Responses of Universities to the Introduction of Undergraduate Teaching Assessment in China: A Case Study of Ten Universities in Tianjin

ZHANG Yan*

Abstract

In 2008, the Chinese Ministry of Education completed the first round of the *Undergraduate Teaching Assessment on Regular Higher Education Institutions* (UTA). It is necessary and important to examine whether assessment objectives have been realized and what impacts the assessment has had on the development of higher education institutions. Based on the framework developed through reviewing the existing studies of assessment impacts and the field surveys of ten universities in Tianjin Municipality, China, this study analyzed universities' responses to the UTA, in terms of institutional resources development, university management and organizational culture.

The analysis shows that, with the introduction of the UTA, universities improved financial and physical resources, clarified institutional objectives, consolidated institutional regulations and rules, strengthened the internal quality monitoring, and paid more attention to evaluation and the quality of teaching, since all the mentioned aspects are requirements of assessment criteria. However, those changes are more likely to be passive rather than active ones. This study also finds that there appears to be no obvious differences among universities on the dimensions the assessment affected universities, since assessment criteria and standards are same for all universities. However, to what extent the assessment may affect universities shows some differences. Therefore, how the UTA may affect universities and colleges is influenced by assessment design and institutional context.

Key words: quality assurance, teaching assessment, resource development, university management, organizational culture

1. Introduction

Quality has been a central concept in higher education for many decades. In particular, since the mid-1980s, public interest in the quality and standards in higher education has intensified. This change in the emphasis put on higher education is due to a number of factors, including: the expansion and diversification of higher education, public budget-cuts in higher education, the changing

^{*} Doctoral student, Graduate School of International Development, Nagoya University. The author would like to express her sincere thanks to professor Akiyoshi Yonezawa, Professor Aya Okada, and Professor Shoko Yamada for their invaluable advice and continuous support and encouragement. The author gratefully acknowledges the anonymous referees for their comments that have substantially improved the quality of the paper. Thanks also due to Mr. Mark Rebuck for proofreading the paper.

relationship between the state and universities, and increasing market competition in the field of higher education. To assure and enhance quality, especially the quality of teaching, quality assessment as a common approach has been introduced in higher education in various countries.

Since the end of the last century, China has faced the same situation as in many other countries. In 1999, the Chinese Ministry of Education (MOE) made the decision to expand higher education enrollment. Within a few years, the Gross Enrollment Rate (GER) of higher education increased from 9.8% in 1998 to 24.2% in 2009. In China, higher education has moved from the elite to mass stage. However, with the rapid growth in the scale of higher education, quality assurance of the majority of universities has not caught up with the increase in student numbers. Concerns about the quality of higher education have been raised by the government, students and their parents, higher education institutions themselves and the society as a whole.

In 2003, the Higher Education Department of MOE issued a notice, stating that it would conduct an assessment of undergraduate teaching in 592 universities and colleges within 5 years.³ This country-wide assessment was named the *Undergraduate Teaching Assessment on Regular Higher Education Institutions* (hereafter UTA).⁴ The UTA aims at standardizing university management and assuring the quality of undergraduate education. By June, 2008, the MOE had completed the assessment of all public universities in China.⁵ Therefore, it is timely to examine what impacts the UTA has had on universities, and whether the aims of the UTA have been realized. It is also important to investigate assessment impacts in order to contribute to the further improvement of the UTA and the development of universities.

This paper examines the impacts of the introduction of the UTA on universities in China in terms of resource development, university management and organizational culture, and attempts to explore how universities have responded differently to the UTA. China shows a special case that has a more public-oriented and centralized system of higher education than other countries (Gu et al., 2009). By analyzing the impacts of the UTA, this study displays the specialty of external quality assessment of the Chinese case. Based on the elaboration of the changes in the above three aspects after the introduction of the UTA, this paper also discusses how universities respond to the UTA is largely influenced by the assessment design, including assessment criteria and assessment methods, and may be influenced by the specific context of the university as well. This paper finally argues although the current UTA has already had a significant impact on improving educational quality in universities, the assessment itself still needs to be improved. Previous studies (Stensaker, 2003; Harvey & Newton, 2004) showed that external assessment usually fails to assure teaching quality in universities, and the cost is huge. Therefore, universities are better to take responsibilities on assuring teaching quality, and the purpose of external assessment is to encourage universities to fulfill such responsibilities effectively. Moreover, the unified criteria and standards may, to some extent, limit the development of special features of universities, especially in the era of massification of higher education that requires

diversification⁶ of missions among different types of universities and colleges. Therefore, setting different assessment criteria and standards for different types of universities could help universities to meet the various demands.

This research is based on a field survey of ten universities in Tianjin Municipality, China. The survey includes a collection of basic data and self-assessment reports of selected universities, interviews with university actors, i. e. faculty members, managerial staff and students, and questionnaires with them. The paper consists of 5 sections. Section 1 explains the background to the introduction of quality assessment in higher education in the Chinese and international context, focusing on the implementation of the UTA in China. Section 2 summarizes the findings of previous studies on the main impacts of quality assessment on higher education institutions. Section 3 explains the methodology of this paper, including the selection of the research site, the selection of universities and research methods. Section 4 analyzes Chinese universities' response to the UTA. Section 5 is a discussion based on the main findings and the conclusion of this paper.

2. Impacts of Quality Assessment on Institutions

Studies⁷ of impacts of quality assessment in institutions reveal a "mixed picture". There are positive claims that quality assessment increased attention towards teaching and learning and triggered cultural change in the attitudes of institutional faculty (Brennan & Shah, 2000a, b; Minelli *et al.*, 2003; Stensaker, 2003; Harvey, 2006). However, there are also some ambiguous or even negative findings, for example, that money spent on quality assessment outweighs the potential benefits for institutions, and that various kinds of quality assessment have led to greater centralization and bureaucratization in higher education institutions (Stensaker, 2003).

Brennan and Shah (2000a) provided a model for investigating the impacts of quality assessment. They distinguished between impact through rewards, impact through changing institutional policies and structures, and impact through changing cultures. Impacts on rewards are of three kinds: institutional or programme status, institutional income and institutional influence. Assessment impacts on institutional policies and structure include the adjustment of strategic planning, the adjustment of internal organizations of the university, the reform of the curriculum, a fundamental shift in authority from basic units to the administrative center of the institution, etc. The impacts of quality assessment on institutional culture include an increasing attention to a university's function of teaching and evaluation culture. However, they questioned whether the increasing assessment activities and the time devoted to those activities may give rise to a distinctive evaluation culture. They further argued that the nature of the impact was a function of the methods used for the assessment and the national and institutional context of the assessment.

Rosa, et al. (2006: 145-58) showed that, compared to academics, university rectors held more

optimistic views on the positive impacts of quality assessment for institutions. University rectors paid more attention to the results of assessment, while academics were more centered on processes of the assessment. Their study also showed that rectors held more interest in internal management than to actual improvements in the student learning experience, which corroborates the finding of Harvey and Newton (2004: 157), who considered it far from clear that external assessment contributes to teaching and learning.

Stensaker's study (2003) mainly discussed the impact of assessment on teaching and learning and on institutional management and leadership. He found that assessment promoted institutions to put more emphasis on teaching quality through such activities as a more active discussion and cooperation within departments and the clarification of the related responsibilities for improving teaching quality. The assessment impact on institutional management reflects that the decision-making process has become more centralized.

