# Research on the Course of Geographical Science Management in Colleges and Universities

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**Abstract:** Geographic science course is a compulsory course for free normal students. Because of its strong theoretical and sports knowledge, it will have some difficulties in the process of learning. This paper puts forward the research on the course of geographic science management in Colleges and universities on the basis of some classroom problems of free normal students' survival in Hunan City College, which has certain practical value.

Keywords: Geography knowledge; University curriculum; Application; Research

#### 1. Introduction

The comprehensive practice of regional physical geography is an important practical teaching link in the training system of undergraduates majoring in geography science (normal university). It is an important way for students to analyze and solve practical complex geographic problems by using the theoretical knowledge they have learnt and to obtain comprehensive knowledge[1-3]. That is to say, to enable students to make comprehensive analysis from the perspectives of geological, geomorphological, climate, hydrology, soil and vegetation. And to understand the integrity and difference of geographical environment, to explore the causes and mechanisms of natural geographical phenomena and processes, and to promote the effective integration of theoretical knowledge and practical skills in classroom by creating realistic problem situations, so as to improve students' ability of geo-thinking and practical innovation. Therefore, the comprehensive practice of regional physical geography is not only the embodiment of innovative talent training and comprehensive quality education for college students[4-5], but also the requirement of laying a solid foundation for students' follow-up professional learning and better engaging in geography teaching in their work posts. This paper introduces the selection route and content of the comprehensive practice of physical geography in Hunan area, which is the major of geography course for normal students in Hunan city college. Based on practical experience, the common problems affecting the teaching effect in the process of practice are sorted out and summarized, and some meaningful explorations are made to solve these problems in combination with practice.

### 2. The Inadequacy of Geography Curriculum

The curriculum group is built for the goal of personnel training. It is necessary to integrate the contents and optimize the structure of all courses from a systematic point of view. The existing curriculum group lacks the research of horizontal relationship, overemphasizes the independence and integrity of single curriculum, neglects the horizontal connection and cross-synthesis between courses, and fails to design the teaching objectives of each course from the perspective of curriculum system, resulting in excessive repetition of contents among courses, outdated curriculum content and the disjunction between curriculum design and curriculum implementation[1]. For example, in the course system of geography science, some textbooks have too much space to elaborate the contents of remote sensing and GIS, which makes it difficult for students to understand without touching the contents of relevant courses. If they spend too much time in teaching, they will shorten the teaching time of cartography theory knowledge, fail to reach the learning objectives of the course, and make cartography course and remote sensing, and GIS difficult for students to understand. Geographic Information System (GIS) courses have poor cohesion, repetitive content, lack of integration and complementarity, and the system is closed and separated, which results in the teaching synergy between courses and the overall training advantages cannot be maximized. In the aspect of vertical relationship, there exists a chaotic phenomenon between the structure system of pre-course and precourse, which does not form a complete chain. Some knowledge points appear repeatedly in the pre-course and the follow-up course, or they are not mentioned in the pre-course, but they need to be used in the follow-up course. The knowledge points of the course are scattered, and the lack of connection between the pre-course and the follow-up course makes it difficult for students. Master systematic knowledge.

# 3. Students' Inadequate Response in Geography Class

Firstly, it is difficult for a few students to get good exercise in their practical and innovative abilities. Compared with classroom teaching, the comprehensive practice of physical geography emphasizes practicality and comprehensiveness. Abundant practice content and problem situation-centered teaching mode can provide students with many materials for flexible use of theoretical knowledge to analyze and solve practical problems. We require students to make full use of geological maps, topographic maps, soil distribution maps, vegetation distribution maps, traffic maps and GPS, geological compass, geological hammer and other practical tools in their practice. Students are required to collect major rock, soil and plant specimens, and fill in field observation records and practice reports. However, there are often some students who do not put their energies into teaching well. They are keen on tourism and entertainment activities when teachers explain or other students in the same group conduct field observation and sampling. Finally, they use the results of other students to cope with records and practice reports. This situation is easy to occur when teachers uniformly explain and assign group tasks.

