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We are pleased to present the second issue of the International Journal of Fine Arts and Creative Innovation, spanning September to December 2024. This issue continues our mission to explore the intersections of creativity, culture, and social science across various disciplines.

In this edition, we highlight a diverse range of topics, from innovation and educational strategies. These contributions reflect the evolving reflect the diversity and depth of contemporary research in fine arts and related fields.

We extend our gratitude to the authors, reviewers, and editorial team for their invaluable contributions. As we conclude the first year of publication, we look forward to continuing to provide a platform for groundbreaking ideas and academic excellence.

With kind regards,

Asst. Prof. Dr. Kasemrat Wiwitarakulkasem
Editor-in-chief

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CONSTRUCTION OF RESOURCE-BASED CITY INNOVATION ECOSYSTEM

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Abstract

Based on the viewpoint of innovation ecosystem and regional innovation system,this topic constructs the models of four subsystems:innovation operation (university technology enterprises, industrial enterprises above Designated Size), innovation assistance (intermediary institutions, government), innovation R & D (Research and development institutions, universities) and innovation environment (social, natural, economic and basic environment), study the construction of innovation ecosystem in resource-based cities. Through the empirical analysis of the construction of innovation ecosystem in Xinzhou of China. This paper obtains the key points of Xinzhou in the construction of innovation ecosystem, obtains the weight of model indicators by using statistical software, captures the features of the construction of innovation ecosystem in resource-based cities, and offers a proposal for the development sustainability of resource-based cities.

Keywords : Resource-based city, Innovation ecosystem, Innovative operation, Innovative R&D, Innovation assistance, Innovation environment

Introduction

Resource-based city refers to the natural resources such as coal, metal and oil owned in the region, which are closely related to the survival and development of cities. According to the development degree of resource-based cities and the results of the development and utilization of natural resources, resource-based cities can be divided into two urban modes: "first mining, then city" and "first city, then mining". The essential difference between the two is whether the urban form has existed before the exploitation, development and utilization of the natural resources in the region. The rational development of natural resources is conducive to promoting the sustainable development of resource-based cities.

At present, the effective way to achieve the high-quality development of resource-based cities in China is to build an innovative ecosystem. At present, the innovation ecosystem at regional level and enterprise level are two major types of scholars.The innovation ecosystem at the enterprise level refers to the structure mode of "enterprise-user" composed of integrators, upstream component providers and downstream complementary component providers by participating in the process of innovation activities. Innovation ecosystem at the regional level refers to the ecosystem formed by universities, enterprises, research and development institutions, governments, intermediary agencies and the environment in resource-based cities through the interaction and cooperation of the flow of innovation resources and information.

Theory

Innovation ecosystem is a complex network structure composed of these factors, including enterprises, universities, governments, intermediary agencies, research and development institutions and other factors. Innovation paradigm has undergone several developments, realized the transition from a linear paradigm (innovation paradigm 1.0) to an innovation system (innovation paradigm 2.0), and started entering the ecosystem of innovation

stage (innovation paradigm 3.0). The innovation ecosystem is a symbiotic economic community, among which the various elements influence and depend on each other. As an intermediate force in the innovation ecosystem, the government provides policy support for the development of enterprises, and provides sufficient funds for the transformation of innovation achievements of universities and development and research institutions. On this basis, enterprises have close contact with universities and research and development institutions, and the two sides conduct cooperation in production, learning and research. Intermediaries play an important role in talent, capital, information and other links, and they innovate together with other elements to realize the sustainable development of each elements.

Regional innovation system is an open system with the characteristics of self-organization. In the perspective of the ecosystem of innovation, further development. Regional innovation system is a regional organization system that cooperates, cooperates and operates by geographically interrelated production enterprises, research and development institutions, and local governments, which can effectively promote regional economic growth and make it develop continuously. Regional innovation ecosystem mainly includes three elements, namely the main elements, functional elements and environmental elements. Among them, the environment is the most basic constituent element, which determines the structure, behavior and evolution law of the whole system, and is composed of the system, institutions, government or legal regulation, infrastructure construction and guarantee conditions. Universities, research and development institutions, local governments, intermediary agencies and enterprises in the region are the main bodies. Service innovation, management innovation, system innovation and technological innovation constitute the functional elements. The social interaction between different elements constitutes the organization and spatial structure of the innovation ecosystem, and enhances the regional innovation ability and competitiveness.

