In order to improve the evaluation methods of English teaching efficiency, improve the accuracy and operability of evaluation, this paper analyzes the basic characteristics of English teaching efficiency from the perspective of ecological classroom theory, and puts forward a formula to measure the efficiency of Ecological English teaching. On this basis, this paper discusses a new method to evaluate eco-English teaching efficiency from two levels of basic characteristics and overall structure and illustrates the intuitiveness and feasibility of this method through an example to enhance its application value and reference significance. For the evaluation of effective English learning process, this paper combines the principal component analysis method and data development analysis method to establish an analysis model of the relative efficiency of effective English learning, including a constant return to scale model, variable return to scale model, and scale efficiency model, which provides a quantitative analysis basis for the evaluation of effective English learning process. In order to facilitate the analysis of the relationship between “input” and “output” in English learning, and facilitate the quantitative analysis of the relationship between strategy choice and achievement in English learning, so as to provide scientific reference for English teaching and research.

1. Introduction

Bialystok [1] studied the effectiveness evaluation of English learning earlier in foreign countries. This research on the relevant forms of English learning includes the specific forms of practice, monitoring, functional practice and the use of reasoning strategies, the relationship between relevant forms and English scores and learning effectiveness, as well as the problems of outcome evaluation. Politze [2] studies the relationship between the strategies used by “good English learners” as described in English learning and their English competence and communicative competence through the evaluation approach from result to process and further evaluates the relationship between the above two indicators with the selection of effective learners as the evaluation criterion. Based on the empirical study of the relationship between the use of English learning strategies and English scores, Green and Oxford [3] proposed a set of relevant evaluation indicators, which provided great help for the subsequent use and evaluation of English learning strategies. Domestic studies in this area are mainly as follows: Wen Qufang and Wang Tsunamis [4] studied the relationship between learner factors and foreign language learning performance by constructing a linear weighted evaluation model, and the results show that the model can carry out a result-oriented evaluation of the learning effect of ordinary students. Zhou Qi [5] in the form of a questionnaire, the relationship between learning strategies and listening ability in English listening comprehension has carried on the related investigation and evaluation analysis, find related indicators occupies a large proportion in the evaluation model, and obtained the self-management strategy and phase GuanYingYu all were positively correlated with English listening skills training tactics in the conclusion. Li Jiong [6] based on further subdivide each refers to the standard and its relationship with English, the results show that the memory, cognitive, metacognitive, and social strategies use between English into positive correlation, and compensation and emotional strategy, it has to do with the use of English show the related, therefore should treat the subdivision and differential indicators into the model. Zou Yanying [7, 8] used Oxford’s SILL questionnaire to
investigate and study 335 college students. Through the
collection and demonstration of the evaluation model,
she found that the evaluation results were highly correlated
with students' performance, and believed that the relevant
indicators and model had certain objectivity and reliability.
Hu Zhujie [9, 10] modified Oxford's SILL questionnaire and
obtained results consistent with the study of Li Jiongying [6]
by constructing a relevant evaluation model. Tan PJ [11]
discusses an English evaluation and teaching system that
consists of several parts. The author argues that previous
research studies developing English evaluation and teaching
device systems have rarely been researched from the dual
perspective of developing the information technology sys-
tem and learning and teaching language.

In English learning, the evaluation of effective English
learning is very important. On the one hand, it is necessary
to evaluate the quality of their learning, that is, the learning
results. The quality of English learning and the level of
efficiency is not only related to the effectiveness of students' English learning but also the more important reason is the
foundation and language learning talent of students in early
English learning. Therefore, simply to evaluate students' English learning results is not perfect, reasonable effective
English learning evaluation should be in the English learning
result evaluation in combination with the process of English
learning stage evaluation at the same time, can we truly
reflect a student learning English in a certain period or
period of good-bad, high and low learning efficiency. However,
the existing research mainly focuses on the outcome
evaluation, and less on the process evaluation. Therefore,
this paper uses a data envelopment model to evaluate students' effective English learning process from
two aspects of English learning input and English learning output. At the same time, considering the collinearity of
the related indexes in the evaluation, the principal component
analysis method was used to deal with the irrelevance of the
evaluation indexes included in the main influencing factors
before the process evaluation. By dealing with the irrele-
ance of the relevant indicators of the influencing factors of
effective English learning, the irrelevance of the input in-
dicators and output indicators of English learning is guar-
anteed, and a reasonable evaluation model of effective
English learning process is established.

