Research and Discussion on the Education Quality Construction for Colleges and Universities

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Abstract: It is a key topic for colleges and universities to study the view of education quality and set up the system of education quality. This paper first analyzes the concept of quality and then puts forward the education quality concept should include the connotations of both conformity education quality and adaptability education quality. The education quality should be appraised together by the three of the society, the colleges and universities and students. This paper also points out our country should build up multi-dimension quality views and inside the colleges and universities, the keys of the high school quality construction are as follows: objective of talent cultivation, college teacher’s construction, and teaching conditions’ construction and teaching implementation.

Key words: education quality, multi-dimension quality views, quality construction

1 Introduction

How to improve education quality has been becoming the common theme of higher education all over the world. The 1998 World Higher Education Conference ranked education quality as one of the three instructions of higher education for new century. After ten consecutive years of enrollment in universities and colleges of China, such an idea has been proposed definitely that “the major task of higher education for the next stage is to improve education quality”\textsuperscript{[1]}.

2 Quality and Education Quality

2.1 Concept of Quality

The concept of quality has been changing with the time. In ISO9000:2000 Basis and Terms of Quality Management System issued by ISO (International Organization for Standardization) in 2000, quality is defined as the degree of a group of intrinsic properties satisfying the requirements. “An intrinsic property” refers to “the innate or permanent properties existing in a matter or a thing and “requirements” means “the obvious and usually implied or duly implemented request or expectation”. From the definitions and instructions of quality by ISO, we can see that the concept of quality is not only applied to the products, but also to “service, process, system, organization and combination of these aspects”\textsuperscript{[2]}.

In the history of deepening the concept of quality, there appear two representative ideas of “conformity quality” and “adaptability quality”. “Adaptability quality” was put forward by American quality expert Milan. From the perspective of the users, he sums up quality as the adaptability of the product, that is, the degree of the products (or service) satisfying the users. Another American quality expert Philip B. Crosby produces the other concept “conformity quality”. From the perspective of production, he concludes that quality is the degree of the product (or service) conforming to the requirements. Compared with adaptability and conformity quality, the quality concept of ISO is generalized, containing the connotation of both adaptability and conformity quality. Therefore, whether the quality is poor or good is judged by whether the properties of a product or a service satisfy the needs of people and to what extent it satisfies. In other words, people’s judgment on the quality of a product or a service is related to their expectation and thus the judgment is relative. People may think that a mobile phone of 1000yuan is of high quality for it is worth the money and they may complain that the one of 10,000 Yuan is of poor quality for it is too expensive. People do not compare the quality properties (such as functions, service life, reliability and so on) of the two phones,
instead, they assess the two phones on whether they conform to their expectation of a 1000 yuan mobile phone and a 10,000 Yuan one. If the phone conforms to their expectation, it may be regarded as good, and if not, poor or bad. People also judge the quality of a service like this. The passengers who take the ordinary bus in hot summer do not expect the bus to provide the cooling service, and if there are some palm-leaf fans in the bus, they would praise the service even if they are wet by sweating. Instead, the passengers who spend 30 Yuan to take a taxi would expect to enjoy the cooling service, and if the air in the taxi is not cool enough, they would complain about the service.

“Expectation” is one of the most fundamental and the most important properties of quality concept.

2.2 Concept of Education Quality
At present, there are mainly two views on education quality. The first one is that education quality is finally reflected through the quality of the students and the measurement criterion is the aim and the objective of education of universities and colleges, which lays stress on quality requirements and quality specification. The second is that education quality lies in whether the products of college—students are able to make full of their ability to meet the needs of the society, whether they can play an important role for the development of the society, and whether they have been improved, which emphasizes the needs of the society. Obviously, the first is “conformity education quality” and the second is “adaptability education quality”.

