Thought and Suggestions on Teaching Material Management Job in Colleges and Universities Based on Improvement of Innovation Capacity

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Abstract

In the recent years, the job of teaching material management in colleges and universities in China has been developed step by step towards systematization and construction of teaching materials has been institutionalized gradually and has achieved great attainments. However, updating and compiling of teaching materials and management means of teaching materials are out of date and backward. Thus, construction of teaching materials is still unable to meet the development requirements of educational reform. This paper sets out from the perspective of improving the innovation capacity and puts forward pertinent suggestions in view of the problems existing in the job of teaching material management with cultivation of universities. It is aimed to facilitate combination of teaching material management with cultivation of university students' capacity and integration of the job of teaching material management and the education system in universities so as to form a characteristic management mechanism of teaching materials in colleges and universities.

Keywords: teaching material management, college and university, improvement of innovation capacity

1. An Analysis of the Current Situation of Teaching Material Management in Colleges and Universities

1.1 Education Innovation Promotes Individualization of Teaching Material Service

The colleges and universities have taken multiple new measures in terms of educational teaching and reform in order to cultivate innovation-based highly competent talents who acclimatize themselves to the development need of the new century. For example, they adjust setup of majors, broaden major scopes, update teaching content and attempt to push forward excellent courses of different majors. The scale of school running in colleges and universities is continuously enlarged and the number of students enrolled is on a continuous increase. Quite a large number of colleges and universities have also vigorously developed distance education and continuing education and have held a variety of medium term and short term training classes. Both of the variety and quantity of teaching materials in need have largely increased. The credit system has been comprehensively carried out and students have the opportunity to select their courses across different departments and majors. They are each assigned a class schedule. Flexibility of major selection is enlarged, which embodies the spirit of human orientation. It requires the job of teaching material management to more reflect personalized service to advocate individualization development of students. Also a lot of colleges and universities come up with development towards research universities, for which they enlarge the number of postgraduates enrolled, increase supply of postgraduates' teaching materials and academic monographs, enhance the level of supply of teaching materials and increase the variety of teaching material supply. There are also other attempts, such as running schools across different campuses and across different areas and encouraging teachers to change their previous practice of using one teaching material for one course and to use several referential books for teaching.

1.2 Education for All-round Development Propels Generalization of the Scope of Teaching Material Selection

The Central Committee of the Communist Party of China and the State Council jointly promulgate "Decision on Deepening Educational Reform and Comprehensively Propelling Education for All-round Development". The Decision proposes higher and perfect requirements for education for all-round development. Afterwards, education in all colleges and universities is continuously improved to meet the target of education for all-round development. The specific content of education for all-round development is to contain moral education in teaching of all

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disciplines in terms of moral education and to cultivate the five capacities of information processing, acquisition of knowledge analysis, problem solving and language expression in terms of intellectual education. The colleges and universities regard it as a guiding thought to boost service of comprehensive education for all-round development and further enhance the job of teaching material management. Thus, in the process of selecting the teaching materials, it is necessary to take full consideration of what kind of teaching materials are suitable for comprehensive education for all-round development and what kind of teaching materials concentrate more on students' innovation spirit and cultivation of their practical ability. Not only this consideration should be taken in the process of selecting the teaching materials, but also it should be paid enough attention in the process of compiling the teaching materials. This is what differs from the traditional educational mode and the traditional education objective. Hence, the selection scale should not only aim at objective knowledge implanting. Instead, the scope of teaching material selection should be gradually comprehensive and comprehensive education for all-round development should be imparted to students.

