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Employability as New Mission? Organizational Changes in Chinese Vocational Colleges

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Abstract: The purpose of this study is to analyze the recent development of Chinese vocational colleges from two perspectives: the adoption of employability as new institutional mission and the organizational changes in six areas. The analysis is based a multiple-case study. The analytical frameworks are developed from sociology theory and organizational theory. This study argues that vocational colleges in China are experiencing substantial transformations. At the macro-level, they are transforming from social institution to industry under the neo-liberal arguments for globalization. Colleges adopt employability as their new mission. At the micro-level, there are considerable changes under the influence of the new mission, in terms of program goal, program development, curriculum development, dominant pedagogy, faculty development, and internal management. The changes fit the rhetoric of the employability as core competency, as well as the impact-reaction model for organizational change. There is a tendency that Chinese vocational higher education institutions will be degenerated to employment training organizations.

Key word: employability, vocational college, mission

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1. Development of Chinese Vocational Tertiary Education

Vocational 3-year college is a rather new phenomenon in the long history of vocational education in China. Vocational higher education institutions—many of them are previously vocational middle schools, technical colleges, and TV universities, have experienced substantial changes in the past 20 years (Ma & Guo, 2009). Beginning as complementary to 4-year colleges and universities, these colleges are playing a major role in the recent tertiary education expansion. Only 6% of freshmen enrolled in vocational colleges in 1998 when the higher education expansion started. The share increased to 34% in 2008 when China moved into mass education stage with a gross tertiary enrollment at 23.3%³.

While the vocational college proponents are optimistic about its future, their enthusiasm is cooled out by the stratification in higher education (Gerber & Schaefer, 2004; Shen & Yan, 2006). The stratification based on functional division and prestige has put vocational colleges at marginalized position⁴. In addition to the perceptional stereotype, vocational colleges face other critical challenges. These challenges make a careful examination of changes in vocational college mission and function relevant and important.

First and for most, tertiary enrollment expansion will reach its end quickly due to the demographic change and the demand for vocational higher education will drop accordingly. On the one hand, this may dry out vocational colleges' major funding source because tuition and fees account for 50.1% of their total revenue (Bao, 2007). On the other hand, the enrollment decline may threaten the legitimacy of vocational colleges as the enrollment-absorbing institutions.

Funding becomes a serious problem itself. Although the government appropriation for vocational colleges has been increasing over time, per student expenditure and the proportion of budget appropriation in total revenue have been declining (Bao, 2007). The fiscal pressure has forced these colleges to consider a more-market oriented development trajectory.

Last, but not least important, is this argument of employment crisis facing

³ Author's calculation based on Chinese Education Statistical Yearbook 1997 to 2009.

⁴ Vocational colleges remain at the bottom of the higher educational institution hierarchy. It is hard to move from the notion of vocational colleges as second-chance institutions for losers in college competition and as producers of semi-professionals.

Chinese college graduates. Wage compression and college unemployment have become explicit in recent years (C. Cindy Fan, Yasheng Huang, Daniel A. Bell, Albert Park, & Loren Brandt, 2010)⁵. Recent analysis suggests there is a trend of increasing job placement rate with decreasing salary for vocational graduates. For instance the initial employment rate for vocational graduates increased from 68% in 2004 to 80% in 2008⁶. The average monthly salary for vocational graduates in 2005 was 1333 RMB, which increased to 1734 RMB in 2007 and reduced to 1647 RMB in 2008⁷.

To keep Chinese best and brightest staying away from unemployment, the government has been taking active labor market interventions⁸. On the demand side, the state issued several policies for enhancing college graduate employment in public sector formally or informally⁹. On the supply side, Chinese government encourages vocational colleges become employment-enhancing institutions. In 2005, State Council emphasized the importance of educating highly competent labor and redirecting vocational colleges to adopt "service and employability" as their development guideline (State Council., 2005a). In 2006, Ministry of Education decided to designate 100 exemplary vocational colleges nationwide (China Ministry of Education, 2006b). The policy dedicated to enhance college graduates' employment competitiveness through transformed institutional practice. In 2006, Ministry of Education issued another policy which took employment rate and job quality as performance indicators for vocational colleges (China Ministry of Education, 2006a).