The eco-English teaching mode is different from the
traditional teaching mode. In the process of learning En-
lish, the disadvantage of the low efficiency of the traditional
teaching mode is abandoned, and students can learn English
more actively through specific training. Under the eco-
English teaching mode, the teaching efficiency of eco-En-
lish can be evaluated by observing the improvement of
English learning efficiency. According to the teaching
method of Eco-English, the evaluation method of teaching
efficiency can be constantly improved.

2. Evaluation of Effective English Learning
Process and Evaluation Purpose
Mobile learning refers to the process of learning at different
times and places with the help of mobile computing devices.
The technology, mainly mobile computing and Internet
technology, is realized by small mobile computing devices,
such as mobile phones, tablet computers, and so on. For
students, mobile phones are indispensable tools, and mobile
learning is also spread through mobile phones.

2.1. Measurement Features. Teaching efficiency refers to the
ratio between the effective benefits gained by students and
the time and energy paid by students and teachers in the
practical teaching process under the given teaching back-
ground. Eco-English teaching efficiency refers to the
teaching process that achieves better short-term and long-
term teaching effects in unit time through the application of
eco-English teaching methods based on clear teaching ob-
jectives and teaching contents. From the perspective of
space-time characteristics, eco-English teaching efficiency
has two main characteristics:

(i) Time characteristics, which mean that the ratio of the
time required for students to master all the teaching
content in a specific period of English teaching to the
benchmark time is relatively low. Baseline time is the
average time required in the syllabus to complete the
teaching objectives. It can be seen that the teaching
practice with lower time characteristics has a better
effect than that with higher time characteristics.

(ii) Spatial characteristics: in a specific time range,
students can complete and master the teaching
content in a wide range of fields, the breadth and
depth of teaching content are increased, and the
ability of independent English learning in the en-
vironment outside the classroom is also improved. If
students' potential and innovation are considered
comprehensively, the spatial characteristics of eco-
English teaching do not set an upper boundary to
some extent, that is, after students' innovative ideas
have gone beyond the actual spatial scope they
should master, the teaching will enter a new stage of
expanding to the outside world.

Learning evaluation refers to the process of judging the
value of students' behaviors in the teaching process by
establishing relevant standards and adopting relevant means.
In the English evaluation system, the evaluation of students
should include the basic knowledge and skills, learning
methods and attitudes, language ability, independent learning
ability, innovation ability, and the embodiment and de-
velopment of various nonintellectual factors shown in the
learning process. The evaluation system of effective English
learning should be a kind of comprehensive evaluation, that
is, it should include process evaluation and summative
evaluation. The process evaluation of effective English
learning mainly refers to the effect evaluation of students in
the whole process of English learning, which mainly includes
two aspects. On the one hand, students' Investment in English
learning, including learning time, learning attitude, and
learning energy. On the other hand is the output of learning
English, including English, English level test results and actual
communicative competence of English, effective English
learning process assessment should be able to effectively combine the above two aspects. The so-called effective it is in large English achievements on certain inputs or under the condition of English must be paid into smaller, All of these are effective ways of learning English, and the above two effective ways of learning can be distinguished and distinguished in process evaluation. The process evaluation of effective English learning can further guide students on how to improve their English learning methods.

The process evaluation of effective English learning needs to pay special attention to the evaluation principles of learning and inquiry process. In the process of self-development of students, there is always a process to promote students’ development. In the process of students’ English learning, we should according to certain standards of every effort to them, every process experienced by description and judgment, form knowledge of student development, according to the analysis of the relevant, advantages or disadvantages of for a student to give incentive or specific and targeted Suggestions for improvement. In addition, we also need to pay attention to the efforts and progress made by students in the learning process, the formation of a positive learning attitude, scientific exploration spirit, emotional experience, etc., these factors also play a key role in the evaluation process.

(i) The efficiency of English teaching of the traditional English teaching mode is taught by teachers, students practice to complete, and the ecological English classroom teaching mode pays attention to student’s personal development, training students in the process of English learning interest, to the personal development of students as the center, to improve students’ English learning efficiency as the goal. The eco-English classroom has also improved in the teaching environment. With the continuous input of Education in China, the development of English teaching has become a key work of education units. The idea of eco-English teaching is introduced into the traditional English teaching mode, which also promotes the continuous improvement of the teaching environment and teaching methods [12].

