

Construction of Advanced Listening and Speaking Course from the Perspective of Educational Ecology

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Abstract: The *College English Teaching Guidelines (2020)* (a guide for ordinary colleges and universities to formulate college English teaching syllabuses, and the main basis of English course teaching and course evaluation) offers new requirements for college English teaching. *Advanced Listening and Speaking*, as one essential optional course in the College English course group, aiming to improve students' English listening and speaking ability in class activities, should comply with this requirement to achieve the goal of good English language expression ability and cross-cultural communication ability. This course, has a more dynamic environment than other courses in the course group, which can help teachers find the problems to improve the students' performance and create a better situation to cultivate students' language proficiency to meet the actual needs of the individuals, country, and society. Therefore, this study analyses the whole teaching process of *Advanced Listening and Speaking* course through teaching process under the guidance of Educational Ecology, in order to solve some problems like "classroom silence" and "poor language production" by analyzing the ecological factors and the ecological system of this course, and give suggestions by using four laws of educational ecology theory: the law of tolerance, the law of limiting factors, the niche theory, and flowerpot effect.

Keywords: Educational Ecology, *Advanced Listening and Speaking*, Curriculum Construction

1. Introduction

China's Education Modernization 2035 has strived to cultivate first-class talents and improve the level of international exchanges and cooperation, putting forward higher requirements for education in 2019. The following year, the Fifth Plenary Session of the 19th Central Committee pointed out that China's higher education has entered the stage of popularization, and it also proposed to promote high-quality development and build a "high-quality education system" to improve the quality of the people and promote the all-round development of people. College English, as a compulsory public basic course for most non-English majors in the undergraduate education stage, is an important part of higher education in China, which is of great significance to promote the coordinated development of college students' knowledge, ability and quality. In recent years, China has always attached great importance to the study of College English. The Ministry of Education has carried out three large-scale revisions of college English teaching syllabus in

just 20 years since the beginning of the 21st century, emphasizing the importance of developing abilities to use English.

To meet the needs of communication with more and more frequent exchanges between countries in the world, listening and speaking ability of English has become an important criterion for evaluating whether talents are qualified or not [23]. And from students' interests and personal development, their learning needs are relatively consistent: Speaking is generally listed as the language skill of most interest, followed by listening and reading [25]. Thus the listening and speaking-based course, *Advanced Listening and Speaking*, as an elective course of college English group, has been chosen by most students. In Southwest Petroleum University, good results have been obtained, but there are still some problems like "classroom silence" and "poor language production" after years of reform and development. In the new round of curriculum, the endeavors to use educational ecology theory is to explore the current construction of the course *Advanced Listening and Speaking*, and to strive to improve these

problems through classroom observation. Then some principles of educational ecology, whose main feature is to apply the theories and methods of ecology to study educational phenomena and educational problems, and to explore educational laws [9], will be applied to analyze the cause according to the different phenomenon in this course. Consequently, through the study of this course combined with Educational Ecology, the relationship between the environment and education in this course can be better demonstrated and suggestions for sustainable development paths can be put forward, with a view to provide reference for the future development of English listening and speaking courses.

2. Overview of Educational Ecology

"Ecology" was first proposed by Thoreau H. D. in 1858, but its connotation has not been uncertain until the German biologist Haeckel E gave it a clearer definition in 1868: Ecology is the science that studies the full relationship of animals to their inorganic and organic environments F. With the continuous penetration of ecology into natural sciences and social humanities, many sub-disciplines have emerged, such as plant ecology and animal ecology, city ecology, and social ecology. Among them, the basic principles and methods of ecology are also widely used to study the phenomena and problems in the field of education, and then the ecology of education is derived. The formal use of the term "ecology" in educational research began with the book *Sociology of Education* published by American scholar W. Waller in 1932, who firstly proposed the word "classroom ecology". Then the concept of "ecology of education" was firstly proposed by Lawrence Cremin in his book *Public Education* in 1976. Cremin believes that education is an organic, complex, and unified system. All factors in the educational ecosystem are organically connected, and this connection is dynamically presented as consistency and contradiction, balance and imbalance.

Wu Dingfu (1988) continues to develop and improve Cremin's educational ecology, and draw on relevant principles of ecology, and put forward the principles of "the law of tolerance", "the law of limiting factors", "the ecological niche theory", and "flowerpot effect" etc.. He summarizes that educational ecology is using ecological methods to study education, the laws of educational development from the interconnection of the material environment and spiritual environment that affect education, so as to continuously improve the benefits of education, affected by complex ecological environment including natural environment, social environment and normative environment. In short, educational ecology is the science that studies the relationship between education and the overall ecological environment (social, normative, natural). The purpose of research is to find the internal laws and external conditions of educational development, specifically involving macro factors (such as factors in natural environment, social environment, and normative environment) and micro factors

(such as factors in human's physiological and psychological condition) in the ecological environment [5].