Any social activity is of the mode of “input—transformation—output”[3] and education activity is no exception. However, education activity is a special activity and educational industry belongs to the fourth industry, which many scholars believe has gradually been developing. “Output” of the first, the second and the third industry basically depends on the outer conditions of “input” and “transformation”, that is, the same input and transformation will produce the same output. For instance, with the same blank and the same technology process the same spare parts will be produced. As far as educational industry is concerned, because its output is special products—students which are of initiation and are involved actively in transformation, the “output” does not just depend on outer conditions of “input” and “transformation” but on the degree of their active involvement in “transformation”, which is the key factor to decide the output. Therefore, the same college and teachers can not produce the same students. In addition, the products of college “students” have their own expectation of “transformation” and “output”. The “conformity quality” of education does not only satisfy the objective of the production unit (a university or a college) but also the expectation of the “products” (the students)—to master some knowledge. The adaptability quality of education should not only meet the needs of the employment unit (various organizations and factories) but also the needs of the products (the students)—to play an important role in their work. Thus, education quality means quality in a broad sense, embodying the connotation of “conformity education quality” and “adaptability education quality”. “Expectation” of education quality in a broad sense embodies that of the employment units (the users of the products), universities and colleges (the production unit) and the students (the products). Laying stress on the expectation of one party is not enough, which is the factor that differentiates education quality from the general concept of quality. Hence, quality education means to what degree that the educational activities and the educated individuals satisfy the requirements of society and their own development. It lays emphasis on both the needs of the society and that of improving themselves.

2.3 Evaluation on the Education Quality
It is far from easy to evaluate the quality of higher education in that students require for conformity and adaptability, and that it is difficult for universities and colleges to formulate the content of conformity and adaptability. General products are just required to meet the “contemporary” demand. They can be multi-functional, but function reserve is not a necessity. In the light of lean manufacture, it’s a waste to endow product with an unnecessary function. However, students, as the products of universities and colleges and colleges, can’t be trained just to meet the “contemporary” demand. Collegians ought to have knowledge reserve, and this is why “solid foundation” is attached great importance to in universities and colleges and colleges. It is also far from easy to nail down how deep or solid the
foundation should be. The depth is dependent on scientific prediction of the development of science and
technology and the demand of society. Hence, it is more important to cultivate collegians’ ability of
learning and creativity than to impart knowledge.

Some hold that students’ satisfaction is the criterion on assessing education quality [4]. I take the opinion
as partial. They focus on the different attribute between students and industrial and agricultural products,
but they ignore the fact that collegians are unlikely to be and incapable of being in the leading position
in the course of teaching. To most collegians, they enter college directly after their graduation from high
school, having little knowledge of society and modern science and technology. In that case, they are
confused about what they should learn. If collegians are unconscious of what teacher should teach or
what they should learn, they can’t make scientific and objective evaluation on the education quality.
Hence, students’ satisfaction should not be the enfold criterion on the quality of higher education.

3 Multi-dimension Education Quality Views

Due to the variety of requirement of the society to the talents, the specifications of universities and
colleges are also various. In China, undergraduate universities can be classified into the four types,
research-oriented universities, research-teaching-oriented universities, teaching-research-oriented
universities and teaching-oriented universities. Variety of higher education necessarily has brought about
multi-dimension, multi-specification and multi-criteria of quality of higher education. Different tapes of
universities and colleges should not be judged according to the same quality criteria. The reason why
some enterprises in some job fairs do not recruit the graduates from some key universities is that what
these enterprises need are talents of practical skills instead of academic learning. Meantime,
multi-dimension education quality views on judging education quality implies that it is meaningless to
compare universities and colleges in a general sense. For instance, we can compare the military skills
between two army companies, but we should not compare between an army company and an air
squadron because it is meaningless. Only comparison in the same or suitable platform is significant.

Diversification of higher education quality makes it possible for any university or college to establish
itself as the university or college of high quality and the outstanding one of the same type and also
makes them impossible to find excuses for their backwardness, such as lack of governmental concern,
less investment, geographical position and so on. Diversification of higher education quality is not against its integrity. Universities and colleges of any
type should meet the requirement of “basic quality”. It is the lowest requirement of society to the
institutions of higher education. In China, it is embodied in such laws and regulations as Higher
Education Law of the People's Republic of China and Regulations of the People's Republic of China on
Academic Degrees.