(ii) To improve the efficiency of English teaching evaluation methods in the process of English teaching is the need for students to learn the situation of research and analysis regularly, so as to analyze the efficiency of English teaching, in the traditional teaching efficiency appraisal, just according to the final results from the student evaluation, evaluation results cannot fully reflect the students’ learning situation below. When ecological Classroom English is evaluated for teaching efficiency, the teaching situation can be accurately projected from multiple aspects of learning, and the results are of more practical value [13]. The evaluation process of English teaching efficiency is investigated based on the reflection of various aspects.

Therefore, educators should constantly improve the teaching level and schools should be equipped with learning tools in time to ensure the smooth completion of ecological English teaching [14].

(iii) Improved the characteristics of measuring teaching efficiency as a direct result of reflecting the teaching situation, teaching efficiency is improved through continuous practice teaching, which requires teachers to pay a lot of hard work to prepare the teaching content. At the same time, it also needs the active cooperation of the school to improve the teaching efficiency through all-around improvement. The measurement feature of teaching efficiency in Eco-English class is also being further improved. The evaluation of teaching efficiency is carried out from the two aspects of time feature and space feature. The time feature analyzes teaching efficiency through the summary of a student’s learning status in a fixed time, and the space feature analyzes teaching efficiency through the summary of a student’s learning status in a fixed time. The scope and content of students’ learning knowledge are summarized, to analyze the teaching efficiency under the influence of spatial characteristics [15].

2.2. Analyze the Evaluation Method of Eco-English Teaching Efficiency. Evaluation of covariant features can reflect the psychological changes, emotional expression changes, and teaching-learning changes of teachers and students in the process of teaching, and are the specific content reflecting the teaching situation. Through the observation of students' psychological changes, teachers can discover students' problems in time, help students solve the difficulties in learning, and also improve the efficiency of English teaching. Through the observation of students’ emotional changes, teachers can understand students’ interest in learning English, observe their words and deeds in the learning process, and grasp students’ emotional changes in time for better guidance. It is these covariance characteristics that can make the teacher the first time grasp the learning situation of students, found himself in the process of teaching, evaluation of covariance characteristics, is an important way to evaluate the ecological efficiency of English teaching, can accurately evaluate the teaching situation, the results of the evaluation of the improvement of teaching model is more effective [16].

The teaching mode of the Eco-English classroom attaches great importance to the balanced characteristics of students’ learning, which is reflected in the allocation of teachers and students, students and teaching environment, as well as teaching needs and hardware. The eco-English teaching and learning are carried out with balanced teaching conditions. It improves the balance characteristics of ecological English teaching, which can guarantee the effective learning of students, and is also a method to improve the efficiency of ecological English teaching so that the teaching mode of ecological English is gradually recognized.
2.3. Evaluation Methods. In order to a more intuitive understanding of efficient English teaching to facilitate quantitative analysis efficiency, De-li Shen sums up the classroom teaching of the four basic characteristics: high-speed memory, teaching strategy and learning quality, and enjoyable learning, and put forward the teaching efficiency and the knowledge, ability, the intelligence factor “is proportional to the,” and the learning time and mental burden is inversely proportional to the empirical formula (De-li shen 2006: 145–148). If English teaching is placed in the context of the ecological classroom, and the teaching efficiency is evaluated based on the above discussion of the two basic characteristics of ecological English teaching efficiency, the results will be more targeted and practical. Therefore, based on the basic characteristics of basic classroom teaching and the space-time characteristics of ecological English classroom teaching efficiency, we propose the evaluation formula of ecological English classroom teaching efficiency (teaching efficiency evaluation formula for short):

\[ E = \frac{H + A}{T_1 \times T_2} \]  

Among them, E represents the teaching efficiency of receptive education, H (Harvest) represents the English knowledge mastered by students, A(Ability) represents the practical English Ability formed by students, T1 (Time1) represents the in-class learning time invested by students, and T2 (Time2) represents the extracurricular learning time invested by students. It can be seen that the learning efficiency of students in ecological class is directly proportional to the total amount of knowledge mastered and ability acquired, and inversely proportional to the passive learning time in class and active learning time out of class. This teaching efficiency evaluation formula puts the study of ecological classroom teaching efficiency into the learning efficiency of students, to reflect the teaching efficiency of English teachers. When this reverse reaction is achieved, it also reflects the fundamental purpose of English classroom teaching: to master the knowledge and improve the ability of students as the ultimate goal. However, since the teaching process is a bilateral activity between teaching and learning, the teaching preparation time of teachers should also be a part of measuring teaching efficiency.