1.3 Informationization of Network Accelerates Diversification of Teaching Material Forms

Emergence of multimedia teaching materials makes the rustle of page turning of textbooks become an echo in the past. Accordingly, enormous reformation has occurred to the carrier of word that heavy books turn to convenient electric texts. This is a kind of innovative teaching material form which comes into being in companionship with application of information technology. Its characteristics are obvious to all in that its convenient form and abundant content can increase by a large margin the teaching quality and teaching efficiency. In the meantime, extensive application of electric teaching materials is of important significance to enhance the comprehensive quality of students. It is able to effectively improve students' learning ability to continuously enrich themselves by applying modern education technology. The colleges and universities have made large investment in both capital and human resources in construction of electric teaching materials and strengthened construction of computer-assisted instruction courseware (including multimedia teaching materials), network teaching materials and electric teaching materials that are suitable for distance education to fit in with the step of the new era.

2. An Analysis of the Problems Existing in the Job of Teaching Material Management in Colleges and Universities and Their Reasons

There exist all kinds of problems in the process of implementing the job of teaching material management in colleges and universities. For instance, efficiency of teaching material management is low and is unable to well cooperate with proceeding of the education work. Consequently, it fails to cultivate talents that are suitable for social work. Such a series of causal association requires us to rapidly and effectively resolve problems existing in the job of teaching material management.

2.1 Backward System of Teaching Material Updating

The major content of former teaching materials concerns completeness of knowledge structure and logic of knowledge system and the teaching materials are thus compiled and published. The system of the former teaching materials helps students to fully comprehend and master the discipline system and basic theoretical knowledge. Nevertheless, the system fails to play its due role in certain aspects, especially its inability to cultivate students' creative thinking and divergent thinking and to assist in developing students' innovative capacity. Therefore, it is necessary to lay emphasis on updating of teaching materials in management of teaching materials and resort to choice content and system to enable the process of knowledge impartation to benefit more for growth of students' comprehensive quality. The management system of selection of teaching materials has been set up in a large number of colleges and universities. However, this system is neither complete in a large majority of universities nor is well implemented. There is no information feedback about the usage of teaching materials and even though there is, they fail to make timely adjustment in accordance with the feedback, that is, lack of updating mechanism. The content of former teaching materials fails to contain the latest research achievements of the research fields of all disciplines. This leads to inconsistence of the content of teaching materials with the objective of the education and the result of education deviates far from education for all-round development. The issue of updating of teaching materials not only exists in paper-made teaching materials, but also in multimedia teaching materials. Digitalized resources are deficient in some disciplines and the online learning system is outdated, which fail to provide diversified teaching materials for higher education in colleges and universities.

This is mainly caused by the following three reasons. In the first place, teachers are reluctant to update teaching materials in preparation of class, which renders relevant real-time information unable to be conveyed to students in time. Even a minority of teachers conduct no adequate research on teaching materials and teach at their random in the class without any book to follow, which leads to the situation that the teaching materials used by students become

useless. In the second place, feedback and opinions from students and teachers are not well adopted, as a result of which outdated teaching materials are still selected. In the third place, a large majority of universities still use the traditional mode in subscription, ordering and distribution of teaching materials. Instead, the teaching materials are ordered and distributed uniformly. Even though the content of teaching materials has been obsolescent and even incorrect, they are still used in order not to waste the residual textbooks which are distributed to students. As a result, content of teaching materials is unable to be updated in time.

2.2 Low Level of Teaching Material Compiling

In compiling of teaching materials, the majority of compilers merely refer to instructional syllabus and curriculum teaching, but they tend to neglect the idea of education for all-round development and the innovative index requirement of student capacity cultivation. As a consequence, the philosophy deviates from the practical action and the anticipated educational effect is unable to be achieved. It is a must to come to full realization of the important role of teaching materials in cultivation of innovative talents and boosting of national development in order to work out teaching materials with high level. At present, domestic academic evaluation lays particular stress on specialized and academic innovation and scholars are more willing to compose monograph instead of compiling teaching materials. It is considered to be low-end work to compile teaching materials by quite a lot of people, so they are more willing to undertake scientific research projects. As a result, the number of excellent teaching materials is obviously low. A review of foreign cases, we find that only the first-class scholars are qualified to compile teaching materials which can then be effectively popularized. For instance, teaching materials compiled by such economics authorities as Samuelson, Stiglitz, and Mankiw are much appreciated and even become "the best sellers".

