

Article

Environmental Law Clinics in Collaboration with Environmental NGOs in China

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Abstract: The purpose of this paper is to study the effect of an innovative curriculum design on environmental education in China, specifically with regard to an Environmental Law Clinic (ELC) course, to be run in co-operation with environmental NGOs (ENGOS). Adopting a qualitative case study method, our researchers investigated the effect of this innovative curriculum, including the quantity of student environmental knowledge, the level of the sense of student environmental responsibility, and the ability of students to solve environmental disputes. We also investigated each participant's attitudes toward this innovative design. Our researchers employed various methods to analyze the student questionnaires, and to simulate consultation records and interview records. The results of our study show that an ELC (in co-operation with ENGOS) would be innovative and indispensable in the field of contemporary environmental law education. In fact, our design largely solves the problems faced by China's ELC education. The innovative curriculum we have designed is beneficial to the sustainable development of society, because it not only improves a student's practical ability, necessary knowledge, and the skills to deal with cases, but the curriculum also increases a student's sense of environmental responsibility. However, to promote the wide-range practice and sustainable development of this curriculum in China, sound and multilevel support systems and measures are required.

Keywords: legal clinic education; environmental law clinic; environmental law; sustainability; environmental NGO

1. Introduction

1.1. Legal Clinic Education

Legal clinic education (LCE) works from a “learn-by-doing” philosophy. The practice draws on the successful experiences of medical schools that use clinics to train interns. The goal of LCE is not only to impart legal knowledge and practical skills, but also to encourage students to internalize the core values that underlie the legal profession. These values include integrity, competence, respect for the rule of law, loyalty to clients, and other professional ethics. Under the guidance and supervision of a clinical counselor (including professional lawyers), LCE students are divided into groups and asked to deal with real cases as would-be lawyers. This type of training has laid a solid foundation for the future careers of many law school students [1,2].

The LCE was developed in the 1960s [3], when legal clinics were in use in the United States, UK, Canada, Australia, India, and some Latin American countries [4–6]. However, over the following four decades, only the United States saw the rapid and full development of LCE, while other countries and regions witnessed almost no advancement [7]. Many of those countries did not see another

rise in LCE until the late 20th century. At the beginning of the 21st century, legal clinics, as an innovative model of legal practice teaching, were on the rise in many of the countries and regions of Asia, Eastern Europe, and Africa [8,9]. This growth in clinics was seen as the further development of democracy and rule of law. On the other hand, LCE had undergone a period of slow growth in some European countries (such as Germany, France, and Turkey), because those countries still upheld traditional theoretical teaching methods and paid little attention to practical education [10].

In 2000, with the support of the Ford Foundation of the United States, China set up the first group of legal clinics in seven universities (Peking University, Tsinghua University, Renmin University of China, Wuhan University, Zhongnan University of Finance and Political Science, East China University of Politics and Law, and Fudan University) [11,12]. According to the Committee of Chinese Clinical Legal Educators, 199 universities had joined the committee and carried out LCE by 30 November 2016 [13].

1.2. Environmental Law Clinics and Sustainable Development

In the middle and late 20th century, environmental problems were highlighted at a global level. The world was ushered into an era of environmental crisis [14]. With this social background, Environmental Law Clinics (ELCs), with a focus on environmental protection, were developed and produced as a new type of legal clinic model. ELCs first appeared in the United States in the 1970s, when the University of Oregon opened a legal clinic that focused on environmental law. Meanwhile, the University of Colorado focused on wildlife conservation [4]. To date, there are more than 30 specialized legal clinics operating in the United States [15], and this number is increasing [16].

The ELCs in the United States have made impressive contributions to environmental protection and social sustainable development. First of all, in many environmental cases, the clinic teachers and students act as environmental public interest lawyers. They represent the interests of the environment and the victims of pollution, and they prosecute the government and polluting enterprises. These teachers and students also participate in negotiations, so as to maintain a proper degree of social environmental justice. For example, since its inception in 1989, the ELC of Tulane Law School has played a positive role in lawsuits on behalf of the interests of the environment and other victims. They have participated in cases such as *Gulf Restoration Network v. Ener Vest Operating, L.L.C.* [17], *Holy Cross Neighborhood Association v. US Army Corps of Engineers* [18], *Bernard Citizens for Environmental Quality, Inc. v. Law Firm's ELC and Chalmette Ref., LLC* [19], and *Louisiana Environmental Action Network v. Whitman* [20].

