Exploration of Geographical Practice Curriculum Reform in Junior Middle School

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Abstract: Geographical practice class is an open teaching form, which lets students go out of the class to broaden their field of vision, comprehend the life, exercise their will, and enhance their abilities in the “big classroom” (the society). Of course, it’s also an effective way to reduce the geography “burden”, increase efficiency and implement quality education in China. Through the questionnaire survey on the part of junior high school students, the development of the geographical practice class is not optimistic. The practical activities of a geography class in each semester were rarely carried out, and failed to reach the requirements of geographic practice regulated by ”Full-time compulsory education—geography curriculum standard”. Therefore, the survey showed the reason, which geographic practice could not be effectively carried out, is the current evaluation system and indifference. The government should fit the geographical practice activities into the final or entrance exams to evaluate, attach importance to the high school students’ geographical practice activities, and increase the input and control of the course.

Keywords: Junior High School, Geographical Practice Activity, Curriculum Reform

I. Introduction

The geographical practice activity is that the students carry out a planned practice under the teacher's guidance based on the geographical study in a classroom, the use of the learning and mastery of geography knowledge. It includes some activities on the natural environment and the production activities, such as astronomical observation, geographical investigation and local geographic surveys [1]. It is one of the most important and effective teaching activities to cultivate students' innovative spirit and ability, and is also the main position to cultivate students' patriotism and love their native land.

In the eyes of most parents, geography is a "minor subject", even once dismissed with a different set of eyes. Among the students, the jingle of "geography is minor subject, solve it just by reciting while taking part in an examination" is spread widely. Obviously, if examination oriented education always haunts like a spell, it is difficult to possess the pure blue sky of quality education [2]. "Full-time Compulsory Education—geography curriculum standard" thinks that "geographical practice activities, especially field investigation, can make students experience the process of geographical knowledge and strengthen their geography practical ability".

Exam oriented education makes the students in China have been detained in the classroom and textbooks for a long time. They often have little practical experience, and are lacked of vitality, imagination and creativity. Therefore, it is necessary to change the situation of "study mechanically" and "reading in a pedantic way" by increasing the class of geographical practice activity to meet the international demands. High school students in China have always accepted the traditional education, and they attach great importance to dealing with the exam successfully through learning by rote memorization. The result causes a phenomenon of "high scores but low abilities". So, students cannot complete a field inspection project independently. Of course, they cannot learn the useful knowledge about their lives and lifelong development [3]. The educational contents and methods of geography curriculum must be reformed to let students out of the classroom, carry out practical activities, and accumulate of practical experience. Carrying out practical activities in the geography class will help to broaden the students’ view field, develop personal interests, hobbies and expertise, and fully experience the fun of life. So, it should make students learn they need. It is an effective way of changing the education situation. It plays an irreplaceable role in realizing the goal of geography teaching, completing the task of geography teaching, cultivating the high school students in the new era. Therefore, carrying out the practice activities of geography is necessary. In September 2007, the Curriculum and Teaching Research Department of the Central Education Science Research Institute conducted a three-month survey to understand the implementation of the geography curriculum in China [5]. Taking the students of a famous local junior high school as an example, this paper uses the questionnaire survey method to carry out the research.
II. Research Methods

This questionnaire mainly explores geographical practice activities in junior high school. Taking all students of seven different grades in a famous public school in Hunan Province as the object of investigation, a survey was conducted on the spot. 450 questionnaires were issued, and the effective questionnaires were 449. The effective rate was 99.8%.

III. Survey Results Of The Course Of Geographical Practice Activity

The "new curriculum" stipulates the curriculum is composed of two parts: the subject curriculum and activity curriculum. Activity curriculum refers to the course outside of the subject curriculums, which are organized by the school, comprehensive use of the knowledge learned, and conduct the curriculum system with the main features of the practice, autonomy, interest and non subject.

