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Institutionalization of Higher Vocational Education in China: A Neoinstitutionalist Perspective

Abstract From the perspective of neoinstitutionalism, higher vocational education has become an emerging institution in Chinese society. Its development over three decades entails a trend of institutionalization of higher vocational education. In such a process, higher vocational education is gaining legitimacy and experiencing isomorphic changes. Various challenges have indicated an absence of institutional legitimacy at all levels of higher vocational education, namely regulative, normative, and cultural-cognitive legitimacy. The latter two are considered key for the ongoing process of institutionalizing higher vocational education. Moreover, the emergence and development of higher vocational education in China has indicated isomorphic changes in Chinese higher education in terms of non-university sectors, practical/skills learning, teachers with dual qualifications and graduate employment.

Keywords higher vocational education, neoinstitutionalism, institutional environment, legitimacy, isomorphism

Introduction

Aiming at generating high-level skilled manpower, higher vocational education (*gaodeng zhiye jiaoyu*)¹ has arisen and seen great developmental achievements over the past three decades. The rapid growth of vocational and technical colleges (*zhiye jishu xueyuan*) and student enrollment have directly resulted in

¹ Higher vocational education in China belongs to the educational category of Technical and Vocational Education and Training (TVET). According to UNESCO's (1997) International Standard Classification of Education (ISCED) 1997, higher vocational education is located at the junior stage of post-secondary education (Level 5B) with programs focusing on practical occupational specific skills for workforce preparation, rather than leading directly to an advanced research qualification such as a degree. Vocational and technical colleges are major organizational forms of higher vocational education in China.

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higher education expansion in China in the early 2000s. Also, the development of higher vocational education has facilitated high-level skilled manpower team-building in Chinese society. According to the Organization Department of the Central Committee of the Communist Party of China and the Ministry of Human Resources and Social Security of the People's Republic of China (as cited in Xinhuanet, 2011a), by the end of 2009, total high-level skilled manpower had reached 26,310,000, accounting for 24.7% of the country's skilled and qualified human resources. According to human resource forecasting, high-level skilled manpower is expected to increase by 5,400,000 in 2015 and 9,900,000 in 2020 (As cited in China Development Gateway, 2011). Meanwhile, the two ministries noted that:

Admittedly, the country has made great progress in supplying higher-level skilled manpower in recent years. However, there are still some major challenges. First, the institutional capacity of supplying high-level skilled manpower is not compatible with the economic needs, which has resulted in insufficiency, unreasonable structure, and scarcity of leading talents of high-level skills manpower; second, funding for fostering high-level skilled manpower is insufficient, which has led to poor capacity construction of relevant institutions and a system obstructing human resource development; third, Chinese people still value academic/theoretical knowledge and devalue skills so that high-level skilled manpower is undervalued. Consequently, on-the-job skilled workers and students in schools are not encouraged to learn skills. High-level skilled manpower is still struggling with some challenges such as a narrow development path and lower salary. This indicates that the social environment for human resource development needs to be improved.

Indeed, these three challenges have been central to the debate since the inception of higher vocational education in the early 1980s. Research has indicated that higher vocational education has been confronted by various challenges, including lower social status, limited upward mobility, unreasonably high tuition, student dropout, insufficient funding, weak infrastructure, insufficient qualified teachers, and low graduate employment rates (Xiong, 2011). According to Xiong, in addition to the emergence of tuition and employment issues in recent years, other challenges have been unresolved since the emergence of higher vocational education in the early 1980s. Why have so many challenges remained unresolved even as new challenges emerge? Researchers and scholars have tried to answer this through policy and cultural studies. Xiong (2011) stated that the development of higher vocational education has embodied a trend of vocationalism, in conflict with Confucianism which has traditionally dominated Chinese society. The cultural conflicts between vocationalism and Confucianism have accounted for challenges facing higher vocational education.

From the perspective of organizational studies, this article explores a trend of institutionalization of higher vocational education in China from 1980 to the

present. Analysis and discussion are based on the theoretical framework of neoinstitutionalism, which has become influential in the field since the 1970s. According to neoinstitutionalism, the institutionalization of higher vocational education is determined by the formation of corresponding institutional environments of higher vocational education, which are supported by regulative, normative, and cultural-cognitive elements. For higher vocational education, regulative environments are reflected in laws, regulations, and government policies that demonstrate political and economic interests in developing higher vocational education. Second, industry is expected to be the major normative force providing universal criteria for higher vocational education, which is considered key to promoting standardization of higher vocational education in terms of curricula and teaching conditions and evaluation and so forth. Third, vocationalism has been imposed on Chinese society as the cultural environment supporting the development of higher vocational education, while resistance of Confucianism to vocationalism exists (Xiong, 2011). The eventual formation of institutional environments for higher vocational education depends on gaining regulative, normative, and cultural-cognitive legitimacy. The institutionalization of higher vocational education will not be achieved if any of the three pillars of institutional legitimacy of higher vocational education is absent. Moreover, the emergence and development of higher vocational education in China has indicated isomorphic changes in Chinese higher education in terms of non-university sectors, practical/skills learning, teachers with dual qualifications² (*shuang shi xing jiaoshi*) and graduate employment. From a neoinstitutionalist perspective, the author argues that higher vocational education is a newly emerging institution in Chinese society and its development entails a trend of institutionalization of higher vocational education while experiencing isomorphic changes.

The author will first focus on the core concepts of neoinstitutionalism, such as institutional environments, legitimacy, and isomorphism. Within this analytical framework, the following section will explore the ongoing process of institutionalization of higher vocational education since the early 1980s, which is analyzed and discussed within a time frame of the four-stage historical development of higher vocational education in China. The author proposes that in the ongoing process of institutionalization, the emphasis should be on gaining normative legitimacy and cultural cognitive legitimacy, especially the latter, of higher vocational education, in which social equity is a paramount issue to be addressed.

² Teachers at vocational and technical colleges are required to have both teaching certificates and qualification certificates.

Neoinstitutionalism

The emergence of neoinstitutionalism was a reaction to the old or more traditional institutional theories, mainly “functionalism and ... Marxist/conflict theory that dominated American sociology in the 1970s” (Meyer, Ramirez, Frank, & Schofer, 2006, May, p. 5). In old institutionalism, the production of social structures was explained as the functional needs or the power and interests of actors operating in local situations. Organizations were viewed as continually adapting and changing as closed, rational systems that emphasize rational actors and the drive toward efficiency (Rowan & Miskel, 1999). In contrast, neoinstitutionalism believes that local organizations are dependent on the wider social and cultural environment, such as meanings, definitions, rules, and models (Scott, 2001; Scott & Christensen, 1995; Scott, Meyer, & Associates, 1994). Moreover, organizational changes are highly constrained: Once a local structure has been established, whatever change does occur will be toward greater conformity (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). This trend toward conformity is viewed as a central element of the neoinstitutional perspective, which is called isomorphism. Furthermore, the key constraint of organizations is legitimacy not efficiency (Meyer & Rowan, 1977, 1978). These ideas of neoinstitutionalism have been applied to educational organization since the late 1970s with John Meyer and colleagues as major contributors (Meyer & Rowan, 2006).

Given the absence of concepts such as rationality, self-interest, difference, and efficiency in neoinstitutionalism prior to the 1990s, Meyer and Rowan (2006) critique the fact that institutions were viewed “as objective structures that exist independent of human action” (p. 6). With new social developments, a renaissance of neoinstitutionalism has emerged since the 1990s (Meyer & Rowan, 2006), which Campbell (2004) calls “*a second movement* in institutional analysis” (p. 4). An important feature of this renaissance is that those absent concepts have been reconsidered by neoinstitutionalists so as to study educational organizations since the 1990s (Meyer & Rowan, 2006).