There has been a wealth of research and many scholars proposed to think about educational issues from the perspective of ecology, and did a lot of experiments to conduct research, infiltrating ecology into every aspect of education, including the relationship between individual behavior and the environment [3, 2], the relationship between education and the environment [17, 28], the school ecology [11], and research on classroom ecology [4, 15] that becomes a major research area. Among them, the concept of "ecology" has also been introduced into language learning and language education. Foreign language teaching, as a subsystem of the education ecosystem, was paid attention to improve the relationship between factors [22] within the system, the dynamics of language classrooms [29], the individual differences between learners and teachers, the use of device to support learning [10], and to create an effective ecological environment, stimulate learners' subjective initiative [21, 1], and improve the quality of language teaching.

In China, there also has been abundant research on the application of educational ecology to foreign languages. At the macro-ecosystem, researches paid more attention to foreign language teaching, especially for college English, and proposed that an overall, systematic and dynamic educational ecology theory should be used to construct a college English teaching environment [6, 24, 16, 13]. At the micro level, the principles of educational ecology are used to analyse ecological factors [7], ecological niche [18, 26], technology-based cooperative learning [30, 19, 12] to give suggestions or build teaching mode, exploring the creation of an ecological English classroom teaching environment. Some scholars have also begun to pay attention to the ecological construction of other courses, such as regional education, children language acquisition [27], vocational education, even some ecological construction of specific courses in college English, such as speaking teaching and grammar teaching.

To sum up, with the in-depth development of ecology in the field of education, foreign scholars have gradually expanded from the macro-level research to the micro-level research, that is, the "ecological classroom" research. The domestic research on educational ecology mainly follows the foreign research results, but the research on the subject teaching from the microscopic aspect is not mature enough. For example, the application of ecological classroom rarely focuses on the specification of vocabulary, pronunciation, dialogue, reading, and writing in English courses.

3. Curriculum Construction of *Advanced Listening and Speaking Course* from the Perspective of Educational Ecology

As an important elective course in college English, *Advanced Listening and Speaking*, based on listening and speaking strategies, cross-cultural knowledge, and the

humanities of social and natural science, aims to cultivate students' autonomous learning ability and the ability to understand, research, integrate social and natural sciences and humanities, and ultimately wish to achieve the goal of good English language expression ability and cross-cultural communication ability. This course has been developed in Southwest Petroleum University for more than ten years, which initially focused on traditional listening and speaking. After infrastructure construction, reform and development, introduction of platforms, updating of teaching materials, and multiple breakthroughs, a student-centered course has been built, which is oriented to implement morality, cultivate people, and improve the quality of talents.

However, Like most English courses, this course has not completely broken away from the traditional teaching mode, and some typical problems have existed for many years, such as "teaching by holding students' hands", "classroom silence", and "poor language production", which have not been well solved [13]. Thus after reviewing this evidence, the teaching and research group of *Advanced Listening and Speaking* course in Southwest Petroleum University, taking the new perspective as a key point, tries to explore a holistic, dynamic and balance curriculum system with its strong theoretical support and build an open, symbiotic and sustainable foreign language platform, aiming to offer practice activities and wishing to provide students with a richer and diverse experiences in acquiring language proficiency.

This course can be viewed as a sub-system in the educational ecosystem whose environment can be divided into external environment and internal environment. External environment includes natural environment, social environment, and normative environment. Internal environment, the inner ecological environment, refers to the physical and psychological environment of the educational object. There are various ecological factors in this subsystem, including teachers, students, classroom environment, teaching process and resource, motivation, etc. There are also various interpersonal relationships (student-student relationship, teacher-student relationship, teacher-teacher relationship), which have mutual interaction of each other. No ecosystem is closed. Whether it is its internal ecological factors or external ecological factors, they are in constant motion and circulation, carrying out the never-ending exchange, transmission and transformation of material, energy and information and maintaining the normal operation of the ecosystem. *Advanced Listening and Speaking* course, as an ecosystem, its internal material flow, energy flow and information flow also reflect the material circulation, energy flow and information transfer between teachers, students, various teaching elements, internal and external environment and other factors. This kind of cyclic input and output process ensures the orderly operation of the teaching system.

In order to realize the utility of this course more efficiently, the teaching and research group of *Advanced Listening and Speaking* course of Southwest Petroleum University tries to break their discourse hegemony and design an environmental

curriculum, based on the theory of educational ecology, so as to create a high-quality open compound foreign language class for all teachers and students, strengthening cultural self-confidence and international vision, and establishing a sense of social responsibility and action to inherit and spread Chinese culture.