3. Grey Correlation Analysis Method

The specific steps of grey correlation analysis are as follows:

3.1. Determine the Analysis Sequence. On the basis of qualitative analysis of the studied problem, the comparison sequence (evaluation object) X_i and reference sequence (evaluation standard) X_0, n + 1 data sequence matrix is determined as follows:

\[
\begin{bmatrix}
X_0(1) & X_0(2) & \ldots & X_0(n) \\
X_1(1) & X_1(2) & \ldots & X_1(n) \\
\vdots & \vdots & \ddots & \vdots \\
X_m(1) & X_m(2) & \ldots & X_m(n)
\end{bmatrix}_{(m+1) \times n}
\]  

\(X_0, n + 1\) data sequence matrix is determined as follows:

\[X_i(k) = \frac{x_i(k) \times 100}{\min X_i(k)},\]

where \(i = 1, 2, \ldots, m; k = 1, 2, \ldots, n\). The maximum and minimum in the absolute difference matrix are the maximum and minimum.

3.2. Dimensionless Sequence of Variables. In general, original data series have different dimensions or orders of magnitude. In order to ensure the reliability of analysis results, dimensionless variable data should be carried out, and dimensionless data should be carried out by initial value method:

\[x_i(k) = \frac{x_i(k)}{x_i(k)}\]

Find the difference sequence, maximum difference and minimum difference

\[\Delta 0i(k) = |X'0(k) - X'i(k)|,\]

where \(i = 1, 2, \ldots, m; k = 1, 2, \ldots, n\). The maximum and minimum in the absolute difference matrix are the maximum and minimum.

3.3. Determine the Corresponding Weight of Each Index Value. Generally, the analytic Hierarchy Process (AHP) is used to determine the corresponding weight of each indicator:

\[W = \{W_k|k = 1, 2, \ldots, n\},\]

where \(W_k\) is the corresponding weight of the kth evaluation index.

The grey correlation coefficient was calculated:

\[\delta 0i(k) = \frac{\Delta (\min) + \rho \Delta (\max)}{\Delta 0i(k) + \rho \Delta (\max)},\]

where \(\rho\) is the resolution coefficient and the value is in (0,1), and the correlation coefficient matrix is obtained:

\[\begin{bmatrix}
\delta 01(1) & \delta 01(2) & \ldots & \delta 01(n) \\
\delta 02(1) & \delta 02(2) & \ldots & \delta 02(n) \\
\vdots & \vdots & \ddots & \vdots \\
\delta 0m(1) & \delta 0m(2) & \ldots & \delta 0m(n)
\end{bmatrix}_{(m) \times n}
\]

3.4. Calculate the Grey Weighted Correlation Degree.

\[\gamma 0i = \sum_{k=1}^{n} W_k \delta 0i(k),\]

\[\gamma 0i = \sum_{k=1}^{n} W_k \delta 0i(k),\]

\[\gamma 0i = \sum_{k=1}^{n} W_k \delta 0i(k),\]

\[\gamma 0i = \sum_{k=1}^{n} W_k \delta 0i(k),\]
3.5. Evaluation and Analysis. Rank the evaluation objects according to the size of the grey-weighted correlation degree, and establish the correlation order of the evaluation objects. The larger the correlation degree, the better the evaluation result.

3.6. Evaluation and Analysis of Task-Based Teaching Effect of Tourism Management Major Students Based on the Grey Analysis Method

3.6.1. Selection of Evaluation Index System. According to the research of relevant scholars, this paper selects 12 indicators that affect students’ satisfaction with the teaching effect of the task-based teaching method. Namely learning attitude, learning interest, classroom atmosphere, learning habit cultivation, homework completion, teacher-student relationship, classmate relationship, professional ability cultivation, classroom absenteeism, absenteeism, overall teaching effect and so on to analyze students’ satisfaction with the task-based teaching method.

