The Significance of Establishing Feedback Mechanism of Examination and Its Effect Analysis

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Abstract. Purposes: To explore the significance of the establishment of examination feedback mechanism, through the analysis of the implementation of feedback system in our department, and further improvement measures. Procedures: Choose two groups students in the same with majors, teaching methods, textbooks and teachers, different from grades, one group of formative tests feedback, compare two groups of students in the teaching effect. Methods: The results were statistically analyzed by SPSS17.0, and the measurement data were in the form of mean and standard deviation. Compared with t test, P<0.05, the difference was statistically significant. Conclusions: Through the analysis of the effect of the feedback system in our department, the specific improvement program has been formulated, which can improve the quality of teaching.

Introduction

At present, in the higher education system, the students' learning effect is good or bad, the superiority and inferiority of teacher's teaching effect, the most direct and the most important form is the examination results. The establishment of examination feedback system will help to improve the quality of education and teaching, facilitate the timely communication between the two sides of the teaching, and timely feedback of information. Based on the operation effect of the examination feedback system in our institute, this paper discusses the significance of the establishment of the feedback mechanism to the students, teachers and administrators, put forward improvement measures. Examination feedback mechanism can maintain the reasonable operation of the examination quality management system and timely communication between the two sides of the teaching. Based on this importance, our department has gradually attached importance to the research of feedback mechanism in recent years. Through investigation and exploration, the examination feedback mechanism has been continuously implemented in our department.

Data and Methods

General Data

The examination feedback system began to be implemented among grade 2011 students in our department. Study Group: selection 2011 undergraduate major in Laboratory Medicine students, a total of 71, the courses are "clinical biochemistry examination", and "clinical laboratory quality management". The textbooks are all published by People's Health Press; the teachers are taught in strict accordance with the syllabus. Control group: selection 2010 undergraduate major in Laboratory Medicine students, a total of 73, textbooks, course name, teaching contents and teachers are the same as the research group. The two groups were comparable, P>0.05.

Research Method

Study Group: In the teaching process, the examination feedback is implemented, through the analysis of the results of peacetime examination, focus on the wrong questions and analysis, pointed out the reasons for losing. Guide students to strengthen the review of this part of knowledge, It emphasizes

that students should pay attention to learning style and improved learning methods. So the teacher's guidance to students is more targeted.Control group: the traditional routine teaching and examination methods were used. The 2 groups of students at the end of the four courses test results were statistically analyzed.

Statistical Methods

The results were statistically analyzed by SPSS17.0. The measurement data are in the form of mean

$\pm$ standard deviation($\bar{x} \pm s$). Comparison of t tests, the difference of P<0.05 was statistically significant.

Results

The students of the grade 2011 (Study Group) and grade 2010 (control group), the average score of" clinical biochemistry exam" is 84.8 and 78.37; and the average score of "test quality management" course is 83.2 and 81.3. The two groups were compared and analyzed (Table 1). The scores of the study group and the control group were compared by two independent sample t test, the difference was statistically significant (t=2.32, P=0.0227). That is to say, the effect of the study group is different from the control group, the implementation of the examination feedback in the teaching process has achieved certain results.

Table 1. Test report of "clinical biochemistry" and "quality management of clinical laboratory" (score).

Grouping	n	Clinical Biochemistry scores	Quality Management of Clinical Laboratory scores
Research Group (2011)	71	84.5±5.32	83.2±4.81
control group (2010)	73	78.37±6.21	81.3±4.95

Note: The 2 courses of the 2 groups were compared with P<0.05, there were significant differences, indicating that

Discussion

The Origin of Examination Feedback

In order to meet the needs of education development and social demand for high-quality talents, the quality of examination in Colleges and universities must be appropriately improved to provide impetus for the improvement of higher education quality [1]. The management of all aspects of examination quality is one aspect of the management of the examination process. Focusing on the whole process of education and teaching, the establishment of reasonable feedback mechanism is an important part of examination quality management. Examination feedback can improve learning ability for students and Improve teaching measures for teachers, and ultimately improve the level of examination management. In the feedback process, teachers and students can find their own shortcomings, which can leak filled, timely adjustment of teaching methods and find effective measures to improve learning.

Implementation of Examination Feedback System in Our Department

Objective: For both teachers and students, they need to obtain feedback, understanding the situation, finding problems and improving timely. Contribute to the establishment of "feedback correction" mechanism, make students gain knowledge and learning skills, give the teacher feedback by way of evaluation, the teacher can found the breakthrough point, analyzes the reasons, curriculum and classroom were better to regulation [2]. Form: Students' final grades consist of two parts: formative assessment and summative assessment in our department, the formative assessment results should not be lower than 50% of the final total score in principle, and the score feedback also includes the two parts. For formative assessment, the feedback form is mainly reflected in the usual teaching process：