3.1. Using the Law of Limiting Factors to Improve the Effectiveness of the Advanced Listening and Speaking Course

Justus Von Liebig (1840) found that the yield of cereal crops is not only limited by the nutrient elements that are required in large quantities, but mainly by those minor elements in soil after he researched the effects of various chemicals on plants [20]. As long as the demand for these elements is slightly increased, the yield of cereal crops can be significantly improved. Then this rule was called Liebig's Law of the Minimum. Knight (1965) pointed that when the ecological factor is missing, or below the critical limit or exceeding the maximum tolerance, it will play a role in restricting development. After that this law has been perfected and expanded into the field of education, and it has formed the law of limiting factors in educational ecology.

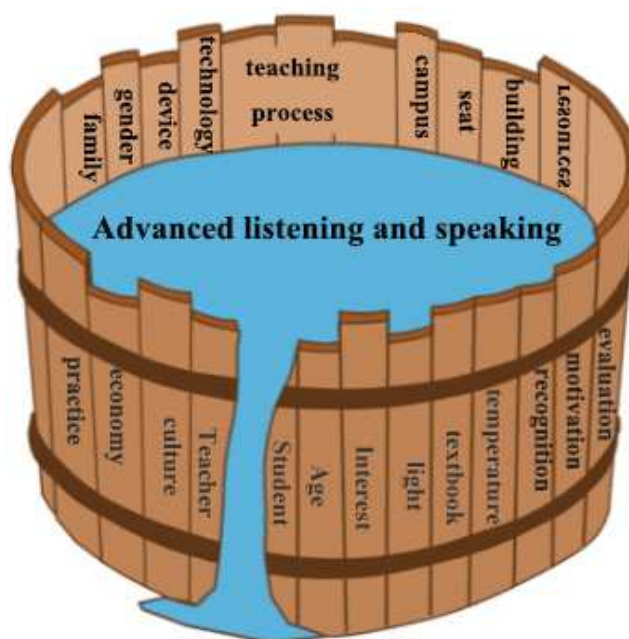


Figure 1. The law of limiting factors.

Graphically, the law of limiting factors is illustrated by the picture (Figure 1), which shows that almost all factors in the educational ecological environment can become limiting factors, and the amount of such factors will limit the effect of education. In this course, the main goal is to construct a student-oriented teaching form, giving a chance for students to gain autonomous learning ability, helping them finish after-class practice independently and acquiring communication ability fluently under the guidance of teachers and with the help of English practice platform. Therefore, finding the limiting factors in various factors in the

teaching environment and control the appropriate amount is very important in this course teaching.

3.1.1. Great Influence of Physical Environment on Students' Mood, Interest and Atmosphere in Classroom Learning

The environment is the foundation and guarantee for the construction of ecological classroom, which can ensure the smooth construction and improvement of other teaching factors. Factors in the environment below or exceeding the critical limit, such as the intensity of the light in the classroom, the layout of the classroom, the arrangement of seats, the size of the class, the size of the activity space, teaching speed, teaching method, the workload of homework, the teaching content, the lecture time and so on, can all become limiting factors. Taking the seat distribution as example, most students who were seated at the front and those who were seated closer to the teacher were more attentive. To a certain extent, they also respond faster to instructions given by teachers. Even in terms of the size of the classroom, smaller classroom can not only reduce the density of students and classroom noise, so that students have a quieter and more relaxed learning atmosphere, but also allow teachers to have more opportunities and time to interact with students and improve teaching effectiveness. But it is difficult for teachers to change the classroom atmosphere by changing the desks and chairs and the arrangement of students' seats in large classroom, and they are unable to monitor the majority of students' learning.

3.1.2. Key Role of Teachers in Classroom Ecosystems as Dominant Factors

Its absence or deficiency or excess will directly lead a restrictive effect to students' language learning. When the teacher's guidance is deficient, students cannot capture the key points in the text content, and the learning efficiency is reduced; when the guidance is greater than the students' tolerance, the phenomenon of "teaching by holding students' hands" and "absolute authority" are obviously and students are accustomed to being obedient and reliant on teachers, with relatively weak awareness of the subjectivity and insufficient spirit of skepticism and innovation. This is why the traditional cramming education method not only fails to promote the development of education, but also fails to improve the teaching effect. It also can be seen that teachers blindly letting go or over-instructing will become a limiting factor in the learning process of students. Therefore, teachers should pay attention to the research and application of teaching methods to better promote the construction of course to balance teachers' output and students' output in limited classroom time and space. Secondly, only when teachers and students coexist harmoniously and cooperate with each other, can the teaching effect be guaranteed. Classrooms should not be just lecture halls for teachers. The display of students' language learning achievements is also language input to other students, and is the object of

imitation and learning for other students. Teachers' evaluation from multiple perspectives is not only the language interaction and communication with students, but also the promotion of students' English learning.