In addition, legal clinics provide multiple opportunities to engage in direct dialogue with regulators and policymakers. This dialogue has increased public participation to a large extent [21], and has positively affected the development of environmental laws and policies [22]. For example, the ELC of the University of Oregon Law School has been involved in litigation on behalf of endangered species and forest protection, ultimately making these two causes an agenda [23]. However, the positive actions of ELCs have also infringed upon the interests of local governments and powerful enterprises. Therefore, many ELCs are facing great pressure from local governments, polluting enterprises, and even the courts, which try to place restrictions on ELCs in the forms of case agent qualifications, financial support, and the scope of ELC practice [24].

The United States has a mature legal clinic operating model, as well as advanced environmental legislation and judiciary systems. These conditions have been good in terms of the development of specialized legal clinics, e.g., ELCs. Nowadays, as environmental problems are becoming increasingly serious, many legal clinics have shifted their focus on environmental disputes to a more global perspective. However, most countries' legal clinics only began operating in the early 21st century. As such, the inherent mechanisms of development face shortages, making it difficult for the new ELCs to achieve development as professional as has been seen in the United States.

The development of China's ELCs is in the embryonic stage [25]. According to incomplete statistics, only about ten university law schools are currently founding, or are trying to build, their own specialized ELC (According to statistics, China University of Political Science and Law, Renmin

University, Wuhan University, Zhongshan University, Shandong University, China Ocean University, Zhongnan University of Economics and Law, Anhui University, Southwest Forestry University, Ningbo University, and Guiyang University have established legal clinics in China). Vermont Law School of the United States has played an important role in promoting the establishment of ELCs in China. They set up special support funds to help establish and operate ELCs in some Chinese universities. The Southwest Forestry University, with the support of the Vermont funds, has founded a law clinic specializing in environment and biodiversity. On 21 November 2016, the China-US ELC Education Seminar was held with the support of Vermont Law School, Kunming University of Science and Technology, the Friends of Nature, and other institutions. The seminar's goal was to further promote the development of ELCs [26].

2. Dilemmas of China's ELCs

China's ELC education has just started and is facing many difficulties. Specifically, the main problems are as follows.

2.1. Lack of Qualified Teaching Faculties

Most of the existing ELCs in China rely on law school teachers for guidance. Environmental law is a new discipline, so the number of professional teachers in China's universities who are qualified to teach this subject is small. Chinese teachers are mainly involved in teaching and research. Therefore, the number of teachers with practical experience as lawyers (especially lawyers with experience in handling environmental disputes) is very low [27]. Thus, a huge gap exists between the number of qualified individuals in reality, and the requirement in terms of numbers for high-quality professional and practicing instructors in ELCs. In addition, environmental law is an interdisciplinary combination of law and environmental science. Teachers of law majors cannot provide specialized guidance to legal clinics. Therefore, instruction by interdisciplinary tutors is required. We can certainly conclude that the current status and size of China's teaching force greatly restricts the operation of ELCs in China [28].

2.2. Lack of Any Real and Stable Source of Cases

The key to the teaching and establishment of legal clinics is providing students with the opportunity to deal with real cases [29]. Therefore, a real and stable source of relevant cases is critical. At present, many countries (such as the United States and the United Kingdom) [29] have granted legal clinics the qualification to be litigation representatives, which ensures the stability of the real cases source for ELCs. However, the laws in China haven't yet granted a similar authorization. Environmental litigations can be divided into environmental litigation for personal interest and environmental litigation for public interest. In China, when environmental pollution harms someone's personal rights or property rights, the victims can request environmental litigation for personal interests to seek relief, according to the Tort Liability Law of People's Republic of China. Meanwhile, according to the Civil Procedure Law of People's Republic of China and the Environmental Protection Law of People's Republic of China, only the ENGOs registered at the Civil Affairs Department at district-level or above and the People's Procuratorate can act as litigation representatives for environmental public interest, when environmental pollution causes damage to the ecological environment. In both proceedings, the plaintiffs can appoint one or two persons to act as his litigation representatives. Lawyers, legal workers at a grass-roots unit, a party's near relatives or staffs, persons recommended by relevant public organizations, or the units to which a party belongs, may be entrusted as the party's litigation representatives. It is found that China's existing laws neither authorize ECL as plaintiffs of environmental litigations, nor grant the ECL as litigation representatives, which makes it difficult for teachers and students in clinics to participate in real cases [30]. This fact has resulted in a serious lack of any real and stable source of cases, which currently leaves most of China's ECLs "out of business".

