Exploration and Practice of Standardization for College Undergraduate Teaching Management in University

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Abstract. The standardization of college undergraduate teaching management is the key to improve the management efficiency and teaching quality in university. Based on the practice of college undergraduate teaching management, this paper introduces the standardized methods and ways of teaching management from five aspects including clearing job responsibilities, strengthening the construction of basic teaching documents, perfecting management rules and regulations, making teaching work process and strengthening humanize management.

Introduction

With the deepening of the two-level management mechanism of college and university, the focus of undergraduate teaching management continues to be transferred from university to college. A college teaching section is not only a planner and an organizer but also an implementer and a controller of various undergraduate teaching activities. Besides teaching research, teaching reform, teacher-team building and professional construction, it also needs to maintain the teaching order and to organize daily teaching activities. The level of college undergraduate teaching management directly affects the quality of the overall level of university-level education. Accordingly, the college teaching section is not only an integral part of the overall undergraduate teaching system in university but also a relatively independent and complete basic teaching organization [1-2].

School of Mechanical and Electronic Control Engineering of Beijing Jiaotong University (SMECE) has a long history. Nowadays, SMECE possesses four departments and three centers, five undergraduate majors, 15 classes in each grade and more than 170 teachers. The characteristic of more college institutions, more majors, more teachers and students gives undergraduate teaching management a certain degree of test. How to standardize the management is the main subject for undergraduate teaching management staff to explore. In recent years, the college has done a lot of exploration and practice in the standardization of teaching management.

Based on the regulation of teaching characteristics, the standardization of teaching management needs to establish and perfect various rules and regulations of the teaching management in order to form a unified, standardized and relatively stable teaching management system [3]. With regard to the purpose, the standardization of teaching management can gradually incorporate college teaching into the track of legal-system management so as to reduce the blindness and arbitrariness in teaching. In addition, it can rationalize the relationship of right and responsibility among colleges, departments (centers) and curriculum groups thereafter it can reduce misunderstanding, improve work efficiency and eventually to achieve orderly coordinated and efficient teaching. The standardization of teaching management at the college level should focus on three aspects. First, it would standardize the right and responsibility of each job in the teaching so that the division of labor, the right and responsibility are clear. Second, it would standardize every procedures and requirements of teaching. Third, it would reduce the randomness of daily teaching and management and enhance the institutional and rhythmic awareness in accordance with the rules and regulations. Only in this way, the experience
management can be transformed into rule management, the teaching management cannot be cluttered with trivial daily affairs and the management efficiency and management level i.e. the overall college teaching quality can be improved [4].

Confirmation of Job Responsibility and Formation of Hierarchical Management System

The various affairs of the college are led by the dean of teaching. The hierarchical management is implemented by teaching dean, teaching steering committee, teaching section, department (center) director, responsible person of major construction and curriculum teaching group. The hierarchical undergraduate teaching management system of SMECE is shown in figure 1.

![Figure 1. Hierarchical undergraduate teaching management system of SMECE.](image)

In the hierarchical undergraduate teaching management system, every part should have a clear division of labor. The teaching dean is fully responsible for the college undergraduate teaching, cultivating, the formulation and summary of teaching plans, supervision of the staffs implementing all teaching management rules and regulations of university. Under the leadership of the college council, the teaching steering committee is responsible for reviewing major issues such as cultivating programs, major building programs, teaching reform programs, projects and achievements. Under the leadership of the dean, the teaching section is responsible for the undergraduate teaching reform and construction, daily teaching organization and management, student status management and performance management organization. Under the leadership of the college, the director of department (center), who is the major planner for undergraduate major construction, the organizer of the teaching task implementation, the coordinator of discipline construction, platform construction and degree program construction, takes full responsibility for the administration and management. Under the leadership of the college and the director of department (center), the responsible person of major construction is in charge of the construction planning of the major, the organization of the construction of professional connotation, the improvement of the professional construction level and the quality of training. Under the leadership of the department (center) director and the responsible person of major construction, the curriculum teaching group is in charge of the implementation of the course construction and the course teaching task, the improvement of the course construction level.

