. Such pressures include lack of funds, inadequate campus construction, imperfect policies, of teaching assessment pressure and low social recognition. The interview materials are as follows: " The school does not have the same government subsidy fund (F1) as the public university ", " the college did not have a campus of its own and students must borrow classrooms and dormitories of Sun Yat-sen University (F1, F2, X1, F4),"there were no perfect policies and regulations (F1)", "Xinhua College also needed to deal with the pressure of teaching evaluation of the Ministry of Education (F1)", "Enterprises and society believe that independent colleges are profit-oriented institutions. When candidates fill in as volunteers, they have many doubts (F1). Enterprises also have doubts about the abilities of students



trained by independent colleges (F1, F6).

According to the coding results in Table 6-2, Xinhua College tends to adopt public welfare behavior to cope with the pressure from the organization survival, the Ministry of Education and the public (e.g. Table 6-3), and seeks support from Sun Yat-sen University, the parent organization. At this stage, Sun Yat-sen University, the parent organization, has provided it with external resource support, such as teaching resources, teacher resources, management knowledge and brand resources, which fully reflects the public welfare. In order to obtain public recognition, the college did not take profit as the current target, but put public welfare behavior in the first place. During this period, the board of directors played a secondary role in the management of the school. For example, the interview materials mentioned that "the school merged with Guangzhou Nanyue College in order to expand the scale of the school (F1)", "the school is very willing to spend a lot of money to invite many professors from Sun Yat-sen University, the school will spend a lot of money on this, open bus lines, to pick up professors from Sun Yat-sen University to attend classes (F2)", "middle and senior managers were also hired from Sun Yat-sen University. (F1, F3)".

Table 6-2 Relevant Concepts and Typical Examples Xinhua College

Stage	Demonstration of primitive evidence	Number of items	Key Words	Primary Code	Secondary Code	Category
Stage one	The living and study condition of student is tough; the college didn't have its own campus.	8	School, Campus, Tough, Need, Library, Teaching Building, Football field	School facilities are in need		
	The funds for running the school mainly came from investment and tuition, and there was no government subsidy.	4	Financing, Subsidies, Tuition Fees	Lack Funding	Pressure	Environment Cognition
	Operation funds were mainly raised from tuition fees. The group was also responsible for its own financing.	3	Profit and loss, Profit-making, Profit	Profit-making needs		
	The college still had to have its own management method in daily operation	3	Management, Operation	Operation demand		
	There were no sound policies and regulations at the time.	1	Without, Policies, Regulations	The policies were not good		

<p>The Ministry of Education assessed the quality of education in all majors</p>	1	Quality, Assessment	Education quality assessment		
<p>There were a large number of students who could not be admitted into undergraduate program by public universities. And they do not want to go to junior college, so Independent colleges of Public universities met their needs</p>	1	Society, Needs	Social needs		
<p>In May 2003, the Ministry of Education issued an official document the "Several Opinions on Standardizing and Strengthening the establishment and management of Independent Colleges launched by universities with New Mechanisms and Models", and proposed a new concept of "independent colleges".</p>	1	The Ministry of Education	Policy Support	Opportunity	
<p>The purpose of merging Guangzhou Nanyue College was to expand its scale.</p>	7	Expand school	Infrastructure construction		
<p>One aspect of attracting students is that the teachers are all invited from Sun Yat-sen University.</p>	12	Teacher	Construction of Teacher		
<p>The middle and senior leaders of Xinhua College were also recruited from Sun Yat-sen University.</p>	6	Senior hire	The introduction of management	Public Welfare	Paradox Equilibrium System
<p>Independent college are using private funds to expand enrolment and expand the degree of civic education</p>	12	Recruiting students	Student Cultivation		
<p>The board of directors has 60% shares and Sun Yat-sen University has 40% shares. Among them, 20% of the board's shares were be used for campus construction.</p>	4	Board of Directors, shares	Business Value	Commerciality	
<p>College funds mainly came from shareholder' investment funds and students' tuition fees</p>	6	Tuition, funds, subsidies, financing	Cooperation Assets	Internal innovation capability	Independent Capability
<p>Hardware facilities were scarce in the early days of the College's establishment</p>	4	Library, Gymnasium, Facilities,	Infrastructure		

			Campus, Dormitory			
	We needed to use the brand of Sun Yat-sen University to enhance the influence of our school.	9	Need, name, brand name, fame, brand	Brand effect		
	Guangdong Dongbao Group and Sun Yat-sen University cooperated to build a school	5	Joint venture, Cooperation and Funding Cap	Capital operation		
	Lecturer and professor were hired from Sun Yat-sen University to teach	6	Part-time, assistance, support, hire, instructor, professor, teacher	Faculty Strength	Internal replication capability	
	The need to use the student dormitory and classroom of Sun Yat-sen University	3	Borrow, temporary residence	Infrastructure		
	At the time of the establishment of Xinhua College, Sun Yat-sen University sent middle and senior management personnel, teachers and professors to the school for management and teaching.	3	Hiring, assigning, concurrently, Sun Yat-sen University	Management Ability		
	The college has no fiscal subsidies; Its funding mainly comes from enterprise	6	Fiscal subsidies, Subsidies, Financing, Tuition fees	Lack Funding		
	Shareholders want profit from college operation	10	Profit and loss, Profit-making, Profit	Profit-making needs		
	There are many independent colleges in Pearl River Delta; the competition is fierce	4	Competition, Independent college	Competitive pressures		
Stage two	The college needs to keep on constructing its hardware facilities to meet demands	5	School, Campus, Tough, Need, Library, Teaching Building, Football field	Campus Construction	Pressure	Environment Cognition
	The construction and development of independent colleges in some places needs support from government	2	Without, Policies, Regulations	Policy Restrictions		
	The college required every school to create characteristic subjects	4	Characteristics, Subjects, Requirements	Leaders' Requirements		

<p>The Ministry of Education will assess education quality of all subjects</p>	2	Quality, Assessment	Education quality assessment		
<p>There are a large number of students who are not able to be admitted into undergraduate program by public universities. And they do not want to go to junior college, so Independent colleges of Public universities can meet their needs</p>	1	Society, Needs	Needs from society		
<p>Recent years, the Country issued policy to promote student enrolment; Xinhua college increased its student enrolment in responding to this policy</p>	3	Policy, Student enrolment	Policy Support	Opportunity	
<p>At that time, the college had an urgent demand on land because the limited campus area of Guangzhou Campus limited its development. However, the college got land from government easily</p>	2	Land, Country Support	Policy Guidance		
<p>Professor mechanism was established and Dr. Yuan Chiping and Dr. Li Zhenghua were first recruited as professors.</p>	4	Teachers, doctors, hire	Construction of Teacher	Public Welfare	
<p>The Dongguan campus was completed in 2011 and welcomed the first batch of students.</p>	6	Campus Facilities	Infrastructure construction		Paradox
<p>College leaders have shares in the school and tend to be commercial in their thinking.</p>	10	Commercialize	Increase organizational control		Equilibrium System
<p>Schools don't want to invest too much because investors need to make profits.</p>	15	Profit and loss, Profit-making, Profit	Business Value	Commerciality	
<p>The implicit purpose of holding parent-student conferences is to raise funds.</p>	4	Investment, financing, funds	Get Financing		
<p>The college's funds are no longer based on tuition fees, but rather open up ways such as sponsorships and store rents.</p>	3	Tuition, funds, subsidies, financing, rent	Capital operation	Internal innovation capability	Independent Capability
<p>The school began to recruit new professional teachers</p>	8	Recruitment, new tactics, external, teachers,	Faculty Strength		