2.3. Lack of Funding

The lack of funding is a common problem faced by legal clinics in several countries. Compared to traditional classroom teaching, LCE has a high funding requirement, specifically because of its practicality. Legal clinics need specialized office space and facilities. A legal clinic's activities will also inevitably produce transportation, food and beverage costs, consulting fees, and other costs. Because environmental cases are often more complicated, such disputes have higher funding requirements.

The legal clinics in the United States have multiple, flexible sources of funding. In addition to support and donations from various foundations, legal clinics can earn certain service fees through litigation, or by offering other legal services. However, under China's existing legal and policy structures, legal clinics cannot independently provide paid legal services. Also, the majority of Chinese universities provide limited or even no financial support to legal clinics. Even worse, some activity costs need to be covered by clinic teachers and students [31]. This lack of funding has seriously affected the effective functioning of ELCs in China.

2.4. Lack of a Curriculum System

At present, very few universities in China are specializing in setting up ELCs, except for those that already have a sound foundation in environmental law. However, the majority of these schools have not yet introduced ELC as a formal course. In these schools, ELC work is not offered either for student credit, or as part of a teacher's workload, which are run by teachers and students on their own accord. In fact, much more time and effort is required to guide students through dealing with cases than is needed for in-class teaching. Therefore, if no sufficient system guarantees are in place, college teachers are faced with the heavy task of scientific research. The majority of teachers do not have enough energy and interest to then guide clinic students through dealing with cases, especially under the current educational management systems in China. Such systems are seriously affecting the function of legal clinics in China.

2.5. Incomplete Legal Clinic Goals

The primary goal of LCE is not merely to cultivate a student's ability to practice law, but also to cultivate a student's sense of professional ethics and social justice [32]. At present, Chinese universities pay more attention to the function of cultivating a student's ability to practice in ELCs. This fills the gap between a student's traditional learning of legal theory and actual judicial practice, but concentrates less on a student's sense of professional responsibility and environmental justice. Furthermore, the teaching objectives are not comprehensive or ideal, which will also fundamentally affect the effectiveness of ELC courses in China.

3. Design of the Curricula

In recent years, some universities have carried out active explorations of potential ways to solve the problems existing in China's ELC. The ELC (in cooperation with ENGOs) described in this paper is one of the innovative models currently being explored. Our model draws upon the experience of the United States, with features such as cooperation between the ELC of American Pace Law School and the Hudson Fund. At present, Environmental Law Research and the Service Center of China's University of Political Science and Law, and the Friends of Nature, have established a partnership, as has the Law School of Anhui University and the Green-Anhui Environmental Development Center, Fuzhou University Law School, and the Fujian Green Home Environment Friendly Center.

Objectively speaking, the current curriculum design is still in the exploratory stage. Most aspects of our model have not yet been formally incorporated into the university curriculum system, except for the enthusiasm of teachers and students to spontaneously run an ELC. Our research team, building on the material of several universities which explored running such courses, introduces the general pattern of such a curriculum design (Figure 1).

