

# *English Graded Reading Achievement Assessment Model Based on Achieve3000 Platform*

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**Abstract:** As a new learning model, graded reading achievement evaluation system has extensive and far-reaching theoretical significance and social value. The assessment of English graded reading performance is an important indicator to evaluate students' learning status, which has a guiding role in teaching, and can also reflect the problems existing in the daily management of teachers and parents. This paper adopts the methods of literature research and questionnaire survey to analyze and discuss. First, the overall conceptual model and specific steps are proposed according to relevant theories. Then, the corresponding database is established based on keyword retrieval technology and the graded reading test results are calculated through data processing technology. Finally, the achievement test results of English graded test are analyzed using Achieve3000 platform. The test results show that the overall English scores of students' reading in class during this period are generally high. On the contrary, when the final test data shows a downward trend and is statistically significant, the score drops again and reaches the lowest point, which is shown by the average score higher than the average of other periods, but the overall level is relatively low. This shows that students' reading performance in class is better than that before and after class, and that students' memory in class is stronger.

## **1. Introduction**

As an important indicator of students' achievement, graded reading plays a vital role in the examination system. However, at present, China's English proficiency is uneven, students' reading ability and learning efficiency are different [1-2]. Therefore, this study will focus on analyzing the relationship between students at different levels and levels on English grading and learning efficiency, and put forward corresponding suggestions according to the actual situation to improve the simplification of communication methods and methods between teachers and parents under the existing teaching model, improve the quality of student performance evaluation and promote the interactive development between teachers and students [3-4].

Grading reading is a new model, which has been developing for a short time, but it will become the mainstream in the future. Since the 1980s, many scholars have done a lot of research on hierarchical learning. Some scholars believe that there is a special relationship between educational institutions and students - "Kusho" effect. When this phenomenon occurs between teachers and students, teachers can no longer pass the answers to students to generate wrong information, but

need to pass it on by some means, which is called "reverse communication" [5-6]. American psychologists first put forward the concept of the relationship between academic performance and examination results. With the continuous development and progress of science and technology and the increasing demand for scientific and cultural knowledge, Chinese scholars began to study the number of articles in classified books and journals. Some scholars believe that the electronic examination has more advantages than the traditional paper interview. First, it can help students better understand the knowledge content. Second, it can stimulate their desire to explore new skills and ideas to a certain extent, so as to further improve themselves [7-8]. Therefore, based on the platform of Achieve3000, this paper studies the assessment model of English graded reading achievement.

With the continuous progress of society and the improvement of science and technology, English, as a language, has become an indispensable part of people's daily life. At present, the reading situation of Chinese students is relatively good. However, there are many problems and drawbacks in the evaluation of students' academic achievements, such as lack of understanding and nonstandard operation. This paper mainly puts forward a more reasonable proposal from the Achieve3000 platform to improve the current teaching situation and improve teachers' professional quality, provide reference and reference for training outstanding talents in the future, and make the English graded examination more perfect.

## **2. Research on the Assessment Model of English Graded Reading Performance Based on Achieve3000 Platform**

### **2.1 English Graded Reading**

English graded reading is a student centered teaching mode. In the process of learning, teachers give classified guidance according to different levels and types. At present, most colleges and universities in China adopt the three-step training method of "listening, speaking and reading". This method can fully mobilize the classroom teaching atmosphere and enthusiasm, and can also stimulate and maintain a good balance between student achievements [9-10]. In addition, it can also effectively improve the level of teacher-student interaction and promote the development and value of English knowledge understanding. Therefore, in practical application, we should pay attention to the cultivation of students' interest in language graded reading in the learning process. Graded reading is an important part of English teaching. In English learning, students can choose books suitable for their own development needs and preferences according to their different levels and ages. According to the English grading criteria and test indicators, determine the grade level, and then divide each grade into a group of test papers according to certain principles. In this way, teachers can better understand what students are learning and how they can achieve the grading goals, and students at different levels can get more information about their abilities, achievements and knowledge at the same time. The English graded test is mainly divided into three parts: the first is the basic knowledge test, the second is the basic skills test, and the third category includes the task book for testing and evaluating the vocabulary and grammar of the target language. Among the three categories, listening ability, reading achievement and writing ability are the most direct indicators of students' level. Grading reading performance evaluation is one of the important indicators to measure students' performance. In the process of evaluation, researchers often take scores as the basis, ignoring the impact of other factors on English learning. This paper mainly uses mathematical statistics and analysis methods to process relevant data, and then uses the Achieve3000 platform to obtain the results, and explain its accuracy and effectiveness. At the same time, it also uses the test toolbox to obtain the corresponding sample size data, and obtains the final classification score table and comprehensive evaluation score table.