			teacher			
	In cooperation with Dongbao Group, it organized the "Dongbao Cup Planning Competition".	11	Professional, program, practice, practice, business, cooperation	Practical ability		
	Internal management of the schools more structured than before	2	Experience, supervision, management	Management Ability		
	During job fairs, the media is invited to publicize and enhance the influence of the school.	2	Brand, influence, position, reputation, fame	Brand appeal		
	The computer room facilities are equipped with a variety of software, and there are different classrooms for different majors and different courses.	8	Classrooms, facilities, library, gymnasium, dormitories, football field	Infrastructure		
	Relying on the parent school Sun Yat-sen University, to access first-class platform and resources	5	Relying on, reputation, brand	Brand effect		
	Some Xinhua College teachers come from Sun Yat-sen University	3	Part-time, assistance, support	Faculty Strength		
	Being situated near Sun Yat-sen University and sharing the academic resources of the 985 school helps to better carry out academic exchanges	3	Research, academic, books, rely on, mother school	Research Ability	Internal replication capability	
	Using corporate resources, to establish mechanisms for students to engage in internships.	7	Depend on, rely on, internships, school-enterprise cooperation, practice, programs, majors	Practical ability		
	Environment has changed rapidly, so enterprises have higher requirements on students' quality	3	Student, Requirement, Enterprises	Social Demand		
Stage three	Enterprises start to believe the college has potential of profit making, which has increased their involvement in school management	15	Profit and loss, Profit-making, Profit	Profit-making needs	Pressure	Environment Cognition

<p>The independent colleges visited are well constructed; their campuses are very standardized, and these independent colleges face great competitive pressures.</p>	7	<p>Competition, Independent college</p>	<p>Competitive pressures</p>
<p>Students want to have a library first so they could have a place to study</p>	10	<p>School, Campus, Tough, Need, Library, Teaching Building, Football field</p>	<p>Campus Construction</p>
<p>It is difficult for independent colleges to get fiscal subsidies from the government like public universities</p>	5	<p>Policy, Regulation, capital, Country, Application</p>	<p>Policy Restrictions</p>
<p>The school requires each college to run its own specialty.</p>	5	<p>Characteristics, Subjects, Requirements</p>	<p>Leaders' Requirements</p>
<p>Students hope the school could hire highly specialized teachers</p>	3	<p>Teachers, Students</p>	<p>Student need</p>
<p>Currently, it's difficult to tell whether independence can be achieved. The new principal has his own ideas different from the previous one. Xinhua college has the possibility of breaking away from Sun Yat-sen University.</p>	9	<p>Break Away, Reform, Independent, Threats</p>	<p>Independent Threats</p>
<p>The Ministry of Education will assess education quality of all subjects.</p>	2	<p>Quality, Assessment</p>	<p>Education quality assessment</p>
<p>The college is located in Mayong Town, Dongguan City. It is the water town Xincheng area planned by Dongguan City. In the future, it will be a demonstration place for industrial transformation and upgrading. The government will increase investment in the future and focus on investing in tourism culture. The environment will inevitably change greatly and the economy will inevitably prosper. It is a rare opportunity for an application-oriented university to pursue the</p>	10	<p>Policy, Change</p>	<p>Policy Environment Opportunity</p>

service of the local economy.

Many independent colleges develop very fast now and have a desire of breaking away from parent university; for example, the Zhuhai College of Beijing Normal University has set up such a goal. Many other independent colleges also have such goals and ideas

8

well-developed; break away; independent; ideas; goals

Will of being Independent

Currently, Xinhua College not only cooperate with Sun Yat-sen University but also work with other universities

5

University, Cooperation, Combined Training, Exchange Board of Directors, Dongbao Group, Investment

Cooperation between Universities

Board of directors also bring in a lot of resource, such as corporate recruitment fairs.

5

Directors, Dongbao Group, Investment

Management Resource

Because the college has high tuition fees, students who could afford to study in this college usually have family with good economic background. Therefore, many students also rely on their family relationship for employed after graduation.

6

Students' Parents, Excellent, Employment, Investment

Parent Resource

A former dean of our apartment was asked whether he belonged to Sun Yat-sen University when he lead student to have internship in a hotel. He said he has retired and did not belong to Sun Yat-sen University. The company did not distinguish his current college, Xinhua College, with his former university, Sun Yat-sen University. Professors have changed and attained a new identification, now identifying themselves as members of Xinhua College instead of Sun Yat-sen Univeristy,

6

Exchange, Mather School, Teacher, Identification

Teacher Resource

The new dean focuses more on research ability.

5

Dean, Leader

Leaders' desire

Many enterprises have desire to cooperate with colleges

4

Enterprises; Cooperation

Cooperation

and universities especially small businesses			between universities and enterprises	
Salary structure adjustments were made in 2014 to improve the outflow of teachers.	5	Salary structure, teachers quit	Construction of Teacher	
Dongguan campus now needs to build a library, teacher apartment and so on.	6	Library, teacher apartment, dormitory	Infrastructure construction	
The lab is opened on work days and weekend for students	4	Students, increase opportunities, psychological education	Caring students	Public Welfare
February 23, 2015, the Open Source Laboratory of Xinhua College passed the Massachusetts Institute of Technology (MIT) Fab Lab audit and officially became a member of the international Fab Lab	11	Maker culture, universities	Student Cultivation	
Investors insert their own people into the leadership team. The assistant principal has a close relationship with the chairman of the board. Some of the college leaders are also investors. .	3	Relatives, relations, commercial, investment	Increase organizational control	Paradox Equilibrium System
The board hopes to make a profit from the school.	11	Shares, business, profit and loss, profit, profit	Business Value	Commerciality
There is no independent library, there is no gymnasium, only three teaching buildings, dormitory and dining hall.	5	Inadequate facilities, poor condition, scripted	Inadequate investment in the construction of facilities	
The establishment of the alumni association is also a way of financing for the construction of the college.	4	Investment, financing, funds	Get Financing	
The college encourages college students to start their own businesses and set up alumni associations with the hope of giving back to their alma mater.	16	Tuition, funds, subsidies, financing, sponsorship, rent	Capital operation	Internal innovation capability Independent Capability