Institutional Environments

Scott (2001) states, that “institutions operate at multiple *levels*, from the world system to interpersonal interaction” (p. 50). Campbell’s (2004) definition is helpful to understand what institutions mean:

Institutions are the foundation of social life. They consist of formal and informal rules, monitoring and enforcement mechanisms, and systems of meaning that define the context within which individuals, corporations, labor unions, nation-states, and other organizations

operate and interact with each other. Institutions are settlements born from struggle and bargaining. They reflect the resources and power of those who made them and, in turn, affect the distribution of resources and power in society. Once created, institutions are powerful external forces that help determine how people make sense of their world and act in it. They channel and regulate conflict and thus ensure stability in society. (p. 1)

According to Scott (2001), rules, norms, and cultural beliefs are central ingredients of institutions. Therefore, regulative systems, normative systems, and cultural-cognitive systems shape the institutional environments of individual organizations. Regulative systems involve the capacity to establish rules, inspect others' conformity to them, and, as necessary, manipulate sanctions—rewards or punishments—in an attempt to influence future behavior. Normative systems introduce a prescriptive, evaluative, and obligatory dimension into social life. Cultural-cognitive systems, as central to institutions, are “the shared conceptions that constitute the nature of social reality and the frames through which meaning is made” (Scott, 2001, p. 57).

Tolbert and Zucker (1983) stated that the institution is not a static entity, but a dynamic process, which includes the processes of institutionalization and deinstitutionalization. In this light, institutions are evolving entities and “changes in social practice both modify existing institutions and create novel forms” (Abercrombie, Hill, & Turner, 1994, p. 217). As Scott (2001) put it, “institutionalization is a process occurring over time that affects what kinds of structures develop and persist” (p. 208). In defining its opposite, Scott adds, deinstitutionalization refers to “the processes by which institutions weaken and disappear” (p. 182).

Legitimacy

According to Jepperson (1991), institutionalization leads to legitimacy for individual organizations, and obtained legitimacy enhances the status of institutionalization. Suchman (1995) defined legitimacy as “a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions” (p. 574).

Scott (2001) related that the three pillars of institutions—regulative, normative, and cultural-cognitive elements—provide distinctive bases for institutional legitimacy. Regulative legitimacy is based on conformity to rules, which provide legal and quasi-legal requirements for the establishment and operation of legitimate organizations. Normative legitimacy, linking to professionalism, emphasizes a deeper, moral base for evaluating legitimacy. Compared to regulative legitimacy, normative controls are more likely to be internalized. In

addition to material resources and technical information, cultural acceptability and credibility are necessary for organizations to survive and thrive in their social environment. This relates legitimacy to a cultural-cognitive level. Cultural-cognitive legitimacy comes from cognitive consistency, which embraces an orthodox structure or identity relating to a specific situation. Such orthodoxy is usually historically and culturally engrained. Of the three, “cultural-cognitive mode is the ‘deepest’ level because it rests on preconscious, taken-for-granted understandings” (Scott, 2001, p. 61).

Isomorphism

The idea of isomorphism or isomorphic change is a unique element of institutional theorizing. Isomorphism occurs among organizational forms when organizations are sharing the same institutional environments (DiMaggio & Powell, 1983; Rowan & Miskel, 1999; Scott, 2001). Neoinstitutionalists have revealed that the uniformity of schooling in the world, mass higher education, and the form of higher education (mainly the university) are all isomorphic phenomena in education.

DiMaggio and Powell (1983) identified three mechanisms for institutional isomorphic change: coercive isomorphism, mimetic isomorphism, and normative isomorphism. Coercive isomorphism means that organizations adapt to pressures exerted by other organizations they depend on and by cultural expectations in the society within which they function. In this process, “organizations in a sector follow the formal rules and regulations laid down by the state and its agencies and thereby end up with similar structures or procedures” (Rowan & Miskel, 1999, p. 366).

Mimetic isomorphism comes from uncertainty, which is “a powerful force that encourages imitation” (DiMaggio & Powell, 1983, p. 151). In mimetic processes, “organizations facing uncertainty lack a clear idea of what they should do and so copy the practices of other, apparently successful, organizations in their field” (Campbell, 2004, p. 21). DiMaggio and Powell (1983) stated, “the greater the extent to which technologies are uncertain or goals are ambiguous within a field, the greater the rate of (mimetic) isomorphic change” (p. 156). Mimetic isomorphic change results in “homogeneity as organizations in the same institutional sector adopt similar structures in a long run” (Rowan & Miskel, 1999, p. 367).

Normative isomorphism results primarily from professionalization (DiMaggio & Powell, 1983). That means “the homogenizing effect of the growth of professional networks fosters communication and similar practices and procedures” (Morphew & Huisman, 2002, p. 496). Rowan and Miskel (1999) noted that “professional codes are spread to organizations by personnel who have

been socialized and educated to follow professional standards” (p. 366).

A Neoinstitutionalist Analysis of Higher Vocational Education

From a neoinstitutionalist perspective, higher vocational education can be considered a newly emerging institution in Chinese society since the early 1980s. The over 30 years of development entails a trend of institutionalization of higher vocational education by which it is gaining legitimacy and the formation of institutional environments while experiencing isomorphic changes. Analysis and discussion of this section are unfolded within a time frame of Xiong’s (2010) four historical stages of the development of higher vocational education. “Stage one: 1980–1995, early exploration of HVE [higher vocational education]. Stage two: 1996–1999, legislation for HVE [higher vocational education]. Stage three: 2000–2005, rapid growth of HVE [higher vocational education]. Stage four: 2006–2007, restructuring of HVE [higher vocational education]” (p. ii).

Regulative Legitimacy

In China with a centralized government, the regulative system has played a vital role in developing higher vocational education, which mainly refers to laws, policies, and regulations related to higher vocational education. With an investigation of its four-stage development, an obvious trend of increasingly strong policy support for developing higher vocational education has been identified.

During the first stage (1980–1995), higher vocational education did not gain strong policy support. Policy evidence showed that there were no policies customized for higher vocational education until the enactment of *Some Advice on Promoting the Reform and Construction of Vocational Colleges* (Ministry of Education of the People’s Republic of China, 1995) at the end of this stage. Policy information on higher vocational education was scattered in policies designed for education, or higher education, or vocational education. This indicated the ambiguous identity of higher vocational education. Moreover, “as the directive document for constructing a socialist educational system with Chinese characteristics, the ‘Outline of China’s Education Reform and Development’ drafted a blueprint for education reform and development in the 1990s and the early 2000s” (State Council of the People’s Republic of China, 1994, para. 1). However, this important policy did not plan higher vocational education as an independent part of education, which is unique in the educational system. Later, the government addressed the issue in the policy *Advice on Implementing the Outline of China’s Education Reform and Development* (State

Council of the People's Republic of China, 1994), which was a supplement to the former one. This instability in government policy further confirmed the lack of a clear understanding of the role of higher vocational education. Consequently, policy support for higher vocational education was weak, which has led to its unstable and slow development. According to Zhang (1990), the number of short-cycle vocational colleges dropped from 128 in the mid 1980s to 57 in the early 1990s, most of which did not focus on vocational education. Such a weakened trend indicates that higher vocational education experienced a deinstitutionalization process at the first stage. Nevertheless, Yang (1996) stated that the experience of vocational colleges is valuable for developing higher vocational education in China.

At the second stage (1996–1999), the central government started to place an emphasis on developing higher vocational education by strengthening policymaking, especially legislation. Compared to the previous stage, designated policies for higher vocational education were issued, such as *Advice on Running Higher Vocational Education on a Trial Basis via a New Management and Operation System* (Ministry of Education of the People's Republic of China & State Planning Commission, 1999). Most important the *Law of Vocational Education Law* and the *Law of Higher Education of the People's Republic of China* (9th National People's Congress, 1998) were enacted to enhance the role of higher vocational education in the Chinese educational system and to confirm the post-secondary level of vocational education as an integral component of higher education. In addition, the central government also enacted a series of policies to promote higher vocational education across the country, such as *Some Advice on Implementing the Law of Vocational Education to Accelerate the Development of Vocational Education* (Ministry of Education of the People's Republic of China, State Economy and Trade Commission, & Ministry of Labor, 1998); *Action Plan for Invigorating Education in the 21st Century* (Ministry of Education of the People's Republic of China, 1998b); and *Resolution on Deepening Education Reform and Fully Promoting Quality Education* (Central Committee of the Communist Party of China & State Council, 1999). Compared to policies made in the previous phase, these policies indicated a stronger policy support by the central government for the development of higher vocational education. Although the development of higher vocational education at this stage was still slow and unstable, legislation and subsequent supportive policies laid the foundation for a major development of higher vocational education in the next phase.