3.1 Survey results

3.1.1 Degree of liking for geography

<table>
<thead>
<tr>
<th>Type</th>
<th>Like it very much</th>
<th>Like</th>
<th>General</th>
<th>Dislike</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage (%)</td>
<td>35.6</td>
<td>47.7</td>
<td>16.4</td>
<td>0.5</td>
</tr>
</tbody>
</table>

Survey results show that 83.3% of the students like the geography. They felt the geography is very interesting, and like the geography teacher in class. They also think that geography is very useful for life, and learning geography enables them to integrate into society earlier. They think if they learn the geographical knowledge, they will take to glance at the world without leaving home (Table 1).

However, 16.7% of the students do not like the geography, and even two students chose "hate to learn geography". This part of the students thought the teaching form was single in the class, and the course contents were not attractive, even a little boring. Besides, the geography is complicated, and there is too much knowledge points to be remembered. Before an exam, except learning by rote, it's just no other way.

3.1.2 The purpose of learning geography

Based on Fig. 1, students like to learn more geography knowledge for lives, especially for their future lives, rather than just to cope with the exam. In terms of a lot of geographical knowledge, students only know about them in books, but they do not know anything about them in real life. This shows the need of carrying out the geographical practice activity curriculum.

![Fig.1 Purpose of Learning Geography](image_url)

A. To get a high score and get into a better school.
B. Although they do not want to learn geography, there is no way, because it is necessary to accept the examination.
C. To live better in the future.
D. Do not know what to learn to use.
A & B. Selected the options A and B simultaneously

3.1.3 Whether learning the geography knowledge is helpful for the future life

72.83% of students think that learning geography knowledge is helpful to them. Through studying geographical knowledge, they know the natural landscape and customs around the world and customs, how to
prepare themselves for the journey, where is suitable for living and how to prevent disasters, etc. But 27.17% of the students do not know what to learn geography knowledge and why to learn geography knowledge (Table 2).

<table>
<thead>
<tr>
<th>Type</th>
<th>Great help</th>
<th>Not clear</th>
<th>Very little help</th>
<th>No help</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage (%)</td>
<td>72.83</td>
<td>22.27</td>
<td>4.45</td>
<td>0.45</td>
</tr>
</tbody>
</table>

### 3.1.4 Relationship between teaching contents and real life

From Fig. 2, it can be seen that 65.62% of the students believe that the teaching contents relate much with the real lives. 31.23% of the students consider the linkage is in general. Only 2.92% of the students think the linkage is very little, and even a student chose “Almost no contact”.

### 3.1.5 The function of geographical practice activity class

Students who believed the geographical practice activities can enrich their knowledge accounted for 92.20%, and those who think the activities can develop their own ability accounted for 63%. The selection rate for "More intuitive observation of geographical things, deepen the impression of geographical knowledge" is 91.50%. And 38.30% of the students think the course is fun. The other options, such as relaxing themselves, releasing the pressure of learning, promoting the development of physical and mental health, increasing the learning interest of geography, understanding more knowledge, enhancing the ability of cooperation among students, widening their sight and deepening the understanding of the learned knowledge, are chosen by 45.60% of the students (Table 3).

<table>
<thead>
<tr>
<th>Type</th>
<th>Enriching their knowledge</th>
<th>Cultivating their operating ability</th>
<th>More intuitive observation of geographical things</th>
<th>Fun</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage (%)</td>
<td>92.2</td>
<td>63.0</td>
<td>91.5</td>
<td>38.3</td>
<td>45.6</td>
</tr>
</tbody>
</table>

### 3.1.6 The current situation of geography practice activities in school

Obviously, 61.20% of students said they attended the geography practice class occasionally, and 32.56% of the students think they never had the geographical practice class. Unfortunately, only 6.24% of the students said they often carried out the geographical practice class (Fig. 3).

