Evaluation and Research of Management Methods of Chinese Universities’ Undergraduate Education Quality

Lin Li¹, a, *, Yiwei Li², b
¹Wuhan Donghu University, Wuhan, 430212, China
²University of Toronto, Canada
aemail: L6699@qq.com, bemail: evie.li@mail.utoronto.ca, *corresponding author

Keywords: University Education Quality, Quality Control, Management Method

Abstract. This essay takes independent colleges and private higher learning institutes as its main research subjects, evaluates and researches macroscopic and microcosmic management methods of education quality. Aimed at the reality of multi-types and multi-layered Chinese universities, the essay puts forward a correct and effective route to enhance and ensure higher education quality, which is to realize unified and differentiated management and to uphold management principle.

Introduction

In December 1998, Chinese Ministry of Education drew up “the Action Plan of Education Vitalization Facing 21st Century” to positively and steadily develop higher education. The goal was by 2010, the scale of higher education would have expanded substantially, and the enrollment rate has been nearly 15%. In 1999, in order to stimulate domestic demand and consumption, propel economic growth and relieve employment pressure, China pressed a large scale university expansion plan, and the number of students enrolled in that year reached 1.5968 million, which was 0.5132 million more than those of 1998, with an increase of 47.4%. In the following three years, the enrollment expansion rate reached 38.16%, 21.61% and 19.46% respectively. Since then, university expansion has been on the way of rapid development. In 2002, universities enrolled 3.2 million students, and junior and regular college students had reached 14.6252 million. The gross enrollment rate of higher education had reached 15%, and the total scale even surpassed that of the US (14.2 million) to become the largest in the world. By 2015, the number of students signing up for the entrance exam has reached 9.42 million, of which 7 million have been accepted into universities or colleges, with an acceptance rate of more than 74%.

In the background of universities’ continuous and rapid expansion and a lack of input intensity of national financial revenue, “independent colleges”, which were founded as public universities with social funds and built with civilian-run mechanism, emerged. During the three years of huge expansion period from 1999 to 2002, Chinese universities had found more than 300 independent colleges in total, which took a huge share of university expansion and resolved the problem of expanding enrollment scale. By May 30th, 2016, there are 2595 general institutes of higher education, of which 266 are independent colleges.

Though excessive expansion of undergraduate universities realizes more people’s dream of attending the university, it causes a significant drop in the quality of higher education. Recruitment of student of national higher education entrance examination is by batch (enroll mark), and therefore before 2015, independent colleges and private higher learning institutes could only recruit “the third batch of undergraduates”. Low scores of students’ entrance exam, the inadequate experience of running a school, and inaccurate orientation are all factors that exacerbate the problem of lowered educational quality. As a result, Chinese Ministry of Education issued “Some Opinions Regarding Strengthening Undergraduate Education Work in Institutes of Higher Education and Improving Education Quality” in 2001; in 2003, it launched and implemented “Institutes of Higher Education Teaching Quality and Teaching Reform Project”; in 2005, it stressed that quality is the lifeline of institutes of higher education in “Some Opinions Regarding Further Strengthening Undergraduate
Education Work in Institutes of Higher Education”; in 2007, it issued “Ministry of Education’s Some Opinions Regarding Further Deepening Undergraduate Education Reform and Comprehensively Improving Education Quality”; in 2012, it issued “Some Opinions Regarding Comprehensively Improving Education Quality of Higher Education”. These series of measures had a huge impact on higher education battlefront, and played a key role in improving talent cultivation quality. This essay mainly takes independent colleges and private higher learning institutes as its main research subjects to evaluate and research management methods of education quality.

**Macroscopic Management Method**

Education quality management is a systematic project. Macroscopic management method means state level management methods and measures. For example, founding independent colleges to ensure education quality in university expansion, implementing 211 project, 985 project and Double First Class construction to realize world first class universities, dividing universities into 4 types: research, profession, application and technology, to guide scientific and reasonable running of universities, so that universities have different orientations, standards and characteristics to cultivate talents of different levels to fully satisfy different needs of social and economic development.