3.1.3. Extreme Importance of Learning Motivation

Besides these factors in the external environment, students' internal factors also deserve attention. The factors at the previous levels will greatly affect their learning motivation, and learning motivation and goals can affect their learning engagement and learning methods. Internal factors, including motivation, favor of English, attitudes, encouragement and so on, have a great influence on the learning effect. Students' learning goals, learning motivation, learning resources and learning methods play a decisive role in their final learning results. These factors will motivate students to learn actively and enhance students' concentration in class. For example, motivation and interests will encourage students to discuss actively in the group discussion and try their best to search information in the brainstorming process. These internal factors like the energy in the heart, which is continuously pumped out to support the constant learning and exploration of the outside world. Their sense of achievement is an important factor in continuously promoting and enhancing their foreign language learning motivation.

3.2. Using the Law of Tolerance to Maximize the Function of Ecological Body

Shelford (1911) said that the emergence, survival and development of organisms depend on various complex conditions, and if one of these factors exceeds its tolerance, the organism will die out or become extinct. Graphically, the law of tolerance is illustrated by the curve (Figure 2), which represents the dependence of the species response (factor favorability of the species) on the environmental factor/factor strength. In the education ecology, any subject has its own upper and lower limit values for all factors around it. The tolerance range is the range between minimal and maximal values of the environmental factor within which the species is able to survive, which are called as thresholds.

The same is true in the teaching ecosystem, students have different tolerance range for different factors, and different students have different tolerance range for the same factor. Therefore, in constructing the foreign language teaching environment of *Advanced Listening and Speaking* and taking after class activities, it is necessary to strictly grasp the law of tolerance, so that ecological factors such as students, teachers, classroom environment, and teaching activities must achieve the unity of quality and quantity, on this account to avoid the much or little related factors affecting the implementation of curriculum. Therefore in this course, we set each factor according to the law of tolerance, and the entire teaching process maintains a complete chain of ecological factors (teachers, students, teaching facilities, teaching environment).

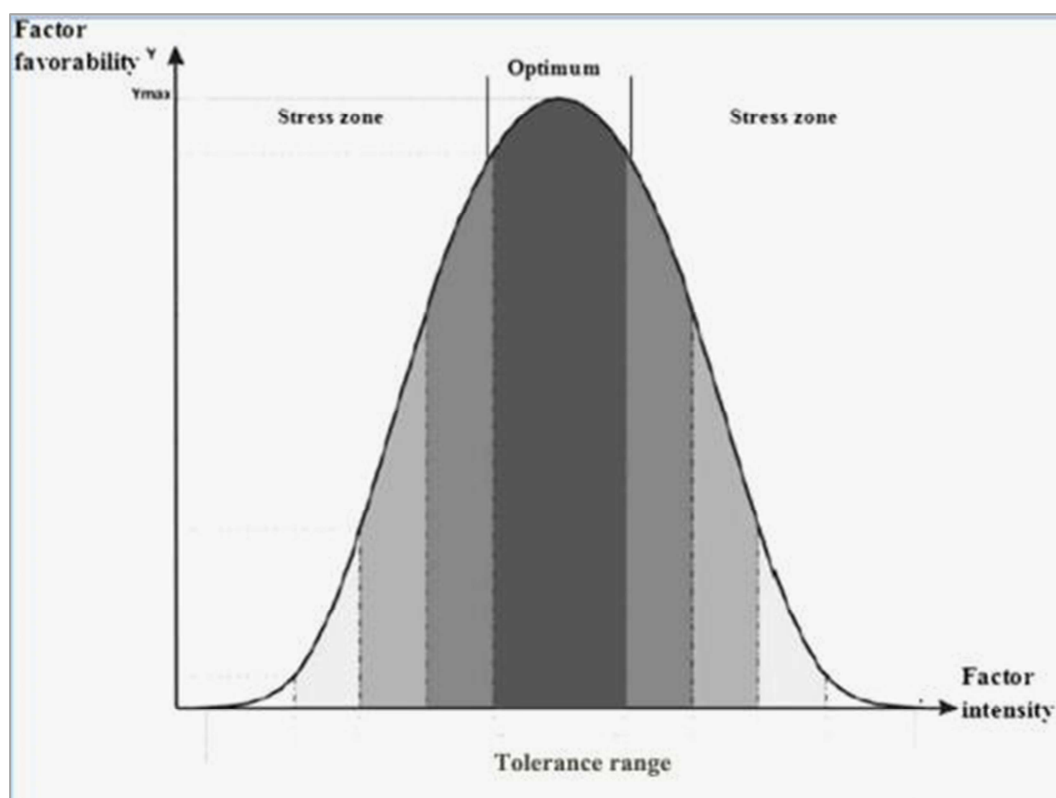


Figure 2. The law of tolerance.