Consequently, vocational colleges seem to transform from enrollment-absorbing

⁵ Census data shows that the urban unemployment rate for college graduates increased from 6.3 percent in 2000 to 11.9 percent in 2005. During the same time, average payment of college graduates is compressed to that of rural migrant workers (MYCOS College Graduate Employment Research Center., 2009).

⁶ Author's calculation based on Beijing University's Recent College Graduate Survey (2003 to 2009); MYCOS's Chinese College Graduates Employment Annual Report (2009).

⁷ Some researchers argue that the tight labor market only exists because of individual's geographic preference in job-hunting process and the shortage of high-skilled, professional jobs in service sector(C. Cindy Fan et al., 2010). But others are more cynical and blame the tertiary expansion and low-quality college education as sources of problem (Luo & Guo, 2005; Zeng, 2004).

⁸ Chinese college graduate employment policy has been changing over time. The first time period extended from 1949 to late 1980s, which is referred to as government allocation under planning economy. College graduates had no freedom of choice and job allocation was based on government needs. The second time period covered 1989 to 1993 where the two-way choice system under the transitional economy combined government job allocation with limited individual free choice. The last time period, from 1993 to date, is called free-choice system under market economy. Government has eliminated all employment restrictions for college graduates, and individuals are took full responsibility of finding their own employment.

⁹ For instance, encouraging graduates work in western, less developed regions as rural school teachers, volunteers, or entry-level civil servants (State Council., 2005b); encouraging government agencies and state-owned enterprises to recruit more graduates (State Council., 2007a); and mandating employment internship for 1 million unemployed college graduates for 3-12 months (State Council., 2009).

institution to producers of competency and employment through a series of organizational changes. In this study, we do not try to judge the value of institutional changes. Rather, we have two purposes. Our first is to report some preliminary findings from a national study of organizational changes in vocational colleges. The project is designed to investigate whether vocational colleges are changing their missions and organizational practices under the policy change. We are particularly interested in how these changes, if any, had happened. Finally, this project concerns with why such changes occurred and their implications for the future development of vocational colleges. Although this is an on-going project, we try to use the information that we already collect to begin develop insights into the nature and consequences of changes in vocational colleges.

2. Research Design

2.1 Method, Sample and Procedure

As an investigation of institutional change at multiple layers, this research adopted a mixed methodology approach. The qualitative research part involved field methods, such as document analysis, interviews, informal conversations, the use of informants, and classroom observations. Following the earlier literature, this study used a multiple-case study design in order to accommodating differences in institutional contexts. Using the purposive sampling, the research team selected 6 vocational colleges from three geographic regions in China¹⁰. These institutions located at cities of different levels of economic development and were a good representation of high-quality vocational institutions at present. The quantitative analysis intended to investigate the employment quality of recent college graduates and individual occupational expectation.

In this paper, the analysis is based data collected from two site visits in June and September 2009. A research team spent five days in each site and conducted individual and group interviews and administrated student surveys ¹¹. Formal

The two institutions from western regions located in Ning Xia and Xin Jiang; the two colleges in middle region came from Hu Nan and Guang Dong; and the two in Eastern region were from Shan Dong and Beijing.
 The following college personnel were interviewed: the president and vice president, chief academic officer,

¹¹ The following college personnel were interviewed: the president and vice president, chief academic officer, chief student service officer, chief human resources officer, samples of mid-level administration (deans or chairs), sample of full-time faculty and support staff, and sample of enrolled students. 83 individuals from two institutions were interviewed, including 8 department chairs, 28 faculty, 37 students, 2 institution presidents, and 8 administrators (Table A1 summaries the sample composition.). Majority of interviews lasted from 1.5 hours to 2 hours.

interviews were tape-recorded and interview notes were recorded by hand. Interview questions were developed and pilot-tested prior to site visits. Questions were both specific and open-ended and invited interviewees to elaborate on their responses.

2.2 Analysis Framework

Analytical frameworks for this study were developed from organizational theory and sociology theory. There are many studies on mission shift from the organizational theory perspective. Levin (2000) had applied Levy and Merry (1986)'s conceptual framework for organizational change to analyze community college missions in the U.S. Following his lead, our study utilized Levy and Merry's four change categories, namely paradigmatic change, mission and purpose change, cultural change, and change in functional process, as analytical tool to classify organizational changes at institution and department level. We intended to use these categories to capture the diversity and complexity in institutional changes within vocational colleges.

