

# Research on the Application of Pigai AWES in College English Composition Writing

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**Abstract:** At present, the writing evaluation system based on cloud computing and corpus is becoming the focus of college English writing research. As an intelligent assisted English writing teaching system, the Pigai Automatic Writing Evaluation System came into being and is widely used in the teaching of College English writing. The Pigai AWES can effectively improve the students' writing level and the teachers' work efficiency. This paper analyzes the advantages in application of the Pigai AWES in College English writing, expounds the problems in detail in its practical application, and puts forward some suggestions and measures. Building a diversified feedback system for evaluation should be insisted on, only in that way can we get complementary and mutually reinforcing effects and promote innovation and development of College English writing.

**Keywords:** Application, College English Writing, Pigai AWES.

## 1. Introduction

In the process of College English learning, English writing is an important part. But why so many College students' English writing skills are so poor? The reason lies in the fact that they practice writing much less than they need. Students lack training opportunities in writing, and their writing level is difficult to improve [1]. The task of College English teaching is very heavy, and correcting compositions is a time-consuming and laborious work, which limits the number of times teachers can assign compositions to students, and they can't review compositions seriously and efficiently. Actually, writing is not only a nightmare for students. The workload involved in correcting and grading students' writing is substantial, presenting a further pedagogical hurdle for teachers. In addition, English as Foreign Language (EFL) students often find English composition classes to be a source of anxiety. With the development of information technology, a new way of writing mode has adopted into college English writing. Automatic Writing Evaluation System (AWES) has been widely used in English writing teaching and learning, which not only provides timely, repeated and rich feedback for students' composition scoring, but also reduces teachers' work pressure. The emergence of Automatic Writing Evaluation System has brought vitality to the teaching of College English writing.

The Pigai AWES is an online service for automatic correction of English compositions based on cloud computing. Because of its intelligent advantages, it has been vigorously promoted and used by teachers in major universities [2]. The principle of the Pigai AWES is to compare the distance between students' compositions and the standard corpus, and map it into scores and comments through a certain algorithm. Composition scores are important, but specific feedback and suggestions from the Pigai AWES are more important because the latter enables students to know how to revise. The system scores students' compositions from four dimensions: vocabulary, sentence, text structure and content relevance. As the leader of domestic machine modified products, the "Pigai AWES" is in the leading position in technology in the world.

It is a popular machine modified composition system based on corpus in China. Therefore, this thesis will focus on the effective application of the system in College English writing.

At present, most domestic research on the Pigai AWES is mainly divided into two aspects, one is the reliability and validity of the Pigai AWES and the other one is whether the application of the Pigai AWES in College English writing can significantly improve students' writing proficiency. It can be seen from that few scholars have studied the advantages and shortcomings of the application of Pigai AWES in College English writing. Therefore, the purpose of this paper is to study the advantages and problems in the application of Pigai AWES in College English writing and put forward corresponding improvement measures.

## 2. The Advantages in Application of Pigai AWES in College English Writing

There is no doubt that the Pigai AWES presents its unique advantages which deserves to be generally introduced into College English writing.

### 2.1. Quickly Composition Correction and Timely Feedback

In the traditional writing teaching, teachers often explain the writing theory first, take students to analyze the model composition, and then let students imitate the model composition to write. After students finish writing their compositions, they will hand them over to the teacher for correction. Teachers usually have to take two or three classes at the same time, and their teaching task is heavy. It will be two to three weeks after the teacher carefully corrects all the students' compositions. At this time, students have almost forgotten the content of their own compositions. When teachers explain some common problems in College English writing class, students lack enthusiasm in listening to lessons and students' writing ability are not significantly improved. Now with the emergence of Pigai AWES, as long as students submit their English compositions on Pigai AWES, they can

immediately check their scores and get the corresponding correction feedback. Despite their limitations in detecting writing content errors, they have helped in providing immediate feedback of mechanical errors for students' writing something a human cannot always do [3]. The emergence of Pigai AWES has brought great convenience to the teaching of College English writing, helped improve students' English writing level, reduced teachers' writing correction workload, and gave teachers more time to do scientific research and complete teaching tasks. In addition, teachers and students can choose time freely and use the Pigai AWES by mobile phones or computers, breaking the time and space limitations of traditional teachers' correction and feedback, and improving the efficiency of feedback.