3.2.1. Appropriate Use of Information Technology Resources

Internet technology provides great convenience for teaching, and blended teaching which mixes the advantages of online and offline learning is the inevitable trend of college English reform. With the rapid development of Internet mobile education technology, various foreign language intelligent learning software and online education management software have accelerated the research and development, and the resources and means of blended teaching have become more and more abundant, such as automatic writing correction system, oral scoring system, and listening training system. Diversified teaching resources help teachers to conduct online exercises, tests, online discussions, voting, group online collaborative output, and mutual evaluation. At the same time, it can also manage the class through the statistics of learning tasks, learning tracking, test evaluation, learning situation analysis, dynamic feedback, etc. However, this approach is both an opportunity and a challenge. If the arrangement of excessive online learning resources exceeds the student's tolerance limit, then information technology will become a limiting factor, affecting the sustainable development of the classroom ecosystem. Some teachers have over-configured the proportion of information technology in the total teaching, which hinders the effective communication between teachers and students, and reduces the effect of students' learning. And excessive dependence on the device will occupy the students' attention, which will lead to a decrease in students'

enthusiasm and attention, resulting in the phenomenon of "classroom silence".

3.2.2. Curriculum Design to Meet Individual Needs of Different Students

Different students have different tolerance range for ecological factors. Taking this feature into account, teachers should increase difficulty gradually in order to avoid one-size-fits-all tasks and to meet the learning needs of different students. Thus, teachers provide preview materials including reading, topic discussion, and prediction to guide students to warm up in advance before class when students can reduce the impact of differences in their language foundation through their own research in advance and reduce language barrier in a certain content, which can help students realize their prior knowledge about the topic of lecture and help teacher avoid exceeding the threshold of students with poor basic ability and cultivate students' self-exploration ability and improve their learning efficiency.

And the design of practice materials should be appropriately combined with the content of the textbook and selected according to students' own interests, so as to avoid excessive combination of practice materials and teaching affecting students' interests. Some challenging practices are enforced based on the full participation of students, and the selection of output exercise topics has been paid special attention in this course practice. The content is adapted to actual conditions rather than unifying the difficulty, and students can choose the section they are interested in and express it according to their own ideas. In this way, the basic

needs of all students can be met, and the goal of full student participation can be truly achieved to a certain extent.

3.3. Master the Principle of Ecological Niche to Encourage Full Participation in Courses and After School Practice

Grinnell (1917) originated the niche concept and his idea is usually designated a 'habitat' niche, which refers to one of distribution set by physical and climatic barriers, with little emphasis on food supply or interactions with other species. Then E. P. Odum compared the ecological niche to the "occupation" of species and the biological environment to the "address". Thus ecological niche not only represents the characteristics of the living space of the species, but also includes the overview of the species in it, such as the resource conditions available to the species, the time and space of activities, and the relationship with other species.

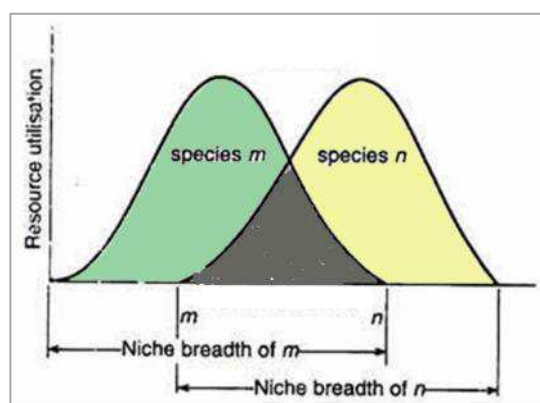


Figure 3. The principle of ecological niche.

Graphically, the principle of ecological niche is illustrated by the picture (Figure 3). Each biological species has an ecological niche that is most suitable for them in the long-term competition and there can only be one species in an ecological niche [32], where exists the relationship of competition and coexistence between populations. The niche theory is the premise of dealing with the internal and external relations of educational ecology [14]. In the education ecology, the niche boundary where an individual is located relates with the extent of the resources they use, and the intensity of competition will also vary with the width of the niche. Thus clarifying individual role helps to create an orderly niche competition and educational environment. As the main body of education in this course, teachers and students are in a corresponding position and have their own unique niche, interacting and communicating with its surrounding ecological factors to jointly form an educational ecosystem. For students, the cognitive abilities of language knowledge and skill and strategic and social skills show their ecological niche [18]. And for teachers, their niche are reflected in the teaching status and the potential ability to influence the teaching environment [31].