Sociological studies focus on conflict and complementarity in institutional missions and functions, in order to understand process, consequence, and reason for organizational change (Bailey & Averianova, 1998; Bailey & Morest, 2004; Brint & Karabel, 1989; Dougherty, 1994; Karabel, 1972). Our study drew heavily from this literature and intended to explain why organizational change in occurred.

We analyzed interview data, institution and government document data, and student survey data with the help of the aforementioned analytical frameworks. Interview and document data were coded based on a category developed from Levin (2000) and Levy and Merry (1986)'s work. Based on the pattern coding, we further conducted content analysis and thematic analysis. The resulted patterns and themes were used to describe and explain the process and reasons for mission and organizational change.

3. Findings

3.1 Mission Shift

This study argues that vocational colleges are experiencing transformations at both macro- and micro-level. At the macro-level, vocational colleges are transforming from social institution to industry under the neo-liberal argument for efficiency and economizing in higher education production (Gumport, 2000).

Vocational colleges gradually divert from their original function of opening college access by offering academic and occupational education at college level, and acquire a new function of enhancing core competency for labor force. Majority of college leaders, faculty and administrators unconditionally embraced this instrumentalism view of vocational colleges. The consensus was reached soon after the State Council issued its opinion on promoting employability in 2005.

To match this new function, vocational colleges had to adjust their mission from promoting higher learning in vocational fields to enhancing employability in labor market (Knight & Yorke, 2003; Kruss, 2004). Figure 1 illustrates the condition and process of mission shift in vocational colleges.

{Figure 1 inserted here}

The change started with the alternation of the perception of higher education institution. The conventional view takes universities and colleges as institutions for higher learning with a relatively indirect link with market. The major goal of higher education institution is to help students mastering a body of knowledge in specific discipline (Morley, 2001). However, the emergence of global competition and the accountability movement force vocational colleges to become institutions for enhancing employability and build direct connections with market. Specifically, facing the diminishing public funding, higher education institutions tend to increase associations and connections with the private sector (Slaughter & Leslie., 1997). The institution-industry connection helps shifting the core business of vocational colleges to helping individuals process a set of core skills or competencies with market relevance. This shift is unavoidable in the sense that vocational colleges have to win legitimacy and support from key stakeholders in the globalized environment.

College president and middle-level administrators often mentioned the way to change their marginalized and inferior position in tertiary education hierarchy was to adopt employability as their new mission and became a new type of higher education institution. This new image of employability-enhancing institution aimed at helping vocational colleges attracting enrollment, bringing more contract-based training, and wining government financial and political support at the time of heated resource competition. Many chairs and faculty members believed that their only chance to survive was to become more vocational, more employment-orientated, and more

responsive to market and state needs. In summary, vocational colleges should focus on increasing individual employability through making direct connection with market.

3.2 Organizational Change

At the micro-level, Our analysis indicates that explicit changes have occurred in organizational action and outcome (Levy & Merry, 1986), in terms of significant changes in institution mission and purpose (program goals, program development, curriculum development), culture (program goals, curriculum development, dominant pedagogy, faculty development), and functional process (dominant pedagogy, faculty development, and internal management). Table 1 summarizes the key organizational changes at department level.

{Table 1: inserted here}

Program goal

Majority of departments claimed that their program goal was to cultivating a generation of high-skilled workers with high competence, instead of nurturing social elite in vocational field as traditionally defined in China. Several observations support this statement. Department's mission statements often highlighted the importance of acquiring applied skills in major field, high competence in work place, and professional ethics. In addition, job options for vocational college graduates were mainly semi-professional or non-professional jobs. The targeted employment clusters imply that institutions believe their students will occupy the lower-end of occupational spectrum in service and industry sector.

The reasons behind the program goal engineering are mostly instrumental. Chairs and faculty mentioned that to be successful in the global competition, individuals need to acquire advanced applied skills and the state need to train a labor force with high competence. Hence, it was the duty of vocational colleges to take the lead in meeting these needs and fill the market niche in vocational education and training. One faculty claimed, "We offer whatever the society needs, the customers need, the industry needs". It also reflected vocational colleges' hope of gaining legitimacy as higher education institution with a unique mission.