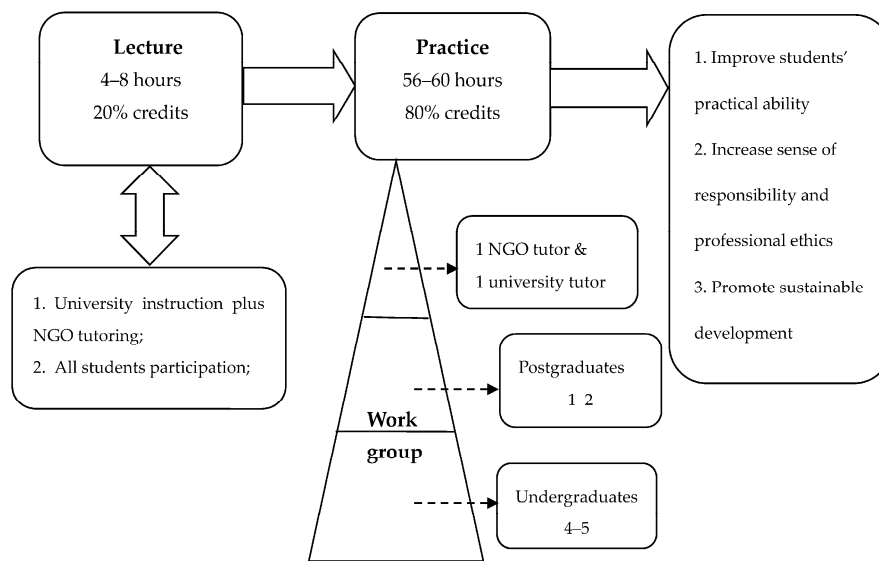


Figure 1. Course structure.

3.1. Goals

By organizing student participation in the process of dealing with real environmental disputes, the course aims to improve the professional ability of students and enhance their sense of moral and social responsibility (environmental justice). Increasing the ability to practice law professionally is the main objective of the course. This overall ability includes the ability to plan cases, manage time, and communicate, as well as the ability to file legal documents, counsel clients, investigate facts, present cases in court, and negotiate settlements. Throughout the course, both teachers and students will be encouraged to promote the implementation of environmental laws, supervise the government's environmental law enforcement, and support environmental public interest litigation, thereby contributing to the sustainable development of society.

3.2. Schedule

One module each semester comprises 48 h over 16 weeks, meeting once per week (three hours).

3.3. Staffing Arrangements

3.3.1. Teachers or Instructors

The course is taught by the instructors of the school and the NGOs. The school tutor needs to have a background in environmental law or have practical experience as a lawyer. The NGO instructors are independently recommended by ENGOs. They are mainly ENGO staff, public interest lawyers, environmental scientists, and environmental protection volunteers.

3.3.2. Students

Students are free to apply and are selected after self-registration and interview by the school tutor and NGO instructor. When both parties reach an agreement, the students who will participate in the course will be finally determined. Each module recruits 15 to 20 students, with a certain percentage of postgraduate students.

3.3.3. Grouping

Generally, five to seven students are allocated to a group, including one or two postgraduate students and four or five undergraduate students. Each group is guided by two instructors, one from the school and the other from the ENGO.

3.4. Content and Structure

The course can be divided into two parts: classroom teaching and practical teaching.

3.4.1. Classroom Instruction

This section is presented by school teachers and assisted by ENGO tutors, with all students participating in the class. Through classroom instruction, students can make the necessary theoretical preparations and knowledge accumulation to help them better handle the practice of disputes. This part of the course usually accounts for four to eight hours, and 20% of the final score.

3.4.2. Practical Instruction

This part of the course is led by the ENGO tutors, with school instructors acting as partners. The ENGO instructors select and provide real cases and assign at least one case to each group, depending on the complexity of the case and the group's workload. Under the guidance of the instructor, students are involved in the planning and management of the case, interviewing victims in person, applying for public information disclosure, case evidence investigation, preparation and exchange (according to law), environmental consultation and mediation, drafting various legal instruments, and assisting in trial work. This part of the course is usually comprised of 56 to 60 h, accounting for 80% of the student's final score.

3.5. Sources of Funding

Sources of funding include a certain percentage of ENGO funds and actively seeking financial support from universities or colleges.

3.6. Student Assessment

In-class instruction is assessed through written examination and accounts for 20% of the final score.

With regard to practical teaching, each work group organizes a meeting each week to discuss case progress, and exchange feedback and evaluations. In fact, this exchange of dialogue between clinic students is a hallmark of clinical teaching methods [33]. At the same time, students prepare weekly internship reports, record their working time and the content of their work, and reflect on the experience which they have gained and their feelings about what has transpired.