During 2000–2005, the third stage, policy support for higher vocational education became stronger. Under the leadership of the Central Committee of the Communist Party of China and the State Council, more ministries and commissions were involved in supporting higher vocational education: such as the *Six Ministries and Commissions including the Ministry of Education Jointly*

Initiating the Project of Supplying Skilled Manpower in Short Supply for the Industry of Manufacturing and Modern Service (Ministry of Education of the People's Republic of China, Ministry of Labor and Social Security, Commission for Science, Technology and Industry for National Defense, Ministry of Industry and Information Technology, Ministry of Transportation and Communications, & Ministry of Health, 2003), the *Plan of Training 500,000 New Technicians in Three Years* (Ministry of Labor and Social Security, 2004), and *Resolution on Further Emphasizing Vocational Education by Seven Ministries and Commissions* (Ministry of Education et al., 2004).

Moreover, most policies in this period were given titles that used words such as “strengthen,” “vigorously,” “jointly,” “further,” “deepen,” and “energetically.” Additionally, concrete numbers appeared in relevant policies such as the *Plan of Training 500,000 New Technicians in Three Years* (Ministry of Labor and Social Security, 2004), and *Action Plan for Invigorating Education Between 2003 and 2007* (Ministry of Education of the People's Republic of China, 2004a). All these facts indicate that the central government has given more emphasis to developing higher vocational education than ever before.

In addition to legislation and supportive policies issued in the second phase, strong policy support at the third stage has resulted in the takeoff of higher vocational education in Chinese society. The number of vocational and technical colleges increased from 432 in 1998 (Ministry of Education of the People's Republic of China, 1998a) to 1,091 in 2005 (Ministry of Education of the People's Republic of China, 2005). The first year enrollments in higher vocational education increased from 430,500 in 1998 (Ministry of Education of the People's Republic of China, 1998a) to 2,681,000 in 2005 (Chen & Guo, 2006). With the rapid growth of higher vocational education, China's higher education has expanded and entered a mass developmental phase³ with a gross enrollment rate of 15% in 2002, 17% in 2003, 19% in 2004, and 21% in 2005 (Ministry of Education of the People's Republic of China, 2003, 2005; Wu, 2004; Zheng, 2008). Total enrollment in higher education reached 23,000,000 in 2005 (Ministry of Education of the People's Republic of China, 2005). Wu Qidi (2004), the Vice-Minister of Education, has stated that higher vocational education has

³ M. Trow defined three stages of higher education development based on changes in the higher education gross enrollment rate (the proportion of the relevant age group that attends post-secondary education institutions). The first is “elite higher education,” which is characterized as a stage when the gross enrollment rate is less than 15% of the age group. “Mass higher education” is the second stage when the gross enrollment rate is more than 15% and less than 50%. The third stage is “universal higher education” when the gross enrollment rate is more than 50%. See M. Trow (1973) *Problems in the Transition from Elite to Mass Higher Education*, and (2005) *Reflections on the Transition from Elite to Mass to Universal Access: Forms and Phases of Higher Education in Modern Societies since WWII*.

played a key role in transforming China's higher education from an elite to a mass system.

At the ongoing fourth stage from 2006 to the present, the central government has been placing the greatest emphasis on developing higher vocational education. Like many relevant policies made at the third stage, most higher-vocational-education-related policies issued in this period have titles that include words such as "accelerating," "fully improving," and "further strengthening." More importantly, these policies have been made specifically or have direct relevance to higher vocational education and/or high-level skilled manpower. The concept of higher vocational education is no longer mixed with other kinds of education such as higher education in general or vocational education, as was the case previously. As a type of higher education, higher vocational education plays an irreplaceable role in accelerating the construction of socialist modernization by supplying high-level skilled manpower for the front line of production, construction, service, and management (Ministry of Education of the People's Republic of China, 2006a; Central Committee of the Communist Party of China & State Council, 2006). The central government stressed that high-level skilled manpower is the only type of manpower supplied by higher vocational education (Central Committee of the Communist Party of China & State Council, 2006; Ministry of Education of the People's Republic of China, 2006a). These policies have indicated a clear and unified understanding of the mission of higher vocational education, which have reflected the firm attitude of the central government in developing higher vocational education. A major turning point in higher-vocational-education-related policy lies in the shift from quantitative development to quality assurance. Although higher vocational education made a great leap at its third stage, quantitative expansion of higher education in the previous phase has led to quality problems for higher education including higher vocational education, which has resulted in low graduate employment rates at vocational and technical colleges (Gao, 2005; Liu, 2006). Pan (2004) pointed out that only 100 out of 1,047 vocational and technical colleges have a good graduate employment rate of around 90%. The graduate employment rate for many other vocational and technical colleges is nearer to 50% and goes as low as 30%.

In order to assure the quality of higher vocational education, the Project of Building 100 Nationwide Model Vocational and Technical Colleges (Ministry of Education of the People's Republic of China, 2009a) was launched in 2006. The purpose of this project was to fund 100 nationwide model vocational and technical colleges to a high level so as to improve the quality of all vocational and technical colleges. This indicated that the focus of developing higher vocational education has shifted from quantity to quality. In order to ensure the supply of high-level skilled manpower to serve economic development, the

quality of higher vocational education has been required to improve greatly to better serve economic construction and social development during the ongoing period (Ministry of Education of the People's Republic of China, 2006a). In 2009, the policy *Notice of Accelerating Higher Vocational Education Reform and Facilitating Graduate Employment at Vocational and Technical Colleges* was issued (Ministry of Education of the People's Republic of China, 2009b). In this policy, restructuring the knowledge patterns and specializations of higher vocational education has been emphasized.

There can be little doubt that a regulatory framework for higher vocational education has been established. However, the reiteration of the importance of higher vocational education in various policies from the first stage to the ongoing stage has indicated that conformity to these higher-vocational-education-related regulations has not yet been achieved. According to neoinstitutionalism, such conformity is a direct result of obtained legitimacy. Moreover, the formation of regulative legitimacy has been negatively impacted by biased policies, which have been mainly reflected in a hierarchical selection system, entry for certain students only, and insufficient funding.

Students who pass the National College Entrance Examination with sufficiently high scores have access to different higher education institutions, including vocational and technical colleges. In China, higher education recruitment is conducted in a certain order based on a three-tier hierarchy of higher education institutions discussed by Hayhoe and Zha (2004). Located at the lower level of the hierarchy, vocational and technical colleges are in the last recruiting group of public higher education institutions and can only recruit students with lower exam scores. This has resulted in discrimination against higher vocational education, which has been considered an inferior form of higher education (Liu, 2006). According to Cao (2002) and Liu (2006), many students recruited by vocational and technical colleges have given up their places and returned to senior secondary schools for remedial education to prepare to re-take the examination in the next year.

Generally, student sources for vocational and technical colleges have been mainly constituted by graduates from senior secondary schools, graduates from vocational secondary schools, and technical workers recommended by industries (Liu, 2006; Xiong, 1995; Xu & Wu, 1991; Ye, 1994). In the early phase of the development of higher vocational education, vocational and technical colleges were considered non-formal higher education. Most senior secondary school graduates with scores qualifying them for university were not attracted to these colleges. In order to recruit sufficient students, vocational and technical colleges opened their doors to many senior secondary school graduates who did not pass the National College Entrance Examination but had reasonably good scores.