By referring to the regional innovation ecosystem and Zhang Aiqin et al. (2021), this paper divides the innovation ecosystem into innovation operation subsystem, innovation research and development subsystem, innovation auxiliary subsystem and innovation environment subsystem. Four subsystems of innovation ecosystem are interrelated and interact with each other (Figure 2.1).The composition of the resource-based urban innovation ecosystem is studied here. The innovation ecosystem construction system including 10 first-level indicators and 10 second-level indicators has been constructed. Taking Xinzhou of Shanxi Province as an example to grasp the characteristics of the innovation ecosystem construction of resource-based city and provide reasonable suggestions for the construction of the innovation ecosystem of resource-based city.
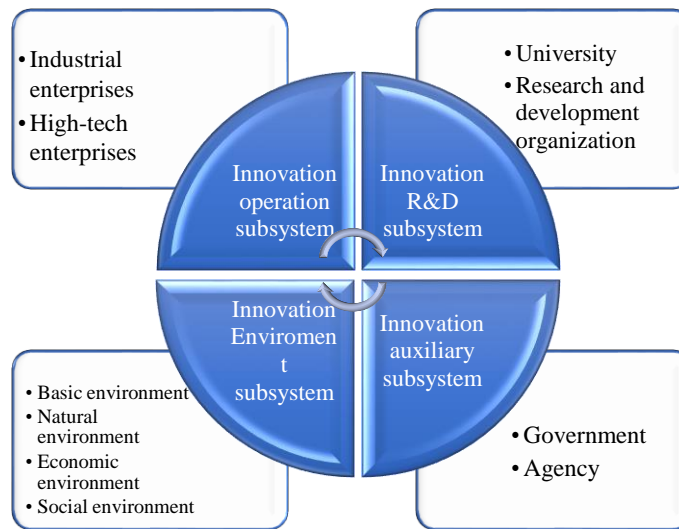
Fig. 1 Composition of resource-based city innovation ecosystem

Construction of the index system for the innovation ecosystem construction of resource-based cities

1) Design of the index system

This paper studies the innovation level of resource-based city innovation ecosystem construction, Building a resource-based city innovation ecosystem construction index, The design of the index system draws on the practice of Zhang Aiqin et al. (2021), According to the composition of the innovation ecosystem, the innovation ecosystem is divided into four first-level indicators: innovation research and development system, innovation operation system, innovation auxiliary system and innovation environment system, Among them, the innovative operation system is respectively reflected by the two second-level indicators of industrial enterprises above designated size and university technology enterprises; The innovation system is reflected by two secondary indicators of universities and research and development institutions; The innovation auxiliary system is reflected by the two secondary indicators of the government and the intermediary agencies; The innovation environment system is reflected by four secondary indicators: economic environment, natural environment, social environment and basic environment. The index system designed in this paper is shown in Table 1

Table 1 Evaluation Index System of Innovation Ecosystem construction

Level 1 indicators	Secondary indicators	Level 3 indicators	unit
Innovate the operation system	Industrial enterprises above designated size	operating receipt (X_1)	100 million
	University technology enterprises	Total exports of high and high-tech products (X_2)	Wan Yuan
Innovate the RESEARCH and	colleges and universities	Number of ordinary institutions of higher learning (X_3)	individual

Level 1 indicators	Secondary indicators	Level 3 indicators	unit
development system	The Agency for Research and Development	Amount of patent license granted (X_4)	piece
Innovation assistance system	government	Public budget expenditure (X_5)	100 million
	intermediary organ	Development investment completed amount (X_6)	Wan Yuan
Innovate the environmental system	Basic environment	Number of public libraries (X_7)	individual
	natural environment	Crop planting area (X_8)	A thousand hectares
	economic environment	GDP total sum (X_9)	100 million
	social environment	Highway line mileage (X_{10})	kilometre