At the end of the semester, the teacher will decide upon a score, based on the content of each student's reports and the teacher's own observation of each student's performance. This segment accounts for 80% of the student's final score. Specific score criteria are as follows (Table 1).

Table 1. Final Scoring Criteria.

Criteria	Proportion
Preparation & Use of Law , including timely and efficient research and analysis of relevant statutory and regulatory provisions and case law.	10%
Knowledge, Analysis, & Use of Facts , including thorough investigation of all pertinent facts and witnesses (favorable and unfavorable), obtaining relevant documents, and developing and implementing strategies for using the facts in the proceeding.	10%
Creativity & Problem Solving , including creative use of legal analysis and other information to advance the client's interests.	10%

Table 1. Cont.

Criteria	Proportion
Written Advocacy , including motions, pleadings, briefs, comments and letters. Written materials should be well organized, clearly written, and persuasive.	10%
Oral Advocacy , including negotiations, client presentations, clinic presentations, hearings, and trials. Oral presentations should be well prepared and persuasive.	10%
Timeliness , including time management, balancing available resources and competing priorities.	10%
Client Relations —Clients must be conferred with at all critical junctures and advised of the issues and law so they can make informed judgments about the case. Clients should receive a copy of every letter and pleading filed or received in their case. This should be reflected in cover letters in the file.	10%
Organization, Record Keeping & Maintenance of Case Files . Files must be both well organized and current.	10%
Professionalism , including your ethical, zealous representation of the client, and the nature of your relationships with courts, opponents, and government employees, co-workers and clinic staff.	10%
Attendance & Completion of All Required Assignments , including timely submission of time sheets.	10%

4. Methodology

The research team used qualitative analysis methods to collect and analyze data. The data were collected by means of questionnaires, simulation consultation, and direct interviews. The data were then analyzed according to the different research topics.

4.1. The Research Method of Studying Student Environmental Awareness

In general, environmental awareness involves people's environmental knowledge, their awareness of environmental issues, and their sense of environmental responsibility (sense of justice) [34]. Our researchers selected 20 students from a number of relevant Chinese universities (including those who had participated in ELC courses in cooperation with ENGOs) as the first sample group. Another 20 Chinese university students who had participated in other types of ELC courses were selected as the second sample group. The researchers conducted a questionnaire survey with both groups and comparatively analyzed the data, in order to measure the level of each student's environmental awareness.

The questionnaires were composed of two parts. The first part contained six open questions, mainly relating to the student's sense of environmental responsibility. The answers were directly given by the respondents, according to their own situation. The quantifiable answers were calculated by researchers, and the average scores for each of the two groups were obtained. On this basis, the degrees of environmental responsibility of the two groups were evaluated.

The second part of the survey consisted of 20 multiple choice questions, with each question having only one correct answer. The questions mainly concerned the respondent's understanding of environmental issues and environmental knowledge (including their knowledge of environmental laws and environmental science). The average scores of each group were calculated. Then, the cognition level of environmental problems and the level of environmental knowledge of the two groups were assessed.

4.2. The Research Method of Studying Student Ability to Practice Professionally

Our researchers conducted eight telephone, e-mail, and face-to-face consultations with ELCs, in collaboration with ENGOs (Group 1 sample) and other types of ELCs (Group 2 Sample), acting as simulated victims of pollution. The researchers set the scoring criteria prior to the consultations. Respondents were then evaluated from the perspectives of reception rituals, communication skills, substantive law analysis ability, familiarity with procedures, and the ability to apply evidence. In order to ensure scoring criteria uniformity, all surveys were conducted by the same person. Comparing the

average scores of the two groups was helpful in terms of measuring the practical ability of the students participating in these new courses.

4.3. The Research Method of Studying the Cognition of Instructors and the Students Participating in the Course

The researchers conducted in-depth interviews with five instructors and five students from different universities. Each interviewee had participated in the design and exploration of ELC courses. We then conducted a detailed analysis of the interview transcripts. Through descriptive analysis, each teacher's and student's knowledge of ELC courses can be described.

