



## Discussion on Statistics Teaching Management

Qingjun Wu

College of Operation and Management, Qufu Normal University, Rizhao 276826, China

E-mail: wuqingjun@yahoo.com.cn

### Abstract

The teaching management requires reasonable deployment of all kinds of teaching essential factors in teaching process to promote students' comprehensive and harmonious development. Having analyzing questions which appears frequently in statistics teaching management of college, the article finds out their causes, according to which this article proposes effective measures for optimizing statistics teaching management.

**Keywords:** Statistics, Teaching Management, Optimization

### 1. Introduction

To optimize the teaching management, we should adjust teaching factors reasonably and systemically tackle all kinds of contradictions in teaching management in order to keep the teaching in a harmonious and unified state with an ultimate aim of achieving the harmony in teaching goal, the course content, the teaching order and the relationship between teachers and students. The teaching management should set up a students-oriented education notion, transform the wrong idea that regards students as test machine and meet students' various needs, thus can help students develop in a harmonious and sustainable way. In the teaching process, teachers should be organizers of students 'learning activities as well as their guiders, encouraging students think positively and initiatively and solve problems by themselves. On the basis of the characteristics of statistics courses in college, the article summarizes the main problems and related reasons in statistics teaching management, accordingly proposing the effective measures.

### 2. The Problems That Appear Frequently in Statistics Teaching Management

#### 2.1 A Few students skip classes

According to a sketchy investigation, about 5% university students or so often skip statistics class.

#### 2.2 Some students are inactive in class.

According to a sketchy investigation, about 15% university students or so doze off, read some entertaining books or chat in statistics class.

#### 2.3 Most students only passively listen to the teacher rather than take the initiatives to think and comprehend actively in statistics class.

#### 2.4 A Majority of students only can solve statistical problems which have been taught but feel quite at a loss to a changed topic.

#### 2.5 Most students are only good at memorizing concepts and formulas while poor at applying the statistical soft wares.

#### 2.6 Many students are only ready to study the statistical knowledge in their textbooks, while unwilling to spend time in extracurricular statistical knowledge.

#### 2.7 Many students would pay much more attention to key points in the exam than those non- examined points.

#### 2.8 Many students only do the assignments given by the teachers, never bothering to find questions on their own, let alone solving problems initiatively.

### 3. The Reasons for these Problems

#### 3.1 The exam-oriented education turns students to a kind of "test machine"

The Exam-oriented education overemphasizes the teaching's utility, consequently neglect its ability, emotion, manner and values targets and thus weaken the essential functions of teaching.

Most students under such a teaching mode tend to pay all their attention to the test result with not even a little interest in statistics itself. Students take their study as a way of finishing tasks. Therefore, they study in a passive way rather than on their own initiative.

*3.2 Most students believe that knowledge taught in class is absolutely correct and objective and that teacher's function is to pour the knowledge into student's brains, while the students' responsibility is to accept and grasp the knowledge undoubtedly.*

These wrong viewpoints cause students not to or dare to propose any questions, thus cause students lack innovative spirits.

*3.3 Because the statistical functions are not fully introduced to students in their first class, they know far from enough about the importance of statistics.*

Ineffective introduction to each class and obsolete teaching methods lead to students' ignorance of the importance of each statistics class and their lack of interest in it.

*3.4 Students who spare themselves relax routinely in statistics class due to the degree variation of teacher's request for different curriculums.*

*3.5 Statistical course content involves much knowledge on higher mathematics, theories of probability in particular.*

Therefore those students who have not so solid mathematics foundation often feel awe-stricken.

*3.6 If statistical class's content only focuses on the derivation and proof of formulas and does not involve software application, students would have no statistical application ability.*

#### **4. Measures to Optimize Statistics Teaching Management**

##### *4.1 Optimization Principle*

###### *4.1.1 Teaching goal needs an overall design*

In teaching management we should adjust and control student's study behavior through establishing teaching target system in order to obtain students' approval of teaching prospects.