3.3.1. Reasonable Strategies to Expand Students' Niche

A reasonable student niche expansion strategy should be

formulated to fundamentally improve students' ability to allocate energy, use optimal strategies, cooperate and compete, develop collaboratively, and adapt to the environment [18]. In class, phenomenon of poor production and class silence is obviously. Students' niche are narrow and teachers need to take a long time to encourage students answer questions, which is inefficient for students learning. Firstly, suitable competitions can stimulate the interests and promote students to participate in competitions and further their studies, avoiding to result in negative psychology such as jealousy and inferiority. Then colorful classroom activities will improve the cognitive abilities of language knowledge and skill and strategic and social skill. Participation in interactive activities, such as group discussion, PPT presentation on topics, debate, and video shows of lecture topics trains students to cooperate effectively and strengthen communication, improving the critical thinking and innovation abilities especially required for information searching and processing. More importantly, offering an equal opportunity to show themselves is important. It is easy for students to cause an imbalance in their niche, because at the center of the ecosystem are often those students with excellent grades and abilities. Due to the different ecological niches, it is easy to find that the status of students in the educational ecosystem is unequal. Taking advantage of WeLearn, fif oral, fun dubbing apps where are full with English TV dramas, songs and other highly entertaining learning resources leverages the role of an information technology platform to strengthen students' interest in learning English and help students find their strengths with opportunities to show.

3.3.2. Role Changes of Teachers

The role of teachers has changed from the previous image of absolute authority to the role of facilitators. The teachers play the leading role to mobilize the enthusiasm of all students through reasonable and effective homework, quiz, questions and dubbing in foreign languages with the aim of offering an interesting environment, with all students engaging in and focusing on learning autonomy. In practical activities, teachers not only care about the grades of students' English, but also strive to help students explore the sustenance information generated from the interaction and provide sufficient learning opportunities especially for oral language practice based on cooperation, aiming to improve limited oral language development and create a platform for students to express freely on the basis of their own English language sufficiency, so as to achieve the purpose of students' language output and enhance their self-confidence, thus promoting growth of all the students.

Teachers also take function as guidance for students' leaning endeavor, encourage students to communicate and discuss in groups, and boosts students' attentiveness to learn from each other. Considering their grade and age appropriateness as well as the students' abilities to understand the topic and participate in a discussion, teachers help students to practice the target content and output exercises

from multiple perspectives, with appropriate formative evaluation feedback to help students find their mistakes and correct them in time. It is also a great opportunity for teachers to formatively assess (through observation) how well students are grasping new content and concepts and pop in to support or challenge them. Then individual differences among the students can be observed and the difficulties or problems that the students had in the communication could be recorded. Finally, students are given appropriate strategies and guidance to improve their understanding and reduce their knowledge gap. The whole teaching process and practical activities are not self-centered or centered on a certain person or some people, but pay attention to entire changes in the ecosystem to ensure the healthy development of the overall factors, and strive to each student to have a more reasonable ecological niche for themselves.

3.4. Comprehending the Principle of Flowerpot Effect to Enhance the Ability to Use English

The flowerpot effect was discovered by Austrian geologist Seuss and first proposed in his treatise on *geology* in 1875 [8]. Plants can grow well in an ideal environment like a flower pot, however, once the plants in the flowerpot are separated and put into the natural environment, they will easily wither or even die, and this phenomenon is called the "flowerpot effect". A flowerpot is a semi-natural and semi-artificial container for plants to grow, which not only has great limitations in space, but also easily leads to a decrease in the adaptation threshold of ecological factors due to the suitable environment created by humans.

In the English classroom, it can be regarded that the school's foreign language classroom as a flowerpot environment, and other learning environments as the natural environment for foreign language learning [8]. The flowerpot effect in the learning process of education ecology is that students can answer questions and even complete exam papers in class, but cannot apply their knowledge to life. This is because the closed and indoctrinated education leads to the separation of knowledge in text books from reality, and students lack the spirit of exploration and innovative thinking, making them difficult to apply and independently gain knowledge. The flowerpot effect can be reflected in many aspects, and the most evident manifestation in English learning is that "students can't remember grammar well" "students can't use new knowledge" "students fear to use English" and so on. Once students are separated from the classroom and textbook, they cannot apply what they have learned to communication and students can not learn English independently well without teacher's guidance. With the convenience of acquiring knowledge on the internet, students have many ways to learn English and teachers can also provide rich teaching materials, and most students' English ability actually has improved. However, according to these years, the passing rate of CET 4 and CET 6 is not high. Although students input a lot of English vocabulary and knowledge in the classroom, it is not ideal for them in actual English communication and how to solve these problems is

still worth thinking about.

3.4.1. Incorporation of Ideological and Political Elements

The fundamental purpose of education is to build morality and cultivate people. In addition to the knowledge in textbooks, teachers should also do a good job in transmitting the value behind the knowledge. During the teaching process of college English courses, students have access to a large number of English materials, and they need to read the history, politics, culture, customs and other contents of western countries, and directly face foreign ideologies and values. In the process, teachers compare the differences between Chinese and western cultural values and expand and deepen the ideological and political content of the curriculum, which is of great significance for enhancing cultural self-confidence. And in the context of Chinese culture outgoing, how to store Chinese elements and how to tell Chinese stories has put forward higher requirements for English courses, which requires the integration of English teaching and ideological and political education, so as to enhance cultural self-confidence and international vision, and establish a sense of social responsibility and action to inherit and spread Chinese culture.