With the legislation of the 1990s and a series of government policies strongly

supporting its development, higher vocational education has been formally established as a non-university sector of the Chinese higher education system. Since then, graduates from senior secondary schools are required to pass the National College Entrance Examination to get access to higher vocational education. Even now, the majority of students in vocational and technical colleges are graduates from regular senior secondary schools. A very small portion is composed of graduates from secondary vocational schools. It is much harder for students from secondary vocational schools to pass the examination than for those in regular senior secondary schools due to different learning systems, although the National College Entrance Examination has been opened to all since 2001. In some places the entrance examination for higher vocational education has been designed to recruit graduates from secondary vocational schools and technical workers in industry, especially the former. However, the number of graduates recruited from secondary vocational schools has been strictly limited by the government. Encouraged by the policy the *Resolution on Reforming the Educational System* (Central Committee of the Communist Party of China, 1985), some short-cycle vocational colleges recruited graduates from secondary vocational schools in the 1980s (Min, 1994; Xiong, 1995; Xu & Wu, 1991; Zhang, 1985). However, the number of students recruited from secondary vocational schools was too small. According to Xiong (1995), students recruited from vocational secondary schools accounted for 5% of total recruitment of vocational and technical colleges. Indeed, this quota has never been expanded. In the 1990s, students recruited from secondary vocational schools still comprised a rather small proportion of the total number of vocational secondary school graduates, although many government policies stressed that vocational and technical colleges should recruit graduates from these schools (Ministry of Education of the People's Republic of China, 1995, 1998b; Ministry of Education of the People's Republic of China, State Economy and Trades Commission, & Ministry of Labor, 1998; Ministry of Education of the People's Republic of China & State Planning Commission, 1999; Central Committee of the Communist Party of China & State Council, 1999). In the policy entitled *Action Plan for Invigorating Chinese Education in the 21st Century* (Ministry of Education of the People's Republic of China, 1998b), it is stated that a certain portion accounting for about 3% of graduates from secondary vocational schools can be recruited by vocational and technical colleges in the near future. At that time, the total number of graduates from secondary vocational schools was about four million (Ministry of Education of the People's Republic of China, 1998a). In 2006, the rate was still limited to 5% by the central government (Ministry of Education of the People's Republic of China & National Development and Reform Commission, 2006). The number of graduates from secondary vocational schools was about five million in the same year (Ministry of Education of the

People's Republic of China, 2006b).

Given the fact that secondary vocational education had no possibilities for further progression before the emergence of vocational and technical colleges, the development of higher vocational education has enhanced education equity by providing higher education opportunities for students at secondary vocational schools. In spite of the rapid growth of higher vocational education and the expansion of higher education, however, secondary-vocational-school-students' access to higher education has been heavily restricted by government policy. The major reason for this restriction may lie in the fact that China needs more skilled workers supplied by secondary vocational education not higher vocational education. In the *Resolution on Vigorously Promoting the Development and Reform of Vocational Education*, the State Council (2002) stressed that:

Secondary vocational education is the focus. The size of higher vocational education needs to be expanded. During the Tenth Five-Year Plan period [2001–2005], secondary vocational education needs to supply over 22,000,000 graduates while higher vocational education needs to supply more than 8,000,000 graduates for society. (para. 4)

Limited access to higher education indicates less upward mobility in society for students at secondary vocational schools. The funding system in Chinese public higher education is hierarchical as well. On the top, universities in Project 211 and Project 985 are key funded institutions. They are funded by both the central government and provincial or municipal governments. Funding for universities under the governance of each province or municipality mainly comes from the provincial or municipal governments. Most universities in China are located at this level. Since each province or municipality has its own Project 211, a similar funding hierarchy exists at provincial or municipal levels. Located at the bottom of the hierarchy, vocational and technical colleges usually get the least funding.

According to Liu (2006), Yang (2004), and Zeng (2004), provincial or municipal government appropriation and tuition are the major funding sources for vocational and technical colleges. Due to the uneven development of the economy, the amount of funding from provincial/municipal governments varies across the country. Among China's three major economic development zones, the west is less developed than the coastal and the central areas. Zhao (2001) pointed out that vocational and technical colleges in Western China could not get sufficient funding from the government. Indeed, government funding for vocational and technical colleges across the country has been insufficient in general (Gu, 2006; Liu, 2006; Yang, 2004). They have been encouraged to raise funds by themselves since their emergence in the 1980s and even since the legislation on higher vocational education was passed in the 1990s, though

raising money is not usual for public education in China. Therefore, higher vocational education has experienced insufficient funding for a long time, which has led, in turn, to high tuition and poor teaching conditions including the lack of necessary facilities for technical training at vocational and technical colleges (Liu, 2006; Sun, Huang, & Lin, 2002; Zhao, 2001).

The aforementioned biased policies have indicated that the regulative environment for higher vocational education needs to be improved, although there has emerged a trend of strong policy support for higher vocational education in recent years. Considering that there are three pillars which have an impact on its institutional environments, it is necessary to look into the other two forms of legitimacy for higher vocational education.

Normative Legitimacy

In order to supply urgently needed high-level skilled manpower, curricula and teaching at vocational and technical colleges have been required to focus on practical and skills knowledge. Since the third stage of development, the central government has encouraged vocational and technical colleges to carry out specifically designed programs such as “responsive education” (*dingdan shi jiaoyu*)⁴, “modularized education” (*mokuai shi jiaoyu*), and “work-study shift programs” (*gongxue jiaoti*) to strengthen cooperation in curriculum and teaching reform between these colleges and industry. Given the fact that such changes in curricula and teaching have continued to be the focus of higher vocational education reform at the ongoing fourth stage, this suggests that the general curriculum and teaching reforms at vocational and technical colleges have not been implemented well. Therefore, discrepancies have existed between the graduates supplied by vocational and technical colleges and the high-level skilled manpower urgently demanded by economic development. This may account for the low employment rate of graduates from vocational and technical colleges in recent years. An important reason for such a failure is the lack of norms regulating teaching and the curricula in higher vocational education. From the perspective of neoinstitutionalism, higher vocational education lacks normative legitimacy.

According to Yang et al. (1995), the issue of developing higher vocational education was initially proposed by various industries, which complained that

⁴ “Responsive education” refers to designated programs offered at vocational and technical colleges, through which human resources demanded by industry are fostered. In other words, industry makes orders at vocational and technical colleges about the number and quality of graduates needed. Then the college responds by designing relevant programs to meet the industry’s needs and graduates’ employment is guaranteed.

graduates from higher education institutions did not meet their needs. Then a question was proposed: What kinds of human resources should be supplied by higher education? Indeed, the mission of higher vocational education to produce applied and skilled manpower at all levels for industry was articulated in all policies. Meeting the needs of industry is the basic demand for human resources supplied by higher vocational education. Apparently, industry is considered capable of setting the criteria for the types of human resources it needs. Therefore, industry was encouraged to get involved in developing higher vocational education.

During the first two stages (1980–1999), curricula and teaching were not the foci of higher vocational education policy. Only one policy addressed the issue of curriculum and teaching reform, which was *Some Advice on Promoting the Reform and Construction of Vocational Colleges* (Ministry of Education of the People's Republic of China, 1995). Although emphasizing practical teaching for occupational needs, this policy did not mention universal norms for curricula, teaching, and evaluation at vocational and technical colleges. Such norms were not emphasized in relevant policies until the beginning of the third stage, when the Ministry of Education of the People's Republic of China (2000) stated that curriculum and teaching reform were important and challenging in higher vocational education and junior college education reform. Specialties, programs, curricula, and teaching at vocational and technical colleges needed to accommodate market and social needs and industry requirements for high-level skilled manpower by focusing on practical teaching and helping students obtain professional qualification certificates so as to enhance graduates' employment competency (Ministry of Education of the People's Republic of China, 2000, 2004a, 2004b; Ministry of Education of the People's Republic of China et al., 2003; State Council of the People's Republic of China, 2005). Accordingly, the central government has strongly encouraged vocational and technical colleges to energetically carry out responsive education, modularized education and work-study shift programs, especially responsive education, to enhance graduates' employability, a process whereby industries and employers have been involved in curriculum development and the employment of higher vocational education graduates (Ministry of Education of the People's Republic of China, 2004a, 2004b). Labs and practical training bases/centers were required to be built as necessary facilities for enhancing practical teaching at vocational and technical colleges (Ministry of Education of the People's Republic of China, 2000, 2004a, 2004b; Ministry of Education of the People's Republic of China et al., 2004; State Council of the People's Republic of China, 2005). Moreover, The Ministry of Education of the People's Republic of China et al. (2004) and The State Council of the People's Republic of China (2005) stressed that industry should provide work experience and practical training for students at vocational

and technical colleges, which should be no less than half a year in length.

