Examination Reform Practice and Suggestions for Economics and Management Type Courses

Case Study: School of Economics and Management, China University of Petroleum (East China)

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Abstract. In the wake of an increasing attention on the guiding role of examination in teaching and learning, there have been increasing calls for reformation of curriculum examination; yet, many problems persist with the current reforms. In order to identify the specific issues with the current reforms and make valuable contribution on situations requiring further reforms we use, we perform Class Reforms on four different categories of Economics and Management type courses, namely: General Fundamental Courses, Specialty Fundamental Courses, Specialty Practice Courses and Experiment Courses. In this paper, we also present some practices and reforms for examinations in the four different classes of courses to highlight the importance of examinations in University Education, so that examination may play a bigger role in the process of strengthening the comprehensive ability of students.

Introduction

These days, Graduates Employers hardly pay attention to academic records of students from School of Economics and Management. According to these employers, after graduates from School of Economics and Management have been recommended based on their academic records, they often later find out that, the academic records of these students do not actually reflect professional competences that are required in the job market.

Specifically, the students usually have narrow minded ideas and ways of thinking at work, possess poor fundamental knowledge, insufficient ability to apply knowledge, have deficiencies in analyzing and resolving real life problems, and lack innovative thinking. In short, there is usually a negative correlation between academic performance and work performance among this group of students.

The disparity between the high academic performance and inability to satisfy actual needs of the society demonstrates that examinations are out of place and irrelevant contents are tested. Despite being a teaching assessment tool, examinations not only do not play their role, but are also counterproductive with regards to the needs of the society. Therefore, in order to groom students who meet the needs of the society, and whose abilities are consistent with their academic records, reforms must be carried out on existing examination curriculum.

Existing Problems in Examination Reforms for Economics and Management Course

In recent years, although Examination Reform has been gaining so much attention many problems still exist in the current reforms. Below, we introduce some of the identified problems.

Blind Advancement of Reforms

A good number of instructors regard examination reform as a blinded “open style” and therefore continuously increase examination openness. Currently, examination reforms have mainly resulted in more emphasis on regular grades, partial open book exams, end of term thesis and other forms of examination.

The methods currently being deployed by instructors for end of term exams lack specificity, do not promote research, and sometimes are blind open-book exams which fall short of offering the students support to in capacity building and mastery of basic knowledge.
Lack of Enthusiasm Amongst Participants in Examination Reforms

Institutional leaderships do not maintain necessary support and enthusiasm when it comes to courses that do not constitute backbone of the department’s curriculum; students pursue “light burdened” reforms and lack interest in heavily burden examination reforms designed to enhance knowledge application and development of innovative abilities; worse still, instructors lack enthusiasm towards examination reforms for three main reasons: Firstly, examination reforms have resulted in increased workload, secondly, students blindly make requests for the prevailing open-book exam and thirdly, pressure from teaching assessment has caused the instructors to blindly please the students with examinations that make the students feel relaxed and happy.

Lack of Necessary Process Management in Examination Reforms

The model for implementation of Examination reform usually follows the following sequence:

- Faculty Leadership passes an order
- Instructor executes order at his discretion
- Leadership accepts the results

The current examination reform has neither a fixed process nor a perfected system; in fact there are no clear rules to be followed. This should not have been the case as it is important that an educational system should also place emphasis on process rather than focusing only on the non-implementation of the results.

Differences between Examination Reforms for Different Majors has not been Analyzed

For different specialties, basic quality and personality characteristics requirements vary widely. Regrettably, institutions often set a common unified standard examination with the aim of facilitating management and the so-called "equality". An example is, language communication and adaptability, a requirement for Marketing Specialty students which is often imposed on Accounting students leading to lack of robustness and seriousness amongst the these students. As a result, promising students from the two majors are forced to become poor students who do not meet the needs of the society.

Suggestions to Economics and Management Courses Examination Reforms

Following studies and discussions regarding the Undergraduate Curriculum for 2011/2015 academic year, courses within the Department of Economics and Management were grouped in to two major classes for discussion purpose. (Refer to Table 1), namely:

[i] General Fundamental Courses
[ii] Specialty Courses(Includes Specialty Fundamental Courses, Specialty Practice Courses and Experiment Courses)

Table 1. Course Categories for School of Economics and Management.