## **2.2. Helping Students Improve Their Autonomous Learning Ability**

The Pigai website has various language databases from many countries. Learners at different English levels can conveniently download the needed writing materials.[4] The Pigai AWES can point out the spelling, grammar, vocabulary, collocation, Chinglish, and other errors in students' compositions directly and pointedly, and give reasonable suggestions for revision. The study by Chen Feng et al showed that students like online timely feedback and comments so that they can make repeated modifications according to the online prompts until they are satisfied with their scores [5]. In addition, The Pigai AWES can timely give learning tips, discrimination, expansion, and recommendations. It can comment on the composition on sentence pattern, comment on the grammar and vocabulary of the sentence pattern in detail, such as confusing words, reference words and discriminating words. It timely correct and feedback the writing areas where students frequently make mistakes. On one hand, students can recognize the correction points; on the other hand, they can maintain their personal self-esteem. Students can carry out composition innovation, search and selection by using internet technology, in combination with modification opinions, improving self-awareness, self-evaluation and self-correction ability.

## **2.3. Stimulating Students' Enthusiasm in Writing**

Through the intelligent Pigai AWES, students can get more writing training opportunities. Students can practice, revise and improve a composition repeatedly online. Satisfactory composition scores can be obtained through continuous revision and training, which greatly stimulates students' writing enthusiasm [6]. Using the Pigai AWES, students become the main body of writing. Students are more willing to accept the grammatical errors, punctuation errors and spelling errors in their compositions detected by the system, and have a strong desire for improvement. They are willing to spend time and effort to modify their compositions according to the prompts of the system in terms of morphology, syntax and text structure. With the help of the Pigai AWES, students can revise as they write, and their enthusiasm has always been in the writing process. In this process, students' good habits of English writing can be cultivated, too. Their learning potential also can be essentially stimulated. Yang Xiaoqiong and Dai Yuncai found that the autonomous writing teaching based on the Pigai AWES can effectively improve the overall level of students' English writing, stimulate students' English writing learning motivation and improve their self-efficacy,

and reduce students' writing anxiety [7].

## **2.4. Sharing High-quality Compositions and Reducing the Plagiarism Rate**

Pigai AWES has an abundant network resource for composition topics, which can help teachers in many aspects, such as the CET composition test and composition prediction. It can also provide students with high-quality composition topics for practice. These compositions have corresponding scope, which can provide convenience and accuracy for the review of compositions, facilitate teachers to make comments in the writing teaching class, and display some students' excellent compositions on the screen. So it is convenient to explain and analyze the common problems of students' writing compositions and improve their writing level. At the same time, the Pigai AWES can analyze the similarity of compositions according to the online resources, indicate the source according to the similarity degree of the topic, which helps teachers quickly and efficiently distinguish the authenticity and prevent the plagiarism of the composition.

## **3. The Problems in Application of Pigai AWES in College English Writing**

The Pigai AWES has great advantages in College English writing practice, but there are also some problems in the process of using it.

### **3.1. The Comments from Pigai AWES Are Too Vague and General, And Lack Guidance on The Content and Structure of The Article**

As the Pigai AWES is only an automatic correction system, feedback method is relatively simple. The system's comments on students' compositions are too general and similar, and are not targeted [8]. Due to the technical characteristics of the software itself, it can give students more help at the level of vocabulary and grammar, but it has limited help at the level of text structure, content logic and coherence [9]. In short, the system will not judge whether the paragraphs of a composition are related to each other, whether the sentences before and after are connected, whether they are contradictory, and whether the content is related to the composition topic. It is not very beneficial to those students who have high proficiency in English writing. These students have a solid foundation in vocabulary and grammar, and need guidance on writing logic, writing structure, etc. However, as the Pigai AWES cannot accurately judge the relationship between paragraphs and sentence patterns of writing articles, and cannot assess whether they are suitable for the theme of writing, it is unable to provide targeted guidance and help for students.

### **3.2. Unable to Confirm Whether the Student's Composition Deviates from The Topic**

Because the Pigai AWES can't evaluate the structure and logic of the students' compositions, it can't distinguish whether the students' compositions are off the topic. For example, the teacher asked the students to write the composition "the course that impressed me most in College". The title of this article is required to introduce an interesting and influential course among so many courses in college, while one student wrote "a most impressed lesson in College".

In the article, he described a very interesting and impressive lesson in detail, which belongs to digression. However, the system cannot recognize that the article deviates from the topic.

If the teacher corrects the composition manually, the teacher can help the students analyze the reasons why the topic is digressing, remind the students to pay attention to review the topic when writing the composition in the future, and emphasize that an excellent composition first requires the article to be relevant and logical, and then requires the grammar and vocabulary to be correct.