Nevertheless, a severe shortage of high-level skilled workers in China has been reported in the third and the beginning of the fourth phases. Statistics of the Ministry of Labor and Social Security (as cited in Xinhua Daily Telegraph, 2006) show that among 270 million employees in cities and towns across the country, only 87.2 million employees were qualified skilled workers that comprised 33% of the total employees. Only 18.6 million are high-level skilled manpower, which accounts for 21% of those qualified. Apparently, the component of high-level skilled manpower is still very low among employees in China. Xinhua Daily Telegraph (2006) and Zhang (2006) have pointed out that the shortage of high-level skilled manpower is challenging the notion of “Made-in-China” and the upgrading of Chinese industries.

Given the low employment rate of graduates from vocational and technical colleges, a core problem in developing higher vocational education must be resolved: How to ensure the quality of human resources supplied by vocational and technical colleges. From a neoinstitutionalist perspective, establishing a normative system for higher vocational education is crucial to answering such a question. In the *Resolution on Energetically Developing Vocational Education*, The State Council of the People’s Republic of China (2005) stated:

With the guidance of educational principles of the state, competent departments of industry and industrial associations carry out manpower demand forecasts for industry, make education and training plans, organize and direct vocational education and training for industry; participate in making criteria for specific occupational qualifications, vocational skill appraisals, and issue certificates; participate in making criteria for qualifications of training institutions and employees; and participate in vocational colleges/schools evaluation and management. (para. 23)

The implication of this policy is that competent departments of industry and industrial associations have normative functions in developing higher vocational education. With the involvement of industry, universal standards for the supply and evaluation of human resources would enhance curriculum and teaching reform at vocational and technical colleges. The ongoing fourth stage—restructuring knowledge patterns and specializations of higher vocational education—has provided a basis for establishing its normative legitimacy. Examples of this include increasing demands for enhanced cooperation between vocational and technical colleges and various industries, extensive application of responsive education and modularized education and work-study shift programs at vocational and technical colleges, and the construction of 100 nationwide model vocational and technical colleges across the country. Therefore, with strong government coercion, it seems that the formation of a normative environment for

higher vocational education is not too remote.

Cultural-Cognitive Legitimacy

Xiong (2011) has asserted that the development of higher vocational education entails a trend of vocationalism that values skills and skilled workers and provides a supportive cultural environment for developing higher vocational education in China. Still, vocationalism has been resisted by various stakeholders holding a Confucian belief in the importance of theoretical knowledge related to good governance, and this has hindered the development of higher vocational education and the production of high-level skilled manpower for a long time in Chinese society. From the perspective of neoinstitutionalism, this cultural conflict indicates that higher vocational education in China suffers from the absence of cultural legitimacy.

As the deepest level of institutional legitimacy, cultural legitimacy may exert great influence on the formation of institutional environments. For instance, since relevant policies were designed at the first stage, the central government has realized that the development of higher vocational education has been confronting an unfavorable social environment, which undervalues both high-level skilled manpower and higher vocational education (Central Committee of the Communist Party of China, 1985; Ministry of Education of the People's Republic of China et al., 2004; State Council of the People's Republic of China, 2005). In order to create a favorable social environment in which (higher) vocational education is valued, emphasized, and supported by the whole society, the central government has strongly reiterated that every occupation is honorable and equal, that the importance and function of higher vocational education need to be widely publicized, and public awareness of (higher) vocational education in society needs to be increased, studies on higher vocational education theories and summaries of its practice should be emphasized, the popularization of higher vocational education reform and development achievements should be enhanced, and people's understanding of higher vocational education needs to be reinforced (Central Committee of the Communist Party of China, 1985; Ministry of Education of the People's Republic of China, 2006a; Ministry of Education of the People's Republic of China et al., 2004; State Council of the People's Republic of China, 2005). Meanwhile, The Ministry of Education of the People's Republic of China et al. (2004) and The State Council of the People's Republic of China (2005) advocated gradually uplifting the social status of skilled manpower by strongly publicizing the important contributions made by outstanding high-level skilled manpower in building socialist modernization and regularly holding national occupational skill competitions that recognise (high-level) skilled manpower with awards and

commendations. One more way to uplift the social status of high-level skilled manpower is to increase their income (State Council of the People's Republic of China, 2005). Government promotion has improved the graduate employment situation for higher vocational education. Xinhuanet (2011b) stated that the graduate employment rate of higher vocational education has been higher than that of undergraduate education for two consecutive years.

Nonetheless, even with an increasing emphasis on the importance of higher vocational education and high-level skilled manpower by the central government, students' motivation to embrace higher vocational education is still not high. Zhang (2011) noted that in Shaanxi Province, more than 80,000 graduates from senior secondary schools with qualified exam scores gave up their opportunities to apply for higher vocational education in 2010, which has led to insufficient first year enrollments in vocational and technical colleges in the province. Zhang also noted that the main reason lies in discrimination against higher vocational education and high-level skilled workers.

Given Chinese students' strong interest in the Civil Service Examination (*gongwuyuan kaoshi*) and the cultural rank of civil servant (*gongwuyuan*) in recent years, there is not much motivation to become low-ranked, high-level skilled workers in China today (Xiong, 2011). This is despite government efforts to foster a favorable environment for higher vocational education and high-level skilled manpower since the first stage. Apparently, strong policy support has not led to a favorable environment for higher vocational education because cultural legitimacy, which is located at the deepest level of institutional legitimacy, has been absent.

According to Xiong (2011), higher vocational education, driven by vocationalism, has been emphasized as education for workforce preparation. Upward mobility for students in higher vocational education is largely limited given the lack of progression opportunities. Since 1999, students at vocational and technical colleges have been permitted to continue their studies at degree granting institutions by taking the "upgrading examination" (*zhuan sheng ben kaoshi*). However, the number of students moving up to degree level programs has been strictly limited by policy at a rate of 5% of graduates (Ministry of Education of the People's Republic of China & National Development and Reform Commission, 2006). Moreover, as mentioned before, the number of students from secondary vocational schools recruited by higher education institutions is strictly limited by policies related to higher vocational education. The indication is that the entire vocational education system is designed to stream students at different levels for workforce preparation. The limited upward mobility goes against social equity. Therefore, higher vocational education has encountered resistance in Chinese society. Thus, providing transferrable education at vocational and technical colleges may be the major way to motivate

Chinese students. However, given the fact that the country has been in great need of skilled manpower at all levels, the government will not open up transfer access for students at either vocational and technical colleges or secondary vocational schools in the next decade. On the other hand, the government has made more efforts to improve the social status of skilled manpower and higher vocational education through further reforms, the National Occupational Skill Competitions, propaganda via mass media, and enhanced leadership (Ministry of Education of the People's Republic of China, 2004b; Central Committee of the Communist Party of China & State Council, 2006; State Council of the People's Republic of China, 2005). However, the author of this article argues that higher vocational education may not easily gain cultural legitimacy if the issue of social equity is not adequately addressed. Apparently, from a neoinstitutionalist perspective, most unresolved challenges, such as student dropouts, less upward mobility, poor practical teaching conditions, low graduate employment statistics, insufficient funding, and lesser status have resulted, directly or indirectly, from the fact that higher vocational education lacks institutional legitimacy at all levels.