<p>Previously, the college required teachers to have master's degree but now they are required to have a doctoral degree.</p>	38	Recruitment, new tactics, external, teachers, teacher	Faculty Strength	
<p>Beginning with the first two years of strategic management courses, students were required to go to the enterprise to conduct surveys, come up with a diagnosis and write a strategic plan for the enterprise.</p>	65	Professional, program, practice, practice, business, cooperation	Practical ability	
<p>Teaching reform, supervisory multiplication program, experts and scholars</p>	13	Experience, supervision, management	Management Ability	
<p>Xinhua college's rankings is gradually taking an upward trend</p>	24	Brand, influence, position, reputation, fame	Brand appeal	
<p>We must not only become a practical talent, but also focus on academics and on fostering an academic atmosphere.</p>	25	Scientific research, Academic, papers	Research Ability	
<p>The dormitory environment (Dongguan Campus) is the top in the province. It contains facilities such as air conditioning, elevator, separate toilet, bathroom, etc.</p>	38	Classrooms, facilities, library, gymnasium, dormitories, football field	Infrastructure	
<p>Xinhua College has more resources from Sun Yat-sen University, which is beyond the reach of other independent colleges.</p>	21	Relying on, reputation, brand	Brand effect	
<p>Some professional leaders are retired or part-time teachers of Sun Yat Sen University.</p>	21	Part-time, assistance, support	Faculty Strength	
<p>The author graduated from Lingnan College of Sun Yat-sen University. The author also visits his supervisor in his home university very often for academic exchanges.</p>	11	Research, academic, books, rely on, mother school	Research Ability	Internal replicati on capability
<p>Currently has more than 500 school-enterprise cooperation units</p>	34	Practice, school-enterprise cooperation, Program, Scheme,	Practical ability	

			Major	
Retired professors will be hired serve as our department head and professional directors.	2	Part-time	Managem ent Ability	

Table 6-3 Comparisons of Items Conceived in the Third Stage of Xinhua College

Stage	Motivation - Environmental Changes		Behaviour - Paradox Equilibrium system		Results - independence	
	Pressure	Opportunity	Public Welfare	Commerciality	Internal replication capability	Internal innovation capability
Stage one						
Stage two						
Stage three						

In summary, as shown in Figure 6-1, Xinhua College is facing the pressures of low social recognition, organizational survival and teaching evaluation in the early stage of its establishment. Because of its lack of internal knowledge, resources and capabilities, the development of Xinhua College cannot be separated from the resource dependence of its parent organization, but also from the dependence on market demand. In order to cope with the pressure, Xinhua College mainly adopts public welfare behavior to explore the knowledge, resources and capabilities of Sun Yat-sen University. It copies the management ability, faculty strength, infrastructure, brand effect and other capabilities of Sun Yat-sen University into the organization to form internal replication ability, so that the organization can operate quickly and normally. Therefore, we have the following proposition:

*Proposition 4: Independent colleges cope with perceived environmental pressures through public welfare behavior, and promote the “External-to-Internal” capability construction process.*

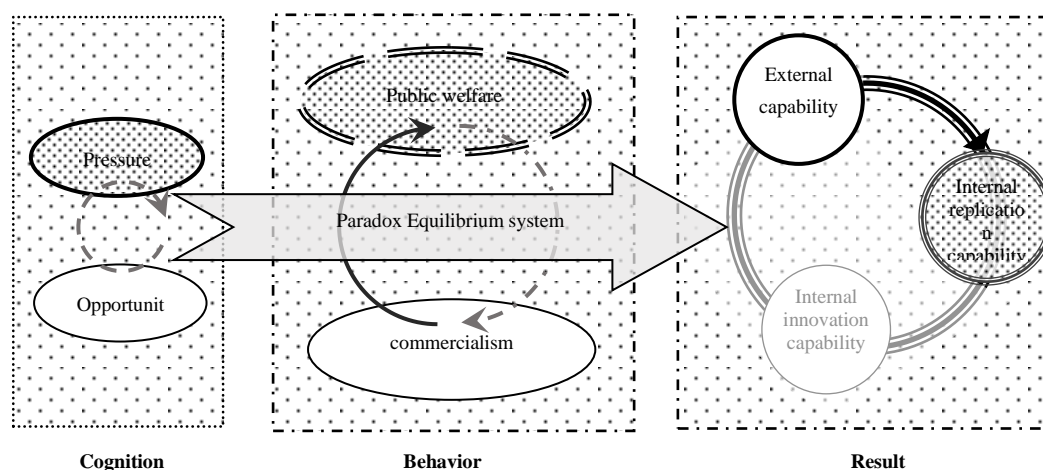


Figure 6-1 Process Diagram of The First Stage Paradox Affecting Organizational Competence

### 6.2.2 Stage two: Internal capability retention stage

The second stage of organizational capacity building i.e. the internal capacity retention stage of Xinhua College was from 2011 to 2014. At this stage, on one hand, Xinhua College continues to explore the external knowledge, resources and capabilities, replicate them into the internal organization, and build the internal replication capability to make the organization operate normally; on the other hand, the organization makes use of and integrates the external acquired knowledge, resources or capabilities through the capacity retention path in the process of the normal operation of the organization through the internal replication capability. In the process, the ability to maintain the internal innovation capability of the organization will be continuously enhanced through the ability to retain the path and utilize the knowledge, resources or capabilities acquired from the outside. The formation process of organizational capability is not only a logic of "External-to-Internal", but also a process of "capability retention".

At this stage, Xinhua College, on one hand, faced challenges from various pressures, such as the increase of competitors, the lack of funds, the demand for profits, the imperfection of campus construction and the performance indicators of leadership appraisal. On the other hand, the implementation of the national enrollment policy and the gradual recognition of the mode of running independent colleges by the state have brought new markets and opportunities for the development of independent colleges. In terms of pressure, according to the coding results in Table 6-2, interviewees described in the interview that in terms of lack of funds, "the school has no financial allocation at all, and rely on enterprises for most of the

funds (F1)"; in terms of profit demand, "shareholders hope to make profits through the operation of the college (F3)"; in terms of Campus construction, "although the school has increased the Dongguan campus, the hardware facilities of the college can not meet demand and thus necessitates the need to continue construction (F6). In terms of performance indicators of leadership assessment, "the school requires each college and department to set up its own characteristic specialty (F3)"; in terms of competitive pressure, Sun Yat-sen University assigns some teachers, but not enough so there is the need for Xinhua College to still recruit from the community. At present, there are many independent colleges in the Pearl River Delta, and the competition is very fierce (F1). In terms of opportunity, the state gradually affirmed the ability of independent colleges to run schools. "At that time, the demand for land was really urgent, because Guangzhou campus was relatively small, so development was relatively limited. Therefore, it is very necessary for the state to attach importance to land resources. If the land resources of the state are not properly handled, there will be no follow-up motive force for development, and there will be no way to facilitate growth to another stage. The state has approved land (F2) for us. Therefore, at this stage, Xinhua College needs to cope with the pressure, seize the opportunity, and realize that the rapid development of the organization is an urgent problem to be solved.

In order to alleviate the pressure of lack of funds, campus construction, profit demand, competitive pressure and leadership assessment indicators, etc., Xinhua College seizes market opportunities. From the summary of the coding results in Table 6-3, it can be seen that public welfare and commercial behavior are mainly adopted to cope with, among which commercial behavior is more. The public welfare behavior is mainly to seek the help of resources and abilities from Sun Yat-sen University. Business behavior is embodied in the fact that "school leaders also have shares in schools, and management thinking tends to be commercialized (F4)"; "schools are not willing to invest too much in recruitment and campus construction, because investors need to make profits (F3)"; "the effect of campus recruitment is not ideal, which is also related to investors, because they do not want to invest. Too much and more cost is spent on recruitment, so many students cannot enjoy the services that are suitable for them. This is not only reflected in recruitment. There are other aspects, such as hardware facilities, which cannot meet the actual requirements due to investment (F1); "Schools acquire funds mainly through raising tuition fees, introducing business rental shops and loans from banks (F3, X4, X5)."