3.4.2. Construction of Fair and Diverse English Practice Platform

The construction of the second class practice platform after class, creates an atmosphere of face to face communication with foreigners, and let students make speech on topics what they are interested in. In addition to colorful group discussions, such as debate, group presentation and discussion related to teaching contents, there are also theme activities including face-to-face communications with foreigners in the after-class practice, which are divided into online and offline communications. Offline give the chance for students to have the real face-to-face communication with international students, and need to have simple introduction, discussion and presentation with them. In this case, Preparation of every student help them have a certain understanding of their own topics after forming teams autonomously, selecting topics, searching materials online and offline, making PPT, and presenting in class, which somewhat helpful for final exams, because most students choose their topics demonstrated before on class for final oral exam owing to the easiness to narrate a familiar topic. These practice not only enhance students outputs but can also in turn contribute to the construction of online platforms to publicize and disseminate China's culture. In the whole teaching system, students search for information by themselves and apply what they have learned to express, which is the reactivation of their existing knowledge. It not only helps students to speak English independently from textbooks, but also builds verbal confidence and enhances cultural confidence.

4. Conclusion

Under the guidance of educational ecology theory, the

course of *Advanced Listening and Speaking* in Southwest Petroleum University has been implemented well. In particular, the English learning atmosphere of the class and the cultivation of students' oral language have been strengthened, which has played a good role in promoting the teaching of college English courses. Through the post-course interviews, most of the students felt that their oral English had improved, with corresponding improvements in grammar, accent, vocabulary usage, vocabulary complexity and speak fluency. Most of the students think that completing the practice after class is an interesting and happy process, which is well received by the students.

At present, this course actively adopts innovative teaching methods to create a practice platform to finish foreign language practical training besides lecturing in the classroom with an open, compound, and various form. In addition to the regular communications between students, this course also supplies the chance to have face-to-face communications with international students. At the same time, a sustainable and diversified foreign language education ecosystem for students has been built by using online platforms to impart knowledge and search information and offline practices to train students' communication competence. In this system, students' personalities have been fully considered, abilities have been greatly enhanced and skills have been cultivated, self-confidence has been greatly stimulated and improved, which have stimulated students' interest in English learning and created a good atmosphere on campus. All these fully demonstrate that creating a real context for students as much as possible in the foreign language teaching ecosystem can promote the development of students' comprehensive application ability of foreign languages, so as to create a dynamic and balance, open and feasible sustainable development of the foreign language course ecosystem, which can truly improve the language proficiency of foreign language learners.

5. Recommendations

As a very important course in the college English group, the Advanced Listening and Speaking course shoulders the task of cultivating students' English application ability and improving their English proficiency. It can be seen that strengthening the relationship between ecological subjects, optimizing the classroom ecological environment, and enabling students to learn in a harmonious environment are the keys to building a classroom ecology. Future research should also start from an empirical perspective and explore how the ecological classroom can help students to enhance their English ability from the perspective of classroom evaluation, so as to improve the teaching effect of the ecological classroom. Furthermore, for different course, the specific English ecological classroom should be designed in detail according to different teaching goals and different themes to promote the sustainable development of college English teaching.

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References

- [1] Ashley B. Heim, et al. (2022). Design, Discover, and Decipher: Student-Developed Escape Rooms in the Virtual Ecology Classroom [J]. *Journal of Microbiology & Biology Education*.
- [2] Barker, R. G., & Gump, P. V. (1964). Big school, small school: High school size and student behavior [J]. *Stanford U. Press*.
- [3] Bronfenbrenner, U. (1976). The Experimental Ecology of Education [J]. *Educational Researcher*, 5 (9), 5–15.
- [4] Brown, Dale. (2014). The Power and Authority of Materials in the Classroom Ecology [J]. *The Modern Language Journal*, 98 (2): 658-661.
- [5] Chen Haijing. (2022). High-quality Higher Education: an Explanatory on Based on Educational Ecology [J]. *Jiangsu Higher Education*, (01): 29-33.
- [6] Chen Jianlin & Gu Zhizhong. (2008). More Reasonable and Precise Requirements with Realizing Directions--Interpreting the 2007 College English Curriculum Requirements [J]. *Technology Enhanced Foreign Language Education*, (1): 3-8.
- [7] Chen Wei & Yang Yue. (2019). Eco-environment of College English Education in the Big Data Environment [J]. *Journal of North Minzu University*, (02): 167-171.
- [8] Chen Xia. (2006). Overcome the "flowerpot effect" and build a foreign language autonomous learning model [J]. *Journal of Teaching and Management*, (06): 66-67.
- [9] Deng Xiaoquan & Du Chengxian. (2009). 20-year Research of Educational Research [J]. *Theory and Practice of Education*, 29 (13): 12-16.
- [10] Gasparini, A., & Culen, A. (2012). Acceptance factors: An iPad in classroom ecology. *International Conference on E-learning & E-technologies in Education* [J]. *IEEE*, 2012.
- [11] Goodlad, John I. (1987). The Ecology of School Renewal. *Eighty-Sixth Yearbook of the National Society for the Study of Education*, Part I.
- [12] Hong Changchun. (2018). A Study on the Construction of College English Ecological Teaching Mode in the Age of Artificial Intelligence [J]. *Technology Enhanced Foreign Language Education*, (06): 29-34.
- [13] Hu Yanhong, Xu jinfang. (2022). College English Classroom in the New Era: Status Quo and Future Prospects [J]. *Foreign Languages in China*, 19 (02): 63-68.