Isomorphic Change

In the process of the institutionalization of higher vocational education, vocational and technical colleges have been experiencing isomorphic changes in terms of missions, structures, curricula, teaching staff, practical training facilities, and graduate employment. Consequently, a non-university sector of higher education is emerging, which is marked by its supply of high-level skilled manpower, offering two to three-year short-cycle skill/practice learning programs, building a team of teachers with dual qualifications, equipping institutions with practical training facilities, and presenting graduates with two qualifications upon graduation. These isomorphic changes of Chinese higher vocational education fit the theory of isomorphism proposed by neoinstitutionalism.

As discussed earlier, DiMaggio and Powell (1983) have defined three isomorphic forces including coercive, mimetic, and normative. Government coercion has been the major force driving isomorphic changes among vocational and technical colleges through policy regulations. First, with the rapid growth of higher vocational education since the third stage, a stable non-university sector of higher education has emerged in China to fulfill its mission of supplying high-level skilled manpower for the booming economy. Second, in order to supply qualified high-level skilled manpower, all vocational and technical colleges have been required to focus more on practical/skills learning, build practical training facilities, and build a team of teachers with dual qualifications. Moreover, graduates from vocational and technical college are required to obtain two qualifications upon graduation to enhance their employment competency,

which include the Certificate of Graduation (*biye zhengshu*) and the Certificate of Occupational Qualifications (*zhiye zige zhengshu*).

Furthermore, mimetic isomorphism has appeared in developing higher vocational education since its inception. In the first stage, with weak policy support, most vocational and technical colleges lacked a clear idea of what they should do. They copied the practice of regular colleges and universities that were considered formal higher education. Consequently, these vocational and technical colleges did not address vocational education but emulated academic education. Since the second stage when legislation was passed for higher vocational education, vocational and technical colleges have been encouraged by increasingly strong policy support to imitate the practice of some successful vocational and technical colleges, especially at the ongoing fourth stage. The Ministry of Education of the People's Republic of China and the Ministry of Finance of the People's Republic of China (2006) stated that, from 2006 to 2010, the central government would carry out the Project of Building 100 Nationwide Model Vocational and Technical Colleges incrementally across the country. The purpose of this project was to stimulate quality improvement among vocational and technical colleges. Meanwhile, the central government has also provided significant funds for implementation of this project. In centralized China, undoubtedly, government coercion rather than cultural expectations has enhanced mimetic isomorphic changes in higher vocational education.

Moreover, normative isomorphism is reflected in curricula focusing on practical/skills learning, teachers with dual qualifications including both teaching certificates and professional certificates, and graduates with two qualifications upon graduation. Among the three isomorphic changes, normative isomorphic change is key in differentiating higher vocational education from regular higher education. According to Campbell (2004), in "normative processes ... organizational leaders have been professionalized to share similar views on what constitutes appropriate organizational practice" (p. 21).

Apparently, isomorphic changes reflect the formation of institutional legitimacy. Major isomorphic changes in higher vocational education have resulted from government coercion, which reflects the regulative system. Isomorphism reflecting the normative or cultural legitimacy of higher vocational education has not occurred to the same extent.

Conclusion

From a neoinstitutionalist perspective, higher vocational education has become an emergent institution in Chinese society. Its development over three decades has witnessed a trend of institutionalizing higher vocational education, which

aims at obtaining institutional legitimacy and the formation of institutional environments.

Since its inception in the early 1980s, higher vocational education has been struggling to gain institutional legitimacy at regulative, normative, and cultural-cognitive levels. Thus, the development of higher vocational education has faced various challenges due to the absence of legitimacy. Although laws, rules, and regulations supporting higher vocational education have been enacted, conformity to these regulations has not yet been achieved, which is indicated by the fact that higher-vocational-education-related policies have not been well implemented and have been biased. Unified standards of professionalism will be established by the greater involvement of various industries in developing higher vocational education and this is expected to lead to the normative legitimacy of higher vocational education. The resistance to higher vocational education in Chinese society is a strong indication that it has not gained cultural-cognitive legitimacy in China. As the core of institutional legitimacy of higher vocational education, cultural legitimacy determines conformity to the regulative and normative systems.

Without a doubt, vocationalism is the culture that supports higher vocational education while Confucianism resists it. In this light, the process of developing higher vocational education is a process of internalizing vocationalism in Chinese society. It is clear from the popularity of the Civil Service Examination and the insufficient first year enrollment at vocational and technical colleges in recent years, however, the cultural influence of vocationalism on higher vocational education is not as strong as that of Confucianism, which stresses individuals' upward mobility in society. Since institutional environments are often varied and conflictual, the elements of institutions may not be aligned and one may undermine the effects of the other (Scott, 2001). The indication is that the issue of social equity needs to be taken into account in developing higher vocational education during the ongoing fourth stage: restructuring higher vocational education.

Meanwhile, the development of higher vocational education represents isomorphic changes in Chinese society. That is, vocational and technical colleges have been established with similar institutional structures in terms of missions, structures, curricula, teaching conditions, and graduate employment. In the case of higher vocational education in China, the isomorphic change has been mainly driven by coercive and mimetic forces exerted by the regulative system not the cultural system. Normative isomorphism has not occurred to a large extent, which is considered key in differentiating higher vocational education from other educational types in the educational system. Undoubtedly, isomorphic changes are reflections of the formation of institutional legitimacy.

Meyer and Rowan (1991) pointed out that if organizations lack acceptable

legitimated accounts of their activities, they are more vulnerable to claims that they are unimportant, irrational, or unnecessary. The marginalized higher vocational education facing various challenges in Chinese higher education systems is a good example for such a theory. In order to achieve its full development in the next decade, the institutionalization of higher vocational education at the ongoing fourth stage needs to put emphasis on establishing its institutional legitimacy at all levels, especially cultural and normative legitimacy.

References

- Abercrombie, N., Hill, S., & Turner, B. (1994). *The Penguin dictionary of sociology*. London, England: Penguin.
- Campbell, J. L. (2004). *Institutional change and globalization*. Princeton, NJ: Princeton University Press.
- Cao, W. (2002). 高等职业教育的困境 [The plight of higher vocational education]. *教育与职业* [Education and Vocation], (3), 49–50.
- Central Committee of the Communist Party of China. (1985). 关于教育体制改革的决定 [Resolution on reforming the educational system]. Retrieved November 15, 2009, from http://news.xinhuanet.com/ziliao/2005-02/06/content_2554936.htm
- Central Committee of the Communist Party of China, & State Council. (1999). 关于深化教育改革, 全面推进素质教育的决定 [Resolution on deepening education reform and fully promoting quality education]. Retrieved October 20, 2012, from http://www.edu.cn/zong_he_870/20100719/t20100719_497966.shtml
- Central Committee of the Communist Party of China, & State Council. (2006). 关于进一步加强高技能人才工作的意见 [Advice on further strengthening the work of high-level skilled manpower]. Retrieved November 7, 2007, from http://news.xinhuanet.com/newscenter/2006-06/11/content_4679446.htm
- Chen, S., & Guo, Y. (2006). 我国高职教育十年发展的成就与经验 [Achievements and experiences in a decade's development of higher vocational education in China]. Retrieved October 20, 2012, from <http://www.cnsaes.org/homepage/saesmag/jyfyzyj/2006/10/gj061006.htm>
- China Development Gateway. (2011). 高技能人才队伍建设中长期规划 (2010–2020 年) [Medium-and-long-term plan for team building of high-level skilled manpower (2010–2020)]. Retrieved April 6, 2012, from http://cn.chinagate.cn/education/2011-07/26/content_23074067.htm
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147–160.
- Gao, Q. (2005). 关于高等职业教育毕业生就业难的几点思考 [Reflections on difficulties for graduate employment in vocational and technical colleges]. 北京联合大学学报(自然科学版) [Journal of Beijing Union University (Natural Sciences)], 19(3), 95–97.
- Gu, L. J. (2006). 从美国社区学院看我国高等职业教育 [Implications of American community colleges for Chinese higher vocational education]. 中国科技信息 [China Science and Technology Information], (12), 239–241.