The aforementioned studies explore the impacts of quality assessment from various dimensions; these include the impact through institutional rewards, the impact through institutional policies and structure, the impact on organizational culture, the impact on teaching and learning, and university actors' opinion of assessment impacts. Based on the previous studies, I categorized assessment impacts on institutions into three aspects: resource development, university management and organizational cultures.

Moreover, these studies reveal several common trends regarding the research on the impacts of quality assessment on institutions. The first trend is the thorough analysis of the assessment impacts. The analysis not only involved "visible changes", including the improvement of physical facility, the standardization of rules and principles, and institutional structure change, but also "invisible changes", such as organizational culture. The second trend is the increasing emphasis of impacts on the teaching-learning process. When analyzing assessment impacts, the concern is not only on the realization of "external purposes" of quality assessment, namely to ensure accountability to the public, to inform potential students and employers and to provide information for decision-making, but also on the realization of its "internal purpose", that is the improvement in the quality of higher education service. The third trend is an increasing concern with the comparison of perceptions on assessment impacts among different stakeholders. It has been found that administrators and academics hold different perceptions on assessment impacts. Moreover, students as "consumers" have also been taken into consideration by researchers of quality assessment.

This paper, following the first and third trends, examines both "visible changes" (namely assessment impacts on resource development and university management) and "invisible changes" (namely, assessment impacts on organizational culture), and takes the perception of different university actors (i. e. administrators, academics and students) into consideration. Since the focus of this paper is on the assessment impacts on universities as a whole, the assessment impacts on

teaching and learning will not be dealt with in this paper.

3. Methodology of the Study

I selected Tianjin municipality of China as the research site. Tianjin is one of four municipalities directly under the control of the central government. It is the third largest city in China, an economic center in southern China, and a city of a high level education. Because the location of the universities in cities is more concentrated than those in provinces, it is more feasible to control for other factors such as geographic location. Moreover, Tianjin contains all types of universities within the same city, which makes it convenient to access different types of universities and examine the differences amongst them.

In total, there are 18 public universities in Tianjin. All these universities have experienced the first round of the UTA during the period between 2003 and 2008. I selected 10 of the 18 universities for my study, mainly according to the type of university. In China, universities are divided into four types: national key universities, provincial or municipal key universities, ordinary comprehensive universities and four-year colleges. Regarding the distinction between college and university, a university is constituted of at least three disciplines as main disciplines, while, a college is formed of only one or two disciplines and student body is usually smaller than university. National key universities are those selected for *Project 211*, which is initiated by the MOE and aims to promote a group of higher education institutions, disciplines and majors to meet world class standards by the beginning of the 21st century. There is no official distinction between provincial or municipal key Provincial/municipal key universities refer to those universities and ordinary universities. universities with a comparatively longer history, better performance and higher prestige and receive more support from local government than ordinary universities. The categorization of local key universities and ordinary universities in this study is based on the introduction of universities in their websites.

As shown in Table 1, among the 10 selected universities, 2 are national key universities, 2 are municipal key universities, 3 are ordinary universities and another 3 are four-year colleges. The field surveys were conducted in October–December, 2008, August–October, 2009 and March–April, 2011. I collected basic educational statistic data of all selected universities, including number of students, faculty size, building area, number of computers, number of seats in multimedia rooms, number of books and teaching equipment value. I requested self-assessment report, interviews and questionnaires for the selected universities. Self-assessment reports contain the information of university performance on every assessment criterion (see Table 3). The interview and questionnaire–1 were conducted on managerial staff, faculty members and students, which aim to examine the perception of university actors on the impacts of the UTA. Questionnaire–2 was distributed to the head of the

| Univ. | Evaluated | University | | Surv | ey Methods | | |
|-------|-----------|----------------|------------|-------------|---------------------|---------------------|----------|
| Code | Year | Туре | Basic Data | Self-report | Interview | Q 1 | Q 2 |
| NK-1 | 2007 | 211 University | • | • | • c | • c | • c |
| NK-2 | 2008 | 211 University | • | • | • c | • c | • c |
| K-1 | 2007 | Key University | • | • | a | a | • b |
| K-2 | 2008 | Key University | • | | a | a | b |
| U-1 | 2006 | University | • | • | • a | a | • b |
| U-2 | 2006 | University | • | | • c | a | • c |
| U-3 | 2003 | University | • | • | • a | a | b |
| C-1 | 2004 | College | • | • | a | a | • b |
| C-2 | 2006 | College | • | | a | • c | • b |
| C-3 | 2007 | College | • | | • c | • c | • c |

Table 1 Evaluation Year, University Type and Survey Methods Employed for Selected Universities

Source: according to field surveys conducted in Oct.-Dec., 2008 Aug.-Oct., 2009 and Mar.-Apr., 2011.

Note: Q1=Questionnaire-1 to university staff, faculty and students;

Q2=Questionnaire-2 to the head of the Department of University Affaires.

c=conducted in Mar.-Apr., 2011

Department of University Affairs of selected universities and required them to fill in the detailed changes of institutional managements that caused by the UTA, which aims at collecting more objective information besides information from self-assessment reports.

As shown in Table 2, to the staff and faculty, I distributed 35 sets of questionnaires for University NK-1, NK-2 and C-3 each and 25 sets for each of other seven selected universities. To students, 30 sets of questionnaires were distributed for each of ten selected universities. From the total of 580 sets of questionnaires distributed, 502 respondents replied, of which 99 are faculty members without managerial jobs, 54 are faculty with managerial jobs, 101 are managerial staff, and 248 are students. The response rate was 86.8%. Interviews were conducted with 76 people, of whom 19 are faculty members without managerial jobs, 18 are faculty with managerial jobs, 15 are managerial staff, and 24 are students (see Table 2). All the questionnaire respondents and interviewees had experienced the UTA, so that they were able to identify the changes before and after the UTA.

This study, which aims to understand a comparatively objective view of institutional actors on assessment impacts, surveyed not only senior administrative staff who are the main implementers of the UTA in universities, but also on ordinary managerial staff, faculty members and students. Moreover, staff and faculty samples cover all the age groups of university staff and faculty, including 69 people younger than 30, 95 people between 30 to 39, 49 people between 40 to 49, 33 people of 50-orolder and 8 missing samples. Furthermore, the academic backgrounds of sample staff and faculty members also cover all four main types of disciplines, 97 people major in literature and humanities, 87 people in social sciences, 37 people in natural sciences, 19 people in engineering and 14 missing

a=conducted in Oct.-Dec., 2008; b=conducted in Aug.-Oct., 2009;

| Univ. | | Questic | nnaire-1 | | | Inter | view | |
|-----------|----|---------|----------|-----|----|-------|------|----|
| code | 1) | 2 | 3 | 4 | 1) | 2 | 3 | 4 |
| NK-1 | 16 | 7 | 11 | 28 | 3 | 1 | 1 | 2 |
| NK-2 | 12 | 4 | 14 | 24 | 2 | 1 | 2 | 2 |
| K-1 | 12 | 4 | 6 | 26 | 2 | 1 | 2 | 2 |
| K-2 | 6 | 8 | 8 | 27 | 3 | 2 | 0 | 3 |
| U-1 | 8 | 6 | 9 | 24 | 1 | 2 | 2 | 2 |
| U-2 | 10 | 4 | 8 | 23 | 2 | 1 | 2 | 2 |
| U-3 | 6 | 5 | 12 | 25 | 1 | 3 | 1 | 2 |
| C-1 | 8 | 6 | 16 | 29 | 1 | 4 | 2 | 4 |
| C-2 | 11 | 7 | 7 | 22 | 2 | 1 | 2 | 3 |
| C-3 | 10 | 3 | 10 | 20 | 2 | 2 | 1 | 2 |
| Total No. | 99 | 54 | 101 | 248 | 19 | 18 | 15 | 24 |

Table 2 The Number of Respondents to Questionnaire-1 and Interview

Source: according to field surveys conducted in Oct.-Dec., 2008 and Mar.-Apr., 2011.