### **3.3. The Corpus Is Not Complete**

During writing, students will use some proverbs or famous sayings to give prominence the theme or increase the highlights of the article. In the process of daily writing, students can do more exercises in this aspect so as to apply them properly in the composition writing examination. However, due to the lack of a comprehensive and complete corpus in the Pigai AWES, if the famous sayings and proverbs in the students' writing do not store in the corpus, the Pigai AWES will determine that the grammar is wrong, and reduce the students' English writing scores. At this time, the students will choose to delete them directly, which undermines their initiative in applying famous sayings and proverbs. Sometimes students will cite some famous local names or people names in their compositions, but if there is no corresponding data in the corpus, they will also be classified as suspected mistakes. In the long run, students will not quote local names or famous sayings and sentences in their writing, but will only write in English according to the overall framework set by the Pigai AWES, resulting in a lack of interest and liveliness in their compositions.

## **4. Some Suggestions in Application of Pigai AWES in College English Writing**

### **4.1. Building A Diversified Feedback System for Evaluation**

Teachers may realize AWE can help them reduce the heavy work burden but cannot completely replace them. There are still some problems in autonomous writing modification based on online automatic feedback [10]. Establish a multi feedback mechanism that integrates online automatic feedback, teacher feedback and peer feedback. The three complement and promote each other to make up for the shortcomings of the single online automatic feedback mode. Teacher feedback can improve the defects in the teaching application of the Pigai AWES, give students more targeted guidance and suggestions for revision, and work with students to explore whether the composition content and framework structure meet the theme of the article. Online automatic feedback of evaluation and correction can help students correct their vocabulary and grammar errors, and strengthen the content of basic knowledge by using word discrimination, expression recommendation and learning tips. The Pigai AWES can help students to randomly evaluate peer compositions. When correcting not so good English compositions, students can look at their classmates' improper use of grammar and vocabulary, think about how to modify them, and improve their proficiency in application. At the same time, it can also be an effective way to detect knowledge

mastery. The establishment of a diversified feedback system effectively makes up for some shortcomings in the process of online automatic feedback, and allows students, teachers and collaborators to participate in it, so as to achieve the optimal effect of applying the Pigai AWES in College English writing.

### **4.2. Upgrading and Optimizing the Function of Evaluation System**

During the optimization of the evaluation system, the system should be constantly supplemented and improved in many aspects in combination with intelligent technology, so that it not only has the function of correcting students' grammatical errors, distinguishing confusing words and calculating total scores in time, but also has a certain function of modification, analysis and guidance. So it can give direction to students in grammatical rhetoric, article framework and ideological content of English compositions. Reduce those unclear and vague expressions in the evaluation system, such as checking the missing conjunctions and suspected errors. In the comment by sentence, if there are logic or cohesion problems in the sentences of the article, the Pigai AWES can point them out directly and provide students with some relevant examples. Moreover, the system can also directly help students modify. After students submit the composition on the Pigai AWES, every student can know his own writing problems and what aspects need to be corrected.

### **4.3. Expanding and Improving the Corpus of Evaluation System**

The corpus should be expanded and improved. Feedback from the system on students' composition is all based on the corpus and the cloud system. Therefore, when the system makes comparison between students' composition and standard corpus, the more comprehensive the corpus content are, the less unreasonable misjudgment will appear. Words, names, place names, idioms and proverbs related to English books from the high school to the university need to be included in the corpus for teachers and students to choose. The Pigai AWES can add a forum platform. If students find that what they have learned in the writing process is not included in the corpus, they can put it forward on the forum. Teachers can also explain some problems found during the correction of students' compositions on the forum. For example, if some fixed collocations in the Pigai AWES are not authentic or used less in the exam, teachers can bring them up. Information technology personnel regularly update the corpus according to suggestions put forward by students and teachers. Teachers and students cooperate together to improve the corpus, which is helpful to improve students' English writing level and cultivate their autonomous learning ability.

## **5. Conclusion**

In a conclusion, as a brand-new online English composition evaluation system, Pigai AWES has a very broad development space and application prospect. It has a very obvious auxiliary effect on improving students' English writing level. Teachers should actively encourage students to use the Pigai AWES to assist learning while doing a good job in writing teaching in class. At the same time, Pigai AWES itself should accept the feedback from teachers and students, listen to reasonable suggestions, update the corpus in time, and constantly improve the system function, so that it can play a greater role in College English writing. At the same time, it

is also necessary to build a diversified feedback system for evaluation, give play to their mutual cooperation effectiveness, and achieve the optimal effect of College English writing teaching.

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