Legal enforcement of intellectual property of teaching materials in colleges and universities is lacking in vigorousness. Much plagiarism and infringement on the copyright of teaching materials is detected in the process of compiling teaching materials. Thus, if this bad phenomenon is not to be taken under restraint, heavy losses on education will be inflicted. Therefore, colleges and universities have to guard a pass and re-check their teaching materials in the process of compilation.

2.3 Serious Backward Means of Teaching Material Management

The phenomena of low degree of informationization in management of teaching materials and deficiency of advanced scientific management system and means generally exist in a majority of colleges and universities. This results in mistakes that are difficult to be discovered, confused account and data statistics not in time. Also, it is unlikely to make an effective analysis and summary of the current situation, make timely response to abnormal actions that are increasing day by day or have an idea of distribution and reception of teaching materials. Even if students have already had the teaching materials or have borrowed the teaching materials and even if teachers only lecture a certain chapter in the teaching materials in the class, students are required to buy these materials. This not only encroaches students' right to choose the teaching materials freely and aggravates students' economic burden, but also hinders implementation of the credit system in the colleges and universities.

This issue is mainly caused by the following two reasons. Firstly, teaching material management personnel have no deep understanding in the job of teaching material management, so they are unable to have full realization of the importance of management of teaching materials. In their eyes, it is enough to finish the task of management just to know about basic math and basic management arrangement. As a result, their working means is simple and time consuming and their capacity in computer operation is limited. This makes such multimedia as computer become only decoration, and there are only a few management personnel with strong capacity. What's more, educational level of some working staff is low and they have no idea of university students' education or basic learning of all majors. They rarely have any communication with university students. Unsmooth communication will necessarily lead to low working efficiency and low satisfaction with their work. Secondly, with popularization of education for all-round development and liberalization of students to select a course, the number of students selecting a certain course can only be confirmed before the class begins. This leads to gradually large amount of work on teaching materials and great difficulty in management of teaching materials.

3. Thought and Suggestions on Innovation of the Job of Teaching Material Management in Colleges and Universities

After an analysis of problems existing in the management of teaching materials in colleges and universities, it is necessary to take relevant measures to ensure successful proceeding of management of teaching materials in colleges and universities. At a new era, construction of teaching materials in colleges and universities should highlight innovation and the following should be done in practice.

3.1 Updating Reference Textbooks at Real Time and Serving Selection of Teaching Materials

Strict rules and requirements should be followed in selecting teaching materials. Excellent teaching materials should be selected and outdated teaching materials should be abandoned and updated. It is necessary to try to set up and improve the system of selection and management of teaching materials, update selection of teaching materials in time and keep consistent with education and teaching to enable students to use excellent teaching materials. In selection of teaching reference books, either great leap forward or march on the spot is prohibited. Instead, steady upgrading is encouraged. First of all, one textbook may be assigned and, in the meanwhile, other several excellent booklists can be distributed to students for them to choose. It is better to provide information feedback mechanism in the process of using the textbooks and to adopt opinions from both students and teachers so as to do a good of selecting textbooks.

In selecting teaching materials, it is necessary to carefully and meticulously check the content of teaching materials. This task can be assigned to teachers of different majors and fields who are qualified to provide recommendations. The content of teaching materials should keep pace with the times, focus on cultivation of the comprehensive capacity of students and present the latest content to students to broaden their field of view. Selecting teaching materials may refer to excellent teaching materials at a national level assessed in the recent years by the Ministry of Education. The quality of teaching materials selected has to be up to high standard. Either excellent teaching materials or self-designed teaching materials should be treated equally without discrimination so long as they are of high quality.

During the planning period of the "12th Five-Year Plan", colleges and universities should make great efforts to construction of excellent teaching materials of construction of the system of teaching material series. They should not provide students with paper-made texts, but should also do a good service job for students' extracurricular learning, self-study program and multimedia data download. This helps to create a positive learning atmosphere and explore students' innovative capacity.