### 3.2 Results analysis

#### 3.2.1 Students like to learn geography

Most of the students like to learn geography, which provides a precondition for carrying out geography activity class. Interest is the best teacher. If students have an interest, they will be able to learn useful knowledge about their lives. Of course, some students do not like, or even hate learning geography. Carrying out the geography activities’ courses will help to improve these students' interest of learning geography.
3.2.2 Evaluation mechanism has a restrictive effect on students’ learning purpose

Under the current education model of China, the examination is still the most important evaluation way. So, whether students or parents, they all want to get high records in the exam. Among the surveyed students, although 68.63% of them said learning geography is for a better life, they are mainly hoping to enter a key senior high school, and then a leading university. Their ultimate aim is to find a better job. Also, 24.05% of students think learning geography is just for the test. All shows that students are most concerned with the examination rather than interest, life or something else. In fact, the geography teacher’s teaching method is also impacted by the above thought seriously. They just take the knowledge points of the regular test in place, and ignore the training of practical skills.

3.2.3 Expected value which students are expected to carry out the geographical practice class is very high

The students in this school said that only part of the students had visited the geographical park to have an outdoor class, and only a small number of classes had visited the astronomical observatory to observe a moon phase. However, some students complain that they had not had an outdoor class. Thus, the students are very much looking forward to the outdoor activities. Due to the relatively small age of junior high school students, playing is their nature. Because every day’s classes are in the classroom, this makes them full of curiosity and novelty of the outdoor practice activity course. Based on the investigation, relaxing their moods, releasing the pressure of studying and promoting the development of physical and mental health may be the real idea of another part of the students.

3.2.4 Situation of carrying out geographical practice activities in school is not optimistic

According to the above, the percentage of carried out the geographical practice class is 61.20% (occasionally), 32.56% (never) and 6.24% (often) respectively. Some of the students said they had only one chance to see a moon phase with less than a minute for three years in the school. Though the interview of geography teachers, the main reason which the school opens the too little geography practice course may be concluded as the following several aspects:

1. High pressures of entering a higher school. As a local school, there are about 2000 students in each grade. Why are there so many parents and students to choose this school? The main reason is the school is almost in a monopoly position owing to its outstanding achievements of the annual examination and subjects’ competition. Students admitted to key high school each year accounted for almost half of the local candidates. The high expectations of the parents for students will undoubtedly increase the huge pressure on the school.

2. Big difficulty for the organization. Because each grade has over 2000 students, it is sometimes difficult to organize. For example, if the school arranges students to watch a moon phase, it must be on a day or two days near the full moon. Moreover, the weather is sunny, and it must not be done in a weekend (the students not at school). Further, it can only let students of three classes to watch. So, the time could add up to six months if the school let the entire 30 classes in a grade.

3. Lack of field practice base and funds. Society pays not enough attention to carry out such practical activity’s curriculum. Therefore, there is not good field practice base and adequate funding.

4. The safety of the students to go out. The safety accident was a concern for every educator. Indeed, first of all, the safety of students should be put in the first place. In fact, the safety factor of students going out is certainly lower than that of staying in the classroom. The middle school students are very active, which is prone to accidents. To avoid safety accidents as far as possible, Schools (or teachers) have to try to reduce the opportunity for students to go out to practice.

4. IV. Exploration On The New Curriculum Reform Of Geographical Practice Activity Course

The basic idea of the new geography curriculum reform is letting students learn the geography knowledge which is useful for life and the lifespan development. Because the geographical practice activity course is to make the geography knowledge living and practicing, the reform must be undertaken from two aspects of the social status reform and the course reform.

4.1 Reform of the social status of geographical practice activity course

4.1.1 Reform of an evaluation system

Too much emphasis on the evaluation of geographical knowledge has a great impact on the development of the practice activity’s class of the geography. At present, the final or entrance examination is based on the assessments of subject knowledge, and this leads to many students or parents only pay attention to the learning of geographical knowledge and despise the ability of comprehensive practical training of geography. Therefore, only integrating the evaluation of geography comprehensive practice ability into the evaluation system of further education, it can cause the attention of teachers, students or parents.
Therefore, the government should change the existing evaluation system firstly. In order to provide institutional support to carry out and open up a path for the geographical practice class, the government should make a set of a systematic, rigorous and reasonable evaluation system on the process and effect of the implementation, learning achievement and teaching of teachers. At the same time, the school should carry out the corresponding evaluation system to ensure the effective implementation of the geographical practice activities, and create favorable conditions for teachers and students.