The internal and external environment of Xinhua College has brought a lot of pressure

and opportunities to enterprises. In order to alleviate the pressure, the organization seized the opportunity and adopted the behavior of giving priority to commerciality and supplementing public welfare. First of all, in terms of public welfare behavior, although Xinhua College has improved its ability compared with the previous stage, its own ability is still insufficient. Driven by pressure, it needs to rely on the support of Sun Yat-sen University, the parent school. The continuous help of knowledge, resources and capabilities of Sun Yat-sen University has accumulated a certain knowledge base for its internal capacity building. In the process of replicating external capabilities, organizations gradually assimilate and absorb external knowledge, accumulate internal knowledge through the path of capacity retention, and lay the knowledge foundation for internal innovation capability. For example, through the introduction of resources such as teachers, middle and senior management, brand effect and so on from Sun Yat-sen University, in the course of many years' development, its teaching level, management concept and brand awareness have gradually been digested and absorbed by Xinhua College, which has evolved into the internal innovation ability of the organization. Secondly, in the aspect of commercial behavior, the tendency of commercial behavior has brought profits to Xinhua College, providing an economic foundation for the company to continuously build internal innovation capabilities as well as positive effects to the construction of school organizational capabilities. For instance, the promotion of profitability can enable enterprises to recruit more qualified teachers with higher salaries, and employ excellent doctors such as Yuan Chiping and Li Zhenghua as professors, which increases the construction of the organization's faculty. While the College pays attention to the goal of profitability, it also allows enterprises to expand various channels of obtaining funds, not only from students' tuition fees and investors' funds, but also through other channels, such as bank loans, rent collection by merchants and so on which has improved the capital operation ability of the college. The upgrade can be used to invest more funds in the construction of school infrastructure, such as the construction of Dongguan Campus, which will increase the infrastructure construction capacity of the school.

In summary, the process mechanism of capacity building of Xinhua College is shown in Figure 6-2. From the picture, we can see that in order to cope with the pressure of the environment and seize the opportunity, Xinhua College mainly adopts the behavior of giving priority to commerciality and supplementing public welfare. In the process of coping with the environment, the construction of internal replication ability of Xinhua University has been strengthened through the path of "External-to-Internal", and the knowledge foundation of

internal innovation ability has been gradually established through the path of "capacity retention". The process of organizational capacity building of Xinhua College is ultimately the path from "outside to inside" to "capacity retention". However, driven by pressure and opportunity, organizations tend to adopt commercial behavior to cope with this stage, but it is noteworthy that commercial behavior can alleviate the pressure faced by organizations at this stage. Too much emphasis on commerciality will however lead to the loss of public welfare of organizations, such as backward teaching facilities, low level of teachers, poor quality of students, which will affect the organization's capacity building. Therefore, how to balance the relationship between commerciality and public welfare is very important. From this, we can get the following proposition:

*Proposition 5: The behavior of independent colleges from public welfare to commerciality should cope with the perceived environmental pressures and opportunities, so as to strengthen the construction process of "External-to-Internal" to "Capacity retention", and form the innovation ability within the organization.*

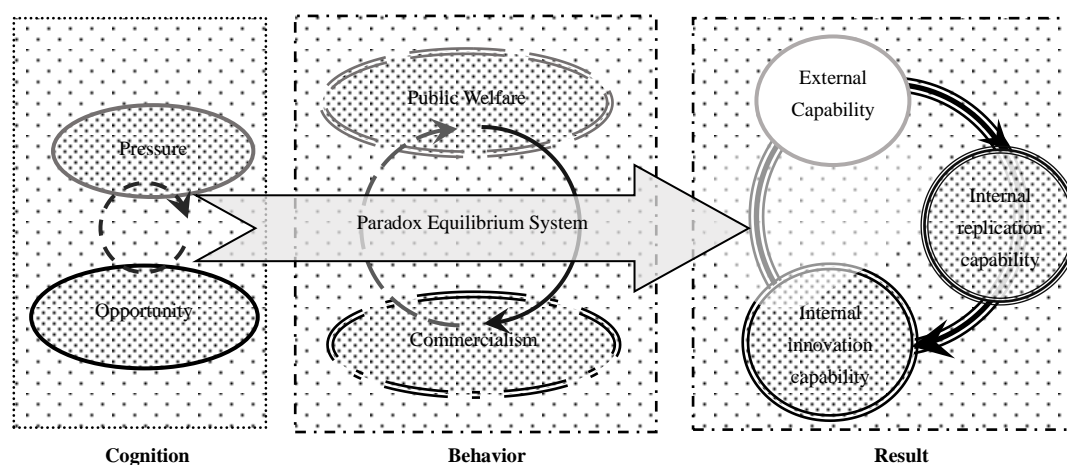


Figure 6-2 Process Diagram of The Second Stage Paradox Affecting Organizational Competence

### 6.2.3 Stage three: Capability development stage from internal to external

The third stage of organizational capacity building of Xinhua College i.e. the development stage "Internal-to-External" commenced from 2014 to present. On one hand, Xinhua College not only relies on the resources of the parent organization, but also expands a variety of external resources, such as related resources from Sun Yat-sen University to the parent university, from students to parents and alumni associations, from teachers to teachers' Alma mater, tutors, friends and other relations, from the board of directors to off-campus enterprises, partners, government relations and other resources. Xinhua College replicates these resources and abilities within the internal organization, forms internal replication ability through the

“external to internal” path, and lay the foundational knowledge and ability for internal innovation ability through the "capacity retention" path. On the other hand, Xinhua College gradually strengthens its brand influence through the continuous expansion of internal innovation ability. For example in "February 23, 2015, the Open Source Laboratory of Xinhua College passed the MIT Fab Lab audit and officially became a member of Fab Lab (S2)", "Xinhua College and the Nazareth University jointly organized international projects (S2)", "Xinhua College and Salisbury University jointly organized the 4+1 MBA train program (S2)", etc., to achieve the development process "Internal-to-External".

With the accumulation of the knowledge base of Xinhua University, it can better identify the opportunities contained in the internal and external environment of the organization. Firstly, with the improvement of the influence of Xinhua College, enterprises are willing to cooperate with schools and set up school-enterprise cooperation projects, such as "Jingmiaoban" and "Unmanned Vehicle" projects with Beijing-East cooperation. "Many enterprises, especially some small companies need to cooperate with colleges and universities, so that they can benefit from the advertisement. Though these small businesses advertise online, they find it hard to recruit the people they need, they therefore need to cooperate with universities (F1). Secondly, with the development of independent colleges, national policies are becoming more and more fair. For example, in September 2014, the State Council issued the “Implementation Opinions on Deepening the Reform of the Enrollment System for Examinations”, which proposed that the conditions for the gradual abolishment of enrollment admissions for colleges and universities should be gradually abolished, and from 2015 onwards, the trials for admission batch reforms will be carried out in qualified provinces. In order to make the independent colleges with limited enrollment fair in student income (S2), at present, schools are more equal in terms of job title evaluation and allocation of research funds. Along with public universities, they allocate a certain number of places to independent colleges every year. The number of Xinhua College and Southern College used to be privately run regardless. Now privately run schools can also apply for projects and research funds. Funds, which also reflect both sides of the country, are taken into account. Finally, independent colleges are becoming more and more mature. Some schools have the ability and strong willingness to leave their alma mater and develop independently. For example, "Many independent colleges have developed very well now, such as Zhuhai College of Peking Normal University, many of which have developed very well, having in mind that one day they will be able to leave their parent universities, and many of them are now able to develop

independently. Independent colleges have such a goal and idea (F1). In addition, independent colleges link multiple subjects in terms of resource acquisition, diverse resources from different subjects, and no longer rely solely on the resources of the parent university, which provides an opportunity for the independent development of independent colleges.