Notes: ① = Faculty member without administrative work;

samples. Student samples also cover all four main types of disciplines, 91 students in literature and humanities, 111 students in social sciences, 26 students in natural sciences and 20 students in engineering.

The existing studies pointed out that there are obvious methodological problems attached to studying the impacts of quality assessment in higher education. The main problems include that it is difficult to isolate the impacts of a particular quality assessment process from many other external and internal measures that higher education institutions react upon (Stensaker, 2003; Harvey & Newton, 2004; Rosa, et al., 2006). The potential political and economic returns of being a "good implementer" of quality assessment can make the measurement of assessment impacts overly optimistic (Stensaker, 2003). In addition, the measurement of assessment impacts is more often based on impression than systematic analysis (Harvey, 2006).

As explained above, to separate the impacts of the UTA from other institutional changes, I selected samples of questionnaire respondents and conducted interviews with those who had experienced the UTA, so that they could identify the changes caused by the UTA. In order to balance the possibly over optimistic view on assessment impacts by administrative staff, faculty members and students were also surveyed. To overcome the third measurement problem, I applied categories of assessment impacts that were identified from reviewed literatures as the framework of my study. I then analyzed information obtained from self-assessment reports of selected universities and what actually had changed in universities; rather than only relying on impressions of university actors.

^{2 =} Faculty member with administrative work;

③ = Administrative staff;

^{4 =} Student.

4. Quality Assessment of Higher Education Institutions in China

4.1 Basic Features of the UTA

In 2003, the UTA was formally introduced in all regular higher education institutions that provide a four-or-five-year undergraduate education. This was initiated by the MOE and was designed to be conducted every five years. The implementation of the UTA was mainly for the purpose of assuring and improving the quality of undergraduate teaching which had declined due to the rapid expansion of higher education enrollment since 1999.

The procedure of implementing the UTA includes three main parts: self-assessment, external peer visit and final report. Firstly, universities are required to conduct a self-assessment and complete a report according to a unified assessment criterion system (see Table 3). Secondly, an external expert group visits and evaluates universities based on the same criterion system. Finally, the external visit group submits final reports to the MOE, including the assessment result (excellent, good, pass, or failure) of the assessed institutions and provides suggestions for them. It is so designed that universities that fail in the UTA will be required to stop enrolling students and improve their situation. When they are able to meet the standard of the UTA, they are allowed to re-enroll students.

Table 3 The Assessment Criteria Used in the UTA

| First-layer Criterion | Second-layer Criterion |
|-------------------------------------|---|
| 1. Guideline of Running Institution | 1.1 Institutional objectives1.2 Educational ideology of institution |
| 2. Faculty | 2.1 Faculty structure 2.2 Lecturer |
| 3 Teaching Facilities | 3.1 Physical facilities 3.2 Educational expenditure |
| 4. Program & Curriculum | 4.1 Program 4.2 Curriculum 4.3 Practical education |
| 5. Educational Management | 5.1 Managerial staff 5.2 Quality control |
| 6. Campus Atmosphere | 6.1 Academics' manner 6.2 Learning atmosphere |
| 7. Teaching Effectiveness | 7.1 Basic knowledge and capability of students 7.2 Graduate thesis and graduate design 7.3 Students' moral 7.4 Physical education 7.5 Institutional reputation 7.6 Employment of graduates |

Source: MOE. (2004). The Scheme of Undergraduate Teaching Assessment of Regular Higher Education Institutions.

Note: Criteria in bold font mean main criteria.

By June 2008, the MOE had completed the first round UTA. Amongst 589 institutions evaluated between 2003 and 2008, 424 institutions were evaluated as excellent, accounting for 72% of the total; 144 institutions were assessed as good (24%); 21 institutions were evaluated as passed (4%); no institution failed.

4.2 Assessment Impacts on Universities

4.2.1 Development of financial resources

Financial resource development is considered to reflect directly on the change of institutional expenditure and indirectly on the development of institutional physical facilities. In the case of China's UTA, both institutional expenditure and physical facilities are listed as main criteria (see Table 3). The MOE also draws up the criteria list of the criteria and sets the standards of each criterion. Therefore, after the introduction of the UTA, in order to meet the minimum requirements, improve the situation and achieve a good assessment result, universities put more investment into those aspects.

The following criteria are used for analysis; 1) per-student value of four-kind expenditure (see notes of Table 4), 2) per-student number of building area, 3) per-hundred-student number of computers, 4) per-hundred-student number of seats in multimedia rooms, 5) per-student number of books, and 6) per-student value of teaching equipment. Table 4 shows that, during the first round of the UTA from 2003 to 2008, universities increased the expenditure on teaching activities and improved the situation of most aspects of teaching facilities required by the MOE, although the content and extent of improvement may be different depending on the university.

As shown in Table 4, national key universities, local key universities and four-year colleges had better performance on the development of physical facilities and educational expenditure than non-key universities, after the introduction of the UTA. Possible reasons to explain the situation are that in order to achieve the standards and perform better than other colleges, four-year colleges endeavored to improve institutional physical facilities. The UTA is an external pressure for them. For national and local key universities, even though the UTA had not been conducted, they would have still improved their physical facilities to maintain a considerably high educational level, which is due to their own initiatives of pursuing high quality. However, non-key universities neither feel pressures of UTA, nor undertake such initiatives.

However, University U-1 is likely to be an exception for non-key universities. It improved the situation of all the six criteria, and it is the only university that developed all aspects. University U-1 could be considered as a special case. It was just promoted from the status of four-year college to university in 2007. Receiving the result of excellence of the UTA is a requirement for the promotion; therefore, University U-1 must have taken the UTA more seriously than other colleges and universities.

