

# Effective Ways and Strategies of Human-Computer Combined Assessment Model to Promote Students' English Writing Ability

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**Abstract:** With the advent of artificial intelligence and its growing presence in educational sectors, the integration of AI in high school English writing instruction is becoming increasingly prevalent. However, high school English writing instruction encounters increasingly more challenges, including inadequate writing proficiency among students and a lack of innovative and effective teaching methods. Therefore, this study investigates the application of the human-computer integrated assessment model in enhancing high school students' English writing abilities. The research, underpinned by the new literacy theory, examines the current state of high school English writing instruction, the components of the human-computer integrated assessment teaching model, and the corresponding teaching strategies and designs. The findings suggest that the human-computer integrated evaluation teaching model holds substantial theoretical and practical implications for high school English writing instruction, providing a novel teaching strategy and offering solutions to writing instruction challenges in the context of educational intelligence, thus positively impacting the assessment and enhancement of students' English writing skills.

**Keywords:** Human-computer Integration; Evaluation Model; High School English Writing Ability; Teaching Strategy; Instructional Design

## 1. Introduction

With the rapid development of science and technology, artificial intelligence technology gradually penetrates into various fields. The field of English education is no exception, and the application of artificial intelligence in high school English writing teaching is becoming

more and more widespread [1]. Among them, the new literacy theory provides a new theoretical framework and guiding direction for high school English writing teaching. This study explores the human-computer integration assessment model of high school English writing from the perspective of the new literacy theory, aiming to provide a new teaching strategy for high school English writing teaching [2]. Under the perspective of the new literacy theory, the study of high school English writing assessment model has become an important topic. The new literacy theory emphasizes the interaction among reading, writing and speaking, advocates student-centeredness, and pays attention to students' personalized development and the cultivation of language literacy. Under the guidance of this theory, the high school English writing assessment model should pay more attention to the combination of human and machine, so as to improve the accuracy and effectiveness of the assessment [3].

The purpose of this paper is to discuss the research on the human-computer integration assessment model of high school English writing based on the perspective of the new literacy theory. First, through the overview of the new literacy theory, we analyze its guiding significance in high school English writing assessment. Then, we discuss the necessity of human-computer integration in high school English writing assessment mode and analyze the problems of the current high school English writing assessment mode. Then, the specific strategies and methods of the human-computer integration assessment mode of high school English writing based on the perspective of the new literacy theory are proposed to improve the accuracy and effectiveness of the assessment [4,5]. Finally, the validity of the proposed assessment model is verified through empirical research, and its limitations and room for improvement in

practical application are explored.

## 2. Current Problems and Challenges in Teaching English Writing in High School

As the process of digitalization and informatization of education and teaching continues to advance, high school English writing teaching also faces a series of problems and challenges.

First of all, students' lack of writing ability leads to low quality of writing. This may be due to students' lack of effective input and output exercises in the writing process, as well as their lack of mastery of writing skills and methods.

Secondly, ineffective writing is also a common problem. This may be due to the fact that students focus too much on grammar and vocabulary in the process of writing and neglect the organization and expression of content. In addition, the lack of innovation in writing teaching is also a challenge. The current mode of teaching English writing in high school is relatively homogeneous and lacks teaching strategies that address students' individual needs and interests. In response to these problems and challenges, educators usually enhance the effectiveness of teaching and learning through the following strategies: first, focusing on the development of students' writing skills. This is achieved by providing rich input and output exercises and by instructing students in effective writing skills and methods. In addition, we need to encourage students to actively participate in the teaching of writing, make them realize the importance of writing, and cultivate their interest in writing. Secondly, in order to improve students' writing efficiency, we need to provide them with effective writing skills and methods and help them to organize their writing content to improve their writing efficiency. Thirdly, we emphasize the innovation of writing teaching. I use a variety of teaching methods, such as task-based teaching and discussion-based teaching, to increase students' interest and participation in learning. In addition, I have introduced some new writing teaching resources, such as online writing platforms and writing competitions, to improve students' writing ability and interest.

To summarize, there are a series of problems and challenges in the current high school English writing teaching. Educators also need

to take effective measures to improve the quality of writing teaching. This includes focusing on the cultivation of students' writing ability, improving students' writing efficiency, and emphasizing the innovation of writing teaching. Only in this way can we improve the quality of high school English writing teaching and provide better support for students' English learning.

## 3. Analysis of Factors Affecting High School English Writing Teaching in the Context of Educational Intelligence

Due to the rapid development of educational intelligence, the situation of high school English writing teaching has also changed significantly. However, at the same time, there are some obvious problems in high school English writing teaching under the background of educational intelligence.

1). Blind reliance on technology in writing teaching: Although intelligent teaching tools can help students improve their writing skills, some teachers rely too much on these tools, neglecting the cultivation of students' thinking and creative abilities in the teaching process [6].

2). Lack of effective personalized teaching: Intelligent teaching tools provide a large number of learning resources and the possibility of personalized learning, but in practical application, the individual needs of each student are often ignored and a "one-size-fits-all" approach to teaching is adopted.

3). Examination methods are too single: written examinations are generally adopted, often ignoring the evaluation of students' ability to think and write in a comprehensive way using English, and failing to reflect students' writing ability in a comprehensive way.

4). Neglecting to guide students' writing strategies: Although intelligent teaching tools can provide rich language knowledge and training, teachers often neglect to guide students' writing strategies in practical applications.

5). Information security and privacy protection: While the intelligence of education has brought convenience to students' learning, it has also brought new challenges to the security of students' personal information [7,8].