## 2.2 Graded English Reading Test

Graded reading performance is assessed by the examination results of preschool children. The assessment of graded reading achievement is based on the test of students, and the corresponding English level of each level is assessed through examination. The evaluation process is a dynamic process of continuous change and improvement, continuous cycle or gradual improvement, gradual deepening and development. It mainly includes two aspects: first, whether the students can accurately grasp the learning content after reading this course, and second, how well the teachers and parents understand, grasp and apply the purpose of the subject [11-12]. In order to evaluate students' examination results and evaluate teachers' teaching efficiency. We need to use some methods to judge whether there are differences between different learning levels and different subjects, so as to provide a basis for improving students' comprehensive quality and ability. After measuring the English grading results, we analyze the evaluation results and feed them back to teachers or other staff in a timely manner, so that we can make corresponding decisions, adjust plans and coping strategies. From the perspective of teaching evaluation, it is one of the most important and effective ways to explain students' learning process and knowledge absorption level by level in English. However, in practical application, this can avoid misunderstanding caused by repeated memory, and it is also convenient for testers to choose different courses suitable for their own level according to each examinee, which can effectively reduce the possibility of subjective factors affecting the final results, thus improving the efficiency of graded learning.

## 2.3 Algorithm of Student Achievement Evaluation

Through online training for readers, the graded reading performance evaluation mode enables readers to master retrieval technology more quickly. In this process, users can not only use the Internet to search the article content and resource information they are interested in, but also use the Internet to complete the reading task and acquire the corresponding knowledge and skills. The electronic grading reading score evaluation system divides the courses learned by students at each learning stage into two parts, the basic theory course and the application practice course. The basic theory course is mainly to sort out and summarize the teaching materials and use them in the classroom. The function of the platform is to provide online reading services for readers, including books, software and multimedia information. In the aspect of retrieval, the corresponding results are obtained by analyzing and processing the relevant data of users. At the same time, it can use the network to query and manage, and can also classify readers at different levels into multiple categories to achieve resource sharing among users. It is obtained according to the following formula, but the data applied to numerical values need to be converted into numerical data according to the initialization of data.

$$\bar{x}_i = \frac{1}{n} \sum_{x \in C_i} x \quad (1)$$

In order to express the change of the center of mass, the error square is introduced to measure the clustering quality. Calculate the error of each data, that is, the square of its Euclidean distance from its center of mass. For two different clusters generated by the given two runs of K-means algorithm, we prefer the one with small error. Therefore, if the difference between the sum of squares of two consecutive errors is found to be within a given small range, it can be considered that a convergence effect has been achieved. It is unnecessary to conduct the following iteration to end the operation of the algorithm. SSE is formally defined as follows:

$$SSE = \sum_{I=1}^K \sum_{X \in C_i} dist(c_i, x)^2 \quad (2)$$

One of the earliest K-center point algorithms is the PAM (Partitioning Around Meoid) method, which assumes that the object at the center of the cluster is the representative of the cluster, and then makes k partitions for n objects. In the initial state, k objects are randomly selected as the center point, and non center points are repeatedly used to replace the original objects, so as to find new center points and continuously improve the quality of clustering. In the clustering process, each element in the cluster will be calculated as the center.

### 3. The Experimental Process of Assessment Model of English Graded Reading Performance Based on Achieve3000 Platform

#### 3.1 Achieve3000 Platform

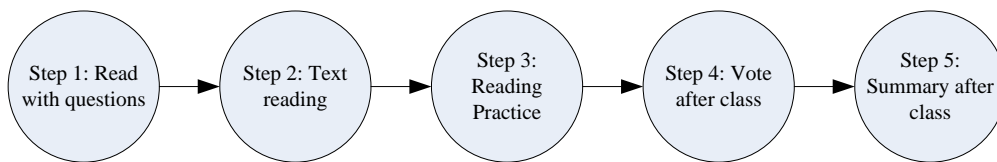


Figure 1: The Achieve3000 platform learning steps

The platform (as shown in Figure 1) provides readers with a support based on Internet technology, multimedia communication and big data processing capabilities from the perspective of users. In this information age, we can use the Internet to search and retrieve the learning content we need. For example, you can browse to the barcodes or text boxes on all pages of the website to search for related books, and you can also use the browser to filter keywords, so that users at different levels can access and query the same book. Under the network environment, teachers can use multimedia equipment to organically combine different audio and video resources to achieve interactive communication between students. Improve teaching quality and efficiency through Internet technology. Students can choose reading time and content type according to their own needs, independently arrange learning progress and curriculum settings and other operational requirements, and can also make self-evaluation of their own interests and hobbies and other information and feed it back to teachers or other students as reference opinions or suggestions for teachers to consult relevant materials for supplement in their spare time, so as to achieve reasonable allocation and optimal utilization of resources.