3.2 Optimizing Content of Compiling of Teaching Materials and Improving Quality of Usage of Teaching Materials

Equalitarianism no longer exists in the process of compiling teaching materials and the opportunity is equal to all. The colleges and universities mainly aim at the most characteristic majors and the most prestigious high level experts in organizing the compilation of teaching materials by giving them particular preference. All these efforts are made for the purpose that these experts can work out teaching materials with distinguished features and with high level both at home and abroad so as to promote continuous updating of both content and form of teaching materials. The colleges and universities should pay great attention to cooperation with related publishers to boost compilation and publication of teaching materials with high level. It is also necessary to encourage the teachers to cooperate in compilation of teaching materials with researchers of high level. It is noticeable that scientific research subject of excellent disciplines and compilation of relevant teaching materials are set up at the same time. In this way, two achievements can be achieved in the final report of the scientific research and the achievement of teaching materials becomes an important component of scientific research in this discipline. The latest scientific research achievement will be brought in compilation of teaching materials to enhance the quality of teaching materials.

It is necessary to formulate strictly evaluation index system of teaching materials. Measurement of the quality of teaching materials for higher education at a new period should be improved. To this end, basic theoretical learning and education for all-round development must be placed at an equally important position and cultivation of talents with comprehensive quality should be regarded as the supreme goal so as to compile teaching materials with high level.

For the purpose of restraining the bad morals of plagiarism and duplication and protect the copyright of teaching materials, teaching materials compiled by experts have to be strictly checked to improve the academic position of compilation of teaching materials and prevent teaching materials with low quality from damaging the image of higher education.

3.3 Learning Modernized Management Means and Improving Efficiency of the Management Job

Nowadays, with informationization of network, advanced management technology and method is a convenient and effective shortcut to do a good job in management of teaching materials. In management of teaching materials, old-fashioned management means are far from meeting the need of teaching material management. This requires teaching material management personnel to use widely such modernization information technology as computer technology, multimedia technology and network communication technology to gradually enhance the work efficiency and attempt to realize modernization of management means of teaching materials.

In practical operation, the teaching material management sections in colleges and universities should, in the first place, utilize modern technology platform and learn to book, purchase and regulate teaching materials online. The network platform helps to have a timely idea of the supply situation of teaching materials by publishers and such issuing authority as Xinhua Bookstore so as to contact for teaching materials in time and ensure usage of teaching materials on schedule. The network platform also helps to have an idea of the usage of teaching materials by teachers so as to consummate service in teaching and satisfy requirements of both teachers and students. The network platform helps to have an idea of evaluation on teaching materials and works for selection of excellent teaching materials. The network platform also helps to establish such systems as entry registration of teaching materials, distribution of teaching materials and query of teaching materials, which is convenient for daily management of teaching materials.

4. Concluding Remarks

Improvement of the level of teaching material management is of profound significance in that it not only makes for teaching management in institutions of higher learning, but also provides basic guarantee for cultivation of talents with comprehensive quality in the process of socialism construction. Colleges and universities ought to deepen importance of teaching material management in the work of teaching assistance, make a detailed plan of solution to problems existing in teaching material management, teaching material compilation and teaching material selection, choose excellent teaching materials and apply advanced management means in management of teaching materials so as to ensure consistence and adaptability of teaching material management and education teaching.

References

- Hu, Ge. (2011). Characteristics and Measures of the Job of Teaching Material Management in Higher Education at a New Period. *Journal of Inner Mongolia Normal University*, (5), 35-37.
- Liu, Ke, & Liu, Aiying. (2010). Thought on Pushing forward Reform of Teaching Material Management in Colleges and Universities and System Construction. *China Adult Education*, (9), 41-42.
- State Education Commission. (2011). Opinions on Construction and Reform of Teaching Materials in Regular Higher Education. State Education Commission.
- Wang, Hao. (2007). Post-modern Thought on Construction of Teaching Materials in Colleges and Universities. *Education Exploration*, (3).