Data source and processing

The research object of resource-based city innovation ecosystem construction is Xinzhou city, Shanxi Province. According to the long-term plan of national resource-based city published by China, Xinzhou of Shanxi Province is listed in the list of 262 resource-based cities. Moreover, as the development and utilization of natural resources in Xinzhou is in a stable stage, its leading industry has not yet entered the recession stage, and its resource guarantee ability is strong, which belongs to a mature resource-based city. Therefore, in this paper, the data of Xinzhou from 2012 to 2021 were selected for study. The required data are mainly derived from China National Bureau of Statistics, China Science and Technology Statistical Yearbook, Xinzhou Statistical Yearbook, and Xinzhou National Economic and Social Development Statistical Bulletin, etc. At the same time, because the studied data scale is different, the calculation results will have an error. Therefore, in order to eliminate the influence of magnitude, it is necessary to standardize the selected data before analysis. The formula for the interval-dimensional treatment is shown below. At the same time, the entropy method requires that the data cannot be zero or negative. Therefore, the data to be studied should be non-negatively translated through the SPSS tool.

$$\text{Intervaled dimensional processing} = a + \frac{(b-a)(X-Xmin)}{Xmax-Xmin}$$

Xmin represents the minimum value, and Xmax represents the maximum value, with the default a, and b being 1 and 2, respectively

3. Model construction of innovation ecosystem construction in resource-based city

This paper uses the entropy value method (Entropy) to calculate the weight of the construction index, which provides a basis for the importance of the index to the research object. This paper uses the SPSS tool to first analyze the weight of each index according to the weight calculation results, and get the weight analysis matrix through the weight calculation results, and finally summarize the analysis.

Considering the complex influence between various factors, five models are constructed.

1) Take the resource-based city innovation ecosystem as the dependent variable, and take the innovation operation system, innovation research and development system, innovation auxiliary system and innovation environment system as the independent variables to establish models:

The Resource-based City Innovation Ecosystem $=a_0$ Innovative operation system $+ b_0$ Innovative r & D system $+ c_0$ Innovation auxiliary system $+ d_0$ Innovate the environmental system

2) Take the innovative operation system as the dependent variable, with the operating income of industrial enterprises above designated size (X_1) And the total export amount of high-tech products of university technology enterprises (X_2) For the independent variable:

Innovation operation system $=a_1X_1+b_1X_2$

3) Take the innovation research and development system as the dependent variable, with the number of ordinary institutions of higher learning (X_3) And the amount of patent granted (X_4) For the independent variable:

Innovative R & D system $=a_2X_3+b_2X_4$

4) Take the innovation auxiliary system as the dependent variable, and use the development investment completed by the intermediary agency (X_5) And the government's public budget expenditure (X_6) For the independent variable:

Innovation assistance system $=a_3X_5+b_3X_6$

5) Taking the innovative environmental system as the dependent variable, the number of basic environmental public libraries (X_7). Planting area of natural environment crops (X_8). Total GDP of the economic environment (X_9) And the mileage of social environment (X_{10}) For the independent variable:

Innovation Environment system $=a_4X_7+b_4X_8+c_4X_9+d_4X_{10}$

In summary, we can get the final index weight model as follows:

$$y=aX_1+bX_2+cX_3+dX_4+eX_5+fX_6+gX_7+hX_8+IX_9+jX_{10}$$

Among them, the coefficient before each index is the weight value of the constructed index, and the weight of each index constructed is calculated and analyzed through the entropy value method, which clarifies the influence degree of the constructed index on the innovation ecosystem of resource-based city.

Describe the statistical results

Describes the sample size, mean value and standard deviation of each analysis item when truly entering the algorithm model. If there are missing values in the data, the sample size at analysis will be smaller than the "number of data rows". Through the analysis, we can get the conclusion that the data is complete and not missing. The mean values or the standard deviation values of each analysis item can be described in Table 2

Table 2 Descriptive statistics

Item	Sample capacity	Average value	Standard deviation
Total exports of high-tech products	10	1.237	0.304
Number of ordinary institutions of higher learning	10	1.600	0.316
Patent authorization	10	1.272	0.295
Public budget expenditure	10	1.473	0.362
Development investment completed amount	10	1.377	0.321
Number of public libraries	10	1.100	0.316
Crop planting area	10	1.723	0.315
GDP total sum	10	1.330	0.321
operating receipt	10	1.262	0.286
Highway line mileage	10	1.628	0.285