At this stage, Xinhua College continues to face challenges from various pressures, such as lack of funds, demand for profits, threat of independence of independent colleges, imperfect campus construction, performance indicators of leadership assessment, etc. According to the coding results of Table 6-2, the interviewees described that in terms of lack of funds, "it is difficult for independent colleges to apply directly to the state as public universities do for subsidized funds for running schools". "Although Xinhua College attaches great importance to scientific research, it is not as strong as other public universities in rewarding the publication of papers(F3, F6, F7)"; "Enterprises feel that schools can make money, so management involvement is increasing (F1)." In terms of the threat of independence, "It's hard to say about the independent development of Xinhua College. Is it not the reform of CUHK? The new principal's thinking is different from the previous one. It is possible to move us aside. The independent college used to hang the brand of the parent school, but this is hard to predict in the future. Of course, Xinhua College does not want to, but there is no way to be independent. (F6), "According to the current national policy, it is a trend to encourage and support the society to run schools and move towards the private sector. In terms of campus construction, "students first want libraries built so that they can have a place for reading and learning (F2)". In terms of leadership requirements, "in fact, the school is very concerned about employment, so school leaders often put pressure on us, saying that we must ensure employment (F1).

Comparing the number of entries coded in Table 6-3, the results show that Xinhua College is facing various pressures, but at the same time, it also has diversified development opportunities. At this stage, Xinhua College, on one hand, copes with various pressures. On the other hand, tries to seize various opportunities, and tends to adopt a balanced behavior of public welfare and commerciality to cope with the pressures and opportunities generated by the internal and external environment of the organization. Specific behavior shows that when facing the environmental pressure, the college mainly responds with the balanced behavior of public welfare and commerciality. In the face of the pressure of independent threats, on one hand, to strengthen school-enterprise cooperation to earn income for enterprises, its behavior reflects the commercial needs. On the other hand, to establish practice bases in enterprises to



enhance students' practical ability, its behavior reflects the needs of public welfare. Faced with the pressure of profitability, students' tuition fees are raised, bank loans are increased, parents' investment channels are expanded, and capital income is increased while part of the funds are used to recruit excellent teachers at home and abroad, strengthen the construction of teachers' ranks, improve teachers' salaries and remuneration, adjust the salary assessment structure, and employ scholars from the Yangtze River as academic leaders. Teachers enhance the ability of organizational scientific research, strengthen the construction of campus infrastructure and create a good learning environment. Their behavior reflects the needs of public welfare. In order to seize the opportunity, the college also takes the balanced action of public welfare and commerciality to deal with it. For example, on one hand, in order to link the resources of the board of directors, "the investor inserts himself into the leadership team, the assistant principal has relatives with the chairman, and some of the assistants are investors (F1)." Their behavior reflects the commercial needs; on the other hand, the relationship between the investor brings many resources to the school, such as many enterprises joining campus recruitment fairs. To alleviate the employment pressure of students, their behavior reflects the needs of public welfare. On one hand, the college links resources of parents and alumni associations, in order to obtain investment from parents and alumni, which reflects the commercial needs. On the other hand, it expands employment channels for students, and allows, "exchange of experience between students and outstanding graduates (F9)", which reflects the needs of public welfare.

At this stage, in order to cope with the environmental pressure and seize the opportunity, Xinhua College mainly adopts the balanced behavior of public welfare and commerce to cope with it, and stimulates the organizational innovation vitality in the process of coping with it, and gradually strengthens the internal innovation ability. Xinhua College continues to acquire valuable key resources from Sun Yat-sen University, its parent organization, and continues to expand a variety of access to resources. The College replicates the resources of parent organization and other external subjects into the internal organization to form the internal replication ability, and absorbs, digests, transforms and integrates them. It accumulates knowledge base for Xinhua College's internal innovation ability through the way of "capacity retention", and gradually reduces its dependence on parent organization. For example, Xinhua College introduces teachers from Sun Yat-sen University and some of these teachers stay. In order to make students' practical ability meet the needs of the society, the college has been constantly contacting with enterprises, and cooperative enterprises have developed from the initial 50 to more than 500 today, and established practice bases to enhance students' practical

ability. Driven by pressure and opportunity, the organization is based on the existing knowledge base and through acquisition. With the balanced behavior of public welfare and commerciality, we can continuously tap the opportunities of internal and external environment, stimulate the innovation vitality of the organization, and enhance the innovation ability of the organization. For example, the college has adjusted the salary structure, solved the problem of frequent job-hopping of teachers, and raised the requirement of teachers' quality, "from the previous master's degree requirements to doctoral degrees (X1, F5, F8)", strengthened the organization's teaching force; "invited experts and scholars from other schools to exchange, and encourage new teachers to return to their alma mater for academic exchanges (F4)." The board of directors of the college is no longer only investing funds, but also going deep into the daily management of the college, strengthening the management of teaching and students, implementing the teaching reform, adding the doubling plan of supervision and guidance, setting up the platform of employment guidance, and so on, so as to enhance the management ability of the organization. The promotion of internal innovation ability helps organizations to realize the development path "Internal-to-External".

To sum up, under the influence of environmental pressure and opportunity, Xinhua College has no obvious tendency to choose public welfare and commercial behavior of the two dimensions of paradox. Instead, it uses the dynamic balance before the two to alleviate the pressure in the environment and seize the opportunity in the environment. Under the joint action of environmental awareness of pressure, opportunity and organizational behavior of public welfare and commerciality, it activates organizational innovation vitality and enhances the internal innovation ability of enterprises, thus realizing the development path of organizational ability External-to-Internal and "capability retention" - Internal-to-External (see Figure 6-3). At the same time, the cyclic process of organizational competence can help organizations accumulate more abundant knowledge base, so that organizations can better identify the opportunities of internal and external environment to cope with the pressure of the environment. Therefore, make the following proposition:

*Proposition 6a: Organizations cope with environmental pressures and opportunities through public welfare and commercial balanced behavior, stimulate organizational innovation vitality under their joint action, and drive the cycle construction process of "External-to-Internal", "Capability retention", and "Internal-to-External".*

*Proposition 6b: The cyclic process of organizational capability accumulates the knowledge base of innovation, and activates the vitality of organizational innovation under the joint action of environmental cognition and paradox balance system, which gradually*