Program Development

In terms of program development and revision, most departments replied that their criterion was to achieve seamless integration between program and industry and the state. In other word, all programs were added or eliminated by their market or policy relevance, and the degree to which they could contribute to institution-industry or institution-government collaboration.

It is evident that most departments worked very closely with industry and government agency regarding program development. They responded to current or anticipated market and state needs by adjusting program offering. For instance, industry leaders or government agency representatives held positions in program review committees and had substantial influence in program development. Some new major areas were actually created under the request of government and industry. Furthermore, the more marketable majors also received more favorable policies and additional resources.

By adjusting program offerings based on industry and state demand, vocational colleges built direct and generic links with market and government. These connections were expected to generate extra revenues for institutional development. In addition, institution-industry collaboration was a critical factor for enhancing department competitiveness or even leading the development of industry. It is believed that programs became more responsive, flexible, and even cheaper through such collaborations.

Curriculum Development

Vocational colleges reached the consensus that they could create a scientific curriculum system by focusing on employability as their new curriculum goal. Based on the analysis of curriculum plans of 22 programs in six departments, we identify a trend of coupling of curriculum, competency and employment at department level. Figure 2 describes the transformation process of curriculum reorganization.

{Figure 2 inserted here}

Curriculum development in most departments usually included three stages. Employment position was the starting point of curriculum development. Based on selected employment positions, departments outlined the employment related core competencies and skills. In order to help students acquiring these competencies and skills, departments adjusted their curriculum correspondingly. As a result, curriculum content and arrangement were connected to future employment through the concept of core skills or competencies. This process contradicts the conventional way of curriculum design where knowledge occupies the center position and curriculum arrangement follows.

Often time, departments adopted current industry or occupation standards as their curriculum standards. Furthermore, majority of programs condensed or integrated their general education courses and expanded their occupational courses ¹². Some departments even simplified the content of foundation course to suit the needs of requirement of specific job position. Our interviewees generally agreed that each department had its unique definition of core ability, core competency, and professional technique. Furthermore, these definitions were closely related to employment position clusters. The purpose of embracing employability as curriculum goal is to define the unique mission of vocational higher education institutions and earning support from the state, business, and students. In reality, these explanations serve the purpose of legitimizing industry and state intervention in curriculum development.

Dominant Pedagogy

The dominant pedagogy in most departments clustered around work-based learning and mandated internship. Particularly, we observe that most departments had mandated work-based learning not only in their required and selective courses in major areas, also in their general education courses. For instance, work-based learning usually occupied 45% of classroom instruction time. To fulfill this requirement, majority of departments had established their on-campus labs or training centers imitating the real working environment. Faculty members also mentioned that institutions encouraged them using the module approach for teaching, where several courses related to one specific production process were clustered together and offered in same course module.

¹² General education courses account for 36.4% of total credits, vocational courses account for 63.6%; only 27% of total credits are required general education courses for math, English, computer, and humanities.

The most striking part in vocational college pedagogy was the extensive use of internship. In general, a student had to participate in four types of internship program before graduation ¹³. During the graduation internship period, students worked as full-time employees and earned minimum wages. Another prevalent practice was to measure student learning outcomes by the relevance to employability. Instead of having independent exams for learning, most departments relied on occupational or professional certificate exams for student learning evaluation and employability assessment¹⁴.

These changes in pedagogy reflect institution's intension to closely match teaching and learning with industry standards, in order to realize seamless integration of learning and employment. College educational process becomes subordinated to the preference of the market and the state. The pedagogical changes actually legitimize industry's and government's intervention in teaching and learning.

Faculty Development

The stated goal for faculty development was to crafting a group of capable faculty with dual qualifications or competencies. It implied that vocational institutions required faculty not only have a master's degree in major area, but also have working experiences in industry or hold occupational certificates. Industry-internship was mandated for faculty at all ranks. Many programs required their faculty members to work 15 to 60 days as full-time employees in industry during winter or summer break. Other departments implemented mandatory field internship as the induction program for new faculty. Almost all departments used industry training as the major method for professional development. The underlying assumption was that industry practice and now-how were the critical sources of core competencies and professional skills. By taking industry-internship, faculty can improve their capacity in teaching and research, as well as increasing their ability for educating future professionals.