| | | | - I ny sieur ruen | | | |
|-------|-----------|-----------|-------------------|----------|-----------|---------------------------------|
| Univ. | Building | Computer | Multimedia | Books | Teaching | Four-kind |
| Code | Area (m²) | (No. of | Room (No. | (No. of | Equipment | Expenditure |
| | | Computer) | of Room) | Book) | (RMB) | (RMB) |
| NK-1 | 49.6 | 21.0 | 23.6 | 151.9 | 19131.0 | 1517.3 ^d |
| NK-1 | (13.3%) | (74.3%) | (339.8%) | (-3.4%) | (44.6%) | (6.3%) |
| NK-2 | 53.8 | 24.0 | 89.7 | 71.2 | 43666.4 | 1267.6° |
| NK-2 | (-40.1%) | (30.0%) | (-2.1%) | (117.7%) | (-44.0%) | (4.4%) |
| K-1 | 50.0 | 21.5 | 36.4 | 128.6 | 5676.1 | 1149.6° |
| V-1 | (-22.6%) | (39.5%) | (85.4%) | (2.2%) | (41.3%) | (26.2%) |
| IZ O | 21.5 | 21.2 | 36.6 | 76.4 | 7151.4 | $1444.2^{\scriptscriptstyle d}$ |
| K-2 | (49.8%) | (-7.5%) | (91.3%) | (20.7%) | (41.5%) | (8.7%) |
| U-1 | 30.7 | 13.4 | 59.9 | 48.6 | 4637.0 | 907.3b |
| 0-1 | (19.9%) | (120.9%) | (64.8%) | (208.0%) | (115.9%) | (27.6%) |
| 11.0 | 32.0 | 16.9 | 49.0 | 79.5 | 8776.0 | 965.2° |
| U-2 | (-5.3%) | (56.8%) | (82.7%) | (3.1%) | (9.4%) | (26.7%) |
| 11.0 | 34.9 | 9.6 | 40.7 | 72.5 | 4265.4 | 868.5^{a} |
| U-3 | (-5.7%) | (218.8%) | (12.8%) | (-8.1%) | (8.4%) | (27.9%) |
| C-1 | 32.0 | 8.7 | 51.9 | 69.7 | 6190.3 | 1049.5ª |
| C-1 | (9.1%) | (127.6%) | (64.4%) | (70.0%) | (8.3%) | (10.4%) |
| C 0 | 33.4 | 18.2 | 42.2 | 49.3 | 21068.2 | 1118.5^{b} |
| C-2 | (-26.0%) | (25.8%) | (57.6%) | (34.7%) | (-31.5%) | (29.2%) |
| C 0 | 29.2 | 18.2 | 43.3 | 38.7 | 4855.3 | $1002.4^{\scriptscriptstyle d}$ |
| C-3 | (7.2%) | (22.5%) | (106.7%) | (78.8%) | (69.5%) | (16.2%) |

Table 4 The Development of Physical Facilities and Educational Expenditure

Source: based on Tianjin Year Book of Educational Statistics 2003-2008.

Notes: The four-kind educational expenditure refers to expenditures on professional work, business trip, maintenance of sports space and facilities, and maintenance of educational facilities.

The percentage in parentheses indicate changes in institutional facilities from 2003/2004 to 2008/2009, and the numbers more than 10% are in bold font.

Table 4 also shows that during the period from 2003 to 2008, computers and multimedia rooms demonstrated the most rapid improvement. It is partly because these two are the new criteria, which have never been required by the MOE before; that institutions make more of them than those old criteria, like books and institutional building. And partly it may be due to the urgent need for advanced teaching technology, such as using PPT, video, etc.

Moreover, it appears how universities respond to the UTA is influenced by their institutional context. University U-1, as explained above, is a good example. When the development goals of

The data on four-kind expenditure is from self-assessment reports of selected universities.

[&]quot;a" the 2000/01 data and the rate of change from 2000/01 to 2002/03;

[&]quot;b" the 2001/02 data and the rate of change from 2001/02 to 2003/04;

[&]quot;c" the 2003/04 data and the rate of change from 2003/04 to 2005/06;

[&]quot;d" the 2004/05 data and the rate of change from 2004/05 to 2006/07;

[&]quot;e" the 2005/06 data and the rate of change from 2005/06 to 2007/08.

institutions coincide with the requirement of the assessment, the institutions will respond more actively. Another two cases are Universities NK-2 and C-2. University NK-2, as a national level key university, had the worst improvement among all selected cases. Of six criteria, only two increased after the introduction of the UTA. However, although some criteria decreased a lot, such as building and teaching equipment, they still kept a high level among all. Since most of its facilities are the best originally, like building area, computer, multimedia room and teaching equipment, University NK-2 invested more on books, which is a little lagging behind.

University C-2 shows a large drop in the amount of per-student teaching equipment, but a still higher amount than other universities, even than some key universities. As explained by the head of the Department of University Affairs of University C-2, due to the rapid increase in enrollment and comparatively limited resources in recent years, the university needed to distribute more resources to other important aspects to maintain the overall quality. In fact, due to the budget constraints, all institutions attempted to make up the aspects that are not good enough by increasing the investment on those aspects and keeping the investment level unchanged on the aspects that are relatively advanced. Therefore, how institutions respond to the assessment depends on their traditional advantages and disadvantages, namely their own institutional context.

It may be argued that physical facilities of universities would have improved even without the introduction of the UTA. The former dean of a school in University C-1 pointed out the role of the UTA in the improvement of university teaching facilities. "If the UTA had not been conducted, the physical facilities of universities would have still improved gradually over time, but the improvements of university facilities would have taken longer. Now, with an increase of resources for the assessment, such as more funding, there has been a rapid improvement in the physical facilities. The UTA encouraged local government, related educational departments and universities to increase financial investment in the physical facility of universities, resolving the problem in a short time. The UTA played the role of a catalyst in bringing about the change." However, what the interviewee mentioned does not mean universities are able to get additional funding for the UTA. In fact, local governments just allocate budgets at one time, which they planned to distribute separately over several years, so that universities could have enough budgets to prepare for the UTA.

Therefore, in the context of China, the UTA just influences the resource allocation within universities, namely universities increase the expenditure on teaching and education rather than on other institutional tasks like researches and social services. It is different from the cases of some other countries, where the quality assessment may have an impact on external funding for universities. In central and eastern Europe, accreditation is a prerequisite for state funding. In the United States, accreditation brings rewards in the market place (Brennan & Shah, 2000a). The fact that the UTA in China has no impact on the distribution of external resource is mainly because the assessment results are not linked to the decision-making of government budget allocation.

4.2.2 Improvement of university management

In the context of China, the improvement of university management after the introduction of UTA is considered to reflect the clarity of the university's objectives, the completion of various regulations and rules, and the improvement of internal quality monitoring. In the case of China's UTA, university objectives, regulations and rules and internal quality monitoring are criteria of criterion 1.1 and criterion 5.2 (see Table 3). Therefore, in order to improve the situation and achieve a good result of the UTA, universities have made more effort on the improvement of those aspects, since the introduction of the UTA.

Firstly, by preparing for the UTA, all universities clarified their institutional objectives as displayed in Table 5, since they were required to have a clear statement of their objectives in self-assessment reports. Institutional objectives include institutional type (i. e. research university or teaching university) and institutional status (i. e. the balance between undergraduate and graduate education), and the structure of disciplines and majors. The universities were also required to state what kind of human resources and what kind of needs they aim to foster.

To prepare for the UTA, in all cases, universities hold staff meetings to discuss what objectives their universities should set. Meetings were firstly conducted at the department level to collect ideas from faculty of every basic unit. Then, the collected ideas are discussed at institutional level. During the processes of participating in discussion, university staff and faculty members gained a clearer and deeper understanding of their university's objectives.