**University Rankings at Home and Abroad.** University Rankings is a ranking widely present in countries around the world aimed at various kinds of institutes of higher education. It means a lot to expand the popularity of institutes everywhere and improving cultural education level. Abroad, the US, UK and Canada issue University Rankings every year, which is very influential. In China, the most influential University Rankings are Chinese University Appraisals issued by the Chinese Academy of Management Science, China University Rankings issued by Shenzhen NetBig Company, and Chinese University Appraisals issued by university research teams from Chinese Alumni Association Net.

University Rankings is like a mirror, it is an important reference for improving education quality and standard for running a university, and students choosing which school to attend. However, how to ensure the objectivity of rankings has become the important topics faced by University Rankings around the world.

**Special Project Construction.** In 1995, China began to implement the 211 project, which was mainly constructing about 100 institutes of higher education and a batch of key subjects facing the 21st century. In 1998, based on the 211 project, China decided to mainly support Peking University, Tsinghua University and some other universities to build world first class university and high level university, aka 985 project. These two projects are very significant, but ordinary universities don’t have the chance to compete fairly. In January 24th, 2017, The Ministry of Education issued “Construction Implementation Method of Propelling World First Class University and First Class Subject with Overall Planning (Temporary)”, aka “Double First Class” construction, which is to have a five-year cycle and dynamic adjustment with no system of life tenure. In the mid-term of construction, construction universities and committee of experts will hold a mid-term performance evaluation. To universities with effective construction, the support shall be increased; to universities that fail to reach construction goal and level, warnings shall be given, support be decreased, or it would even be eliminated out of construction range. At the end of the construction period, construction universities should do an overall self-assessment, committee of experts will do an evaluation of construction effectiveness and put forward evaluation comments. Five years later, the next round of construction range will be determined based on evaluation results. Obviously, “Double First Class” construction is an integrated and successive improvement based on the performance and experience of 211 project and 985 project. It provides competitive opportunities to improve education quality and school-running standard to more universities.

**Educational System Management.** In independent colleges and private higher learning institutes, the biggest obstacle to improving education quality is the universal phenomenon of students not studying actively, seriously and hard. Since they will all get graduation certificates and degrees after 4 years of school, they lack stress and motivation for studying. As a result, importing foreign
advanced flexible educational system is bound to have a notable effect. Obviously, flexible educational system should be improved with Chinese situation in mind, it should make no hard and fast rule about “come in easily, out strictly”, and only put into practice when will students’ study be qualified, and when can they graduate. In this way, it would have a good effect.

On February 4th, 2017, The Ministry of Education issued newly revised Management Regulation of Students in General Institutes of Higher Education in the form of ministerial order, in which flexible educational system will be implemented, students’ period of schooling will be relaxed, and students finishing their study in stages will be allowed. Running schools according to law and realizing flexible educational system can be expected soon.

Unified Standardized Exams. Universities have some degree of liberty in running the school, so they have their own standards of course exams that students take. As a result, they bear huge responsibilities in checking education quality. For universities around the country, scores of unified entrance exam before students enroll to the university could be used to evaluate the quality of student source, scores of course exam students take after they have enrolled no longer possess large scale comparability. Currently CET Bands 4 and 6 is the only platform to compare English performance of students who take the test from universities all over the country. CET Bands 4 and 6, like national examination for admissions to the civil service, is a standardized exam. With thorough organization, strict invigilation, authentic and credible scores, it is widely accepted by the society and employers. Although there are many ways to measure and evaluate talents, unified exams still possess strong credibility. As a result, to manifest fairness of education, encourage fair competition among universities, and enhance education quality and talent cultivation quality, it is very necessary to carry out unified exam management of a few of public basis courses and specialized courses, and to realize standardized exams on a national scale.

It is relatively easy to realize unified English exams, as it only needs to improve current CET Bands 4 and 6. Stipulate that after 4 terms of English lessons, students should all participate in CET Bands 4 and 6, the score of which should be included in the student’s transcript, instead of mere distinctions of “Qualified” or “Disqualified”. If a student is not satisfied with his or her score, he or she could take the test again before graduation, and the best score shall be included in the transcript.

In the information era, the ability to use a computer is indispensable; as a result, university students should all take part in unified computer exams. Currently, our country has cancelled any hard and fast rules regarding English or computer in title examinations; as a result, unified computer exam could absolutely be merged with Computer Rank Examination. However, as limited by computers and other hardware conditions, it could be difficult to implement.

To continuously improve basic qualities of university students and citizens, law and politics courses should be included in the scope of unified exams. This has important practical value to establish the idea of ruling by law and virtue.