The following table summarizes the methods of data collection and analysis (Table 2).

Table 2. Data collection and analysis methods summary.

Research Questions	Data Sources	Methods of Analysis
Student's sense of environmental protection	Group questionnaire	Comparative analysis
Student's ability to practice	Simulation consultation	Comparative analysis
Cognition of instructors and students	Interview	Content analysis

5. Results

5.1. Student Level of Environmental Awareness

5.1.1. Environmental Responsibility (Environmental Justice)

Environmental responsibility is the ideological basis of people's environmental protection. The degree of each person's sense of environmental responsibility directly affects their consciousness of environmental protection behavior, which in turn, is the fundamental guarantee for achieving sustainable development. In this study, the average scores of the answers to the six questions set by the researchers on the degree of environmental responsibility of the two respondent groups, are as follows (Table 3).

Table 3. Analysis of the questionnaire on the sense of environmental protection.

Questions	Group 1 Average Answers	Group 2 Average Answers	Conclusion
1. How much time would you like to spend on working to protect the environment?	6.8 h/week	2 h/week	>4.8 h/week
2. How much of your personal income would you like to contribute to environmental protection?	18%	3%	>15%
3. What's the possibility of you choosing environmental protection as your future career?	20%	2.5%	>17.5%
4. To what extent would you live a low-carbon lifestyle?	70%	38%	>32%
5. To what extent would you apply environmental protection awareness to real work?	68%	30%	>38%
6. To what extent will you choose low-carbon transportation?	80%	45%	30%

The results of our questionnaires show that the first group of respondents is willing to contribute an average of 6.8 h per week to the public welfare of environmental protection work. That figure was 4.8 h per week more, on average, than the second group. The first group of respondents is willing to contribute an average of 18% of their personal income to public welfare environmental protection causes, while the second group averaged only 3%. In the first group of respondents, 20% acknowledged the probability of pursuing environmental public welfare as a future career, while only 2.5% of the

second group of respondents viewed that career choice as a possibility. In addition, 70% of the first group of respondents said that they will lead a low-carbon life, 68% said they will implement environmental protection concepts, and 80% said they will choose low-carbon means of travel in the future. However, the second group of respondents only had positive response rates of 38%, 30%, and 45%, respectively, to the above three questions (Table 3). The results of the survey indicate that the first group of respondents (those students who have participated in ELC courses in cooperation with ENGOs) were willing to spend more time and more money to support environmental protection efforts, than the other group. The first group was also more willing to adopt a low-carbon lifestyle in their work and life choices, or even to choose environmental public welfare as their future career.

5.1.2. Environmental Awareness and Environmental Knowledge

The average scores of the answers to the 20 questions presented to the two groups of students, which pertained to the current state of the environment in China and the environmental knowledge of the students, relative to how to solve environmental disputes, were as follows (Table 4).

Table 4. Analysis of environmental status awareness and environmental knowledge questionnaire results.

Questionnaire Contents	Points/No. of Items	Group 1 (Average Score)	Group 2 (Average Score)	Conclusion
Cognition of environmental status	10 points/item \times 5	47	41	>6
Environmental knowledge	10 points/item \times 5	45	33	>12
Procedure law knowledge	10 points/item \times 5	45	32	>13
Environmental science knowledge	10 points/item \times 5	37	29	>8

The results of this section of our questionnaire show that the degree of accuracy of the first student group's cognition of environmental status, environmental law knowledge, procedural law knowledge, and environmental science knowledge, is higher than that of the second group. This result indicates that the first group of students (namely, those students who have participated in ELC courses in cooperation with ENGOs) have a clearer understanding of the current status of China's environmental crisis and a greater knowledge of environmental science. These students have also obtained a solid base of legal knowledge, which is in fact more solid, at least to a certain extent, than that of the second group (Table 4).

5.2. The Level of Student Ability to Practice Professionally

In this project, researchers graded the level of the ability of the two groups of respondents to practice professionally. The results are as follows (Table 5).

Table 5. Student ability to practice professionally (level scores).