*strengthens the internal innovation ability and promotes the cyclic development of organizational capability.*

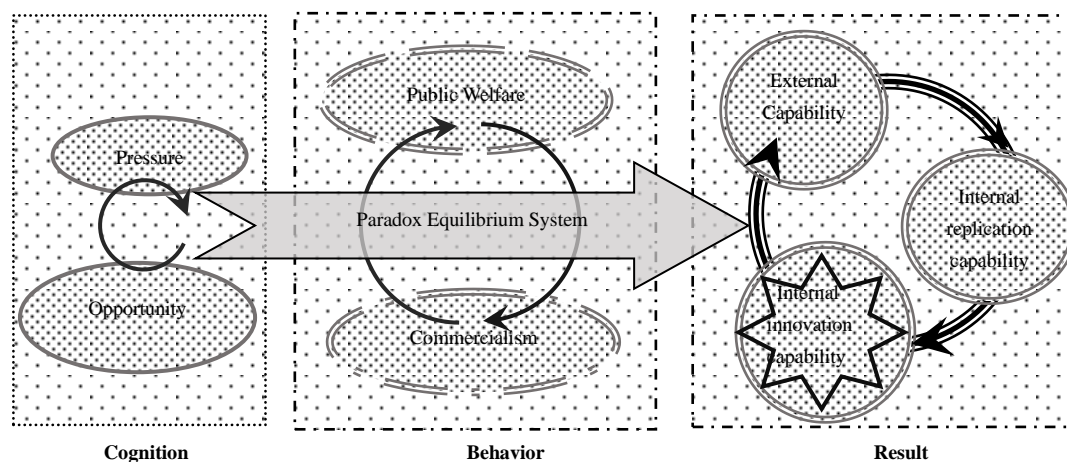


Figure 6-3 Process Diagram of The Third Stage Paradox Affecting Organizational Competence

#### 6.2.4 Evolution model of organizational capability based on paradox cycle

Paradox theory points out that paradox comes from conflicts (Lewis, 2000), contradictory and interrelated elements, which are persistent and coexisting throughout the evolution of the organization (Smith & Lewis, 2011; Wang, 2017). This thesis mainly based on the contradictory, interrelated, simultaneous and persistent characteristics of paradox (Smith & Lewis, 2011) and discusses the capacity-building process of independent colleges from the two dimensions of internal replication ability and internal innovation ability. It also divides the paradox of the nature of independent colleges into two sides: public welfare and commercial contradictory principal axis. Additionally, it combines the organization's perception of environmental change, namely, pressure and opportunity, to analyze the behavior tendency of independent colleges to cope with environmental change, and how they are. Influencing the organizational capacity building mechanism of independent colleges (as shown in Figure 6-4), the results show that the organization's perception of environmental pressures and opportunities will affect its tendency of commercial and public welfare behavior, and then affect the construction of organizational capacity of independent colleges.

Stage one: The stage of introducing external capability. At the beginning of the establishment of the independent college, its internal knowledge, resources and capabilities were extremely scarce, social recognition was low, and survival pressure was the main cognition of the organization to the environment at this stage. In order to cope with the pressure of the environment, the development of organizational ability depends on the support

of the parent organization and the market. Its behavior mainly reflects the characteristics of public welfare. By copying the knowledge, resources and abilities of Sun Yat-sen University into the organization, the organization forms the internal replication ability and completes the basic operation of the organization. The process of capacity building of independent colleges is a logic of "External-to-Internal".

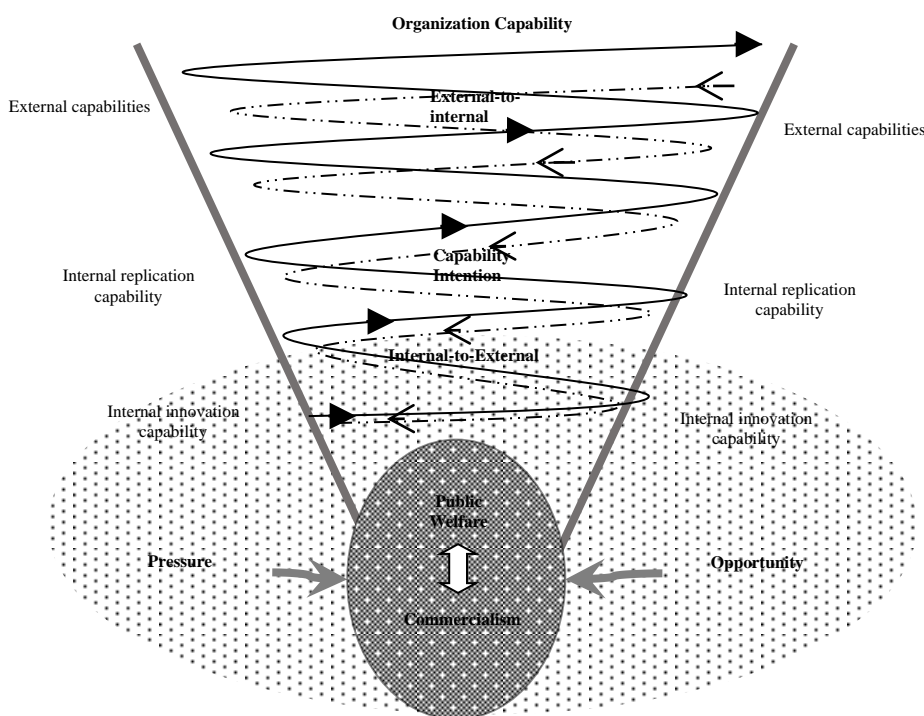


Figure 6-4 Evolution Process Model of Organizational Capability of Independent Colleges

Stage two: The internal capacity retention stage. In this period, besides coping with the unsolved pressure in the previous stage, Xinhua College also faces the pressure of its competitors. At this time, the policy of enlarging enrollment has provided a good market opportunity for Xinhua College. Paradox is a dynamic process, which can produce positive or negative results. The key feature of paradox is that its elements are contradictory and mutually exclusively coexist (Cameron & Quinn, 1988), and any choice is temporary. In a stage where the public welfare behavior adopted by the organization in response to environmental pressures is unable to promote the development of the organization, Xinhua College tends to make commercial decisions complemented by public welfare behaviors. In the process of coping with environmental pressures and opportunities, commercial behavior enhances the organization's capital operation ability and lays an economic foundation for the development of organizational ability; public welfare behavior promotes the accumulation of knowledge base, improves the organization's teachers, infrastructure and practical ability through the

development of organizational capabilities. The independent college's ability building process is logic of “External-to-Internal” – “Capacity Retention”.