It was typical to find an extensive use of adjunct faculty in classroom teaching and work-based learning process. On the one hand, increasing the size of adjunct

¹³ Curriculum-based internship in labs or training centers was the most common form for freshmen. Starting from the second year, most students were assigned to basic and advanced internship in major areas. The advanced internship in major areas was often supervised by faculty. Finally, all students had to take graduate internship in out-of-school working environment for 6 to 10 months.

¹⁴ 90% to 100% of graduates having middle-level skill certificates; 100% graduated with two skill certificates in major or related areas.

faculty is a department's strategy to fulfill government requirement (State Council., 2005a, 2007b); on the other hand, it is a tool to deal with budget cut and leverage resources from business and government. Last but not least important, we observe vocational college faculty took on multiple and sometimes conflicting roles, including classroom instructor, market analyst, intern supervisor, researcher, and administrator. In summary, we observe a destruction of a professional faculty class in vocational colleges by intensive using of adjunct faculty, devaluing academic degrees, and overpricing industry working experience.

Internal Management

It was obvious that vocational colleges were introducing standardization and economizing in academic affairs and non-academic management. For instance, one college had implemented four types of standardization to formalize program development, curriculum design, internship arrangement, personnel management, and budgeting and accounting. This new trend of managerialism was considered a necessary evil to achieve efficiency and maintain education quality.

One of the major innovations in internal management is the decentralization of human resource system. At present, department chairs had major control over faculty hiring and deployment. In addition, the personnel system became much more flexible than ever. The new practice further deconstructs the collegial atmosphere since faculty members are treated as disposable commodities, rather than critical participants in academic community.

The last observation related to the new culture of team work and internal competition. Many chairs emphasized the importance of motivating faculty to participate in team work for curriculum development, joint research, and internship supervising. Vocational college also changed incentive structure by introducing internal competition. One vocational college introduced the project-based competitive budgeting for research and program/curriculum innovation.

4. Vocational Institution in Global Environment

4.1 Why change?

There are several lines of discourse can potentially explain why Chinese

vocational colleges changed their missions and organizational practices. Our analysis begins with the sociological explanation of the conflict and the complementarity in community college missions. Starting from Clark's (1960) critics on the "cooling-out" function of community colleges, earlier literature put a great emphasis on class struggle and mission conflict. Karabel and his fellow researchers criticized community colleges for being diverted from their original academic education and transfer mission and becoming overwhelmingly vocationalized under the pressure of the market (Brint & Karabel, 1989; Dougherty, 1994; Karabel, 1972). The conflict theorists highlighted both environmental changes and the institution agency's reactions to change as the drives for institution's mission shift.

However, later analyses hold a more benevolent view of mission change. Scholars highlighted that community colleges had adopted multiple missions which were complementary rather than incompatible (Bailey & Averianova, 1998). Due to fiscal pressure, majority of institutions had taken on additional missions through vertical and horizontal expansion, in order to generate revenue and address the interests of key stakeholders such as industry, government, and students (Bailey & Morest, 2004). The complementary argument takes a more instrumental view of organizational change, that is, mission expansion occurs because institutions have to constantly search for revenue. Scholars also take mission expansion as a way of economizing—to achieve economy of scope by changing the service mix (Bailey & Averianova, 1998).

Both arguments are basically the variations of impact-response model where institutions react to changes in their environment. This study argues that Chinese vocational colleges have to adopt employability as their new mission, both as a reaction to environmental change and as a way of economizing and gaining legitimacy.

Vocational colleges take on the new mission as a response to the emergence of global economy and the notion of employment crisis. Both Levin (2000) and Morley (2001) pointed out that the discourse of globalization had fundamentally changed the economic, political, and social environment for higher education institutions. Currently, the global economic competition has evolved into global educational competition. The rhetoric implies the competition for knowledge production and

acquisition has evolved into the competition for production and acquisition of core competency. At this critical time, higher education institutions are taken as the new engine for the knowledge-based economy in the global environment (Slaughter & Leslie., 1997). As part of the tertiary education sector, vocational colleges also have to take actions to deal with the national imperative, in this case, the employment crisis of college graduates.