- Hayhoe, R., & Zha, Q. (2004). Becoming world-class: Chinese universities facing globalization and internationalization. *Harvard China Review*, 5(1), 87–92.
- Jepperson, R. L. (1991). Institutions, institutional effects, and institutionalism. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (143–163). Chicago, IL: The University of Chicago Press.
- Liu, Y. (2006). 当前高职教育招生与就业问题现状及对策 [Status quo and solutions for current higher vocational education recruitment and employment]. 重庆科技学院学报 (社会科学版) [*Journal of Chongqing University of Science and Technology (Social Sciences Edition)*], (1), 105–107.
- Meyer, J. W., Ramirez, F., Frank, D. J., & Schofer, E. (2006, May). *Higher education as an institution* (Working Paper no. 57). Stanford, CA: CDDRL.
- Meyer, J. W., & Rowan, B. (1977). Institutional organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340–363.
- Meyer, J. W., & Rowan, B. (1978). The structure of educational organizations. In M. W. Meyer (Ed.), *Environments and organizations* (pp. 78–109). San Francisco, CA: Jossey Bass.
- Meyer, J. W., & Rowan, B. (1991). Institutionalized organizations: Formal structure as myth and ceremony. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (41–62). Chicago, IL: The University of Chicago Press.
- Meyer, H.-D. & Rowan, B. (2006). Institutional analysis and the study of education. In H.-D. Meyer & B. Rowan (Eds.), *The new institutionalism in education* (pp. 1–13). Albany, NY: State University of New York Press.
- Min, G. T. (1994). 大力发展高职教育, 适应市场经济需求 [Vigorously developing higher vocational education to meet the demand of a market economy]. 江苏高教 [*Jiangsu Gaojiao*], (4), 10–13.
- Ministry of Education of the People's Republic of China. (1995). 关于推动职业大学改革与建设的几点意见 [Some advice on promoting the reform and construction of vocational colleges]. Retrieved December 19, 2007, from http://old.hnedu.cn//fagui/Law/17/law_17_1111.htm
- Ministry of Education of the People's Republic of China. (1998a). 1998 年全国教育事业发展统计公报 [Statistical bulletin of education in China in 1998]. Retrieved January 15, 2009, from http://www.edu.cn/jiao_yu_fa_zhan_498/20060323/t20060323_11626.shtml
- Ministry of Education of the People's Republic of China. (1998b). 面向 21 世纪教育振兴行动计划 [Action plan for invigorating education in the 21st century]. Retrieved December 19, 2007, from <http://www.moe.edu.cn/edoas/website18/level3.jsp?tablename=208&infoid=3337>
- Ministry of Education of the People's Republic of China. (2000). 关于加强高职高专教育人才培养工作的意见 (2 号) [Advice on strengthening human resource supply by higher vocational education and junior college education (No. 2)]. Retrieved December 19, 2007, from <http://www.lvcv.cn/office/Article/ArticleShow.asp?ArticleID=5257>
- Ministry of Education of the People's Republic of China. (2003). 2003 年全国教育事业发展统计公报 [Statistical bulletin of education in China in 2003]. Retrieved August 15, 2008, from http://www.edu.cn/jiao_yu_fa_zhan_498/20060323/t20060323_95235.shtml
- Ministry of Education of the People's Republic of China. (2004a). 2003–2007 教育振兴行动计划 [Action plan for invigorating education between 2003 and 2007]. Retrieved December 19, 2007, from http://news.xinhuanet.com/zhengfu/2004-03/31/content_1393111.htm

- Ministry of Education of the People's Republic of China. (2004b). 以就业为导向深化高等职业教育改革的若干意见 [Some advice on deepening higher vocational education reform to strengthen graduates employment]. Retrieved October 20, 2009, from <http://www.moe.edu.cn/edoas/website18/72/info13572.htm>
- Ministry of Education of the People's Republic of China. (2006a). 关于全面提高高等职业教育教学质量的若干意见 [Some advice on fully improving the quality of higher vocational education]. Retrieved October 20, 2012, from http://www.moe.gov.cn/publicfiles/business/htmlfiles/moe/moe_745/200612/19288.html
- Ministry of Education of the People's Republic of China. (2006b). 2006 年全国教育事业发展统计公报 [Statistical bulletin of education in China in 2006]. Retrieved January 15, 2008, from http://www.edu.cn/jiao_yu_fa_zhan_498/20070608/t20070608_236759.shtml
- Ministry of Education of the People's Republic of China. (2009a). 国家示范性高等职业院校建设计划 [The project of establishing nationwide model vocational and technical colleges]. Retrieved October 20, 2012, from http://221.12.38.131/web/articleview.aspx?id=20110731145204324&cata_id=N161
- Ministry of Education of the People's Republic of China. (2009b). 关于加快高等职业教育改革促进高等职业院校毕业生就业的通知 [Notice of accelerating higher vocational education reform and facilitating graduate employment at vocational and technical colleges]. Retrieved May 8, 2012, from http://www.moe.edu.cn/publicfiles/business/htmlfiles/moe/moe_737/201001/xxgk_79641.html
- Ministry of Education of the People's Republic of China, & Ministry of Finance. (2006). 关于实施国家示范性高等职业院校建设计划, 加快高等职业教育与发展的意见 [Advice on accelerating the reform and development of higher vocational education by implementing the project of building nationwide model vocational and technical colleges]. Retrieved July 9, 2009, from <http://www.tech.net.cn/info/sfyz/zczd/12419.shtml>
- Ministry of Education of the People's Republic of China, Ministry of Labor and Social Security, Commission for Science, Technology and Industry for National Defense, Ministry of Industry and Information Technology, Ministry of Transportation and Communications, & Ministry of Health. (2003). 教育部等六部门联合启动“制造业和现代服务业技能型紧缺人才培养培训工程” [Six ministries and commissions including Ministry of Education jointly initiating the project of supplying skilled manpower in a time of severe shortage for the industry of manufacturing and modern service]. Retrieved October 20, 2012, from <http://www.lyedu.com.cn/jydt/GNZX/200402/9824.html>
- Ministry of Education of the People's Republic of China, & National Development and Reform Commission. (2006). 关于编报 2006 年普通高等教育分学校分专业招生计划的 通知 [Notice of compiling and submitting regular higher education recruitment plans based on institutions and disciplines in 2006]. Retrieved October 26, 2012, from <http://gaokao.chsi.com.cn/gkxx/zcdh/200606/20060619/516045.html>
- Ministry of Education of the People's Republic of China, National Development and Reform Commission, Ministry of Finance, Ministry of Personnel, Ministry of Labor and Social Security, Ministry of Agriculture, State Council Leading Group Office of Poverty Alleviation and Development. (2004). 教育部等七部门关于进一步加强职业教育工作的 若干意见 [Some advice on further emphasizing vocational education by seven ministries and commissions including Ministry of Education]. Retrieved October 20, 2012, from <http://edu.people.com.cn/GB/8216/54807/54811/3822282.html>
- Ministry of Education of the People's Republic of China, State Economy and Trade