Stage three: Capability development stage from internal to external; Organizations identify pressure and opportunity through their cognition on internal and external environment (Hambrick & Mason, 1984; Dutton & Jackson, 1987; Nadkarni & Barr, 2008). The knowledge base of organizations can help them better seize opportunities of internal and external environment. Meanwhile, paradox theory indicates that the dynamic balance between two poles of paradox (such as exploitation and exploration, public welfare and commerciality) pushes enterprises to conquer their weaknesses and construct their organizational capabilities (Yoon & Chae, 2012). Paradox management is to keep and embrace conflicts rather than eliminate them (Smith & Tushman, 2005; Smith & Lewis, 2011). Through adopting specific strategies dynamically, purposefully and consecutively, organizations are able to alleviate tensions resulted from conflicts (Smith & Lewis, 2011) and they are also capable of preventing negative dynamics by seeking positive potentials from conflicts (Cameron & Quinn, 1988; Lewis, 2000). In this way, organizations realize organizational innovation and self-growth (Ashforth et al., 2014), remarkable performance (Ingram et al, 2016; Sheep et al, 2017) and sustainable development (Smith & Lewis, 2011) so as to maintain their competitive advantages (Heracleous & wirtz, 2014). Therefore, under the pressure and opportunity of the environment, Xinhua College activates the vitality of organizational innovation, enlarges the ability of internal innovation, gradually reduces the dependence on the parent organization and market, and further promotes the interaction between pressure and opportunity, commerciality and public welfare, and the ability of internal innovation, so as to realize the independent development of the independent college. The process of capacity building of independent colleges is a development path of "External-to-Internal - "Capability retention" - "Internal-to-External" (as shown in Figure 6-4).

### **6.3 Summary**

This chapter mainly explores the growth process and driving mechanism of organizational competence of independent colleges from the perspective of paradox and resource dependence. The results show that, under the pressure and opportunity of the environment, independent colleges can activate the vitality of organizational innovation, expand the ability of internal innovation, and gradually reduce the dependence on the parent organization and the market. This promotes the interaction between pressure and opportunity,

commerciality and public welfare, and the ability of internal innovation, so as to realize the capability of independent college, and the circular development process of organizational capability with three stages, namely, "External-to-Internal", "capability retention" and "Internal-to-External".

## **Chapter 7: Research Conclusions and Prospects**

### **7.1 Main research conclusions**

Based on the current theoretical research of organizational competence, this thesis takes Xinhua College of Sun Yat-sen University; a typical case of emerging independent colleges in the context of China is used as the research object. The organizational competence structure and its evolution process of independent colleges with dual attributes are also investigated. Through exploratory case studies, this thesis answers three questions " What is the organizational capacity of an independent college? How the organizational capability of independent colleges evolved? And how is the internal innovation capability of independent colleges activated?" The research not only reveals the internal evolution mechanism of dual role organizational competence, but also brings new ideas to the theoretical research of organizational competence, and provides useful practical enlightenment for the sustainable development of Independent Colleges in China.

(1) As an independent Institute of spin-off organization (Chatterji, 2009), the process of organizational capacity building can be revealed through the change process of internal replication ability and internal innovation ability. Interview materials, qualitative materials and questionnaires are collated and analyzed at different stages of the development of Xinhua University through qualitative research methods. It deconstructs the organizational capacity of independent colleges from the perspective of maintaining the integrity of organizational capacity, and divides the internal organizational capacity into internal replication capacity and internal innovation capacity. The research illustrates the process of organizational competence construction through the changes of internal replication ability and internal innovation ability.

(2) The development of independent colleges is different from that of traditional public universities. The development of their organizational capabilities is strongly dependent on the support of maternal organizations (Kroll & Liefner, 2008; Rasmussen & Borch, 2010). Their organizational capabilities are bound to undergo the process of "absorption-replication-innovation". Through the longitudinal qualitative research method, we have constructed the evolution process and growth path of organizational capacity of independent colleges from "inside to outside" to "outside to inside". Firstly, in the context of resource dependence, the recognition of environmental pressures drives the organization to introduce external

capabilities into the organization, to form internal replication capabilities, and to realize the process of building "External-to-Internal" capabilities. Secondly, in response to environmental pressures and seizing opportunities, the process of "External-to-Internal" of independent colleges' ability will form internal innovation ability through "capacity retention" path. Finally, under the influence of environmental pressures and opportunities, the innovation vitality of independent colleges has been constantly stimulated, and the dependence on parent organizations has been continuously reduced, so as to realize the cycle construction process of "External-to-Internal", "capability retention", "Internal-to-External".

(3) This thesis answers the question "How is the internal innovation ability of independent colleges activated under the conflict of persistent paradoxes?" The organizational ability of independent colleges is influenced by the dual inherent conflicts of public welfare and commerciality (Li et al., 2018). It is also influenced by the dual driving factors of environmental pressure and development opportunities (Hambrick & Mason, 1984; Dutton & Jackson, 1987; Nadkarni & Barr, 2008). Based on the paradox cycle, this thesis explores the release of the internal innovation ability of independent colleges driven by conflict. From the universal logic of "cognition (environmental cognition) - behavior (paradoxical balance system) - result (independent ability)", we apply qualitative research to the "independent ability" of Xinhua University. The release process is analyzed. Firstly, independent colleges cope with the perceived environmental pressures through public welfare behavior, and promote the process of capacity building External-to-Internal. Secondly, the behavior of independent colleges from public welfare to commerciality should cope with the perceived environmental pressures and opportunities, so as to strengthen the capacity-building path from "outside to inside" to "capability retention" and form the internal innovation ability of the organization. Finally, organizations respond to environmental pressures and opportunities through public welfare and commercial balancing behavior, stimulate organizational innovation vitality under their joint action, and drive the process of "External-to-Internal", "capability retention", "Internal-to-External" circular construction. The cyclic process of organizational competence accumulates the knowledge base of innovation, and activates the vitality of organizational innovation under the joint action of environmental cognition and paradox balance system, which gradually strengthens the internal innovation ability and promotes the cyclic development of organizational competence.



## 7.2 Theoretical contribution

This thesis revolves around "What is the organizational capacity of an independent college? How the organizational capability of independent colleges evolved? And how is the internal innovation capability of independent colleges activated?". Based on the theory of resource dependence, organizational capability and paradox, the author explored the organizational capability construction process of independent college. It also deconstructs the organizational capabilities of independent colleges, reveals its construction process with the underlying driven factors, and deepens the related theories of organizational capabilities. The research has the following theoretical contributions:

(1) This thesis deepens the research on the organizational capabilities of independent colleges by deconstructing the construction of organizational capabilities of independent colleges in China. Previous research on independent colleges mainly focused on the discipline construction (Zhu, 2006; Liu, 2007; Wang et al., 2016;), the future development direction (Pan & Wu, 2004; Feng, 2006; Xu, 2006; Yang, 2010) and the student training (Zhou et al., 2004; Si et al., 2005; Dai & You, 2006). The previous research has neglected the value of researching on organizational capability construction of independent colleges as derivative organizations (Chatterji, 2009). Since the capabilities of derived organizations have various generation sources, capability is divided into internal replication capability and internal innovation capability. And through the gradual expansion of internal innovation capability, the organization realized the capability evolution process with stages from "Internal-to-External" to "External-to-Internal".