Based on its relative advantage in occupational education, vocational colleges realize that they can make a unique contribution to the global educational competition by becoming employability-enhancing institutions. It is clear that employability is the center of core competency and recent labor market policies (Kruss, 2004; McQuaid & Lindsay, 2005). By integrating employability as their new mission, vocational colleges create a win-win situation¹⁵.

Moreover, vocational colleges embrace employability as a way of economizing and legitimizing due to substantial changes in relations among institution, the state, and the market. The traditional triangle between institution, the state, and the market is twisted today. For instance, the connection between vocational colleges and the market becomes explicit, direct, and closer. The notion of "of the market, by the market and for the market" can be found easily in institution's mission statement, program design, curriculum and pedagogy statement, and conversations with faculty and administrators. Under this notion, vocational colleges have built direct connections with the market in many forms. By focusing on promoting employability, vocational institutions legitimize their presence as higher education institutions which are responsive to market needs and can enhance individual employability efficiently.

What is more intriguing is the changing association between the state and vocational colleges. From their beginning, vocational colleges served the state's political agenda by producing occupational professionals for the planning economy. Later, vocational institutions worked for the state economic agenda and the interests of capital by producing high skilled labor. Although the share of budgetary appropriation in total institution revenue has been declining, government initiated

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¹⁵ On the one hand, the state and the industry acquire highly competent labor force which they desperately need for global competition. On the other hand, vocational institutions fulfill their duty in global educational competition, strengthen their position as public higher education institution, and generate additional revenue from taking on a new mission.

many funded mandates and unfunded mandates in order to maintaining its control over vocational institutions (Ma & Guo, 2009; State Council., 2005a, 2007b).

At present, college employment and employability is on the top of government agenda. Therefore, by taking employability as new mission, vocational colleges gain additional funding and favorable policies from the state. As a result, vocational institutions shift their legitimacy basis from being the enrollment-absorbing institutions in late 1990 to being employability-enhancing organizations in late 2000s.

4.2 Consequences of Change

Although this study doesn't intend to judge the value of organizational changes in vocational colleges, it raises one potential consequence of mission shift. There is a possibility that Chinese vocational colleges will inevitably degenerate into advanced pre-service training organizations.

The hypothesis is built on the fact that vocational higher education institutions have adopted a decontextualized definition of employability. Prior literature points out that the prevalent concept of employability is disembodied and ignored gender, social class, ethnicity, and affective domain. In addition, it overlooks material and attitudinal barriers (Morley, 2001). It is argued that the narrowly defined employability only focusing on the supply-side of the market. The operational definition often overlooks personal circumstances (like household circumstances, work culture, access to resources) and demand-side factors (such as labor market factors, macroeconomic factors, vacancy characteristics, recruitment) (McQuaid & Lindsay, 2005).

Unlike their western counterparts, Chinese vocational colleges indeed pay attention to the demand-side factors when using this definition of employability. Unfortunately, when they interact with the market and the industry, vocational colleges overwhelmingly emphasize on developing employment-specific core competency and getting employment in specific occupations. As a result, vocational higher education in its present form may greatly increase individual's employability in a limited area and promote one's likelihood of being hired in a narrowly defined area of job positions. In other word, college graduates have a very high probability of being employed in one or two positions they are trained for, but an extremely low

change of finding jobs in other positions.

In the economic terminology, vocational college education increases one's accumulation of specific human capital, instead of general human capital (Becker, 1975). However, the conventional economic thinking suggests vocational colleges should focus on increasing individual's general human capital in academic and occupational field, and leave the specific human capital provision to employers through on-the-job training. This is largely due to the fact that general human capital is transferable and specific human capital is attached to specific employment positions. Because specific human capital is not transferable, it usually has high value for specific employers and low value in the outside labor market.

