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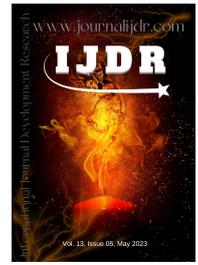
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RESEARCH ARTICLE

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ON TEACHER'S SENSE OF IDENTITY AND RESPONSIBILITY FOR ENVIRONMENTAL EDUCATION -- A CASE STUDY OF NANCHONG CITY

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ABSTRACT

Environmental education is an important promoter of ecological civilization construction and sustainable development, which requires teachers to integrate subject teaching and environmental education to achieve a positive impact in subject teaching. Therefore, this paper takes teachers of different disciplines in Nanchong City as research objects to explore their sense of identity and responsibility for environmental education. The results show that teachers of different disciplines have relatively high sense of identity and responsibility of environmental education, but there are some differences among different disciplines. Therefore, we propose to combine curriculum teaching with environmental education in the actual teaching process, strengthen the ability to combine theory with practice, better promote the development of environmental education, and expand the breadth and depth of ecological civilization construction.

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INTRODUCTION

The Party's 20th National Congress pointed out that China's ecological civilization construction still needs to face the arduous task of ecological environmental protection. In order to consolidate and expand the achievements of ecological civilization construction and continuously improve the quality of ecological environment, we must pay more attention to the coordinated and interactive construction direction, give consideration to the overall plan, promote the whole, and take multiple measures in coordination (Xu *et al.*, 2022). Environmental education is an important measure of adapting to the construction of ecological civilization in our country, which can implement Xi Jinping's ecological civilization thought, help social personnel to establish a firm consciousness of environmental protection. Teachers play a major role in the construction of ecological civilization and play an important role in the publicity and practice of ecological civilization. Teachers can guide students to establish correct ecological civilization thoughts through environmental education, so that ecological civilization thoughts lead students' environmental protection behavior and turn into internal driving force to promote sustainable environmental development. With the increasing human activities and the occurrence of environmental hazards, people find that it is impossible to achieve the goal of harmonious coexistence between human and nature by only

relying on the existing technical means to solve the pollution problem (Yang, 1997). In the process of exploring the path of sustainable development, people try to realize sustainable development by awakening people's consciousness of environmental protection. Therefore, environmental education has been developing continuously under the joint action of environmental pollution and social philosophy. In the history of the development of environmental education, the thought of ecological civilization has greatly promoted the development of environmental education. School is an important carrier of environmental education, and teachers are the main grasp of this carrier. With the continuous reform of education, schools have taken "three comprehensive education" and "morality education" as important indicators to measure the quality of teaching. In the teaching process, teachers pay more attention to helping students set up correct moral values and sense of responsibility. However, the sources of environmental problems are diverse, covering physical, chemical, biological, economic and sociological aspects (Liao *et al.*, 2022). Therefore, for teachers of different disciplines, a correct understanding of the importance of environmental education is the basis for the implementation of environmental education, so as to promote the rooted development of ecological civilization. At present, researches on the development of environmental education at home and abroad mainly focus on the formation of students' awareness of environmental protection and their attitudes towards environmental protection, and lack of analysis and research on the development of

environmental education from the level of teachers. Education is an important driving force of social development and the core of humanity. Nanchong education is at a good teaching level in the current development, but there is still a gap in the research of teachers' cognition of the importance of environmental education in different disciplines. Therefore, this paper takes teachers of different disciplines in Nanchong City as the research object, analyzes the specific role of teachers in environmental education based on the data obtained from the investigation, and puts forward relevant suggestions to help promote the development of local environmental education and build a green and low-carbon modern city.

The significance of teachers in environmental education: A teacher is a person who teaches and solves doubts. The expectation of national revitalization lies in education, and the expectation of educational revitalization lies in teachers. In environmental education, teachers play the role of guide, finder and troubleshooter (Liao *et al.*, 2022). As one of the subjects in environmental education, teachers' behaviors can subtly influence the formation of students' thoughts. Every teacher's potential teaching ideas will more or less promote or interfere with the teaching effect, so teachers should realize the integration of knowledge and action to promote the transformation of students' cognition into behavior (Wang *et al.*, 2020). In the face of today's rapidly developing society, teachers should constantly update their knowledge reserve in environmental education, and do a good job of finding the way and solving puzzles for students under new circumstances.