<table>
<thead>
<tr>
<th>Type</th>
<th>Course name</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Foundation Course</td>
<td>Advanced mathematics, Primary Foreign Language, Introduction of Computer Technology, Morality and Law, Military Theory, Chinese Marxism Theory, Chinese Modern and Contemporary History, Basic Principles of Marxism, Programming Language etc</td>
</tr>
<tr>
<td>Specialty Practice Courses</td>
<td>Higher Education Physics Experiments, Operation Model</td>
</tr>
<tr>
<td>Specialty Experiments</td>
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</tbody>
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As different courses are established for different purposes, the requirements are also different; while some courses focus on the understanding and mastery of basic theories, others focus on application.

In this paper therefore, we establish a classification for the courses on the basis that different courses require different types of reforms. This ensures that the examination reforms beside acting at a tool for enhancing measurement of course teaching process also ensures that the testing process is more scientific and appropriately reflects students’ actual workload and mastery of knowledge.

**General Foundation Course**

At present, closed-book exam is adopted for all final examinations in General Foundation courses. For General Foundation Courses for freshmen emphasis should be on development of moral culture, way of thinking, learning interests and quality behavioral training. Therefore not only knowledge and ability to memorize should be assessed but more focus should be on the cultivation of thinking ability and interests. From this point of view, exams on General Foundation course exams may attempt adoption of the following forms of reform:

**Increase Use of Methods other than Written Examination Method.** Taking into consideration the unified nature of General Foundation course exams and the nature of course curriculum, other examination methods may be added as appropriate.

With written exams as basis, for an application subject like Foreign Language, oral exam method could be included to test the student’s ability to express himself in English. A student could also be given an article to read within a specified time and the student’s shorthand ability and understanding in English tested. However because workload for oral exam is relatively heavy while selection of test questions is one-sidedness and random, oral exam can only constitute part of the assessment with a proportion of not more than 30% of total exam score.

**Student’s Participation in Exam Proposition.** By Participating in Proposition we mean summarizing of key course contents by the student prior to completion of the course; the summary acts as a reference to the proposition. It is suitable for courses with solid theoretical and excessive teaching content fore example Chinese Marxist Theory.

Based on students understanding of key points, the instructor may test the student on practices nurtured from usual class participation and studies, ability to gain knowledge and understanding as well as the students’ ability to select and summarize useful contents. On the other hand, the proposition may be developed based on the key points. This ensures specificity of the exams and avoids blind teaching program where only sections to be tested are taught leading to fragmentation in knowledge system.

**Instructors from Different Departments should collaborate in setting Questions.** Most General Foundation courses are taught by instructors from departments other Economics and Management. In order to strengthen course practicality, emphasis in delivering course content should be based on the students’ majors, for example, in the application of Advanced calculus for management students focus can be on its application in economic analysis, shedding more light on conditions for use and scope of application in economic analysis. For Science and Engineering students, focused should be on its application in mechanics and electromagnetic and other physical phenomena.

Due to the fact that Instructors from the department may not have understanding of application of course in the Specialty, there is need for different departments Instructors to collaborate in setting examination questions so as to strengthen the specificity of the curriculum examination. This will enable the students to understand the importance of General foundation courses to their specialty while promoting interest and enthusiasm through application of the course.

**Method of Optional Questions with Different Unequal Marks.** The method of setting Optional Questions has been adopted without success in the past. In this case, we can apply pay heed to suggestions from the Advanced Mathematics Examination by Xu Xiuzhen et al., improving on the question selection process whereby a choice in made in selecting a a question from two questions with unequal marks. While to the easier question five points are allocated, ten points are allocated to the more difficult question with five points deducted in this harder question is answered.
wrongly. Such method besides testing student’s mastery of knowledge also enables the student to learn how to balance gains and losses and challenge themselves, thereby preparing them psychological for entrance into the society.

Specialty Courses

Specialty Fundamental Courses. Although there are some differences between fundamental courses of different majors, they all have something in common, that is they possess more knowledge points and strong professional application.