2) Weight Calculation Results

Table 3 Weight Calculation Results shows the weight calculation results of the entropy method, and the weight of each index is analyzed according to the results.The entropy value method is used to calculate the weight of 10 items, including the total export value of high-tech products, and the weight between the items is relatively uniform, all around 0.100. Thus, we can get the final model as follows:

Resource-based city innovation ecosystem $y = 0.093X_1+0.110X_2+0.081X_3+0.099X_4+0.106X_5+0.121X_6+0.138X_7+0.074X_8+0.113X_9+0.066X_{10}$

Table 3 Summary of Calculation Weight Results

Item	Information entropy value e	Information utility value d	weight coefficient w
Total exports of high-tech products	0.9893	0.0107	11.02%
Number of ordinary institutions of higher learning	0.9922	0.0078	8.07%
Patent authorization	0.9904	0.0096	9.86%
Public budget expenditure	0.9883	0.0117	12.06%
Development investment completed amount	0.9898	0.0102	10.56%
Number of public libraries	0.9867	0.0133	13.77%
Crop planting area	0.9928	0.0072	7.44%
GDP total sum	0.9891	0.0109	11.27%
operating receipt	0.9910	0.0090	9.33%
Highway line mileage	0.9936	0.0064	6.61%

Suggestions on the construction of innovation ecosystem of resource-based city
<u>Accelerate the development of the innovative operation system</u>

Create new new and high-tech products, The production technology of high-tech products is mature technology, high scientific and technological content, high brand added value, and considerable market capacity at home and abroad, which can bring huge economic and social benefits to resource-based cities. We should grasp the inherent development law of new high-tech products, adhere to the basic principles of innovation leading, high-end breakthrough, digital intelligence empowerment, green and low-carbon, create a number of new high-tech products, increase the number and proportion of their exports, and optimize the construction of the innovation ecosystem in resource-based cities.

Cultivate high and new technology enterprises and form industrial clusters, Coal has long occupied a leading position in China's energy for a long time, implementing the cultivation project of high-tech enterprises and accelerating the transformation and upgrading of traditional enterprises. We will accelerate the innovation and guidance of leading enterprises, and focus on cultivating a number of high-tech backbone enterprises with good development prospects, strong core competitiveness and significant driving role. Seize the opportunity of a new round of strategic restructuring and development, cultivate high-tech enterprises into leaders, and support leading enterprises in forming innovation confederations. We will guide enterprises to internationalization, focus on high-tech products, promote mergers and reorganizations, and accelerate the cultivation of a number of top 500 local enterprise groups. We will guide high-tech enterprises to

expand their overseas markets through cooperation and enhance their international competitiveness.

Optimize the supporting construction of the innovation environment

Optimize the construction of public libraries in the basic environment, We will support the full and free opening of libraries, and promote the network construction of digital books in all cities and counties by relying on 5G network construction, big data service system and the application of artificial intelligence. Increase the purchase funds, support the municipal library to purchase the books, expand the scale of the library collection, and support the preservation and maintenance of the library's ancient books, especially the rare books of the ancient books. Consolidate the network foundation of public digital libraries covering resource-based cities, continuously expand the content of digital books, provide more quantity and high-quality digital book resources, and optimize the supporting construction of innovative ecological environment in resource-based cities.

Optimize innovation policies and regulations, The government can set up special funds for resource-based city innovation ecosystem construction projects, support the promotion of key projects and reward related projects; formulate preferential policies of finance and taxation, encourage resource-based city innovation ecosystem construction to set up research and development departments, increase innovation investment, and support scientific and technological innovation enterprises.

Resource-based cities should improve the relevant laws and regulations on innovation, and protect and manage the innovation achievements of resource-based cities. By adopting formal systems, such as the implementation of the innovation achievement registration and certification system, improving the innovation achievement infringement compensation system and other relevant laws and regulations to regulate the behavior of copycat imitators, and extend their time to enter the market. Online and offline approach is adopted to create a good environment for the construction of innovative ecosystem in resource-based cities, and realize the fair and good competition among enterprises in resource-based cities.