#### 3.2 English Graded Reading Performance Evaluation Model Test Based on Achieve3000 Platform

According to the requirements of the experimental assignment, the following factors were tested, including reading before class, reading in class, reading after class, etc. Secondly, in the process of reading, it should be noted that each word should be marked with corresponding letters and numbers. At this stage, users are accessed to obtain corresponding text information. Then convert the corresponding text content into a digital file. Users can choose electronic reading bibliography that is suitable for their own needs and performance requirements, can quickly retrieve relevant content that meets the standards and can be effectively recommended to users, or is easy to operate, fast, safe and reliable. Finally, after the test paper, divide each student's required content into two subgroups for training evaluation and analysis evaluation to detect whether the platform is qualified.

## 4. Experimental analysis of English Graded Reading Achievement Evaluation Model Based on Achieve3000 Platform

### 4.1 Test and Analysis of English Graded Reading Performance Evaluation Model Based on Achieve3000 Platform

Table 1 is the assessment data of English graded reading scores.

Table 1: English graded reading score evaluation

Students of different ages	Reading results before class	Reading scores in class	Reading results after class	Average scores
Age of 6-12 years	64	95	90	83
Age of 12-14 years	73	96	94	87
Age of 15-18 years	79	94	90	87
Age of 18-21 years	81	96	93	90

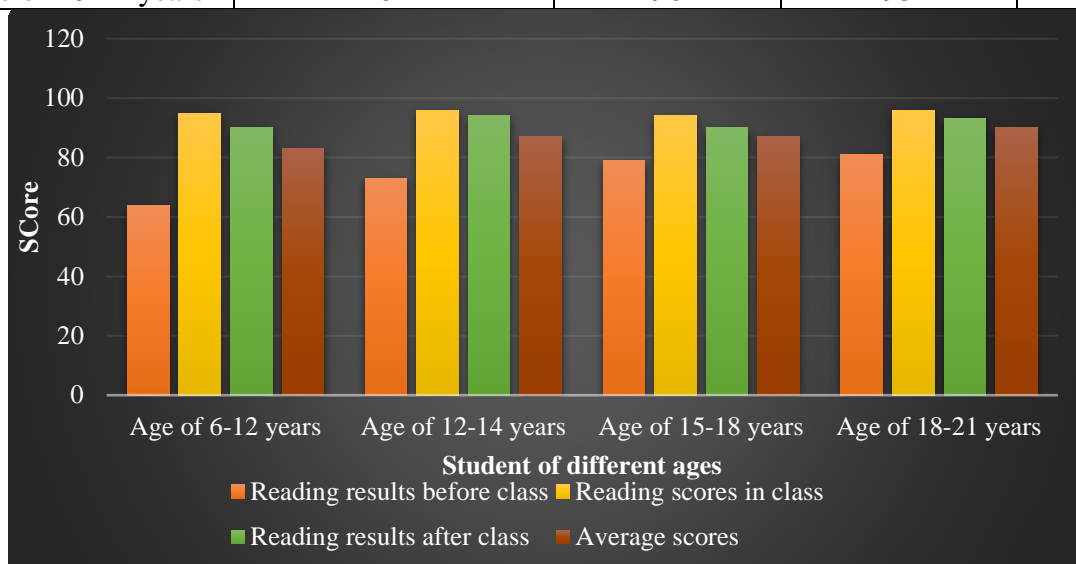


Figure 2: Students of different ages have graded English reading scores

Based on the analysis of this data (as shown in Figure 2), this paper draws the following conclusions: First, from the experimental results, it can be seen that students' English reading level gradually increases with the increase of learning time. This is mainly because there will be some differences in the statistics of examination results at different stages. During this period, the overall English scores of students' reading in class were generally high. On the contrary, when the final test data showed a downward trend and was statistically significant, the scores dropped again reached the lowest point, which showed that the average score was higher than the average of other periods, but the overall level was relatively low. This shows that students' reading performance in class is better than that before and after class, and that students' memory in class is stronger.

## 5. Conclusion

With the development of science and technology, English graded reading has gradually become an indispensable and important learning form in people's daily life. This paper will use multi-dimensional projection analysis to test the remote examination system. This method sets different levels and depths at the head and tail of the learners to observe whether the students have

completed the tasks of the corresponding grade papers, and calculates the comparative authenticity value between their scores and the average total score, and then compares the graded reading effect according to the data, so as to judge the students' English level and the quality of teachers' correcting homework.

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