Concrete examples of how the UTA encourages universities to rethink and improve their objectives emerged in interviews with the staff and faculty members. Below is one typical response: "Before the UTA, my university was going to develop from a normal university to comprehensive one, but by participating in the UTA, the feature of university, namely special education for training teachers was re-emphasized and institutional orientations were clarified10" (Staff/faculty-interviewee of University K-1). If the university developed to a comprehensive university, it would have to weaken the special education for training teachers, which is just the advantage of the university. If so, the university would lose its advantages, which may hinder its development. A faculty member of University C-1 commented, "Before the UTA, the objectives of our university were not clear; however, by participating in the UTA, our university set an objective of changing from a teaching university into a teaching-research university¹¹". With the modification of institutional objective, the university and its staff and faculty paid more attention to the research than before, including an increased emphasis on applying research outcomes to teaching and encouraging students to participate in research. These typical comments clearly show that the UTA provides an opportunity for institutions to reconsider, adjust and clarify their institutional objectives and functions, although the situation of each university may be different. It is very important for institutions to clearly state their objectives in the period when Chinese higher education is moving from an elite stage to a mass

Table 5 Institutional Objectives of Selected Universities

| Objectives | University NK-1 | University NK-2 | University K-1 | University K-2 | University U-1 |
|---|--|---|---|--|---|
| Institutional Type | research-oriented comprehensive university | research-oriented medical university | teaching-research comprehensive university | teaching university, and changing into teaching-research university gradually | teaching university |
| Institutional Status | give same importance for undergraduate and graduate education, and promote foreign student education, adult education and distance education | give priority to undergraduate education, and promote graduate education, foreign student education and continued medial education | give priority to undergraduate education, and promote graduate education, foreign student education and adult education | give priority to undergraduate education, and promote graduate education | give priority to undergraduate education, and promote graduate education |
| Disciplines & Majors | multi-disciplinary university, covering 12 disciplines and keeping balance of humanity and science | multi-disciplinary university with stress on medical education | multi-disciplinary university with stress on normal education | multi-disciplinary university with stress on engineering | multi-disciplinary university with stress on economics management and engineering |
| Type of Human Resource | cultivate high-level professional human resources with a solid foundation of professional knowledge, high quality, creativity and adaptability | cultivate applied and research medical human resources with a solid foundation of professional knowledge, practical capability and creativity | cultivate human resources with creativity and high quality | cultivate human resources with creativity and practical capability | cultivate compound applied human resources according to the social needs |
| Demands That Institution Aims to Cater to | serve for economic and social development of Tianjin Municipal and the whole country | serve for the development of medical and health field of Tianjin Municipal mainly and the whole country | serve for the basic education and socioeconomic development of Tianjin Municipal main and peripheral areas | serve for the economic, especially light industry and social development of Tianjin Municipal mainly and other areas | serve for the socioeconomic development of Tianjin Municipal mainly and other areas |

Table 5 Institutional Objectives of Selected Universities (Continued)

| Objectives | University U-2 | University U-3 | University C-1 | University C-2 | University C-3 |
|---|---|---|--|--|--|
| Institutional Type | teaching university and changing into teaching-research university gradually | teaching university and promote research | teaching university, and changing into teaching-research university gradually | teaching university | teaching university |
| Institutional Status | give priority to undergraduate education, and promote graduate education | give first place to undergraduate education and promote graduate education, foreign student education and continued education | give first place to undergraduate education and promote graduate education, foreign student education and community education | give priority to undergraduate education, and promote graduate education | give priority to undergraduate education, and promote graduate education |
| Disciplines & Majors | multi-disciplinary university with stress on engineering; | multi-disciplinary university with stress on economics and management | multi-disciplinary university with stress on foreign literature | multi-disciplinary university with stress on engineering and education | multi-disciplinary university with stress on engineering |
| Type of Human Resource | cultivate human resources with creativity and practical capability | cultivate human resources with solid basic knowledge, practical capability, adaptability and creativity | cultivate human resources with capabilities of independent learning and inter-cultural communication | cultivate teachers of vocational education and applied higher professional human resources | cultivate high-level applied professional human resources with practical capability and creativity |
| Demands That Institution Aims to Cater to | serve for the socioeconomic development of Tianjin Municipal and peripheral areas | serve for the socioeconomic development of Tianjin Municipal mainly and the whole country | serve for the local socioeconomic development and contribute to develop Tianjin Municipality as an international harbor and a big city | serve for the vocational education and economic development of Tianjin Municipality mainly and other areas | serve for the socioeconomic development and urbanization of Tianjin Municipal and peripheral areas |

Source: based on self-assessment reports of selected universities.

No. of Respondents Response Univ. Code NK-1 NK-2 K-1K-2U-1U-2U-3C-1C-2C-3Total Regulate main aspects of teaching and learning Revise uncompleted regulations and draw up in-urgent-need ones Complete Faculty Handbook and Student Handbook Compile regulation collection

Table 6 Staff/Faculty-interviewees' Responses on Development of Internal Regulations (Multiple answers)

Source: based on interviews conducted in October-December, 2008 and March-April, 2011.

stage, so that they are able to meet the changing demands of economic and social development.

Secondly, after the introduction of UTA, universities revised their internal regulations and rules, which cover all main aspects of teaching and learning, including teaching management, majors and curriculums, classroom teaching, practical teaching, student admission and degrees. When asked how the UTA encouraged universities to improve internal regulations, staff/faculty-interviewees gave a number of concrete examples. As seen in Table 6, 41 staff/faculty-interviewees (78.8% of 52 staff/faculty-interviewees) mentioned the regulation of the main aspects of teaching and learning and offered examples of main teaching aspects, such as teaching plans, graduation thesis, examinations, classroom teaching and practical teaching. Thirty-six staff/faculty-interviewees (69.2%) stated the revision of the uncompleted regulations and the preparation of the in-urgent-need regulations, while 16 staff/faculty-interviewees (30.8%) noted the completion of the Faculty Handbook and the Student Handbook. Fourteen staff/faculty-interviewees (26.9%) raised the compilation of internal regulations as an example that universities completed internal regulations.

The typical responses of staff/faculty-interviewees to the improvement of institutional regulations after the introduction of UTA include: 1) University standardized every aspect of teaching-learning process (Staff/faculty-interviewees of Universities K-1 and C-1); 2) Office of University Affairs made *The Compilation of Management of Teaching Process*, systematizing the original separated rules and standardizing the teaching management (Staff/faculty-interviewee of University U-1); 3) The systematization of principles and rules makes the staff clear about what they should do. Before the assessment, since there were no written rules to follow, there was some work they did not do, even though they might know they should do it (Staff/faculty-interviewee of University K-2); and 4) The preparation of the assessment is the process of completion of university principles and rules

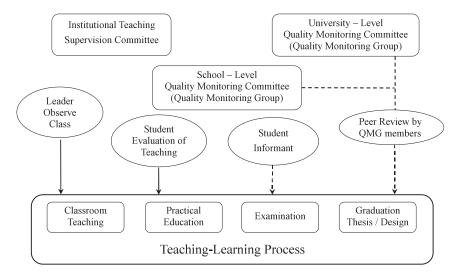


Figure 1 Internal Quality Monitoring Mechanism (Quality Units and Evaluating Measures)

Source: based on interviews conducted in October–December, 2008.

Note: squares show quality units; arrows show evaluating measures; arrows in dotted line show the change after the introduction of the UTA.

(Staff/faculty-interviewee of University C-2). As revealed above, by participating in the UTA, universities standardized the teaching-learning process by completing all kinds of regulations, systematized institutional regulations and rules, standardized responsibilities of the faculty and managerial staff, and established a highly comprehensive regulation system, which made for substantial improvement of institutional regulations and rules.

Thirdly, with the introduction of the UTA, universities strengthened the internal monitoring of teaching quality. This reflects the following aspects: establishment of internal quality monitoring unit, improved methods of assuring teaching quality, and more frequent quality monitoring activities, which encourages the establishment and development of an internal quality monitoring system. Figure 1 shows the internal quality monitoring mechanisms of most universities, including quality monitoring units and evaluating measures.