We will improve the guarantee system for ensuring innovation and reform

Focus enterprises on scientific and technological breakthroughs and promote the transformation of innovation achievements, Focus on enterprise science and technology, the foothold in the project and enterprises. Centering on the leading advantage industries, relying on the backbone enterprises, with major projects as the support, relying on the projects to increase the efforts to solve the scientific and technological problems of enterprises. To rationally distribute the service platforms for new product research and development, we should attach importance to the dominant position of production, take problems and the sales market as the guidance, and basically build a main position for promoting independent innovation, accelerating the transformation of innovative scientific and technological achievements, and promoting the introduction and training of talents. From the aspects of R & D and development project approval, the current talent introduction policy, data platform improvement, to increase the support for the front-line new product research and development service platform. We will promote the commercialization of innovation achievements.

Attract and cultivate high-level talents needed for regional development, We will implement the project to introduce and cultivate talents to enhance the supporting role of talents. We will improve policies for introducing high-level talents, build an innovation ecosystem in resource-based cities, cultivate multi-level and multi-dimensional talent echelons, and focus on high-level talent brands. We will accelerate the construction of

talent platforms, promote the construction of college student internship bases and entrepreneurship parks, and provide a development platform for all kinds of talents. We will encourage the development of high-level talent headhunters, and build a talent service platform. Establish long-term cooperation with high-end think tanks, and cultivate a number of high-end think tanks with outstanding professional characteristics that serve the whole province. We will attract a large number of high-edge talents with institutional innovation, provide better and more comfortable living conditions for talents with excellent services, and create new advantages in introducing talents with policy innovation.

Give full Play to the power of the government, to optimize the construction of the innovation ecosystem in resource-based cities, we must give full play to the power of the government in the innovation auxiliary system. First of all, optimizing the implementation of policies, systems and plans related to the construction of the innovation ecosystem all need to rely on the strength of the government, enhance the mutual cooperation between the innovation ecosystem systems, give play to the organizational and coordinated role of the government, and the government needs to coordinate the various forces of the city to achieve the goals. Secondly, the government plays a key role in building an innovative ecosystem of resource-based cities. The government strives to create all conditions to promote the project landing; the government should build an open cooperation platform, hold major activities such as Taiyuan Energy Low-carbon Development Forum, expand the city influence; increase the government investment, build a public platform for scientific and technological innovation, promote the integrated development of industry-university-research, increase the proportion of related construction investment in the public budget expenditure, and promote the sustainable development of resource-based city.

Conclusion

This paper combines the viewpoint of innovation ecosystem and regional innovation system, the resource-based city innovation ecosystem is roughly divided into innovation operation system (industrial enterprises above designated size, university technology enterprises), innovation research and development system (universities, research and development institutions), innovation auxiliary system (government, intermediary agencies) and innovation environment system (basic environment, natural environment, economic environment, social environment) and other four aspects of the subsystem.

This paper combines the research results of some scholars and the view of innovation ecosystem, and constructs the index system of resource-based city innovation ecosystem construction. Using entropy analysis, the weights of each indicator were 0.093, 0.110, 0.081, 0.099, 0.106, 0.121, 0.138, 0.074, 0.113, 0.066 respectively.

This paper summarizes and references the experience of resource-based city innovation ecosystem construction, and combined with the empirical research results, from accelerating the development of innovation operation system development, optimize innovation environment construction, perfect innovation reform guarantee system, play innovation auxiliary government power in four aspects to optimize the implementation of the resource-based city innovation ecosystem construction path.

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A CASE STUDY OF SCAFFOLDING INSTRUCTION IN COLLEGE ENGLISH WRITING TEACHING

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Abstract

Writing is an important way of communication to convey information and exchange feelings in writing. One of the purposes of English teaching is to cultivate students' preliminary writing ability. Writing teaching is an important part of junior high school English teaching, which should run through the whole process of English teaching, always accompanied by the teaching of vocabulary, dialogue, grammar and text. For English teachers, how to help students improve their writing ability is extremely important. For many years, scholars at home and abroad have devoted themselves to the study of a variety of effective teaching models of constructivism. With the help of this wave of research, Scaffolding Instruction has come out. This article aims to study the applicability of scaffolding theory in school English writing teaching, and explore the use of effective scaffolding teaching strategies to better promote students' English writing ability and literacy in college English teaching.