In class PPT, the common problems of test paper response are unified explained, and the reasons are found. Hold a forum, set up QQ group, WeChat group and other ways to discuss the problems encountered in the process of learning, guidance and improvement of students' learning methods, etc. For the final examination feedback, our department implements the "double feedback system", personal feedback and class feedback parallel. Significance: For students: Through the examination, students can adjust their learning methods and learning state. According to the examination of the feedback information, understanding of them situation timely, further self-discipline, to make greater progress in the next phase of the study, especially for the achievement is not ideal, you can discover problems and find the shortcomings, strive for success on the next stage [3]. The significance of feedback is to let the students ignore the results, pay attention to the process, ignore the scores, pay attention to the harvest. For teachers: Teachers can know the degree of students' mastery of knowledge in time, In view of the teaching methods, teaching methods, timely summary, update the teaching content, improve the quality of proposition and examination, strengthen communication with students, so that the quality of education and teaching has been significantly improved. For Teaching manager people: They can collect examination information through various special assessment, questionnaire survey, targeted student seminars and other ways, Understand the specific circumstances of the implementation of the examination, through the collection of information summary, analysis, in the course of the examination reflects the situation and problems in time to solve and improve. According to the feedback information to related department examination, examination management and personnel promptly correct the problems in the process of managing, take corrective measures to improve the quality of examination management, improve the management of the exam.

The Insufficiency of Examination Feedback

Examination quality analysis and evaluation is not only a basic step in modern examination process, but also a reasonable guarantee to promote the examination to be scientific. Through the correct analysis of the examination results, the quality of examination proposition, the quality of examination, and the quality and level of teaching managers are improved. Judging from the current situation of the curriculum examination in our institute, although the examination evaluation reform has been carried out continuously, the examination analysis and feedback have not been attention to paid. Specifically, the quality of the examination mainly includes the quality of the test paper and the analysis of the students' scores. The basis of achievement analysis is the quality analysis of test paper. The way to accurately reflect the effect of teaching and the problems existing in the teaching process depends on the analysis of students' achievements. According to the indicators in the test paper analysis, whether the teaching process conforms to the syllabus is judged. But in the actual application process, most examinations become mere formality. After the end of the centralized course examination, the teacher submitted the results to the educational administration after reading the test paper, and there was no reasonable analysis and summary [4]. Most of the teachers ended the final examination activities. Even if a part of the teachers can do the test paper analysis, they can only do the pass rate, excellent rate and the distribution of the number of people in each fraction. Few teachers can analyze papers carefully and scientifically, and analyze the difficulty, reliability, validity and discrimination of the test. The feedback of examination and the improvement of teaching methods have no promoting effect. Due to the lack of test paper analysis summary, analysis and feedback, teaching managers cannot make full use of the examination of information feedback is of value to the teaching management and quality assessment information, it is difficult to rely on paper analysis to improve the teaching quality monitoring and feedback incentive, It cannot really play the role of examination in teaching diagnosis and feedback [5].

Improvement of Examination Feedback in Our Department

In order to meet the needs of the development of education and Society for high-quality talents, we must improve the quality of examinations, and carry out scientific quality management of

examinations to provide impetus for the improvement of the quality of Higher Education. The first goal of the examination is to test the degree of mastery of a certain knowledge or skill, and the second is to test whether the test takers have the basic ability to acquire certain qualifications. Management of the examination needs to pay attention to the whole process of teaching, and the establishment of a reasonable feedback mechanism is an important part of examination quality management, therefore, process evaluation should be more concerned. Test feedback can give full play to the examination and evaluation of the pulse diagnosis and incentive function, the feedback mechanism of examination needs to be reconstructed in the process in our department. Through a variety of special assessment, questionnaire survey, targeted student seminars held a variety of ways to collect test information, establish test feedback channels，Part of the information through the collation feedback, guide and help teachers improve teaching, change the form of teacher evaluation in the past, the Trinity test feedback channel composed of teacher evaluation, student self-evaluation and department evaluation is established, subjects, multi-level, multi-step, multi link participation are introduced into the examination activities. Through the collection of examination feedback information, teachers targeted to make suitable for students learning improvement plan. And grasp the students' learning methods and learning situation, and improve them in different stages of teaching at the same time, so as to improve the quality of teaching.

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References

[1] M.M. Yin, On the significance of establishing the feedback mechanism of examination and its effect analysis, J .Journal of graduate school of Chinese academy of social sciences. 7（2010）141-144.
[2] X.J. Yu, Evaluation and Discussion on examination paper quality of 15 medical courses, J. Higher Education Forum. 2(2004)87.

[3] D.X. Wei, Evaluation and analysis of curriculum examination quality, J. Journal of Xuzhou Education College. 12(2003) 43- 44.

[4] L. He, How to give full play to the information feedback function of examination quality analysis, J. Higher Education Forum. 2(2009)104-105.

[5] P. Zhang, J. He, Establishing the mechanism of "analysis and feedback" of students' achievements to improve the fine level of teaching management, J. Chinese University Teaching. 2(2015)81-83.