Universities established new quality monitoring units to manage the quality of teaching. As shown in Table 7, before the introduction of the UTA in 2003, all selected universities, except Universities NK-2 and U-1, established Teaching Supervision Committee (TSC); all universities expect Universities NK-1, U-2, C-2 and C-3 established institutional Quality Monitoring Committee (QMC) and Universities K-2 and U-3 also established school-level QMC. The introduction of the UTA encouraged an increasing number of universities to set up school-level QMCs. The main function of TSC is to discuss and make decisions on the important activities related to teaching. Institutional QMC formulates institutional quality monitoring group (QMG) to conduct monitoring activities, which is usually composed by experienced professors of each discipline. The common

| Units | NK-1 | NK-2 | K-1 | K-2 | U-1 | U-2 | U-3 | C-1 | C-2 | C-3 |
|----------------------|------|-------|------|------|------|------|------|------|------|------|
| Institutional TSC | 1997 | 2006 | 2001 | 2002 | 2007 | 1996 | 1996 | 1998 | 2002 | 1998 |
| Institutional QMC | 2003 | 2002 | 2001 | 1998 | 1988 | 2004 | 1996 | 2002 | _ | 2003 |
| School-level QMC | 2003 | 2006* | 2004 | 1998 | 2008 | 2004 | 1996 | 2009 | _ | 2004 |

Table 7 The Establishment Year of Quality Monitoring Units in Selected Universities

Source: according to questionnaire-2 conducted in Aug.-Oct., 2009 and Mar.-Apr., 2011.

Note: "—" means there is no such unit in the university or college.

Methods NK-1U-1U-2U-3C-1C-2C-3NK-2K-1K-2LOC 1999 2003 1992 2002 1984 1995 1996 1998 2001 1983 QMG evaluation 2003 2004 2008 2000 2002 1998 2005 2006 2003 SET 2006* 2001 1995 2002 1996 2001 1996 2002 2000 1999 SI 2006 2008 2004 2005 2007 2005 2001 2004 2005 1999

Table 8 Starting Year of Evaluation Methods in Selected Universities

Source: according to questionnaire-2 conducted in Aug.-Oct., 2009 and Mar.-Apr., 2011.

Notes: "—" means there is no such unit in the university or college.

activities of QMG include evaluating teaching through class observation, checking teaching plans and final course reports of faculty members, inspecting examination analysis, examining quality of graduation thesis and graduation design, and examining the development of majors.

Besides establishing new quality monitoring units, universities have also increased methods of assuring teaching quality. As noted in Table 8, evaluation methods commonly utilized by all selected universities include university leaders' evaluation of teaching through observing class (LOC), teaching evaluation by QMG, student evaluation of teaching (SET) and feedback from student informants (SI). LOC and SET have been used for many years, while evaluations by QMG in many cases (such as University NK-1, K-1, U-1, U-2, C-1 and C-3) and SI in all cases except University U-3 and C-3 started just after the introduction of the UTA (see Figure 1). Although the implementation of the latter two evaluation methods may not be directly due to the introduction of the UTA, it is clear that the UTA encouraged the implementation of these two methods in universities, since the institutional monitoring on teaching quality is an important observation point of the assessment criterion 5.2 (see Table 3).

Moreover, universities conducted teaching evaluation activities more frequently than in the past.

[&]quot;*" means some basic units established school-level QMC after 2006, but some did not have. It is not an obligation for basic units to establish QMC in University NK-2.

[&]quot;*" means the method of students evaluating teaching has been used for many years; however the regulated and formal SET system has just been established since 2006.

Table 9 Changes in Quality Monitoring Activities

| | NK-1 | NK-2 | K-1 | K-2 | U-1 | U-2 | U-3 | C-1 | C-2 | C-3 | No. of Increased Cases |
|--|------|------|-----|-----|-----|-----|-----|-----|-----|-----|------------------------------|
| Class hours of institutional LOC | UC | UC | I | UC | UC | UC | UC | I | I | I | 4 |
| Class hours of school LOC | UC | UC | I | UC | UC | I | I | I | I | I | 6 |
| No. of institutional QMC members | I | Ι | I | I | I | Ι | Ι | I | _ | I | 9 |
| Class hours of institutional QMC observing class | UC | UC | I | I | I | UC | Ι | I | _ | UC | 5 |
| Activities of institutional QMC | UC | UC | I | I | I | UC | I | I | _ | UC | 5 |
| No. of school-level QMC members | I | UC | UC | I | UC | Ι | Ι | UC | _ | UC | 4 |
| Class hours of school-level QMG observing class | UC | UC | UC | I | UC | UC | Ι | UC | _ | UC | 2 |
| Activities of school-level QMC | I | UC | UC | UC | UC | I | I | UC | _ | UC | 3 |
| Frequency of SET | UC | UC | UC | UC | UC | UC | UC | UC | UC | UC | 0 |
| Contents of SET | UC | I | UC | UC | UC | I | UC | UC | UC | I | 3 |
| Utilization of the result of SET | UC | UC | UC | I | UC | I | I | I | UC | I | 5 |
| Frequency of SI | UC | UC | UC | I | UC | UC | I | I | UC | I | 4 |
| Activities of SI | UC | UC | UC | UC | UC | UC | UC | UC | UC | UC | 0 |
| No. of Items that Increased | 3 | 2 | 5 | 7 | 3 | 6 | 9 | 7 | 2 | 6 | |

Source: according to questionnaire-2 conducted in August-October, 2009.

Note: I=Increased; UC=Unchanged.

Activities of quality monitoring have become part of their routine activities for universities. As can be seen in Table 9, the most remarkable changes are QMGs. All selected universities except University C-2 increased the number of QMG members, and observed classes more often than before the introduction of the UTA. The content of activities of QMG increased in 3 out of 5 universities. Staff/faculty-interviewee of University U-1 reflected that the number of QMG members has increased from 5 to 8 and the monitoring activities have increased from observing two classes a time and twice a week to observing six classes a time and three times a week. This allows for more focus to be put on inexperienced and/or problematic lecturers. Staff/faculty-interviewee of University C-1 pointed out that the activities of QMG were once conducted freely, but after the UTA, the responsibility and workload of the group members were clearly regulated and quality monitoring activities were conducted more often than before. Table 9 also shows that the comparatively obvious changes are leaders' activities of evaluating teaching. Four out of 10 selected universities increased the workload of institutional leaders of observing classes per semester after the assessment, and 6 out of 10 selected universities required school leaders to observe more classes than before. It should also be noted that no university decreased the frequency and content of the evaluation activities.

In general, there is not much change on SET and SI. Usually, universities conduct SET at the end of each semester, and require students to evaluate every course and the lecturer. SET results are mainly used for the further improvement of courses, but some universities (University K-2, U-2, U-3, C-1 & C-3) utilized the results in more ways (e. g. evaluation of faculty members, etc). In all cases, the content of student informants' activities remains unchanged, including the collection and feedback of information from their classmates and the provision of suggestions. In 6 out of 10 universities, student informants could feedback information and provide suggestions at all times. University C-1 changed the time of student informant meeting from once a month to once every two weeks, and University K-2 changed from once a month to feedback information at all times.

4.2.3 Assessment impacts on organizational culture

Organizational culture means the knowledge, attitudes and beliefs that are shared in a particular institution. With the introduction of the UTA, universities paid more attention to the evaluation and the quality of teaching. Firstly, after the introduction of the UTA, with the greater amount of time devoted to evaluation activities, universities increased their attention to evaluation; however, an "evaluation culture" has not seeped into university cultures. There are two criteria used to analyze the development of "evaluation culture", namely, whether university actors recognized the importance of the assessment as a measure to ensure quality and whether they consider the assessment to be an indispensable part of quality assurance and are willing to be evaluated. The first criterion only shows that university actors' concern on evaluation improved. It is the second criterion that indicates the formation of an "evaluation culture".