Survey results and analysis of teachers' awareness of environmental importance in different subjects in Nanchong city.

RESULTS AND ANALYSIS

In this paper, the environmental education of teachers in Nanchong City was investigated and studied by means of questionnaire survey and field investigation, from which 709 valid receipts were obtained and different degrees of recognition were set to investigate the cognition of environmental education importance of teachers in different subjects (This study is mainly divided into four cognitive dimensions to define the degree of cognition, and the degree is graded from 1-4 for quantification, the questions below are graded in the same way). Table 1 indicates that teachers of different disciplines have a good understanding of the importance of environmental education. This demonstrates that under the wide spread of ecological civilization, teachers of different disciplines can adapt to the development of The Times and identify with the requirements of national sustainable development strategy from the ideological perspective. Specifically, teachers of literature and history have the highest degree of recognition of the importance of environmental education, followed by teachers of science and technology, while teachers of art and sports have relatively weak recognition of the importance of environmental education. The reason for this phenomenon is that teachers of different disciplines have different starting points for environmental education. Science and engineering teachers tend to treat environmental problems from a rational perspective and focus on solving practical problems, while literature and history teachers tend to analyze social problems from an ideological perspective, art and sports education pays relatively little attention to social problems.

Table 1. Teachers' cognition of the importance of environmental education in different subjects

| Subjects | Number of samples | Average score | Standard deviation |
|-------------------------|-------------------|---------------|--------------------|
| Science and engineering | 430 | 3.73 | 0.63 |
| Literature and history | 212 | 3.81 | 0.54 |
| Art and sports | 32 | 3.68 | 0.78 |
| Others | 35 | 3.88 | 0.40 |

In order to investigate the cognition of teachers' sense of responsibility for environmental education, the questionnaire designed the question "How do you think environmental education is

related to the subject you teach?" The survey data in Table 2 are obtained. Science and engineering teachers think that the subjects taught are more closely related to environmental education, followed by literature and history, and art and sports are more distant, which is caused by the difference of teachers' teaching content. Science and technology teachers can better integrate curriculum teaching practice into environmental education, for example, they can achieve the purpose of teaching through natural environment in field practice, or they can integrate teaching experiment process to achieve the goal. As teachers of literature and history lack such natural conditions, they need to continuously explore the content related to environmental education and ecological civilization from the curriculum. At present, art and sports teachers pay attention to skill teaching, lack not only environmental education practice, but also the conditions for the mining of relevant content. On the whole, teachers of different subjects do not reject the sense of responsibility for environmental education.

Table 2. Teachers' cognition of responsibility for environmental education in different subjects

| Subjects | Number of samples | Average score | Standard deviation |
|-------------------------|-------------------|---------------|--------------------|
| Science and engineering | 430 | 3.43 | 0.76 |
| Literature and history | 212 | 3.09 | 0.81 |
| Art and sports | 32 | 3.00 | 0.84 |
| Others | 35 | 2.89 | 0.76 |

Lack of understanding of environmental importance among teachers of different disciplines in Nanchong City: In different stages of environmental education, teachers' cognition and behavior are very important and have a huge space for development. Only by correctly recognizing the importance of environmental education and subject teaching responsibility can teachers better play their actual role in environmental education. Only by combining cognition and responsibility into environmental education and teaching can they promote the improvement of environmental education. Through the investigation of different subject teachers' sense of identity and responsibility for the importance of environmental education, we find that the current problems of teachers of different disciplines are mainly manifested in the following aspects :

- Lack of a complete environmental education system, teachers of different disciplines do not realize the common way of environmental education, which is particularly insufficient in the diversified development and multi-discipline teaching, and the teaching content and form are relatively simple.
- Teachers of different disciplines have a high degree of recognition of the importance of environmental education, but there is a disconnect in the sense of responsibility of environmental education, leading to the environmental education results are not outstanding. Literature and history students have the highest awareness of the importance of environmental education, but they are weak in the practice process of environmental education.
- Although teachers of different subjects have a better understanding of the importance of environmental education and their sense of responsibility, the differences in cognition and responsibility among different subjects also indicate the lack of practice of environmental education, that is, the lack of connection between theory and practice of environmental education.