4.1.2 Enlarge the development of the resources of geographical practice activity course
Geography practical activity course is practicable, comprehensive and independent. It can really improve students' life-skills. So, the government should increase the investment of the funds, and provide the implementation base for the school. Schools should also carry out the guiding ideology of the government to make full preparations for the opening of the geography practical activities. Teachers should not only be confined to the activities of the books on the case, but also should look for more resources from the side of life. Its aim is to make the course contents closer to the students' life and enhance their enthusiasm for learning. For example, schools in the mountains should make students closer to the mountains, understand and become familiar with the unique culture and material resources in the mountain area. Wherever it is, there are plenty of resources. Teachers should pay more attention to the resources nearby, and let the students learn how to care about the people and the matter.

4.2 Curriculum reforms of geographical practice activity course
Geography practical activities are mainly the observation, survey and investigation. The contents of the observation and survey mainly are: (1) Observation of astronomical phenomena, such as observing the moon phases, observations and records of the North Star, observation of the solar eclipse and lunar eclipse, etc.; (2) Observations of natural phenomena, such as meteorological observation, observation of geology and geomorphology, determination of the temperature changes when the fronts passed, record the process of weather changes, and so on [8].

The investigative contents are a survey of the local situation, and it is very extensive. It includes wild animals and plant resources, land utilization, water resources, native products, soil erosion, desertification and environmental pollution, etc. Through investigation, taking the vast natural and social as the classroom, let students find, appreciate and praise the beauty of their hometown [8].

4.2.1 Practice activity's course in a classroom
(1) The aim of “Practice activity course in classroom”
“Practice activities course in classroom” refers to practice in the classroom. In the classroom, not only the knowledge of the books not only can be taught by teachers, but also some practical activities can be designed by the students and teachers together. It can cultivate the habits of doing and thinking so as to add vigor to the boring classroom, which is extremely advantageous for mastery of knowledge. The implementation of “Practice activity course in classroom” can stimulate students' learning interest, make their body and mind in the best condition, be able to freely participate in the exploration and innovation, improve the teaching efficiency, mobilize the enthusiasm of students learning, and fully dig their potential. So, it can achieve the study for the purpose of application. Through “Practice activity course in classroom”, it can change "Want me to learn" to "I want to learn", and change "Teaching Classroom" to "Learning classroom". Obviously, it helps to cultivate students' sensibility and ability of innovation, which is conducive to the formation of the scientific world outlook.

(2) The concrete implementation of “Practice activity course in classroom”
The contents of the geography course on China are the necessary content which the students must study, and is the main way to carry out the patriotic education. Taking some practice activities can make students more profound and more specific mastery of knowledge, improve students’ learning interest, better create the scene teaching, and stimulate students’ desire of creation. It can make the terrain model of the various continents, pile up the outline of China by using sand, and prepare the globe by utilizing iron wires.

【Case analysis】
I. Course Title: "Continents and Oceans"
II. Teaching materials: Geography of seventh grade
III. Publisher: People's Education Press
IV. Teaching objectives, knowledge and skills:
①Understand the earth’s surface, and know the proportion of the land and sea.
②Use a map and data to describe the distribution characteristics of the land and sea.
③Understanding the cognitive process of the earth surfaces.

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④ On the world map, displaying the name, location, outline and distribution characteristics of seven continents and four oceans.

⑤ Using the map to determine the continent, peninsula, island, ocean, sea, and strait.

V. Process and method:
① Make students preliminary contact and use the statistical principles to solve the practical problems through designing games of understanding the distribution proportion of the globe land and sea.
② Use a puzzle game or simple geometric figure to draw the outline of each continent, and acquainted with the name and distribution of the seven continents and the four oceans.

VI. Emotional attitude and values:
It can strengthen the ability of cooperation between students through activities. Drawing a conclusion by the students themselves, it can stimulate the interest of students, and feel what they have achieved through their efforts.