3.6.2. Grey Correlation Analysis

(1) Determine the Comparative Sequence and Reference Sequence of Relevant Courses of Tourism Management Specialty. Taking the courses Introduction to Tourism, Practice of tour guides, basic knowledge of tour guides, tourism policies and regulations, and operation and management of travel agencies as examples, this paper conducted research in July 2015. During the investigation, the students majoring in tourism were asked to score the 12 satisfaction indicators reflecting the teaching effect in the application of task-based teaching method within the range of 0–10 points, and the higher the score is, the higher the satisfaction will be. In the analysis, SPSS statistical software was used to calculate the mean scores of each indicator and form a comparison sequence. The five courses mentioned above were selected as the investigation objects, and the maximum mean values of each indicator were selected as the reference sequence.

(2) Determination of the Weight of Evaluation Factors. According to (2), the sequence of variables is dimensionless. According to (3), the maximum difference = 26, the minimum difference = 0; According to (5), the grey correlation coefficient is obtained, where \( \rho = 0.5 \); Seek professional expert consultation, use AHP method to determine the weight of each evaluation factor.

(3) Obtain the Grey-Weighted Correlation Degree. The grey-weighted correlation degree is obtained according to (7). The correlation degree from large to small can be arranged as follows: \( y_0 > \Gamma \); \( \Gamma \); \( \Gamma \); \( \Gamma \); \( \Gamma \); \( \Gamma \); among them, the higher the degree of relevance of the curriculum, the better the effect of task-based teaching.

(4) Data Analysis. Through the analysis, we find that, on the whole, students of tourism management major are generally more satisfied with the teaching effect of task-based teaching method, among which the application of task-based teaching method in the practical training course of tour guide has the highest satisfaction, while the introduction to tourism has the lowest satisfaction. Among them, the students are not satisfied with the classmate relationship of the course of introduction to tourism with relatively little application of task-based teaching method, the situation of classroom desertion is serious, and the classroom atmosphere and the overall teaching effect are barely good. In the course of the tour guide’s basic knowledge which is well applied by TBLT, students have a poor evaluation of classroom absolution and are satisfied with classroom atmosphere, classmate relationship, and overall teaching effect. However, for the course of travel agency operation and management, which widely uses task-based teaching method, only the classroom abdication is not well evaluated, and the students are satisfied with the completion of related departments and homework. In addition, students are generally satisfied with the application of task-based teaching methods in the practical training courses of tourism management major. In particular, the application of this teaching method in guiding practice and tourism policy and regulations training courses.

4. Empirical Analysis

Shuidi Reading is a common WeChat English learning platform. Its registration process is as follows: test vocabulary - matchbook list - add teacher - Enter class level group - Start learning - study for 100 days. Water Drop Reading arranges word tests before students register, provides English book list recommendations for students according to The American Lexile English reading classification method, customizes a 10-minute English learning plan, and divides the reading content of 2-3 books into 100 days of learning. The WeChat group of the class has a professional English teacher who is responsible for teaching the reading content and answering questions. This paper takes droplet reading as an example to conduct a questionnaire survey on users' experience satisfaction.

4.1. Data Collection. Since most of the indicators in the constructed evaluation model cannot be quantified, this paper designs a questionnaire on user satisfaction of water drop reading based on the above user satisfaction evaluation system of WeChat English learning platform conducts a questionnaire on users of water drop reading, and finally obtains 100 valid questionnaires after screening. Through the statistical analysis of the questionnaire results, the proportion of different evaluation grades of each index is obtained.

According to the calculation, the system operation stability is a good specific proportion value of 0.12, which means that 12% of droplet reading users in the effective questionnaire of droplet reading user satisfaction give a good evaluation to the system operation stability index of the platform (see Table 1 for relevant data).

4.2. Weight Establishment. The index weight will directly affect the accuracy of the evaluation results and play a crucial role in the final evaluation results. This paper, invited two
WeChat platform operations staff, 2 information technology companies, technology research and development personnel, two English major professors, and four WeChat English learning platform of the user Evaluation team, through the questionnaire to make team members use the "1–9 scaling method" for each level to determine the importance of the indicators, that the results of a, OV_hen the pairwise comparison judgment matrix is constructed. Matlab mathematical tools were used to calculate the maximum eigenvalue of the judgment matrix and the normalized vector corresponding to the eigenroot, and determine the weight of the evaluation index of user satisfaction of WeChat mobile learning platform through a random random behavior test (CR < 0.10). Evaluation collection table of water Drop reading user satisfaction questionnaire is shown in Table 1.