Keywords: Scaffolding Instruction, Writing Teaching, College English

Introduction

With the development of society and frequent communication, English, as one of the most essential interaction tools among people, is gaining more and more attention. Writing, being one of four basic language skills, is an important way to express one's ideas and personal feelings. English writing not only requires students to translate their experiences and thoughts into written language through conception, but also needs to master the norms and frameworks of different writing genres so as to cultivate students' comprehensive ability to use the second language. Therefore, writing is an indispensable part of English teaching. However, English writing teaching is a weak link English teaching. Although teachers and students spend more effort and practice, they only achieve small progress. Therefore, the author hopes to apply the scaffolding teaching mode to English writing education, focusing on the exploration and application of various scaffolds in English writing class, aiming to help students to construct the framework, acquire skills, accumulate expression, and thus improve their writing ability.

For many years, scholars have been devoted to studying various effective teaching modes of constructivism. With the help of this wave of research, scaffolding teaching has come out and the proposer of it is the famous psychologist Vygotsky of the former Soviet Union. Scaffolding instruction is defined as providing a conceptual framework for learners to construct their understanding of knowledge according to the relevant documents of the Distance Education and Training Program (DGX III) of the European community. In the process of research, scholars have unified the concept core of Scaffolding Instruction. Over the years, scaffolding teaching research at home and abroad has focused on the effective implementation strategies of Scaffolding Instruction from five aspects, including how to build scaffolding, how to create effective teaching situation for specific lesson, how to guide students to analyze and solve problems, how to practice effective learning in groups as well as how to implement effective evaluation. In a word, front-line educators and relevant experts have given practical demonstration and theoretical support on how to reflect the ideas and views of Scaffolding Instruction in the classroom.

Scaffolding teaching mode refers to teacher-guided teaching. Students can master the construction and internalization of knowledge and skills, and then improve their learning level. In short, the task of regulating learning is transferred from teachers to students through scaffolds, so that students can take charge of their own learning and continuously improve their self-discipline and self-control ability. The main purpose of this study is to test the applicability of Scaffolding Instruction in the process of English writing, find several appropriate and effective ways to apply scaffolding teaching mode, and gradually cultivate students' ability of problem-solving and autonomous learning so as to lay the foundation for students' mutual learning and independent inquiry.

The following table is about are review of the relevant literature of Scaffolding Instruction

Table 1 are review of the relevant literature of Scaffolding Instruction

	A review of the relevant literature of Scaffolding Instruction	
	Researcher	**Point of view**
1	Jerome Bruner (1976)	It is used to describe the informal guidance by parents.
2	Palinsar (1982)	Teachers should play various roles.
3	Long and Sato (1983)	Scaffolding plays an important role in learning.
4	Fisher and Mercer (1999)	Scaffolds are the support provided by teachers to students.
5	Raymond (2000)	Learners can acquire new knowledge base don existing knowledge.
6	Smagorinsky (2000)	Teacher-student dialogue can produce new ideas.
7	Hartman (2002)	The purpose is to develop learners' ability to understand and solve problems.
8	A. Walqui (2006)	Various scaffolds should be taught to student.
9	He Kekang (2002)	Five steps: setting up scaffolding, entering the situation, independent exploration, cooperative learning and evaluation
10	Wu Xiaoyan (2006)	should be applied in all links of oral English class
11	Dai Qin (2010)	is important in listening and reading teaching

The Definition of Scaffolding Instruction

Scaffolding Instruction is not only a teaching idea, but also a teaching mode. It is a teaching model that helps students understand specific knowledge and construct knowledge meaning through a set of appropriate concepts. With the help of conceptual framework, students can independently explore and solve problems and construct meaning by themselves.

As a teaching method, based on constructivist learning theory, Scaffolding Instruction takes learners as the center and aims to promote students' ability of problem-solving and autonomous learning. The scaffold was originally used in the construction industry to temporarily assist the construction operation. Once the construction is completed, it will be removed. Constructivists use it as a metaphor to provide students with a temporary support suitable for students' learning needs in the learning process to assist students to gradually complete tasks that they cannot complete independently, and gradually withdraw or fade out with students' progress, until students can complete tasks independently and internalize corresponding knowledge and skills. Scaffolding Instruction is a teaching model in which teachers or other facilitators and learners complete a certain activity together. External support will be provided for learners to participate in the activity, and help them complete tasks that they cannot accomplish alone. As the activity progressed, teachers gradually reduce external support and make common activities give way to students' independent activities. With the help of teachers, the task of managing learning and the responsibility of exploration are gradually transferred from teachers to students themselves, so that students can learn independently. In scaffolding teaching, teachers, as the representative and guide of culture, help students to master and internalize the skills which can enable them to engage in higher cognitive activities. Once students acquire these skills, they can self-regulate their learning more.