For each undergraduate course teacher, he is not only a disseminator of scientific and cultural knowledge, but also plays an irreplaceable role in cultivating students' ideological qualities, psychological qualities, morality and sentiments. For each leader and teacher in the management system, the college provides detailed job responsibilities and writes them into the employee engagement letters of responsibility.
Although each job has its own division of labor in the teaching management system, the jobs of all parts are not isolated. There are criss-cross relations between each other. To do a good job, they also need to strengthen mutual communication, understanding and support.

**Strengthening of Teaching Basic Document Construction and Standardization of Teaching Plans**

**Formulation of Training Plan**

The training plan is an important guarantee for implementing the education policy of the party and the state and for improving the quality of teaching in an all-round way. It is a basic legal document that organizes and directs teaching. University and college attach great importance to the formulation and revision of undergraduate training plans. In 1999, the university completed the formulation of a training plan for the implementation of credit system management and revised the 2008, 2012 and 2016 version training plans.

The formulation of the training plan is organized by the academic affairs office and the deputy director of the academic affairs office is specifically responsible. The academic affairs office of the university promulgates guidance for formulating an undergraduate training plan and is responsible for formulating the part of the basic public course that is involved in the training plan, and for coordinating courses which is opened up across departments and standardizing management of the training plan.

College sets up the formulation working group of training plan and nominates teaching dean as the leader. Members of the working group include college teaching steering committee members, responsible person of major construction, teaching secretary. Through various ways, the working group fully studies and researches the training plans of the same kind at home and abroad, and investigates relevant enterprises and employers. On the basis of the research, it sets the goal of professional training and major orientation, organizes all teachers to seriously discuss and summarize the achievements made in the education and teaching reform in recent years, draws on the useful experience of similar majors at home and abroad in the training and formulating major training plan. College organizes off-campus experts for review. Various majors absorb the rational proposals of experts and make further modifications to the training plan. Eventually, it submitted to university after approved by the college teaching steering committee. Academic affairs office organizes experts to examine the training plan and the modified opinions return to the college. College modified finally in accordance with the views of university.

**Formulation of Syllabus**

Course syllabus is a teaching guidance document which implements major training plan and achieves the goal of training. It is also the main basis of the organization of teaching, the evaluation of classroom teaching qualities and teaching management.

In order to standardize the curriculum syllabus and to ensure the quality of teaching, the office of academic affairs of the university speciallyformulates the "Regulations on the Management of Curriculum Syllabus of Beijing Jiaotong University" which makes special efforts on the basic principles of setting up the syllabus and the content, format and management of the syllabus.

According to the division of the major courses, the college will assign the courses to the corresponding departments and centers according to the categories. Thereafter, the department or center directors will be responsible for the planning and organization of the courses. Therefore, the preparation of the syllabus is completed by the course groups under the organization of department or center directors. Each course group plans and formulates curriculum teaching requirements according to the major teaching goals and ensures the teaching syllabus professionally and scientifically. At the same time, the revised teaching syllabus must fit in with the major training plan. Course group can also adjust the teaching content according to the development of science and technology so as to ensure the advanced curriculum syllabus. The college compiles and manages the syllabus according to the major.
Improvement of Management Rule and Regulation and Standardization of Teaching Process

In order to improve the quality of teaching and ensure the smooth progress of teaching management, various teaching management systems must be formulated. In teaching management, the university has formulated some complete teaching management rules and regulations and made certain clear, standardized and strict rules to the credit system, student status, degree, electives, examinations, experiments, internships and student management.

Based on a series of rules and regulations of the university, the college supplements and improves the teaching management standardizations and systems according to the actual conditions of the college undergraduate teaching management, including:

A. Regularly teaching inspection system. The department leaders, major leaders and course teachers are organized to attend lectures, mid-term teaching checks and end-of-term teaching checks so as to strengthen the management and control of the entire teaching process. Specific content of lectures will be one of the indicators of the year-end assessment.