### Table 1: Evaluation collection table of water Drop reading user satisfaction questionnaire.

<table>
<thead>
<tr>
<th>Target layer</th>
<th>Index layer</th>
<th>Evaluation set</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level 1 index</td>
<td>Level 2 index</td>
</tr>
<tr>
<td>The system features</td>
<td>System operation stability</td>
<td>0.12</td>
</tr>
<tr>
<td></td>
<td>Timeliness of system response</td>
<td>0.24</td>
</tr>
<tr>
<td></td>
<td>Humanization of service</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td>Individuation of service</td>
<td>0.25</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>Innovation of service</td>
<td>0.06</td>
</tr>
<tr>
<td></td>
<td>Interface navigation</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td>Interface friendliness</td>
<td>0.35</td>
</tr>
<tr>
<td></td>
<td>Interface aesthetics</td>
<td>0.36</td>
</tr>
<tr>
<td>Service quality</td>
<td>Professionalism in word interpretation</td>
<td>0.31</td>
</tr>
<tr>
<td></td>
<td>The pertinence of recommending new words</td>
<td>0.05</td>
</tr>
<tr>
<td></td>
<td>The richness of learning styles</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Read for moderation</td>
<td>0.32</td>
</tr>
<tr>
<td></td>
<td>The fun of the story</td>
<td>0.35</td>
</tr>
<tr>
<td>Interface characteristics</td>
<td>The systematization of chapter content</td>
<td>0.34</td>
</tr>
<tr>
<td></td>
<td>The incentive of punishment and reward mechanism</td>
<td>0.18</td>
</tr>
<tr>
<td>Content quality</td>
<td>Real-time of online consultation</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>Friendliness of interactive sharing</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>The effectiveness of mutual recommendations</td>
<td>0.13</td>
</tr>
<tr>
<td>Interaction ability</td>
<td>Ease of feedback operation</td>
<td>0.16</td>
</tr>
<tr>
<td>Feedback mechanism</td>
<td>Responsiveness of feedback</td>
<td>0.14</td>
</tr>
</tbody>
</table>

#### 4.3. Result Analysis and Discussion.

The weight of the user satisfaction evaluation index of the WeChat English learning platform is calculated by using the analytic hierarchy process (See Table 1). It can be seen that the weight of content quality and service quality of first-level indexes in the evaluation index system of shuidi Reading user satisfaction is relatively large, which are 0.30 and 0.23 respectively. The weight of the interface feature, interaction capability, and feedback mechanism is 0.13. The weight of system features is 0.07 (see Figure 1). In the user satisfaction evaluation index system of shuidi reading, the weight of the secondary index service personalization, service innovation, interaction navigation, convenience of feedback operation, and responsiveness of feedback is relatively large, and the weight of other secondary indexes is relatively second, as shown in Figure 2:

According to the results in Table 1, in the user satisfaction evaluation index system of water drop reading, the user satisfaction evaluation of interface features of first-level indicators is very good, and the membership degree is 0.35, which is higher than other levels. According to the principle of maximum membership degree, the user satisfaction evaluation of interface features of first-level indicators is very good. Similarly, the user satisfaction evaluation of system characteristics, service quality, content quality, and interaction ability is better; the user satisfaction evaluation of the feedback mechanism is the same, as shown in Figure 3.
Conclusions

The essence of an ecological English classroom is in harmonious and democratic classroom atmosphere, make common development between teachers and students, the goal is to build and use the inclusiveness, covariance, balance, and openness characteristics of the ecosystem to optimize English classroom teaching, improve students learning efficiency and stimulate teachers’ teaching enthusiasm, realize a virtuous cycle of ecological development pattern. We analyzed ecological English classroom structure characteristics, using quantitative thought new method to evaluate the ecological efficiency of English teaching, from the ecological classroom basic characteristics and overall performance two levels respectively discusses teaching efficiency evaluation method, through an example proves that the hierarchical evaluation appraisal system has a higher objective, reasonable and practical. Based on the previous survey on students’ satisfaction with traditional teaching methods and task-based teaching methods, we concluded that courses with more practical and operational contents, similar to the practical training courses of tourism management major, If you need in the process of teaching emphasizes the practical ability of students, pay attention to cultivate students’ practical ability, can deal with problems independently and subjective initiative, so must change the...
disadvantages of traditional teaching method, should actively use the task type teaching method, thus greatly stimulate student's study enthusiasm, improve the learning effect and quality of teachers' teaching.

**Data Availability**

The data used to support the findings of this study are available from the corresponding author upon request.

**Conflicts of Interest**

The author declares that he has no conflicts of interest.

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