For final exams of Specialty Fundamental Courses, the following reforms can be implemented:

i. Diversification in Assessment Methods
This is prevailing in current examination reforms and includes closed-book, open-book, partial open book exam and so on. As for science subjects such as Statistics, Operations Research, Partial Open Book format can be adopted so that formulae are not blindly memorized. Moreover, more emphasis should be on the understanding of methods and applications. The examination method should be announced at an appropriate time before the Examination to enable students improve on their generalization and summarization skills as well as on their information search abilities.

For Statistics, Econometrics and other courses, knowing how to use the appropriate software and know-how are of essence, this especially applies to students who intend to further their education. At present, final exams for these courses lack assessment of software application, and the fact that students are often spoon-fed during computer practical lessons make it difficult for students to keep up with lectures. This makes the course difficult for the students resulting in cramming of course contents. Therefore, there should be increased computer based exams whereby given a few questions, students should be asked to use the software on the spot to obtain results and submit the results directly to the instructor. This will prevent blind testing while strengthening the students, self-learning and application abilities.

ii. Diversification in Exam Time Table
From a research on examinations in School of Economics of and Management of China University of Petroleum (East China), it was observed that Specialty Foundation course regular grades are basically irrelevant. Regular grades are used by instructors to help student improve their grades, and the final grades remain dependent on final end of term exam. In this state therefore, the students care most about the final end of term exam and are indifferent to regular grades from class participation. To check on this attitude, there should be diversification on examination calendar whereby tests are taken after each chapter or each month so as to test the learning situation of the students. Testing could be by any of the several different methods including written exams and book reading and writing reports.

Test results must be published in a timely manner, to stimulate students’ competitive spirit, to strengthen their practice and sustainability during their studies and learning as well as for the establishment of a good foundation.

iii. Improvement on examination questions
Specialty Foundation courses can be classified into two main groups. The first group is those that are very theoretical with more basic knowledge and also very detailed while the second group is the mathematical courses with strong practicability. Considering these differences, the structure, selection and proposition of the exam questions should also be different but not across the board with the structure of the exam questions maintained as in the present reforms.

For the former class, focus should be on students’ ability to remember basic knowledge points, their mastery and understanding of true or false as well as multiple choice questions,. Terminology is also essential. Through this type of questions, students’ understanding of various basic concepts and their differences can be enhanced. At same time, essay questions requiring application of course knowledge points for analysis of practical problems should be included.

For the latter class, the proportion of short answer questions and essay questions should be increased as appropriate with more focus on the application of specific knowledge. In setting up questions, emphasis should be on the scope of application of various methods and their differences as well as on the mastery of practical application of the methods.
iv. Establishing a Questions bank

The so-called Questions bank is not simply a collection of specific topics, but is a collection of core knowledge points. In order to ensure flexibility, the instructor should be able to freely decide on the type of questions and how to test knowledge.

Not for all purpose is examination by all way and all method, study only what will be tested, making concentrated effort to study close to exam period and other bad habit. The exam bank should be used for reference and should not be a limit to instructors for selection of examination questions.

Specialty Practice Courses. With regard to Specialty Practice Courses, emphasis should be on combination of regular classes and final results and regular tests should be more diversified. The institution should purchase software with strong practicability and operability. Through collaboration and PK team teaching method, students can be guided on knowledge application and cultivation of innovative spirit to attain some requirements for the course content examination. In addition, the following improvements can be performed:

i. Mixed Type Format

The purpose of the examination is not only to assess students' mastery and application of theoretical knowledge, but also to guide students in improving their organizational, communication, adaptability and analytical skills.

Through multiple and various forms of testing, good results can be achieved. Base on their strengths and preferences, students can freely choose from any of the following two combinations of exams:

a) Closed-book exams, Special Report, Seminars, Case study Analysis
b) Open-book exam, Business planning, reading notes.

Through these two combinations, assessment of the students can be carried out from different angles, their organizational skills improved and more room given for self improvement.

ii. Research Paper Format

As part of the courses, students may be assessed in the form of an end of term thesis. With increasing course content and growing knowledge, the student may constantly revise and perfect the thesis. However, there should be a predetermined date for submission and a summary thesis should be submitted at the end of the semester. In this way, students will be obliged to go through the entire learning process of learning and knowledge mastery, meanwhile the general tendency of blind plagiarism and copying is also reduced.

iii. Third Party Participation in Preposition and Appraisal

Due to the fact that most teachers are employed immediately after graduation, their social experiences are usually insufficient; prepositions are not usually in line with practice and their practical abilities are usually weak.