B. Senior professional teacher teaching system. It is stipulated that professors and associate professors must teach at least one course for undergraduates each year, and this requirement should be regarded as an important condition for teachers' professional titles and positions appraisal.

C. Test paper check and joint-mark system. All test paper must be examined and approved by the director of department. A number of teachers have the same course. The unified examination paper, unified assembly line marking and strict quality control of the exam are used.

D. Comprehensive management system of graduation design (paper). College implement the entire process management from the teacher submitting the graduation design (paper) title to the graduation design (paper) warehousing. The process management and monitoring system are established and full quality monitor are achieved.

E. Graduate quality-tracking and employment survey system. The employment information and employment status should be regularly collected, analyzed and reported as a basis for formulating or revising training plan.

F. New teacher class-helping system. The teacher who wants to open a new undergraduate course (including theoretical courses and practical courses) needs one round of class-helping. Then he can teach independently.

G. Management system for student practicing and innovating. College standardizes the whole process of management which students participate in innovation and entrepreneurship training programs and disciplines competition. From project approval, mid-term checks to project closure, a detailed management approach is formulated to ensure the quality of innovative practice of students.

Formulation of Teaching Process and Improvement of Work Efficiency

Process management is an important mode of modern management science. Its main characteristic is the standardization, simplification, consistency and controllability of the management process and operation procedure, which is an effective means for an organization or a system to achieve its established goal of management. Good college teaching depends on the quality of teaching management process. As the core of standardized management in the universities, the teaching management process has received the universal attention in the universities all over the country in recent years. The advanced inner teaching management and the reasonable management process will play a key role in improving teaching quality and teaching management efficiency.

Based on the various university work processes, SMECE constantly studies teaching rules and gradually establishes and forms a structure of various work processes through multiple practices so as to ensure the efficient and orderly conduct of various works. As the orientation of servicing teachers and students, the teaching management system effectively classifies the information from different educational administration departments, recreates the process after reducing the overlap or duplicate parts and arranges the teaching scientifically and rationally. The teachers ought to fill in the teaching calendar and the experimental teaching implementation plan, transfer the class procedures, apply for
the commencement and teaching materials and receive the free teaching materials. Furthermore, the regulations such as teacher involving examination score and graduation design are formulated.

Based on the process system, SMECE gradually realizes automatic management, which highlights the use of college teaching office system. It efficiently achieves many developments in different aspects such as the teaching calendar management, attendance record management and graduation design management, and ensures the accurate delivery of the data and information.

**Strengthening of Humanized Management and Creating of Harmonious Working Atmosphere**

The staffs of teaching section in SMECE always insist the "people-oriented" service concept and have established a democratic management system under a good sense of service in the work. They pay attention to details of the work, strive to create a harmonious working atmosphere, form a good teaching environment and have been unanimously approved by students and teachers. Humanized services are mainly reflected in:

**A. Patient and meticulous work style.** In daily teaching management, the staffs treat each classmate or teacher patiently, respect individual's independence and autonomy, strive to provide attentive and meticulous service and care for special people. For freshmen, students with learning difficulties and foreign students, the staffs provide them learning guidance so as to effectively solve their practical difficulties.

**B. Democratic management.** Based on the immediate interests of students and teachers, the staffs strive to create free learning atmosphere for students and comfortable working atmosphere for teachers after studying a variety of management work and soliciting opinions from students and teachers.

**C. Timely feedback of information.** The staffs can timely transmit and feedback to teachers and students the university's various requirements, notifications and other information. In addition, they can provide enthusiastic help and service for the majority of teachers and students.

**Summary**

Over the years, the teaching section of SMECE has conducted continuous exploration and practice of the undergraduate teaching management standardization, which effectively promoted the continuous improvement of undergraduate teaching quality. The daily teaching work revolve in an orderly manner, furthermore the college has won a number of national and Beijing municipal remarkable performance in major construction, practice platform construction, curriculum construction, teaching material construction, teaching achievement, student's innovation and practice.

**References**