Content	Group 1 Average Score	Group 2 Average Score	Conclusion
Etiquette (10 points)	8.3	8	>0.3
Communication skills (10 points)	8	6	>2
Case entity issues (10 points)	7	5	>2
Case procedure issues (10 points)	7.5	4.5	>3
Application of evidence (10 points)	6.5	3	>3.6
Total points (50 points)	31	23.5	>7.5

By analyzing the scores, we can see that the performance of the first group of respondents in terms of reception etiquette, is similar to that of the second group. However, the ability to communicate, the analytical ability of substantive law, the familiarity with procedural law with regard to the case, and the ability to apply evidence of the first group, are all significantly higher than those of the second group. In other words, students who have participated in ELCs in cooperation with ENGOs

demonstrate a stronger communication ability, more accurate procedural analysis ability, and greater evidence application ability, as well as a greater familiarity with judicial proceedings (Table 5).

5.3. *The Experience of the Instructor on the Course*

The researchers interviewed five instructors, each of whom had participated in an ELC course in collaboration with ENGOS. The instructors concluded that our innovative curriculum design could positively address the difficulties faced by China's ELCs from different perspectives. The instructors provided the following reasons for reaching this conclusion: (1) as mentioned above, the existing laws in China neither authorize ECL as plaintiffs of environmental litigations, nor grant the ECL as litigation representatives, which makes it difficult for teachers and students in clinics to participate in real cases. However, this innovative curriculum means that ELC can obtain real and stable cases from cooperative ENGOS, and also means that ELC can participate in environmental litigation by assisting ENGOS to carry out environmental disputes. Meanwhile, this kind of arrangement also helps ENGOS solve the problem of a shortage of professionals; (2) we know that ENGOS have a long-standing history of cooperation with environmental public interest lawyers and environmental science appraisal professionals and consultants. The ENGO staff and volunteers have a very rich experience in dealing with environmental disputes. The ENGOS have assigned these staff to be NGO tutors in clinics and to cooperate with school tutors, to ensure that students obtain professional (as well as comprehensive educational) guidance. This practice solves the lack of faculty members in ELCs; (3) although ENGOS face the problem of a lack of funding, many environmental protection foundations in China and abroad have provided financial support to ENGOS, to help them deal with environmental disputes. This support has also ensured that ELCs have funds which enable them to practice. Additionally, the ELCs share all kinds of facilities with ENGOS, thereby saving on clinic running costs; (4) such courses are not set by school, and students can self-register. This motivates students to participate; (5) such courses have real-case resources, as well as professional guidance from school teachers, professional lawyers, NGO staff, and environmental science professionals. Thus, a student's ability to practice can be well developed; (6) by participating in such courses, the tutor's professional skills and sense of environmental responsibility (sense of justice) can also be strengthened. However, at the same time, instructors have pointed out that, compared with traditional classroom teaching, such courses require more time and effort. Therefore, if universities and colleges cannot develop proper systems or incentive mechanisms in terms of class hours, allowances, recognition of achievements, etc., ensuring the sustainable development of such courses will be difficult.

5.4. *Student Feelings about Participating in the Course*

The researchers interviewed five students who had participated in an ELC course in collaboration with an ENGO, in order to understand how they felt about the course. According to the interviewees, this curriculum model greatly enhanced their sense of environmental responsibility. One interviewee, Xiangnan Li, of Anhui University, said: "Participating in dealing with real environmental cases allows us to learn the serious environmental problems faced by China. Also, direct contact with the victims of pollution enables us to understand the serious harm environmental pollution causes to citizens. It is the real practice that encourages me to work in an NGO, to be committed to doing environmental protection work, and to making a contribution to sustainable development. I believe that other students share similar feelings, and even if they do not choose environmental protection as their own career path to follow, they will certainly lead a low-carbon lifestyle".

At the same time, the interviewees said that the curriculum model greatly enhanced their level of environmental knowledge and ability to practice professionally. Huishihan Wang, of China's University of Political Science and Law, said: "The complexity of environmental cases not only requires legal knowledge, but also the application of environmental science. The handling of real cases not only strengthens the environmental legal knowledge learned in textbooks, but also allows us to learn more about environmental science. Also, dealing with the victims, the government, the polluter, and other

stakeholders, can encourage students to apply relevant environment substantive laws and procedural laws, to practice investigation and improve their communication skills and capacity to train”.

