Research on the Examination Method of Zoology Experimental Course

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[Abstract] Zoology is an experimental subject. Zoology experiments are an indispensable part of zoology teaching, and it is an organic whole that complements classroom teaching. The good zoology experiment course is a necessary prerequisite for learning zoology, and the examination of the zoology experiment course is an effective means to test the teaching effect of the zoology experiment course. In the past, most of the examinations for the Zoology Experimental Course were carried out together with the final examination of the final theoretical course after the completion of all the experimental courses. There are obvious drawbacks to this kind of "paper talk" test method. First of all, it can't comprehensively and realistically assess students' experimental skills and level; on the other hand, it makes students not pay attention to the experimental course, because it can pass the test only by memorizing the results of the experiment. The irrationality of this traditional examination method has greatly affected the teaching effect of zoology and limited the teaching reform and development of zoology.
[Keywords] Examination method; Zoology experimental course; Reform

1. Introduction

In response to the problems of the traditional examination methods, we have studied and reformed the examination methods of the zoology experimental class, which not only increases the percentage score of the experimental class scores in the total score, but also explores a new zoology test model. This enhances the students' emphasis on the experimental class. The students' ability to observe, draw, experiment, orally express, and analyze and solve problems has been significantly improved. The details are as follows.

2. Examination Purpose and Content

According to the requirements of the educational syllabus of higher normal colleges and the needs of the teaching reform of zoology, there are 20 experiments in the zoology experimental class: 12 invertebrate and 8 vertebrates. The purpose of the exam is to test basic knowledge, operational skills, and the ability to analyze problems. The exam is divided into two parts: the usual assessment and the final exam. Usually, it mainly evaluates the four aspects of the completion of the experimental report, the ability of bio-drawing, the ability to answer questions, and the ability to operate. The phenomenon of late arrival and early departure and lack of seriousness in the

experiment is deducted from the usual assessment results. The final examination is conducted by oral test. The contents include three aspects: identification of morphological structure under the microscope, experimental animal anatomy and animal classification knowledge.

The purpose of the examination and the determination of the examination content not only make the teacher's teaching purpose more clear, but also improve the students' emphasis on the experimental class.

2.1 Scoring Criteria

In the experimental part, the test scores accounted for 20%, of which the average assessment accounted for 8%, and the final examination accounted for 12%.

2.1.1 Ordinary Assessment

Record the score of each student's experimental class in tabular form. The four assessment indicators each account for 2 points, and there are five assessment levels: excellent (2 points), good (1.5 points), passing (1 point), failing (0.5 points), and zero points (0 points). Calculate the average of each item, and then add the four items. That is the average score for each student.

2.1.2 Final Examination

This is a comprehensive test of the students' experimental ability. It also records the scores of each indicator of the students in tabular form. Each of the three indicators has 4 points. Each of the three indicators has 4 points. There are five levels of assessment: excellent (4 points), good (3 points), passing (2 points), failing (1 point), and zero points (0 points). Find the average score for each item and add them together, which is the total score.

2.1.3 Scoring Criteria

Excellent: Successful completion of the test questions; Good: Basically complete the content of the test questions; Pass: One-third of the test questions are not completed: Fail: There is two thirds of the test questions that can't be completed; Zero points: Basically, the test questions are not completed.

2.2 Assessments Implementation

2.2.1 Usual Assessment

This part of the content is carried out during the daily course of the experiment. However, for the assessment of the ability to answer questions, the teacher cannot ask each student questions every time. In response to this problem, we have 3 to 5 chances to answer questions based on the number of participants in the lab and the number of experiments per semester, and then calculate the average to be the score. Classroom questions are random, not in the order of the list, nor in the order of the

student numbers, so that each student is prepared to be questioned and promote the students to prepare for the class.

2.2.2 Final Examination

(1) Establish a test bank: establish more than 10 sets of test questions for the identification of the morphological structure under the microscope, the experimental animal anatomy and the animal classification.

(2) Determine the test date and test location: The test date and test location will be arranged by the department, and after the test date is determined, the laboratory and the specimen room will be opened one week in advance for students to review the experimental content.

(3) Examination method: Each of the three assessment indicators is under the responsibility of a teacher. The questions are obtained by students by lot. After the test is taken, the student must complete the test requirements within a limited time.

3. Some Experiences about the Examination Method

(1) Ask questions before the experiment, and promote students to carefully review the theoretical content related to the experimental content, carefully preview the experimental guidance, and achieve "ready to come" to improve the experimental results.

(2) The usual assessment results can be reflected in the experimental report. Students can see each other and can stimulate and motivate students' enthusiasm and self-motivation.

(3) Since each experiment has several indicators throughout the experiment, every student can take the initiative to operate, avoiding the previous mouth and hands, as long as you know the experimental results, you can write the report report's shortcomings.

(4) The new examination method is an assessment of the overall quality of students. It not only assesses students' theoretical knowledge, but also assesses students' ability to apply theoretical knowledge to practice — that is, experimental operational skills. Through the teacher's question and the student's answer, the students' oral expression ability is exercised, which lays a foundation for the future work of middle school teaching, which is in line with the current Chinese requirements for talent training.

(5) The indicators and details involved in the test scores are recorded in the form of a table, so that we can evaluate the students' skills in one or a certain aspect from the perspective of individual and overall through the analysis of the forms. The

advantages and disadvantages of the teacher, so that the teacher can identify the problem, improve the teaching in a targeted manner, and develop students in a planned manner.

5. Conclusion

After two years of practice, this new method of examination, through the feedback of students, is generally (more than 90% of students) believe that this type of examination helps students master the experimental skills. However, it also has shortcomings such as workload and long test time. In the future practice, we still need to constantly reform and improve.

References

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