Research Methodology

<u>Participants</u>

Participants are 72 sophomore students of Mianyang teachers' college, they are from two classes: experimental class 5 (36) and control class 6 (36) their English teacher is the same: that is the author.

<u>Measures</u>

Both the students of experimental class 5 and control class 6 were given the same topic to write: opinions on conspicuous consumption: but using different teaching methods: the students of class 5 were given the task only after the first class of unit 2, and the students of class 6 were given the task after finish learning unit 2, so the methodology is using scaffolding instruction and comparison, In-depth Interview, documentation method, mathematical statistics and case analysis.

In-depth Interview

Interview is an important method for qualitative research. Mehedi Hasan (2016) In-depth interview (IDI) is a qualitative data collection technique in which respondents are engaged in a one-to-one setting to elicit thoughtful responses. IDIs can be used for a variety of purposes, including ideation, needs assessment, issue identification, and strategic planning. In-depth interviews are most appropriate for situations in which you want to ask probing questions that incite a meaningful conversation/response designed to produce a depth of information from relatively few people (as opposed to surveys, which are conducted with larger numbers of respondents), As IDIs use an open-ended, discovery-oriented method of data collection, the interviewer is allowed to deeply explore the respondent's feelings and perspectives on a subject, which should result in rich background information that can provide contextual

insights and shape further questions relevant to the topic, in which the interviewer prepares the outline of the questions in advance, and then the interviewer collects the required information by means of oral conversation with the interviewees informally. Compared with the questionnaires, the interview can provide more in-depth information on the study. Therefore, in order to obtain more detail information, the in-depth interview was designed based on the specific problems. In this research, the author first interviewed eight students who came from experimental class and controlled class. The following table is their name lists.

No.	Name	Gender	Class
1	Li Hongxia	Female	5
2	Guo Wen	Female	5
3	Liao Zongzhi	Male	5
4	Peng Tianzhi	Male	5
5	Li Panpan	Female	6
6	Li Wen	Female	6
7	Wan Xianbin	Male	6
8	Du Xiaolong	Male	6

Fig. 1 Name lists of Interviewers

Interview questions:
1. Do you prefer the traditional teaching mode or this scaffolding instruction mode?
Most students said that scaffolding instruction was an indispensable part of writing teaching in college English teaching
2. Which factors do you think are the most influential ones to the writing teaching of college English?
Most students replied that the most influential factors are the methods of writing and useful words and expressions which are associated with the topic of the writing.

Research Results

Etudes
In this process, teachers can explain to students the connotations of participation in curriculum development. Participating in the development of the curriculum, From the micro aspect, it usually refers to the evaluation of courses, teaching materials, teaching, or the analysis, evaluation, development and utilization of a specific aspect of the curriculum, teaching materials, curriculum standards, etc., such as the development and utilization of curriculum resources, the discovery and correction of problems in the main text or annotations in the teaching materials, and the discovery and correction of inaccuracies in the preparation of teaching materials.

Exploration
At the beginning, teachers set goals for students. Various possibilities of the situation will be triggered, encouraging students to explore and try. At this time, the goal may be open, but teachers will have a great influence on the direction of exploration. At this stage, teachers can

offer inspiration and guidance, make demonstrations, provide problem-solving prototypes, and provide feedback to students. However, they should gradually increase the exploratory component of the problem and gradually give way to students' own exploration.

Excursions

Teachers let students decide the direction and problems of exploration, choose methods and accomplish independently. At this time, different students may explore different problems. Learning is not only a cognitive activity conducted by learners, but also a process a complexion of social construction. It is the internalization of culture through activity participation. Teachers and more mature members of society can provide learners with learning support, guide and help learners complete activities that they cannot complete independently. Learners can also support and help each other. With the help of this cognitive apprenticeship, learners can gradually internalize more advanced knowledge and skills in real activities.