Therefore, only employers have the incentive to provide job-specific competencies. Providing training for specific human capital is a very risky option for vocational colleges since they cannot guarantee employment for their graduates. Only by making stable and reinforceable partnership with the industry, can vocational colleges afford to provide training for job-specific competencies and skills. However, once vocational institutions get insured by making explicit partnership with industry, they become indifferent from other for-profit training providers. The only difference is that the employers are front-loading their pre-service and in-service training to vocational colleges at non-competitive price. In return, vocational colleges secure their funding and sometimes employment positions for their graduates.

We argue that by adhering to a narrowly defined concept of employability, Chinese vocational colleges are running the risk of degenerating into employment training organizations. The validity of this argument will be explored and tested by our future studies.

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Reference

Bailey, T., & Averianova, I. E. (1998). *Multiple missions of community colleges: Conflicting or complimentary?* (No. Brief No. 1). New York, NY: Community College Research Center, Teachers College, Columbia University.

Bailey, T., & Morest, V. S. (2004). The organizational efficiency of multiple missions for community colleges. New York, NY: Community College Research Center.

Bao, W. (2007). Research on revenue generation of higher education institution in China after enrollment expansion. *Research in Educational Development 13*, 63-68.

Becker, G. S. (1975). *Human capital: A theoretical and empirical analysis*. New York: National Bureau of Economic Research.

Brint, S. G., & Karabel, J. B. (1989). *The Diverted Dream: Community College and the Promise of Educational Opportunity in America*, 1900-1985. New York, NY: Oxford University Press, USA.

C. Cindy Fan, Yasheng Huang, Daniel A. Bell, Albert Park, & Loren Brandt. (2010, March 7, 2010). Educated and Fearing the Future in China. *New York Times*.

China Ministry of Education. (2006a). MOE's opinion on comprehensively improving the education quality in vocational higher education. Retrieved. from.

China Ministry of Education. (2006b). *Opinion on implementing the construction of national exemplary vocational higher education institution*. Retrieved. from.

Clark, B. R. (1960). The "cooling out" function in higher education. *American Journal of Sociology*, 65(6), 569-576.

Dougherty, K. (1994). The contradictory college: The conflicting origins, impacts, and futures of the community college. Albany: State University of New York Press.

Gerber, T. P., & Schaefer, D. R. (2004). Horizontal stratification of higher education in Russia: Trends, gender differences, and labor market outcomes. *Sociology of Education*, 77(1), 32-59.

Gumport, P. (2000). Academic restructuring: Organizational change and institutional imperatives. *Higher Education*, *39*(1), 67-91.

Karabel, J. B. (1972). Community colleges and social stratification: Submerged class conflict in American higher education. *Harvard Education Review*, 42(4), 521-562.

Knight, P. T., & Yorke, M. (2003). Employability and good learning in higher education. *Teaching in Higher Education*, 8(1), 3-16.

Kruss, G. (2004). Employment and employability: Expectations of higher education responsiveness in South Africa. *Journal of Education Policy*, 19(6), 673-689.

Levin, J. S. (2000). The revised institution: The community college mission at the end of the Twentieth Century. *Community College Review*, 28(2), 1-25.

Levy, A., & Merry, U. (1986). Organizational transformation. New York: Praeger.

Luo, R., & Guo, J. A. (2005). College graduate employment crisis and solutions. *Jing Ji Shi*, 2005(1108-110).

Ma, S., & Guo, Y. (2009). *Chinese vocational higher education as historical choice*. Beijing: Higher Education Press.

McQuaid, R. W., & Lindsay, C. (2005). The concept of employability. *Urban Studies*, 42(2), 97-219.

Morley, L. (2001). Producing new workers: Quality, equality and employability in higher education. *Quality in Higher Education*, 7(2), 131-138.

MYCOS College Graduate Employment Research Center. (2009). 2009 Chinese college graduate employment Report. Beijing: Social Science Document Press.

Shen, Z. C., & Yan, F. Q. (2006). Impact of social stratification on education stratification: Analysis of family background of students in private colleges in Xi'an *Peking University Education Review*, 2(11), 72-84.

Slaughter, S., & Leslie., L. (1997). Academic capitalism: Politics, policies, and the entrepreneurial university. Baltimore: The Johns Hopkins University Press.

State Council. (2005a). Opinion on accelerating the development of voational education. Retrieved from

State Council. (2005b). Opinion on guiding and encouraging college graduates to find employment in non-professional occupations Retrieved. from.