- Commission, & Ministry of Labor. (1998). 适于实施职业教育法加快发展职业教育的若干意见 [Some advice on implementing the law of vocational education and accelerating the development of vocational education]. Retrieved December 19, 2007, from http://www.hnedu.cn/fagui/Law/17/law_17_1044.htm
- Ministry of Education of the People's Republic of China, & State Planning Commission. (1999). 试行按新的管理模式和运行机制举办高等职业技术教育的实施意见 (2 号) [Advice on running higher vocational education on a trial basis via a new management and operation system (No. 2)]. Retrieved June 30, 2011, from http://www.pkulaw.cn/fulltext_form.aspx?db=chl&gid=26968
- Ministry of Labor and Social Security. (2004). 三年 50 万新技师培养计划 [Plan of training 500,000 new technicians in three years]. Retrieved October 20, 2012, from <http://www.labournet.com.cn/zyjnp/leixing7c.asp>
- Morphew, C. C., & Huisman, J. (2002). Using institutional theory to reframe research on academic drift. *Higher Education in Europe*, 27(4), 492–506. doi: 10.1080/0379772022000071977
- Pan, M. Y. (2004). 我对高等职教看法 [My view on higher vocational education]. 职业技术教育 [Vocational and Technical Education], (18), 36–37.
- Rowan, B., & Miskel, C. G. (1999). Institutional theory and the study of educational organizations. In J. Murphy & K. Seashore-Louis (Eds), *Handbook of research on educational administration* (2nd ed., pp. 359–382). San Francisco, CA: Jossey-Bass.
- Scott, W. R. (2001). *Institutions and organizations* (2nd ed.). Thousand Oaks, CA: SAGE.
- Scott, W. R., & Christensen, S. (Eds). (1995). *The institutional construction of organizations*. Thousand Oaks, CA: SAGE.
- Scott, W. R., Meyer, J. W., & Associates. (Eds). (1994). *Institutional environments and organizations: Structural complexity and individualism*. Thousand Oaks, CA: SAGE.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, 20(3), 571–610.
- Sun, F. Z., Huang, H. H., & Lin, R. H. (2002). 扩招对职业大学办学的影响及其发展策略 [Developmental strategies for the impact of higher education expansion on vocational colleges]. 教育与职业 [Education and Vocation], (3), 9–12.
- State Council of the People's Republic of China. (1994). 关于“中国教育改革和发展纲要”的实施意见 [Advice on “implementing the outline of China's education reform and development”]. Retrieved October 20, 2012, from <http://www.jnsms.com/edu/code/ggfgz.html>
- State Council of the People's Republic of China. (2002). 关于大力推进职业教育改革与发展的决定 [Resolution on vigorously promoting the development and reform of vocational education]. Retrieved December 19, 2007, from http://www.gov.cn/gongbao/content/2002/content_61755.htm
- State Council of the People's Republic of China. (2005). 关于大力发展职业教育的决定 [Resolution on energetically developing vocational education]. Retrieved August 24, 2008, from http://www.gov.cn/zwzgk/2005-11/09/content_94296.htm
- Tolbert, P. S. & Zucker, L. G. (1983). Institutional sources of change in the formal structure of organizations: The diffusion of civil service reform, 1880–1935. *Administrative Science Quarterly*, 28(1), 22–39.
- UNESCO. (1997). *International Standard Classification of Education (ISCED) 1997*. Retrieved July 20, 2010, from http://www.unesco.org/education/information/nfsunesco/doc/isced_1997.

htm

- Wu, Q. D. (2004). 大力发展以就业为导向的高等职业教育 [Energetically developing higher vocational education to enhance graduates employment]. Retrieved February 20, 2005, from <http://learning.sohu.com/2004/04/01/05/article219700517.shtml>
- Xinhua Daily Telegraph. (2006). 高技能人才短缺, 挑战“中国制造”优势 [The advantage of “Made-in-China” is challenged by the shortage of high-level skilled workers]. Retrieved March 27, 2007, from http://news.xinhuanet.com/mrdx/2006-05/10/content_4529351.htm
- Xinhuanet. (2011a). 我国高技能人才总数超过2600万人 [The total number of high-level skilled workers reached 26 million in China]. Retrieved April 19, 2012, from http://news.xinhuanet.com/politics/2011-07/26/c_121723461.htm
- Xinhuanet. (2011b). 我国高职毕业生就业率连续两年高于普通本科高校 [The graduate employment rate of higher vocational education has been higher than that of undergraduate education for two consecutive years]. Retrieved May 5, 2012, from http://news.xinhuanet.com/society/2011-11/27/c_111197750.htm
- Xiong, J. W. (1995). 论高等职业学校的对口招生—兼论高等职业教育与中等职业教育的相互衔接 [Recruiting students from secondary vocational schools: Articulation between secondary vocational education and higher vocational education]. *教育与职业* [Education and Vocation], (4), 7–8.
- Xiong, J. (2010). The emergence of higher vocational education (HVE) in China (1980–2007): Vocationalism, Confucianism, and neoinstitutionalism (Unpublished doctoral dissertation). University of Alberta, Edmonton, Canada.
- Xiong, J. (2011). Understanding higher vocational education in China: Vocationalism vs Confucianism. *Frontier of Education in China*, 6(4), 495–520. doi: 10.1007/s11516-011-0143-1
- Xu, J. L., & Wu, H. (1991). 职业大学对口招收中等职校毕业生的思考 [Reflections on recruiting secondary-vocational-school graduates to vocational colleges]. *教育与职业* [Education and Vocation], (3), 24–26, 31.
- Yang, J. T. (1996). 艰难而必然的选择: 试论我国发展高等职业教育的决策 [A hard but inevitable choice: A discussion on decision-making for developing higher vocational education in China]. *中国高等教育* [China Higher Education], 21(7), 73–76.
- Yang, J. T. (2004). 教育公平与职业教育 [Education equity and vocational education]. *教育与职业* [Education and Vocation], (7), 4–7.
- Yang, J. T., et al. (1995). 对发展高等职业教育几个重要问题的基本认识 [A basic understanding of some important issues in developing higher vocational education]. *教育研究* [Educational Research], (6), 7–15.
- Ye, C. S. (1994). 关于职业大学的几个问题 [Some issues about vocational colleges]. *中国高教研究* [China Higher Education Research], (4), 57–62.
- Zeng, L. (2004). 政府在高职教育发展中的角色定位和作用 [The role and function of the government in developing higher vocational education]. *教育与职业* [Education and Vocation], (24), 4–5.
- Zhang, B. (2006). 高技能人才短缺阻碍产业升级 [The shortage of high-level skilled workers impedes industrial upgrading]. Retrieved November 27, 2009, from http://www.hrbgzw.gov.cn/news_text.asp?id=8313
- Zhang, R. J. (2011). 高职院校招生难, 突破就业瓶颈成重点 [Facing challenges in recruiting sufficient students, vocational and technical colleges need to focus on improving graduate employment situation]. Retrieved May 5, 2012, from http://www.edu.cn/zh_jiao_

news_295/20110815/t20110815_665161.shtml

- Zhang, W. Z. (1985). 重大的突破—谈职业技术教育与职业技术教育体系 [A great breakthrough: Discussion on vocational and technical education and the system of vocational and technical education]. 江汉大学学报 (人文科学版) [*Journal of Jiangnan University (Humanities Science Edition)*], (3), 14–21, 13.
- Zhang, X. M. (1990). 职业大学走出困境的对策 [Solutions for vocational colleges getting out of the plight]. 教育与职业 [*Education and Vocation*], (9), 9–11.
- Zhao, J. L. (2001). 中西部高职教育存在的问题及对策 [Solutions for challenges facing higher vocational education in central and western areas]. 教育与职业 [*Education and Vocation*], (10), 14–18.
- Zheng, C. S. (2008). 改革开放 30 年高等教育规模扩张及其政策分析 [A historical and policy analysis on higher education expansion over 30 years of reform and opening-up]. Retrieved February 24, 2010, from www.gwnews.net/UploadFiles/200809/20080923154743368.doc
- 8th National People's Congress. (1996). 中华人民共和国职业教育法 [Law of vocational education of the People's Republic of China]. Retrieved December 19, 2007, from <http://www.moe.edu.cn/edoas/website18/level3.jsp?tablename=1118300670083031&nfoid=1427>
- 9th National People's Congress. (1998). 中华人民共和国高等教育法 [Law of higher education of the People's Republic of China]. Retrieved August 24, 2007, from <http://www.moe.edu.cn/edoas/website18/26/info1426.htm>