VII. Teaching focuses: Name and distribution of the seven continents and the four oceans.

IX. Teaching tools needed to be prepared:
A globe, multimedia courseware, scissors, cardboard.

X. Teaching process (Mainly introducing one classroom activities):
Name of the activity: "Match earth"
Ask one student per group to mark five latitudes (the Equator, the Tropic of Capricorn and Cancer, Antarctic and Arctic Circle) and two longitudes (Zero and 180 degrees longitude) on a small blackboard. Other students complete the drawing of the outline of the seven continents and name them. And then cut out the outline of the seven continents, and split joint the outline to the small blackboard according to the atlas. Based on the speed and quality, give a reward to the students.

4.2.2 Social survey course of geography
The investigation will enable the students to comprehend the situation around them. Sometimes, because geography knowledge in the classroom is too far away from the students, it is difficult to understand. For example, “Agriculture of China” is very alien to the students who are growing in a city. So, through arranging the students to investigate the development of the city’s agricultural products, fishery products and agricultural processing industry, they can understand not only the knowledge of this section, but also their native homeland.

Ⅰ. The purpose of the implementation of a social survey
Through the investigation, students can understand the things around them and their homeland comprehensively. It makes the students as the specific person, the real person and the growing person fully experience the meaning of life and survival, enjoying life and meeting the needs.

Dewey’s theory of “Education is not a goal” thinks that the purpose of education only exists in the education process, and it emphasizes the meaning of a child’s growth, survival and life in reality. Though a social investigation, it can make the students find problems by themselves in the activities, and consider the ways and methods of solving the problems.

Ⅱ. The concrete implementation of the social investigation courses
According to the relevant chapters, it can carry out the related surveys, such as the population, meteorological observation, the local tourism spots, local industry and campus environment. For example, in order to investigate the garbage situation of a small town, it can do so:

① Determine the investigation contents
A. Surveying the number of garbage bins in this area;
B. Investigating the classification of garbage in this area;
C. Surveying the number of people, residents and units in this area;
D. Investigating the output of waste (including the household and unit);
E. Researching on how to reduce waste output;
F. Studying how to scientifically deal with the waste, and reduce the pollution of the environment.

② Implementation process:
Students are grouped in a small team (8 people in a team), and elect a leader in charge of the group’s actions. Each group is responsible for a community survey, coordinated by the group division of labor.

③ Survey results
④ Students summarize the garbage disposal method.

4.2.3 Field-test class of geography
(1) The purpose of the implementation of the field-test class
Carrying out geographical practical activities, especially field investigations, can make the students experience the production process of the geographical knowledge, and enhance the students’ ability of practices.

The close relationship between human and land is the important research content of geography. And it determines the geographical teaching must be linked with the objective geographical reality, go out of the classroom, and strengthen the field observation, geographical investigation and visit activities. At the same time, the teachers should also organize the students to discuss, and write the investigation summary by combining with classroom teaching activities. Teachers should be able to make full use of the perceptual information obtained from an investigation to state the abstraction geographical origin and rules. To increase the teaching intuitive and concrete, teachers should explain the geographical knowledge from the near to the distant, from the concrete to the abstract, and from knowing to unknown. That would enlighten the students’ intelligence development, promote the initiative and consciousness of students’ learning geography, and strengthen the cultivation of students’ comprehensive quality.

(2) Preparation of field-test class
1) Preparing the investigation site and route

Some principles may be abided, such as, representative, complete content, closely combined with the teaching content, convenient traffic conditions. In addition, the chose investigation spot should meet the center content of the activity. And it should make the students skillfully master the content. Meanwhile, teachers should collect the necessary information, such as data, charts and specimens to ensure to answer all kinds of students’ questions perfectly.

2) According to the number of the students in the class and the task needed to complete, the students were divided into several groups, and the leader should be selected. The leader or teachers should emphasize to abide by the discipline consciously, pay attention to safety, obey the command, complete the task on time, and count the number of people.

According to the pre-inspection, the teachers should prepare the study outline, explain the route and the investigation site to the students clearly, draw the diagram to the team leader, state the investigation purpose of each group clearly, introduce the relevant information, and guide inspection method.