###### *4.1.2 Teaching content should be rich and varied*

In the teaching content design, we should improve the educational model and teaching methods, by any means excite students' learning interest, stimulate and satisfy all students' inquisitiveness and let them experience happiness of success in autonomous and interesting study.

###### *4.1.3 Teachers and students should cooperate with each other and promote mutually.*

Teaching needs the unification between teachers' teaching and students' study, which is interaction in essence. Harmonious, democratic and equal relationship between teachers and students can only be established by the means of contact. In teaching process teacher should be converted from an egoistic to the participant, collaborator and promoter of students and promote their mutual interaction through equal communications with students.

###### *4.1.4 Teaching appraisal should be fair*

If teaching appraisal is utilized properly, it will be helpful to promote students' mood stability, stimulate their self-respect and self-confidence and encourage their insistent new goals pursuit.

When utilizing teaching appraisal, we should insist in multi-dimensional appraisal instead of sole appraisal and apply a comprehensive and scientific appraising way rather than an appraisal only based on test scores. Moreover, we should combine the examinations of their cognitive ability and skills and by unifying the formative appraisal and terminating appraisal, achieve a harmonious unification between teaching process appraisal and study result appraisal.

##### *4.2 Specific measures*

###### *4.2 .1 Teachers set up some situations and stimulate students' interests.*

At the beginning of class teachers firstly propose the practical problems to solve, by which they can establish a kind of inquisitive environment aimed at stimulating student's desire to inquire.

###### *4.2 .2 Teachers propose questions and encourage students to think*

A doubt is a beginning of thought and foundation of innovation. In the teaching process, teachers should not be eager to give conclusions directly. Instead, they should let students solve problems themselves.

###### *4.2 .3 Students participate in teaching process and learn to explore in academic fields.*

Student's study should not be a passive absorbing process. Even if the scientific knowledge they learn is results of predecessor's thoughts, students still should think themselves before they accept.

In teaching process, we should emphasize students' participation in study, which means fully demonstrating the occurring and developing process of knowledge and transforming the static knowledge to a dynamic exploration object so as to let students receive training and raise their exploring spirits during the process of exploring unknown domains.

4.2.4 We should encourage students to develop their radiating reasoning ability and innovative awareness

In teaching, we should encourage students to solve problems from different angles and with different methods, especially encourage students to propose unique opinions and creative ideas.

4.2.5 Teachers perform appropriate stimulation.

Encouragement is a teaching art, which can fully arouses students' enthusiasm of study, make lessons vivid, lively and virtually effective. If students obtain respect, warmth and friendship from their teachers, they will show more passion in statistics class. Once teachers arrange work in an encouraging tone, student's self-respect can be satisfied, thus their potential talents can be explored to a maximum degree. In teaching process, students' biggest expectation is nothing less than obtaining the appropriate praise and encouragement from their teachers. In class, if contradictions bring up between teachers and students, teachers should tolerate students' shortcomings and not cherish prejudice against them, meanwhile treating students with great warmth and deep emotion.

## References

- Gao, Wen. (2002). *A Discussion on Teaching Patterns*. Shanghai Education Press.
- Lynda Fielstein ,Patricia Phelps. *Teacher new concept*(2002),Chinese Light industry Publishing house.
- Ma, Lan. (2004). *Value Connotation of Cooperative Learning*. Course, Teaching Material and Teaching Method. (4).
- Xu, Xiaozhou. (2002). *On the Team Cooperation Learning Style in Undergraduate Teaching of Research-type Universities*. China Higher Education Research. (5).
- Ye,Lan, *Newly organized pedagogy course*(1991), East China Normal university Publishing house.3.
- Zeng, Qi. (2002). *Reflection and Outlook of Cooperative Learning Research*. Theory and Practice of Education. (3).
- Zhang, Qinxia. (2001). *The Team Spirit of Confucianism and the Cultivation of College Students' Sense of Team*. Journal of Shannxi Education Institure. (1).
- Zheng Jinzhou, *Education reasonable argument*(2000), East China Normal university Publishing house.