4 Key Factors in Quality Construction in Universities and Colleges

Quality construction in universities and colleges is a complex and systematic engineering, involving
both institutions of higher education and society. According to “Undergraduate Teaching Assessment for
Common Higher Education Institutions (Draft)” issued by the Ministry of Education, there are seven
major factors the affect quality of higher education, concerning the three parties of university, teaching
staff and collegians. This paper only focuses on factors concerning university and teaching staff,
discussing the three aspects and their interaction as follows: what to teach, with what to teach and how
to teach. Factors influencing teaching quality vary. In the light of “teaching”, the keys to guarantee education
quality are as follows: objective of talent cultivation, college teacher’s construction, and teaching
conditions’ construction and teaching implementation. As the guiding principle for running universities
is the top layer of a university or a college, the objective of talent cultivation occupies the top layer of a
major. It not only frames knowledge structure system of educate, but is the criterion on teaching quality,
reflecting specific requirements involved in teaching quality. College teachers are the subject of
implementing the objective of talent cultivation. Thus, Qualification of teaching staff determines the
realization of the objective of talent cultivation. Teaching conditions’ construction and teaching implementation is the basis of the objective of talent cultivation. Without excellent teaching condition, the cultivation of qualified talent may not be successful.

As figure 1 shown, three factors to ensure the teaching quality support and restrict each other at the same time. The objective of talent cultivation sets benchmark for college teachers’ construction and teaching conditions’ construction and teaching implementation. Qualified teaching staff and satisfying teaching conditions will in turn help to set up the higher objective of talent cultivation. Qualified teaching staff requires satisfying teaching conditions and realize high-quality teaching implementation, and satisfying teaching conditions lay the foundation for and teaching implementation is the necessary process of constructing qualified teaching staff.

![Fig1 three factors to ensure the teaching quality](image)

The consciousness of the reciprocity of above mentioned factors is of great significance to standardize teaching management

### 4.1 Teaching Plan and Syllabus

A question of questions in the education quality of universities and colleges is what to teach. As production units, universities and colleges should construct quality criterion based on the concept of “conformity quality”. Teaching plan and syllabus stipulate what to teach, reflecting the guiding principles, thought and characteristic for running schools of a university or a college, embodying the quality requirement of universities and colleges for educating talents and being the top layer to guarantee the education quality. Teaching plan frames the objective of talent cultivation in general and knowledge structure collegians should be equipped with. Syllabus reflects quality requirement for courses and teaching process.

Although it is important to improve teaching methods, what to teach is more important than how to teach. Collegians know what to teach through teaching plan and syllabus, and they in turn know what to learn. In that case, even if a teacher lacks teaching technique, students can acquire knowledge through self-teaching and asking questions to teachers. In this process, the end products participate in conversion spontaneously and attain high-quality output. In reverse, if a teacher is good at teaching but with little knowledge of what to teach, students have difficulty in acquiring knowledge. Lack of knowledge of what to teach does more harm to students than lack of teaching techniques.

### 4.2 Quality of Teachers

As to with what to teach, on the one hand, it refers to teaching conditions, and on the other, it refers to teaching staff. This paper focuses on teaching staff.
Quality of teacher is the second important factor that influences teaching quality. The quality of teacher mainly refers to academic level and professional knowledge of teachers. Teachers’ leading position in teaching process results in the fact “that a great teacher produces brilliant students”. Teachers can improve professional knowledge through scientific research. Scientific research can promote greatly one’s teaching, just like science and technology to the development of economy. To teach is not a simple process of imparting knowledge. It is without doubt that the teachers in research-oriented and research and teaching-oriented universities must be research-oriented. Even in teaching- universities or colleges, the teachers should not lack of research ability and experience. Generally, the objective of teaching-oriented and teaching and research-oriented universities is to cultivate talents to be of complex ability, practical skills and innovation. The students of practical skills must be trained and instructed by teaching and research-oriented teachers instead of teaching-oriented teachers. When a fishman teaches his children, he would teach them how to fish rather than just giving them fish. This is true of teachers. A teacher should not only impart knowledge but teach them how to learn. If a teacher can’t combine teaching with scientific research, he / she may not acquire the skill to fish, not to mention teach his / her students how to fish. And it is impossible to cultivate students with innovation and creativity.

4.3 Teaching Methodology
Suitable teaching methods and techniques can help student to absorb knowledge better. So how to teach is another important factor in improving education quality. A teacher incapable of carrying on scientific research is not a qualified teacher, but a teacher who doesn’t know how to impart knowledge is not a teacher at all.

5 Conclusion
As China has entered into the stage of popularization of higher education, it is crucial to study education quality concept and set up quality management system of higher education. Quality of higher education has the attribute of general produce and attribute of it own as well. The end products of universities and colleges are human beings, who have subjective initiative and are ever-changing. This attribute makes it complex to evaluate quality of higher education. By discussing quality of higher education and its evaluation, the paper aims at improving education quality of institutions of higher education.

References