Therefore, in order to match assessment with practice, corporate professionals from relevant fields may be invited to participate in preposition, appraisals, and regular practical. The professionals should also be invited to integrate practical skills into test questions to enhance practical application of knowledge amongst the students. They can also carry out assessment on the students' classroom performance from a corporate perspective after which they may provide valuable suggestions.

Through a combination of classroom and practice the disparity between China's higher education and society can be corrected to improve the practical ability of students, and change the status quo.

iv. Hierarchical Testing

In this paper, we apply the reform method proposed by Zhao Qing of Zhongshan University for University Physics experiment examination reforms to some courses of Economics and Management Department, China Petroleum University (East China). In Marketing specialty for example, hierarchical testing method can be deployed in Marketing Proposal Design, Advertising, and Market research each with scores composed of two parts - Theory and Practical with 40% and 60% of the points respectively.

Practical activities consist of three components namely Proposal Design, Feasibility Studies and Guidelines for Implementation results accounting for 60%, 20% and 20% respectively.

This setting can stimulate students to combine theory and practice, establish a good foundation,
robust design abilities; it can also provide a platform for students with strong operation skills to stand out from the rest.

On the other hand, written exams can be waived for students who achieve 90% in practical operation. In this case however, the student must submit a practice report including their personal design proposal, feasibility studies, problems encountered during implementation with corresponding measures taken, and implementation results. Based on the novelty and the overall effect, the instructor may perform a comprehensive assessment and assign students’ scores

v. Course Thesis and Defense

The format of Dissertation should be applied to course exams. Based on knowledge from regular lectures, the students should put together their innovative ideas during thesis writing and at the end of the semester the instructor should ask them to perform collective defense of all submitted thesis. Thesis defense can take the form of instructor asking the students questions and vice versa. This reduces possibility of plagiarism, at same time enables the students to get more in-depth knowledge and understanding

vi. Debate Method

Debate Method is also referred to as group competition. In the course of teaching, students may be divided into several groups and competitions organize between the various groups in the class. Grading is then done based on impromptu performance of students, team spirit, and knowledge from extracurricular Reading and other aspects. For example impromptu performance can account for 20%, the team spirit -30%, knowledge from extracurricular reading- 40%, others- 10% (the ratio can be adjusted as appropriately in accordance with the specific curriculum).

In the debate method, the instructor should grade according to an objective standard. With a benchmark score of 85%, a team whose score exceeds the benchmark can exempted from examination and those who score below should be required to take final exams. In this way, students' sense of competition, cooperation and the ability to absorb relevant knowledge will be cultivated.

Specialty Experiment Courses. The only Experiment course in the School of Economics and Management of China University Petroleum (East China) is University Physics Experiments administered for Engineering Management Majors. During examination, a combination of attendance, experiment report, end of term experiments can be considered. For end of term experiments, a random draw may be adopted on the spot whereby student are not informed on which specific experiment they will be tested on. This avoids a situation where some students do not perform the tests only to copy experiment results at the end. In addition, teachers can ask students questions in the course of the experiment for objective assessment of the student’s objectives.

As this course is not administered by the School of Economics and management, it will also require the presence of a Physics instructor to enhance communication and cultivation of innovative ability. This includes encouraging students to participate in the construction of electronic circuit design contests and other activities, as a part of the exam. This will not only help in improving students' innovation ability but also in cultivating competitive spirit.

Effects and summary of examination reform

After four years of practical reforms and opinion from employer's feedback, we found that the effect of the examination reform meet the needs of society, the feeblemindedness phenomenon of high scores has dropped, students are now fully confident of walking into the society and employment rate has increased from 78% to 95%. Through the baton effect of examination there has been stimulation of students' enthusiasm towards learning through reformation on teaching content, teaching methods, teaching material selection, education management, staff team etc., as examination reform alone is unable to complete the function of cultivating high-quality workforce required by the society.
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References