Unified exams for specialized courses could take the form of “graduation examination”. Based on the catalogue of instructional programs, choose majors with the largest student number, or majors every university has, like computer, communication, clinical medicine and so on, and organize unified examination according to the type of university (research, profession, application and technology). Graduation examination of specialized courses should cover 3 to 5 specialized courses, scores of the test could be equaled to those of entrance examination for postgraduates. Majors with unified specialized courses examination no longer need to have graduation thesis or graduation project, while majors not included in unified exams can still use the assessment method of graduation thesis or graduation project.

The questions made out for unified standardized exams are of high quality, which truly realize separating teaching from exams, and the scores of which possess comparability among universities throughout the country. Unified standardized examinations can greatly motivate enthusiasm and initiative of university education, allocate best resources to the teaching of relevant courses and improve teaching and talent cultivation quality.

Evaluation of Undergraduate Education. Ever since the 1980s, China has organized and held evaluations of undergraduate education many times. In 2003, The Ministry of Education clearly
stated in The Action Plan of Education Vitalization 2003-2007 that the evaluation system of general institutes of higher education’s education standard should have a five-year cycle; in 2004, Ministry of Education’s Evaluation Center for Higher Education was formally founded. The establishment of an evaluation system’s five-year cycle and the founding of the Evaluation Center signifies that Chinese higher education evaluation is heading towards a standard, scientific, systematic and professional development stage. In October 2011, The Ministry of Education issued Opinions of Ministry of Education about Evaluation of General Institutes of Higher Education’s Undergraduate Education, which established the top-level design of higher education evaluation based on university’s self-assessment, with university evaluation, professional certification and evaluation, international evaluation and regular monitor of basic teaching condition statistics as its main content; In December, The Ministry of Education issued Measures for Implementing Qualification Evaluation of General Institutes of Higher Education’s Undergraduate Education and other documents right after, which basically determined a new round of evaluation; In December 2013, The Ministry of Education issued Notification from the Ministry of Education about Carrying out Auditing of Undergraduate Education of General Institutes of Higher Education, which decided that universities that had taken part in education proficiency assessment of undergraduate education of general institutes of higher education and gotten “approval” or better results should all take part in auditing of undergraduate education of general institutes of higher education, lasting from 2014 to 2018.

Proficiency assessments, qualification evaluations and auditing are all ways for the country to strengthen supervision of how universities run themselves. As long as we adhere to the principle, dare to manage, check the scene more, improve assessment methods, and stick to the full process of evaluation -- rectify -- heck and accept, universities could further specify their guiding ideology and proper position in school management, improve school running conditions, strengthen basic construction of education, intensify education management, deepen education reform, perfect quality security system, develop standards and characteristics, and truly improve talent cultivation quality and school running efficiency.

Microcosmic Management Method

Microcosmic management method means management methods and measures on a university’s level. Universities could play a huge role in the course setting, syllabus, course construction, classroom teaching and experimental teaching.

Establish Quality Monitor System. From 1994 to 1995, Jin Yanmei, Li Zhenshan and others introduced practical experience of quality monitor system of university education, they realized quality monitor system could improve education quality [1,2]. In January 2000, The Ministry of Education issued Notification of Carrying out New Century Higher Education Reform Project, which clearly stated to “explore higher education quality monitor system and its operation mechanism”; In August 2001, The Ministry of Education stated in Some Opinions regarding Strengthening Undergraduate Education Work in Institutes of Higher Education and Improving Education Quality that a healthy education quality monitor and guarantee system should be established. As The Ministry of Education carries out education proficiency assessments, qualification evaluations and auditing in universities nationwide, more and more universities are consistently developing and perfecting education quality monitor system.

Universities’ quality monitor system can positively improve education quality. Since quality monitor system is only a kind of supervision, it is inevitable to become a mere formality sometimes. Classes listened by peers and students evaluating teachers could give out pretty scores, but from evaluation results, causes of teaching problems cannot be seen. As a result, it is bad for consistently improving teaching and education quality. Education quality evaluation systems from the US, UK and Canada are worthy references [3-5].