Countermeasures and suggestions: The development of environmental education at home and abroad has been realized from the aspects of natural ecological environment, social ecological environment and regulating ecological environment (legislation)(He *et al.*, 2022). Meanwhile, special environmental education training programs have been set up in some universities to combine environmental education with students' all-round development, moral sense, sense of responsibility and values. The course of environmental education is set up for non-environmental major students, trying to complete the goal of improving students' environmental moral

awareness in the stage of education. Environmental education has achieved good results under the influence of continuous exploration and ecological civilization construction. At present, the number of environmental education teachers has reached 30,000 (Liu *et al.*, 2020), and a large number of scientific bases for environmental protection have been built in various regions, for example, Guangdong has 190 provincial-level environmental education bases (Huang, 2022). Although the construction of environmental education teachers and practice bases has been greatly improved, the development of school teachers' environmental education and the construction of practice bases are not perfect in the face of the whole society, and can not achieve overall consideration. In the process of implementation, there is also a disconnect between consciousness and behavior. Therefore, it is necessary to further enhance the strength of teachers' moral cultivation in subject teaching, so as to better play the role of teachers as the main force.

Build a comprehensive teaching system: To integrate the concept and practice of environmental education into the education of different subjects, the first thing we need is to build an all-round teaching system. Environmental protection will be integrated with the teaching content of different subjects, and a supporting reference system of environmental education teaching will be formed. Environmental education has obvious interdisciplinary, integrating environmental knowledge into different disciplinary systems is one of the most effective ways to realize environmental education (He *et al.*, 2016). At the same time, as a kind of moral education, environmental education can also carry out ideological and political education in different subject systems, so that students can absorb environment-related knowledge while learning subject contents. In this way, there is no need to arrange special environmental education courses to increase students' learning burden, and there is no need to invest other teachers to increase the cost. Secondly, facing the rapid social changes, environmental education should be connected with the education system of various subjects in the teaching reform, and the "common concept" should be used as the guide to realize the construction of an all-round teaching system (Green, 2019), for example, the history of urban environment and plague history should be integrated into history teaching (Huang, 2022), integrating the conservation of natural resources into geography teaching (Gao, 2022) and integrating the green Chinese dream of "clear waters and green mountains are invaluable assets" into political teaching. Through teachers' practical teaching, we can dig deep the environmental education knowledge contained in various subjects and form an effective teaching system.

Improve teachers' environmental education literacy: School is the main position to spread the idea of ecological civilization, and the environmental education quality of teachers determines the effect of environmental education. There should be special organizers for the construction of environmental education teachers, but at present most of the teachers who undertake this work are related subjects. Due to the influence of traditional exam-oriented education, some teachers do not pay enough attention to environmental education. They do not have the knowledge of both subject teaching and environmental education, let alone the combination of the two applied to teaching, and some educators have not received a complete system of environmental education, so the depth and breadth of environmental education is not ideal. Therefore, we need to strengthen teachers' environmental literacy and comprehensive ability, improve teachers' environmental science knowledge level and participation ability. Schools can use special time nodes to carry out environmental literacy training education to improve teachers' literacy (Heidari *et al.*, 2015).

Strengthen the connection between theory and practice: The formation of environmental education thoughts not only depends on the promotion of theoretical knowledge, but also should be the function of practical activities. Set up the teaching course combining theory with practice, make the subject teaching and environmental education more closely, so as to realize the basic requirements of theory driving practice and practice enriching theory.

At the same time, schools can cooperate with relevant social departments according to the actual situation and local conditions, use social sites and equipment to carry out environmental education activities, establish more places for environmental education practice, further spread the concept of ecological civilization and modern ecological civilization thoughts, promote the socialization of environmental education, and create an environment of environmental education for all staff (Guo *et al.*, 2021).

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