Discussion

Scaffolding instruction is generally composed of several steps: creating teaching situation, building teaching scaffold, independent exploration and research, cooperative learning and evaluating learning effect.

1) Creating teaching situation

To create a teaching situation is that teachers should first set up a teaching theme, which contains the main knowledge that students need to acquire. At the same time, the main problems should be raised to students for the purpose of inspiring their ideas.

2) Building teaching scaffold

The knowledge content that students want to learn should be regarded as the main development area. Relevant questions and important knowledge concepts in textbooks are the basic points to build a teaching support, laying a foundation for students' independent exploration as well as mutual discussion.

3) Independent exploration and research

Independent exploration and research on the connotation and extension of knowledge is the best means to exercise students' comprehensive ability. Teachers mainly play the role of a learning consultant in this process. In turn, when students experience difficulties, they can consult and seek help from teachers.

4) Cooperative learning

It is advisable to divide students into different groups according to different styles and types of students, letting each learning group study the relevant textbook contents through cooperative and mutual learning. Students can get a positive experience through this teaching mode. On the one hand, they can express their understanding of the learning problem, on the other hand, they can exercise their language expression ability. In this way, students' different opinions and various understandings can be unified in group cooperative learning. What's more, their complex attitude towards research problems can be gradually clarified. Finally, through cooperative learning, students can effectively concentrate the collective wisdom to reasonably construct the learning content, so as to gradually acquire the deep-seated meaning of knowledge. When grouping students, teachers need to consider students' interests and hobbies, learning basis, ability level, personality characteristics and so on.

5) Evaluating learning effect

Evaluating learning effect is an important step of scaffolding instruction. Teachers' evaluation of students' learning should be divided into two parts: one is the overall learning evaluation of the group, and the other is the evaluation of students' comprehensive performance in the group. In the specific implementation of the evaluation, the following different emphases

should be accurately evaluated. The principle of more praise and less criticism should be attached more importance when evaluating. In the first place, teachers need to evaluate the rationality and excellence of the knowledge framework designed by students. Second, it is necessary to pay attention to the close degree of interaction and cooperation among group members in the process of designing knowledge framework. Additionally, the process and effectiveness of each group's independent inquiry ought to be evaluated. Fourth, in the process of improving and correcting the knowledge framework, teachers should evaluate the final effect and comprehensive performance of the group. At length, the overall performance of students in the experiment class (class 5) are much better than the control class (class 6). The details can be seen from the following table

Conclusion

Scaffolding instruction is a teaching method that takes students as the center, makes use of teaching forms such as problem, exploration and cooperation, gives full play to students' initiative, and enables students to construct the meaning of the knowledge they have learned. Scaffolding instruction is a complete process, including three stages: building scaffolding, exiting scaffolding and the transfer of teachers' responsibility. None of the three stages is indispensable. Without any part of them, it should not be called Scaffolding instruction. In these three stages, building the support is the basis for exiting the support and realizing the transfer of responsibility. Teachers' withdrawal from the scaffold means that teachers will build a scaffold again in the process of teacher-student interaction. They repeatedly experience the process of building and withdrawing from the scaffold in teaching. After several times of building and exiting the scaffold, it means the continuous improvement of students' ability level. The characteristics of Scaffolding instruction corresponding to its three stages can be summarized as follows: dependence, retreat and responsibility transfer.

First, scaffolding teaching model can stimulate students' interest in English writing. Under this mode, there is more interaction between students and teachers, and students have more voice and decision-making power. Scaffolding Instruction advocates creating a real and reasonable writing situation, and therefore students' enthusiasm is mobilized. Second, the scaffolding teaching model can help students sort out their writing ideas and master the writing framework, so as to improve their writing performance. What's more, as mentioned above, different types of scaffolding can give students different help.

To sum up, research and practice have proved that Scaffolding instruction theory is applied to writing class, which also has a significant impact on the improvement of students' writing ability. Teachers should try to change their own positioning, take students as the main body, keep up with the pace of the new curriculum reform, and highlight the cultivation of students' English core literacy. Given the author's shortcomings, the author will also broaden the scope of her research in future studies to make the research results more comprehensive, and make Scaffolding instruction effectively applied to the practice of English writing teaching.

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