As shown in Table 10, 67.7% of staff and faculty who responded to the questionnaire consider that the assessment has become an important and necessary measure for quality assurance. It seems that to a certain extent "there is a consensus that the assessment is very important for assuring the quality of teaching" (Staff/faculty-interviewee of University C-1). However, when it comes to whether or not it has created the "evaluation culture", the answer has a tendency to be negative. Only 41.7% of staff/faculty questionnaire respondents considered the assessment had become an indispensable part of the quality assurance system of higher education, which is much lower than that of the first criterion (see Table 10). As displayed in Table 11, most of the staff and faculty members that interviewed (29 out of 52 interviewees, 55.8%) expressed that the assessment is important and there are indeed benefits for assuring the quality of university teaching, but it is difficult to say whether or not it has become an indispensable part of the quality assurance system of higher education. A common response of the interviewees was that the assessment remains a phenomenon that has not seeped into a university culture. It is, however, only at the beginning stage of the formation of the evaluation system, and time is, therefore, needed to allow evaluation system to mature and to form an "evaluation culture".

| Univ. C | ode NK-1 | NK-2 | K-1 | K-2 | U-1 | U-2 | U-3 | C-1 | C-2 | C-3 | Total |
|--|----------|------|------|------|------|------|------|------|------|------|-------|
| Statement | N 34 | 30 | 22 | 22 | 23 | 22 | 23 | 30 | 25 | 23 | 254 |
| The assessment is an important measure to ensure teaching qualit | y. 55.9 | 83.3 | 90.9 | 45.5 | 78.3 | 59.1 | 73.9 | 46.7 | 76.0 | 73.9 | 67.7 |
| The assessment is an indispensab part of quality assurance. | le 44.1 | 83.3 | 27.3 | 0.0 | 21.7 | 45.5 | 43.5 | 23.3 | 56.0 | 60.9 | 41.7 |

Table 10 Proportion of Staff/Faculty Questionnaire Respondents' Agreement on Evaluation (%)

 $Source: based \ on \ question naire -1 \ conducted \ in \ October - December, \ 2008 \ and \ March-April, \ 2011.$

Notes: "N" shows the number of the staff and the faculty who responded to questionnaire—1.

Total proportion of each criterion is shown in bold.

Table 11 Staff/faculty-interviewees' Responses on the Role of the Assessment (Multiple answers)

| Response | | | | N | No. of | Respo | ndents | | | | |
|---|------|------|-----|-----|--------|-------|--------|-----|-----|-----|-------|
| Univ. Code | NK-1 | NK-2 | K-1 | K-2 | U-1 | U-2 | U-3 | C-1 | C-2 | C-3 | Total |
| N | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 7 | 5 | 5 | 52 |
| Important, but not indispensable. | 2 | 1 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 29 |
| Still a phenomenon, not a formed culture. | 1 | _ | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 17 |
| The formation of an "evaluation culture" still needs time. | 1 | 3 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | _ | 15 |
| It is debatable whether the assessment is the only measure to assure quality. | 1 | 1 | _ | 1 | _ | _ | _ | _ | 1 | _ | 4 |
| Assuring teaching quality should rely on institutions themselves. | _ | _ | 1 | _ | 1 | _ | _ | _ | _ | _ | 2 |
| Without the assessment, faculty would still teach as they are teaching. | _ | _ | _ | 1 | _ | _ | _ | _ | _ | _ | 1 |

Source: based on interviews conducted in October-December, 2008 and March-April, 2011.

Notes: The total numbers are shown in bold font.

Secondly, after the introduction of UTA, there were increased concerns amongst the universities about the quality of teaching. With the emphasis on assuring teaching quality in the institutional educational ideology, the set-up of quality standards of main circles of the teaching process, and the establishment of teaching quality monitoring system (as analyzed in subsection 4.2.2), a consensus that teaching quality is of fundamental importance for the development of institutions has been reached. As shown in Table 12, most of questionnaire respondents, including university staff, faculty members and students, felt that faculty members considerably increased awareness about the quality of teaching (72.9%) and increased time given to teaching-related activities (77.3%) with the introduction of the UTA. Staff/faculty-interviewees gave examples that faculty members devoted

NK-1 NK-2 K-1K-2U-1U-2U-3C-1C-2C-3Total Univ. Code 22 22 23 22 30 25 254 Statements N 34 30 23 23 Faculty members devoted more 50.0 86.7 81.8 72.7 95.7 68.2 60.9 80.0 60.0 30.4 68.5 time to teaching-related activities. N^* 62 54 48 49 47 45 48 59 47 43 502 Faculty members paid more 61.3 72.9 83.3 75.0 77.6 83.0 71.1 72.9 79.7 66.0 58.1 attention to quality of teaching. 72.6 76.6 77.3 Increased monitoring on teaching 79.6 66.7 75.5 87.2 73.3 70.8 88.1 81.4

Table 12 Proportion of Questionnaire Respondents' Agreement on Faculty's Attention to the Quality of Teaching (%)

Source: based on questionnaire-1 conducted in October-December, 2008 and March-April, 2011.

Notes: The total numbers are shown in bold font.

more time in improving the content of teaching, utilizing student-centered teaching methods and advanced teaching tools in more courses, increasing discussions and experience-sharing among faculty members, and putting more attention and effort into developing students' various capabilities.

However, based on the interviews, 10 out of 52 staff/faculty-interviewees (19.2%) held different views. Seven interviewees considered that external pressures cannot change the fundamental attitude of university actors, although institutional rules and the imposition of standards may be able to change their behaviors. Two interviewees further mentioned that it is difficult to expect the faculty to spend much time on teaching willingly, as long as the research-outcome-based promotion system remains. One interviewee questioned whether the assessment impact on faculty members' attention to teaching could last long or not. Therefore, it indicates that the UTA indeed encouraged university staff and faculty members to pay more attention to the quality of teaching; however, the change of their attitudes is more likely to be a passive rather than an active one.

Thirdly, to examine how universities may respond to the UTA differently, the chi-square test is conducted on university staff and faculty members' attention to evaluation and teaching quality. The findings showed that there was no significant difference in cultural changes among different types of universities, as indicated by universities' response to the UTA¹². However, some interesting points are evident when the perception of university staff is compared. As displayed in Table 10 and Table 12, in terms of institutional concerns on evaluation and evaluation culture, university staff members of key and ordinary universities hold more positive attitude than those of colleges. In terms of institutional concern on teaching quality and increased time-input on teaching, staff members of colleges hold more positive attitudes than those of universities. This may be attributed to different missions of universities and colleges. Among three main functions of higher education institutions — research, teaching and social service, teaching is the most important function for those lower prestige four-year colleges, so traditionally they are concerned greatly about teaching quality. For universities,

research and teaching are of equal importance, while higher prestige key universities consider that they have a vital role in conducting research. In those research-oriented universities, people who succeed in research are more highly evaluated than those who devote themselves to teaching. Therefore, it implies that the assessment impacts on organizational culture are based on their original cultures, namely the external assessment is more likely to strengthen the existing organizational culture than facilitate a new idea or belief to become part of organizational cultures, which also indicates that institutional context influences how institutions respond to the UTA.