(3) The implementation of field-test class
【Case analysis】
I. Name: a field study
II. Location: a tourist attraction
III. Preparation work:
① Investigation content: Draw the traffic map of the tourist attraction, determine the direction in the field, the analysis of the urban settlement changes from the scenic spot to an urban district.
② Making plans
A. Determine the purpose of the field investigation.
   The purpose of the field investigation is determined mainly according to the standards of the course, students’ mental development level and the characteristics of the resources of the local field investigation resources.
B. Determining the investigation time. The First is to assure the safety of students. So, it should choose the days with less rain and mild weather. The Second is adapted to the teaching progress of the course. So that students can combine the knowledge of the book to carry out practical activities, and achieve better effects.
③ Data collection: Collect the relevant information about the scenic spot.
④ Material preparation: Camera, Paper, Pencil
⑤ Preparation of the organizational work.
   Strict organization work is a powerful guarantee for the field investigation, especially for the lively junior middle school students. To form a team in which every order is executed without fail and strict in discipline, the preparation of the organizational work must be done before going out.
IV. The process of field investigation
① Field observation
   Observation is the most important part of the field investigation. This field activity is mainly to make students learn how to observe. Students should take photos, sample and record during the process of observation. At the same time, students should determine the direction according to the natural landscape, and draw the traffic map of the scenic spot.
② Surveys and visits
   Although observation is the most important perceptual process in the process of investigation, it cannot fully understand the process of the development and change of some geographical things or phenomena only relying on observation and thinking. Therefore, it is necessary to conduct an interview at the same time.
V. The analysis of indoor data
Indoor data analysis is an in-depth and systematic analysis of the data derived from the investigation. In general, this stage may do some works listed below:
1. Data processing and graph drawing.
2. Analyzing the data.
3. Write a survey report or a short thesis.
4. Teachers or students assess the impact of the survey.

V. Conclusion

The investigation and research showed the vast majority of students liked geography, and looked forward to carrying out the geographical practice class. However, because of the influence of the pressure of entering a higher school, difficulties of organization, the lack of teaching base and funds, the safety of students and other aspects, the school can only open the geographical practice class a few times occasionally, even once.

Through the statistical analysis, this paper thinks that the geographical practice class is mainly included two aspects of contents. The first is the reform of the social status of the geographical practice class. It should make the whole society pay attention to the geography and the geographical practice class, and recognize the important role of improving the students’ practical skills. It should be mentioned that the reform of the social status mainly includes the reform of the evaluation system and the increase of resource development of the geographical practice class. The second is the reform of the geographical practice curriculum, including practice activity curriculum in a classroom, the social investigation and field-test class.

Carrying out the geographical practice activities is extremely advantageous to the student's many aspects, such as consolidating their knowledge, training their ability, improve their comprehensive quality, promoting their all-round development, increasing infinite charm for a geography class, arousing their learning interest of geography, enriching their love of their hometown, expanding areas of cognitive learning, and promoting the cultivation of practical ability and scientific spirit.

For a long time, the neglect of geography course has hindered the development of the geography activity course. "International Charter on Geography Education" takes the geography curriculum as a core subject, and requires all students should read a coherent group of the geography curriculum. Its aim is to ensure the requirements when the students will need geographical knowledge in the future social life can be implemented. Obviously, the concept and implementation of geography education in China have fallen behind that of the international. Some schools regard the geography curriculum as "subsidary subject" with less class time. By comparison, the number of geography class in middle school of some other countries is up to about ten classes every week. It is five times that of China, and becomes the bottleneck in the development of geography education.

Some countries clearly defined that the course evaluation system in the geography curriculum standards should enhance the guiding functions of teaching. The geographical practice activity course in China is still in the primary stage, and the evaluation system is not fully established. So, some research problems have not been resolved. For example, due to the large amount of students (60-80 students) in a class, it is difficult to take into account each person in the activities. In addition, geographical practice activity class is the auxiliary form of classroom teaching. Although it has many advantages, it cannot replace the classroom teaching nowadays. Only through different special topics, students can master the methods of exploration and acquire more knowledge. It can not only help students to experience the happiness of the life and meaning of the survival, but also useful for lifelong learning.

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References