Research and Establish Education Quality Standards. On July 29th, 2010, the Central Committee of the Communist Party of China and the state council issued Plan Outline of National Medium and Long-Term Education Reform and Development (2010-2020), which clearly stated
“consider improving quality as the core mission in education reform and development” and “establish national standard of education quality”. Thus related departments began researching education quality standards [6,7]. Unlike quality standards of products, education quality standards are special and complicated, because they need to combine theoretical research with practical experience in order to succeed. Universities could first carry out educational quality standard research of the school to acquire more rights to speak when establishing national education quality standards. Lin Li has done some research regarding university classroom teaching quality standard in 2000[8], the model of quality standard is demonstrated in Table 1.

Table 1. University Classroom Teaching Quality Standard (partial)

<table>
<thead>
<tr>
<th>No.</th>
<th>Classification</th>
<th>Quality Index</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teaching Design</td>
<td>Syllabus</td>
<td>Scientificity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teaching Progress</td>
<td>Reasonability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Teaching Courseware</td>
<td>Perfection</td>
</tr>
<tr>
<td>2</td>
<td>Teaching Goal</td>
<td>Clarity</td>
<td>Students could feel what will be taught, what they should learn</td>
</tr>
<tr>
<td>3</td>
<td>Teaching Content</td>
<td>Orderliness</td>
<td>How much teaching content that students could reconstruct</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Completeness</td>
<td>The connection, division and combination of teaching content form a system of their own</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adaptability</td>
<td>How well teaching content matches students’ needs</td>
</tr>
<tr>
<td>4</td>
<td>Teaching Method</td>
<td>Effectiveness</td>
<td>How well students understand difficult points, master key points and how well they could use them</td>
</tr>
<tr>
<td>5</td>
<td>Teaching Effect</td>
<td>Attractiveness</td>
<td>Students’ attentiveness and interest at class</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Effectiveness</td>
<td>Reasonability of teaching goal, passing rate of examinations</td>
</tr>
</tbody>
</table>

These quality indexes are easy to understand, memorize and use. Check a certain course’s classroom teaching one by one using the quality index, and the results match the actual situation well.

Excellent Course Construction. In April 2003, The Ministry of Education decided to launch “Project of Education Quality and Teaching Reform of Institutes of Higher Education” in institutes of higher education (including higher vocational colleges) nationwide, of which excellent course construction of institutes of higher education was of utmost importance. The Ministry of Education will pick out 1500 excellent courses and award them the honorary title of “national excellent course”.

Excellent courses are exemplary courses with first-class teaching staff, teaching content, teaching method, textbook, teaching management and other characteristics. They share high quality teaching resources, provide students with better teaching method and content and enable more students to enjoy high quality education. Excellent course construction has a positive pushing effect on promoting high level teaching staff construction and high quality textbook construction.

The phenomenon of “high on reporting, low on construction” exists in excellent course construction, which generally lacks input. After an excellent courseware is finished, it frequently costs lots of manpower, material resources and time to be maintained to keep its vitality.

MOOC construction. To improve education quality, students’ enthusiasm and initiative in the study should be put to good use. As a matter of fact, some students don’t find attending classes effective enough, they wish to do some self-study after class through the Internet, electronic courseware and other materials. With rapid development of times, today we can provide them with a new course study method--MOOC.
On October 10th, 2013, Tsinghua University released a large scale open online course platform called “Classroom Online” to offer online courses to the whole world. Through registration and login, students can pick lessons freely, take lessons and join community discussions. The system will provide exercises and grade them according to study progress. Teachers can upload teaching videos, add teaching materials and exercises and check students’ feedback in time through the system.

MOOC could promote hybrid teaching pattern innovation, provide students with new experiences, and enhance study efficiency and effect. MOOC construction should not only stick to the best quality of education resources, but also stick to the diversification principle of education resources, only this way can independent colleges and private higher learning institutes benefit from it.

Summary
Currently the scale of China’s higher education is the largest in the world, realizing diversification of universities’ school-running orientation, level and characteristic is the objective need of social and economic development. It is scientific and correct to divide universities into research, profession, application and technology types. Different types of universities have different concrete connotations of education quality, but they have the same standard of education quality.

In macroscopic management of education quality, we should realize unified management and differentiated management, attach importance to the monitor effect of evaluations and improve evaluation methods. In microcosmic management, we should enlarge universities’ autonomy in running schools, and encourage universities to innovate the education quality management method to form their own management characteristics.

References