(2) Without damaging the organization's integrity and activity, this thesis deconstructs organizational capabilities and obtains propositions of organizational capability construction process. It makes this thesis different from research papers using static deconstruction to analyze organizational capabilities. Organization capability refers to an ability for organizations to coordinate a range of activities with their resources (Helfat & Peteraf, 2003). Organization capability is used to achieve strategic goals of the organization and it has a direct impact on organization's strategy decision and innovation (Wingwon, 2012). The organization capability of an independent college should be treated as a whole and its deconstruction should be conducted under perspective of integrity and dynamic. Under this perspective, the internal replication capabilities and internal innovation capabilities of independent college organizations are inextricably and interdependent. They are continuously

developed and evolved. Meanwhile, the dynamics of organization capabilities occur with the dependence of organization on wide range of external resources. Resource dependence theory believes that the survival of an organization is inseparable from its dependence on external resources (Pfeffer & Salancik, 2003). The organization capability development of an independent college as a derivative organization also needs to depend on external resources. For example, dependence on parent university, other resource-dependent parties and social demand. Under the driven of pressures and opportunities, independent colleges develop and evolve their organizational capabilities during the process of interacting with external environment.

(3) The development of organization capability is under the continuous responses of organization to paradox and conflicts. Many scholars believe that conflicts exist throughout the evolution of the organization (Smith & Lewis, 2011; Wang, 2017). As a derivative organization, the independent college continuously responds to conflicts from its establishment to its later development. The perspective of paradox gives instructive function to our research questions. Independent colleges naturally have two attributes of “public welfare” and “commerciality” (Pan, 2010). The conflict between these two attributes is inherent (Smith & Berg, 1987; Cameron & Quinn, 1988) and ongoing (Smith & Lewis, 2011; Wang, 2017). From the perspective of paradox, this thesis re-examines and develops the evolutionary model of the organizational capability of independent colleges. Organizations continues to advance the cyclical process instead of eliminating paradox or conflicts (Cameron & Quinn, 1988; Lewis, 2000; Smith & Tushman, 2005; Smith & Lewis, 2011). This drives the overall vitality of organizational capabilities and push the organization to realize independent development. Similarly, under the conflict of public welfare and commerciality, the development of independent college's organizational capability is not to eliminate the "profit-seeking" (Wang & Yang, 2011) or public-welfare (Pan, 2009) behaviors. Instead, it is realized by adopting balanced and dynamic mechanism dealing both with nature of "profit-seeking“ and "public welfare". Therefore, the independent college organizational capability evolution model constructed under the perspective of paradox has outstanding theoretical inspiration.

The theoretical contribution of this study lies in its answer to "how the innovation in organizational capability of a derivative organization can be promoted?" It is impossible to explain the innovative activity of organizational capability very well under the common perspective of "component allocation". Simply considering the redundancy or hierarchy

changes in organizational capabilities is also impossible to get comprehensive understanding of such innovative "activity" of organizational capabilities. As representative derived organizations with nature of "public welfare" and "commerciality", independent college and the construction of its organizational innovative capability as well as its evolution provides us an opportunity to fully understand the "activity" of organizational capabilities (O'Reilly III & Tushman, 2008; Rogan & Mors, 2014). The findings reveal that organizations cope with environmental pressures and opportunities through public welfare and commercial balanced behavior, stimulate organizational innovation vitality under their joint action, and drive the cycle construction process "External-to-Internal" and "capability retention", "Internal-to-External". The innovation activity is created under the coeffect of environmental cognition, paradox equilibrium and the cyclical development of capabilities. And the innovation ability of organization also contributes to the cyclical development of organizational capabilities. This is a process of "innovation" and it also shows an innovation mechanism driven by external pressure and opportunity contributing to the sustainable development of organizations.

### **7.3 Practical significance**

This thesis not only brings new ideas to the research of organization capability theory and paradox theory, but also provides practical enlightenment for the development of organizational capacity of Chinese independent colleges. The practical significance can be reflected in the following three aspects:

(1) Providing reference for the managers of independent colleges to direct the development of independent colleges; independent college is a special teaching institution in Chinese higher education system. At the beginning of its establishment, resources were scarce, capabilities were in short, and its capacity development needs to rely on the teaching facilities, faculty, and brand effect of the parent university. At this stage, the college formed the "external-to-internal" capability development process. With the development of independent colleges, the internal capabilities of the organization are gradually constructed. The environment outside the organization is gradually optimized. The organization begins to have its own basic knowledge and it keeps on innovating to form internal innovation capabilities. These actions lay the foundation for its independent development. When internal innovation capabilities are gradually enhanced, organizations are exposed to more external resources and its dependence on parent university will be reduced. Besides, the external environment of

independent has been improved with better policies, and some independent colleges have achieved great success in its independent development. All these external factors contribute to promoting the independent development of all independent colleges in China. Affected both by the enhanced internal capacity and the increased external opportunities, the independent college has realized its development process of “from internal to external” and the independent capability has been constructed successfully. Given that the development of independent colleges is bound to experience an evolutionary process with stages of “External-to-Internal” – “Capability retention” – “Internal-to-External”, managers of independent colleges need to recognize that different strategies should be adopted at different stages.

(2) Provide reference for the generation, implementation of future strategy and the construction of the independent college; In view of the current status of independent colleges, there may be two development directions for them: first, the organization can not get good development in the future and ultimately get merged by its parent university, then independent college will no longer exist; second, the organization may develop very well and get independent from its parent university. Independent college can assess its current organizational capabilities and find the right strategic goals of the organization. According to the research conclusion of this thesis, independent colleges who want to have independent development need to connect itself with a wider range of external resources, accumulate its own knowledge base, discover and catch the opportunities existing inside and outside the organization, continuously reduce the dependence on its parent university, and increase its internal innovation capabilities. Only with this strategy, independent college will realize independent development.

(3) Provide reference for the development of secondary organizations with the nature of "public welfare" and "commerciality". Because an independent college is born with two natures, the nature of "public welfare" and "commerciality", it is therefore different from ordinary public or private education institutions. Its development first need to deal with the conflict between these two attributes. It is urgent for organization to decide whether its behavior is more of "public welfare" or "profit" guided. According to the summarization of this thesis, when the behavior of the independent college focuses too much on profit-seeking, the nature of "public welfare" will be suppressed; the interests of teachers, students and society will be hurt. This is not helpful for the organization to accumulate comprehensive knowledge and capability and in the long run the development of the organization will be affected. However, when independent college takes too much more "public welfare"

behaviors, the behavior of "profit-seeking" will be suppressed. It is hard to guarantee the school's profits and its manager's interests. It will also hurt the economic foundation of the college and ultimately damage the long-term development. Therefore, for an independent college with dual attributes, its development needs to balance organization's behaviors between "profit-making" and "public welfare". And the capability construction is also realized under the mutual driven of profit-seeking behaviors and public-welfare oriented behavior.

#### **7.4 Research limitations and projects**

This study has made significant strides in academia by improving the design and contributing to existing theories. It however still has the following limitations:

(1) Limitations of research sample

Although this thesis used a typical independent college (namely Sun Yat-sen University Xinhua College) as the research case and explored the organization capability construction longitudinally, its conclusion need to be generalized with caution because it is a single case study (Eisenhardt, 1989, 1991). Therefore, future research can verify this conclusion by expanding the case sample and using research method of multiple case study.

(2) Limitations of analysis method

Through descriptive statistical analysis and multiple layer coding, this thesis first analyzed and coded the qualitative materials, then the research conclusions were extracted from the analysis of research materials. In the future, researchers can also verify the research conclusion of this thesis with both qualitative and quantitative research methods.



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