Secondly, the teachers are not well prepared and the teaching organization and management are not in place. The background of physical geography in Southwest China is complex, and comprehensive practice has put forward higher requirements for teachers' field teaching ability. Firstly, teachers should have a good knowledge reserve and be familiar with each practice content, and have a clear understanding of the key points and difficulties of practice, so as to create a better situation of practical geographical problems and stimulate students' interest and enthusiasm in exploring knowledge. Secondly, good practice results cannot be separated from scientific teaching organization and management. Instructors should not only improve their own comprehensive knowledge reserves, but also realize the effective transformation from classroom theory teaching to field "interactive" teaching mode. They need to start from students more, and formulate scientific and effective teaching programs in view of the various problems that may arise in practice teaching. Therefore, in the comprehensive practice, teachers should strive to find effective ways to improve students' ability to find problems and practice, and make detailed management of teaching organization. Reasonable teacherstudent ratio is an important factor in determining the quality of practice teaching. Unlike the one-to-many teaching mode in the classroom, once there are too many students and too few instructors in the comprehensive practice, students lack enough time and opportunity to communicate with teachers directly, and also lack enough supervision of the practice process. Because of the large number of students, some students tend to put the questions they want to ask on other students, but they do not take the initiative to raise them, which affects their practice effect. In addition, unreasonable teacher-student ratio is also not conducive to the organization and management of students' life in the process of internship, increasing the probability of emergencies.

Fourthly, there is a lack of a scientific and reasonable comprehensive practice effect test system. The results of comprehensive practice need to objectively reflect the effect of students' practice, mainly based on the practice records and final practice reports submitted by students, combined with the performance of practice for comprehensive evaluation. Among them, the average performance of practice is often due to the large number of students, teachers do not know enough about students, it is difficult to achieve objective evaluation. This requires the establishment of a comprehensive evaluation system involving practice instructors, class committees, group leaders and peer reviews, to urge students to have a correct attitude in the comprehensive practice and to focus on teaching.

### 4. Scientific Construction Geography Discipline Construction and Reform

The rapid growth of geographical science expertise and the shortening of knowledge obsolescence cycle have posed a new challenge to higher education, which is also a basic requirement in the implementation of professional curriculum groups. Many courses in the course group have different knowledge perspectives and emphases through different courses, which make the contents of courses overlap, inherit and penetrate into each other. In the course group design and construction, the content must be merged and decomposed accordingly, the hours should be redistributed and the content should be redesigned to optimize the structure of professional courses. Under the framework of large curriculum, the key to the implementation of curriculum group is to effectively link and integrate the teaching content of curriculum within the group. However, while optimizing the structure of curriculum group, the selection of teaching content should be scientific, timely and innovative, and constantly revised in practice. If the course content becomes rather old, it will seriously affect the training of professionals. Content renewal is not a simple material renewal, but a renewal of ideas and concepts. Through the integration of curriculum groups, content is constantly replaced, old and outdated knowledge is deleted, so as to make it infiltrate, cross and integrate with each other. From content to structure, it will be adapted to the new educational concept. The construction of curriculum group will make the function of curriculum more perfect through the reform of co-innovation talent training mode, so as to realize the optimization of curriculum structure, curriculum system and function, and refine knowledge. A series of teaching syllabuses have been revised and formulated, emphasizing the coordination of the main line, the unification of the teaching objectives and the echo of the teaching contents, so as to form a scientific and complete teaching system. Considering the updating of the course content information, we can formulate several versions of the syllabus, which is convenient for the reasonable tailoring of the teaching process and achieves the effect of modularization.

### 5. Concluding Remarks

Geography research pays attention to the comprehensiveness of geographical system and the dynamics of geographical process. The application of new theories,

new technologies and new methods in the curriculum system of geography science requires the construction of new perspectives and methods of curriculum group. The curriculum group of geography science needs to construct a knowledge system to meet the needs of development.

#### References

- [1] He Z.S. Exploration on the course group construction of computer major in applied undergraduate education . Journal of Chuzhou University. 2006, 8, 30-32.
- [2] Xu J.P. Course group construction of "Network communication technology" in the age of media integration-taking communication science major of Qingdao agricultural university as an example. Educational Review. 2015, 07, 111-114.
- [3] Endsley M.R. Design and evaluation for situation awareness enhancement. Proceedings of the Human Factors Society 32nd Annual Meeting, Santa Monica. 1988, 1, 97-101.
- [4] Dominguez C., Vidulich M., Vogel E., McMillan G. Situation awareness: papers and annotated bibliography. Armstrong Laboratory, Human System Center. 1994.
- [5] Dominguez C. Can sa be defined situation awareness: papers and annotated bibliography. Wright-Patterson Airforce Base, OH: Air Force Systems Command. 5-15.