However, at the same time, students also said that such courses require time and energy, and no corresponding credits are allocated to offset this time and energy. As such, they felt great pressure when participating in the course.

6. Discussion and Conclusions

6.1. *This Innovative Curriculum is an Indispensable Means to Solve the Difficulties Faced by ELCs in China*

We find that the ELC curriculum designed in cooperation with ENGOs can better solve the dilemmas faced by China’s current ELC courses. Firstly, legal clinics can obtain real and stable sources of cases from ENGOs, which will solve the problem of the lack of practical teaching materials. Secondly, the course instructors are comprised of the school instructor and the NGO supervisor. These instructors can provide students with the complete process, giving specialized and interdisciplinary guidance to students and solving the problem of a lack of teachers. In addition, ENGO funding sources are broader and more flexible. In this sense, establishing cooperation with ENGOs, at least to a certain extent, will alleviate the shortage of ELC funding and facilities. Furthermore, the course design can be more comprehensively modeled to achieve the purposes of ELCs, actively involving student participation and motivating their sense of creativity.

6.2. *This Innovative Curriculum Can Enrich Student Environmental Knowledge and Effectively Enhance Their Ability to Practice Professionally*

Students were divided into groups and asked to participate in real environmental cases. The students were guided by university teachers and NGO instructors, in cooperation with ENGOs. This method not only strengthens a student’s knowledge of environmental law and procedural law, but also allows them to obtain various types of environmental science knowledge. At the same time, students in the course, under the guidance of the tutor, will frequently practice law. This includes visiting or receiving victims in person, applying for government information disclosure according to the law, case planning and management, case evidence collection and preparation, environmental consultation and mediation, drafting legal instruments, oral pleading, and assisting with trial work. All of the above can effectively enhance a student’s ability to practice professionally.

6.3. *This Innovative Curriculum Can Improve a Student’s Sense of Professional Ethics and Environmental Justice*

Through this course, students are able to better understand the current situation of China’s environmental crisis and the urgent need for environmental protection, because they are personally dealing with environmental disputes. Through exposure to the victims of environmental pollution, the students can learn about the severe problems that environmental pollution brings to citizens. Meanwhile, students can effectively experience a sense of justice and enhance their sense of professional ethics by helping vulnerable victims of pollution. Furthermore, students are provided with adequate guidance and support from ENGO staff and environmental volunteers, all of whom have a high level of environmental awareness and a sense of environmental justice. Guidance from such people can further enhance a student’s sense of environmental responsibility.

6.4. *This Innovative Curriculum Contributes to the Sustainable Development of Society*

Although the legal clinics and clinic students cannot directly be subjects of environment litigation or litigation representatives, according to the existing laws in China, this course is designed to enable clinic teachers and students to provide diversified support for environmental litigation, such as litigation strategy research, legal documents preparation, investigation and evidence collection, etc. Also, clinic teachers and students are allowed to effectively participate in non-litigation affairs. They can

counsel, receive visitors, comfort victims, apply for government information disclosure, reconciliation, etc. Thus, the teachers and students can use their own power to promote environmental protection and sustainable social development. At the same time, as mentioned above, this course has greatly enhanced the level of environmental awareness of all participants, thus enabling them to implement the concept of environmental protection in every aspect of their work and life, fundamentally ensuring the sustainable development of society.

6.5. A Related System Is Needed to Guarantee the Development of This Curriculum

Through our investigations, we can see that both teachers and students who participated in the course have indicated that it takes a lot of time and energy to attend such a course. However, at present, the curriculum design is based on the support of teachers and students. Most schools have not yet incorporated the curriculum into their formal curriculum. They have not yet calculated the workload of instructors or credits for students, or provided financial support to the clinics. In fact, if the course is to be truly sustainable, schools should draw on the advanced practices of foreign countries [35] and set up relevant support systems. These supports could include giving the school tutors sufficient workloads, recognizing their contribution to practical education, treating NGO instructors as faculty members and paying them an allowance, giving students credits and granting them scholarships or awards for environmental public welfare activities, and providing financial support etc.

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