- [14] Huang Xiaobin & Yang Chao. (2021). Realistic Condition and Future Orientation: a Study on the Professional Development of Vocational College Teachers from the Perspective of Education Ecology [J]. *Journal of Vocational Education*, 37 (08): 103-108.
- [15] Jérôme Leriche, et al. (2016). Compatibility and Complementarity of Classroom Ecology and Didactic Research Perspectives in Physical Education [J]. *Quest*.
- [16] Kang Shumin. (2012). Instructional Design for Foreign Language Teaching from the Perspective of Educational Ecology [J]. *Foreign Language World*, (05): 59-67+78.
- [17] Lacey, Colin, and Roy Williams, eds. (1987). *Education, ecology and development: The case for an education network*. Kogan Page.
- [18] Li Chen & Chen Jianlin. (2017). A Study on the Student's Ecological Niche in College English Teaching Ecosystem [J]. *Technology Enhanced Foreign Language Education*, (05): 15-22.
- [19] Li Yanhong, Yang Wenzheng & Liu Liyan. (2015). Integrated Teaching Model Based on Educational Ecology and MOOC [J]. *Technology Enhanced Foreign Language Education*, (12): 105-112.
- [20] Liebig, J. Von. (1840). *Organic chemistry in its applications to agriculture and physiology*, First edition [M]. Taylor and Walton, London, 387pp.
- [21] Lier, Leo Van. (2010). The ecology of language learning: Practice to theory, theory to practice [J]. *Procedia- Social and Behavioral Sciences*, 3: 2-6.
- [22] Lier, Leo Van. (1997). Observation from an Ecological Perspective. *TESOL Quarterly*, 31 (4), 78 3.
- [23] Liu Miao. (2020). The Improvement and Reflection of English Listening and Speaking Ability--A Review of The Strategy and Research of College English Listening and Speaking [J]. *Theory and Practice of Education*, 40 (09): 65.
- [24] Liu Senlin. (2008). A Study of Non-English Major Class Design: Ecology of Education Perspective [J]. *Technology Enhanced Foreign Language Education* (3): 33-37.
- [25] Pan Haiying & Ma Xiaohao. (2020). Identifying Diversified Needs and Constructing Efficient Classes for English Learning: The Perspectives of Content Specialists and University Students [J]. *Foreign Languages in China*, 17 (06): 69-76.
- [26] Qin Lili, Ouyang Xibei & He Yanhua. (2021). The generative effectiveness of "ecological affordance" in language teaching and learning activity systems in technology-enriched environment [J]. *Foreign Language Teaching and Research*, 53 (02): 251-262+320.
- [27] Tang Hongjuan, Wang Kelu. (2018). Share-style Model of Children Foreign Language Acquisition Based on Ecological System Theory [J]. *Journal of Xi'an International Studies University*, (1): 75-80.
- [28] Tanner, R. Thomas. (1974). *Ecology, Environment, and Education* [M]. Professional Educators Publications.
- [29] Tudor Ian. (2001). The Dynamics of the Language Classroom [J]. *Elt Journal*, 57 (2): 210-213.
- [30] Wang Linhai, Zhang Qing & Ma Lan. (2014). An Analysis of the Integration of IT into College English—from the Perspective of Educational Ecology [J]. *Technology Enhanced Foreign Language Education*, (06): 46-51.
- [31] Wang Nuosi & Peng Xumei. (2019). The Promotion Strategy on Teaching Ability of University Teachers in the Horizon of Niche Theory [J]. *Modern Education Management*, (08): 55-60.
- [32] Xue Chunyan. (2004). A Reflection on the Location of Universities in the Perspective of Niche Theory [J]. *Journal of Chengdu College of Education*, (08): 33-35.