5. Conclusion

The introduction of the UTA has a huge influence on universities, in terms of resource development, university management and organizational culture. The findings of the present research verified those of existing studies. The influence of the UTA reflects the improvement of physical facilities, the clarification of university objectives, the development of university regulations, the development of university quality monitoring system, and the increasing attention on evaluation and teaching quality. Although the UTA encouraged universities to bring about important changes, it appears that the improvements of universities are some kind of passive response rather than active changes. Universities consider the UTA as a forced task of the government rather than what they are willing to do. Although the administrative system of higher education in China is largely different from American and continent European systems, this study showed no obvious difference in assessment impacts on universities between the Chinese case and that of other countries that were analyzed in Brennan and Shah (2000a, b), except assessment impact on physical facilities. Regarding the development of physical facilities, it appears the UTA influence resource allocation only within universities, while external assessment may influence the external resources of universities in some other countries.

Moreover, how universities respond to the UTA is largely influenced by the assessment design, including assessment criteria and assessment methods. Firstly, almost all changes occurred in the aspects which are listed as assessment criteria. Within the improvement of educational expenditure, physical facilities, university objectives, regulations, internal quality monitoring, attention on evaluation and teaching quality, all the improvements are main UTA criteria, except that increased attention on evaluation may be caused by the implementation of UTA itself. It seems that the UTA realized its objective of assuring quality by standardizing the teaching-related aspects. However, whether the assurance of teaching quality should depend on external assessment or should be based on the responsibility of universities themselves is questioned. As mentioned above, universities react to the requirement of UTA as external pressure, rather than respond to it in an active way. Therefore, how to encourage universities to take more responsibility and even the leadership in quality assurance

and be more active in assuring and assessing the quality becomes the challenge for national quality assurance agency in the next round of UTA.

Secondly, the study showed no obvious difference in assessment impacts among universities, since assessment criteria and their standards are almost the same for all types of universities. However, in the context of higher education expansion in China, universities are required to have various missions, different approaches of quality and appropriate strategies to achieve quality teaching, so as to meet various socioeconomic demands. The unified criteria and standards of the UTA, to some extent, may limit the development of special features of universities and also limit universities to fit to the differentiated missions among different types of universities and colleges in the era of massification. Therefore, how to set different assessment criterion systems and standards for different types of universities becomes another challenge for the next round of the UTA.

Although the aspects the assessment may influence universities is similar for different universities, the extent to which universities may respond to the UTA is influenced by their own institutional context. The UTA appears to have a greater impact on lower-prestige colleges than those higher prestige universities, in terms of resource development. Regarding the assessment impacts on organizational culture, the external assessment is more likely or easier to strengthen the existing organizational culture than facilitate a new idea or belief to become part of organizational cultures. The study indicates that the external assessment could speed up institutional development, when assessment objectives coincide with university objectives. On the contrary, if assessment objectives are not part of university objectives, assessment impact must be discounted.

In conclusion, the analysis of universities' responses to the UTA shows the assessment criterion system and assessment method still need to be improved, although the current UTA has already have many significant impacts on improving the quality of education in universities. It is important to understand the notion of quality and the purpose of quality assessment, especially in the context of

expansion and diversification of higher education.

Basic Features of Selected Universities

| Univ. Code | Univ. Type | Univ. Size (km²) (Campus Area) | Year of Establishment | No. of Majors | No. of Faculty | No. of Student |
|---------------|---------------|-----------------------------------|--------------------------|------------------|-------------------|-------------------|
| NK-1 | 211 Univ. | 1,620 | 1919 | 73 | 1,848 | 22,296 |
| NK-2 | 211 Univ. | 400 | 1951 | 15 | 880 | 7,816 |
| K-1 | Key Univ. | 680 | 1958 | 87 | 1,396 | 21,276 |
| K-2 | Key Univ. | 1,088 | 1958 | 46 | 1,139 | 18,154 |
| U-1 | University | 920 | 1980 | 39 | 812 | 12,320 |
| U-2 | University | 1,811 | 1978 | 52 | 1,039 | 18,108 |
| U-3 | University | 1,000 | 1958 | 33 | 778 | 13,932 |
| C-1 | College | 690 | 1964 | 25 | 576 | 9,085 |
| C-2 | College | 630 | 1979 | 35 | 815 | 15,622 |
| C-3 | College | 615 | 1978 | 35 | 716 | 11,480 |

Source: websites of selected universities and Tianjin Educational Statistics 2008.

Appendix

Note

- 1 The data of gross enrollment rate of higher education of 1998 and 2009 is from *Statistics Yearbook of China 1998* and 2009. National Bureau of Statistics of China Website.
- Retrieved from (http://www.stats.gov.cn/tjsj/ndsj/index.htm) on February 10th, 2011.
- 2 Trow (2005) introduced and developed a model of three stages of university massification; those are elite, mass and universal stage of higher education. Higher education is considered as an elite system, when the GER of higher education is less than 15%. It is in the mass system of higher education, when the GER is more than 15% and less than 50%. When the GER is more than 50%, higher education moves to the universal stage.
- 3 The name of the notice is Notice of Conducting Assessment of Undergraduate Teaching in 592 Regular Higher Education Institutions throughout the Country.
 - Regular higher education institutions in China refer to public universities and colleges. Since the assessment is to evaluate undergraduate teaching, the targets of the assessment are those public universities and colleges that award bachelor degrees, but do not include colleges only providing short-circle programs and polytechnics.
- 4 Hereafter, I will use university to refer to those public universities and colleges that provide 4 or 5-year programs and bachelor degrees.
- 5 Perspective of The 5-year Round "Assessment of Undergraduate Teaching". *China Education Daily.* April 23, 2008. Retrieved from (http:edu.people.com.cn/GB/7155941.html) on December 9, 2008.
- 6 In Trow's theory (2005), with the transition of higher education system from elite stage to mass stage, the traditional higher education institutions, namely public universities, are not able to meet the increasing and various demands of students and society any longer. Therefore, non-public higher education institutions and higher education institutions provide short-circle programs must be developed to meet the various demands. The phenomenon of the development of non-traditional higher education institutions is called "diversification".

- 7 Studies about impacts of the assessment include Brennan & Shah, 2000a, b; Frederisks, et al., 1994; Saarinen, 1995; Zbaracki, 1998; Horsburgh, 1999; Newton, 1999, 2000; Gerbic & Kranenburg, 2003; Stensaker, 2003; Harvey & Newton, 2004; Harvey, 2006; Rosa, et al., 2006; and Minelli, et al., 2006.
- 8 According to the interview conducted on the former dean of School of Japanese Study in University C-1 on Dec. 19th., 2008.
- 9 Taking University C-1 as an example, university could get 2 million RMB from the municipal government every year. In order to prepare for the UTA that was to be conducted in 2004, municipal government distributed the amount of the budget of three year (i. e. 2003, 2004 and 2005, a total of 6 million RMB) at one time to the university in 2003.
- 10 According to the interview conducted on a faculty member in University K-1 on Nov. 17th., 2008.
- 11 A teaching university refers to university whose key activities relate to teaching.
 The teaching-research university means the function of the university is mainly teaching but also includes undertaking research.
 - According to the interview conducted on a faculty member in University C-1 on Dec. 19th., 2008.
- 12 Regarding differences among universities, the chi-square test showed no significant difference between managerial staff and faculty members, so the related analysis was not included into this study.

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