State Council. (2007a). Opinion on improving college graduate employment service in 2007. Retrieved. from.

State Council. (2007b). Opinions on Establishing and Improving the Policies for Subsidizing Students from Families with Financial Difficulties in Regular Postsecondary Institutions,

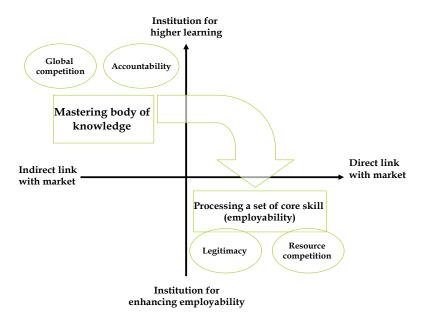
Pos-secondary Vocational institutions, and Secondary Vocational Schools. Retrieved. from.

State Council. (2009). *Notice on college graduates' employment internship program 2009-2011*. Retrieved. from.

Zeng, X. Q. (2004). Job Seeking of College Graduates in Employment Environment under Transition. *Jing Ji Yan Jiu*, 2004(6), 87-95.

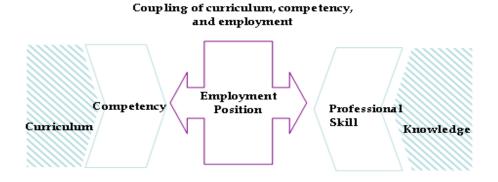
Appendix

Figure 1: Vocational College Mission Shift



Source: Authors' analysis based on interview and document analysis.

Figure 2: Coupling of Curriculum, Competency, and Employment



Source: Authors' analysis based on interview and document analysis.

Table 1: Summary of Key Organizational Changes at Department Level

Area of Change	Content of Change	Observation	Determinant	Analysis	
Program goal	Cultivating a generation of high-skilled workers with high competence	Department and major's mission statements highlight the importance of acquiring applied skills, high competence and professional ethics; Job options are mainly semi-professional or non-professional jobs	Individuals need to acquire advanced applied skills; The state has to train a labor force with high competence	To gain legitimacy as higher education institution;	
Program development	Seamless integration between program and industry or state	Work closely with industry and government; Adding and eliminating programs as response to current and anticipated market or state needs; Empowering marketable majors by favorable resource allocation	Building direct link with market and serve market needs better by working together with business	Generating resources from business and government; Increasing institution competitiveness;	
Curricul um development	Employabili ty is the new curriculum goal	Module approach links curriculum content to specific competencies required by a cluster of employment positions; Cutting of general education and adding vocational courses; Coupling of curriculum, competency and employment position	Defining the unique mission of vocational higher education institutions; Earning support from the state, business, and students	To legitimize industry and state intervention in curriculum development	
Domina nt pedagogy	mandated internship	Students and their learning outcomes are measured by relevance to employability; Mandating work-based learning or internship in all courses; Dominant role of internship over classroom teaching	learning with industry standards; Realize seamless integration between learning and employment	industry intervention in teaching and learning;	
Faculty development	Crafting a group of capable faculty with dual qualifications or competencies	Extensive use of part-time/adjunct faculty from industry; Mandating dual-qualification (academic and vocational) and diminish the value of academic diploma; Faculty's multiple and conflicting roles	Response to the needs of educating application-oriented professionals; Increasing faculty capacity in teaching and researching	Dealing with limited budget and leveraging resources from business and government;	

Internal management Introducing standardization and economizing in management	Focus on standardization and accountability; Change of incentive structure for faculty and administration; Highly centralized funding system and decentralized personnel system	department-level; Achieve efficiency	Introducing business ethics and entrepreneurship into vocational institutions
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Source: Authors' analysis based on interview and document analysis.

Table A1: Sample Summary

	Depart ment Chair	Fa culty	St udent	Pres ident	Chief Administ rator	Suppo rting Staff
Department A	1	5	6			1
Department B	1	5	5			
Department C	1	5	6			
Department D	1	5	6			1
Department E	1	3	7			
Department F	1	5	7			
Department G	1					
Department H	1					
Institution				2	6	
Total	8	28	37	2	6	2

Source: Authors' summary.