In general, in the context of educational

intelligence, high school English writing teaching needs to make full use of the advantages provided by technology, but also pay attention to avoiding the problems mentioned above in order to improve the teaching effect. The teaching of high school English writing is a complex and diversified field, involving many different factors.

In addition, teachers' level, students' interest and teaching resources are important factors affecting English writing teaching in high school. These factors interact with each other and affect the effectiveness of writing instruction. Teachers with high teacher proficiency can provide high-quality instruction to help students improve their writing skills. Students' interest has an important influence on students' learning attitude and motivation. Teaching resources have a direct impact on the effectiveness of writing instruction. Therefore, high school English writing teaching needs to take these factors into consideration and take effective measures to improve the effectiveness of writing teaching [9-11].

#### **4. A High School English Writing Teaching Model That Combines Human-Computer Evaluation**

Under the perspective of the new literacy theory, high school English writing teaching pays more and more attention to the human-computer combination assessment [12]. Combined human-computer assessment refers to the method of teachers and students using computer-aided tools for writing assessment, which combines the traditional manual assessment with the application of computer technology, aiming at improving the efficiency and accuracy of assessment. This paper tries to introduce it into high school English writing teaching [13-15].

Combined human-computer assessment is a method of writing assessment in which teachers and students use computer-assisted tools. This method combines the traditional manual assessment with the application of computer technology, aiming at improving the efficiency and accuracy of assessment. In high school English writing teaching, the application of human-computer combined assessment is especially important. The traditional assessment method requires teachers to spend a lot of time and energy for

assessment, while the combined human-computer assessment can save teachers' time and energy and improve the efficiency and accuracy of assessment.

The basic concept of human-computer integrated assessment is to apply computer technology to writing assessment in order to improve the efficiency and accuracy of assessment. In high school English writing teaching, the application of human-computer integrated assessment is mainly reflected in the following aspects: First, automatic scoring: using computer programs to automatically score students' writing to improve the efficiency and accuracy of assessment.

The second is essay correction: the use of computer programs to correct students' essays, point out students' strengths and weaknesses, and provide students with targeted suggestions for improvement.

Third, writing feedback: computer programs are used to provide students with writing feedback to help them understand their own writing styles and habits and improve their writing.

How to Introduce Human-Computer Combined Assessment into High School English Writing Teaching, Introducing human-computer combined assessment into high school English writing teaching needs to follow the following principles.

1) Focus on the student's subjectivity: in the use of computer programs for evaluation, should focus on the student's subjectivity, to avoid over-reliance on computer programs, affecting the student's independent thinking and creative ability.

2) Focus on the objectivity of evaluation: the evaluation results of the computer program should be objective and fair, avoiding the influence of human factors.

3) Focusing on the diversity of evaluation: evaluation methods should be diversified, combining teachers' manual evaluation and the evaluation of computer programs in order to improve the comprehensiveness and accuracy of evaluation.

To summarize, under the perspective of the new literacy theory, high school English writing teaching pays more and more attention to human-computer integrated assessment. The basic concept of human-computer integrated assessment is to apply computer technology to writing assessment in order to improve the

efficiency and accuracy of assessment. In high school English writing teaching, the application of human-computer integrated assessment is mainly reflected in automatic scoring, essay correction and writing feedback. The introduction of human-computer integrated assessment into high school English writing teaching needs to follow the principles of emphasizing students' subjectivity, objectivity and diversity to improve the comprehensiveness and accuracy of assessment.

## **5. Human-Computer Integrated Evaluation of Teaching Strategies and Instructional Design**

In high school English writing teaching, human-computer integrated assessment under the perspective of new literacy theory is an effective method to help students improve their English writing ability. In this paper, we will discuss the effective ways and strategies to promote students' English writing ability through human-computer integrated assessment under the perspective of the new literacy theory.

### **5.1 Human-Computer Integrated Evaluation of Teaching Strategies**

First of all, the human-computer integrated assessment under the perspective of new literacy theory can improve students' English writing ability through writing skills training. Writing skills training is the foundation of improving writing ability, which can help students master the basic skills and methods of writing.

In writing skills training, teachers can utilize computer software and online platforms to provide students with writing templates, writing guides and writing demonstrations to help students master writing skills and methods. In addition, teachers can utilize computer software and online platforms to provide students with writing feedback and evaluation to help students understand their own writing level and directions for improvement.

Secondly, the human-computer integrated assessment under the perspective of new literacy theory can improve students' English writing ability through writing strategy instruction. Writing strategy instruction is a kind of instruction method for students'

individual differences and writing characteristics, which can help students improve their writing efficiency and quality. In writing strategy instruction, teachers can utilize computer software and online platforms to provide students with writing strategies and writing templates, and help students choose their own writing strategies and methods. In addition, teachers can also use computer software and online platforms to provide students with writing feedback and evaluation to help students understand their own writing level and directions for improvement.

Finally, the human-computer integrated assessment under the perspective of new literacy theory can improve students' English writing ability through writing assessment and feedback. Writing evaluation and feedback is a kind of evaluation method for students' writing level and writing characteristics, which can help students understand their own writing level and the direction of improvement. In writing assessment and feedback, teachers can use computer software and online platforms to provide students with writing assessment and feedback to help students understand their own writing level and the direction of improvement. In addition, teachers can also use computer software and online platforms to provide students with writing guidance and suggestions to help students improve their writing efficiency and quality.

To summarize, human-computer integrated assessment under the perspective of new literacy theory is an effective method to help students improve their English writing ability. Through the ways and strategies of writing skills training, writing strategy instruction and writing evaluation and feedback, it can help students master writing skills and methods, improve writing efficiency and writing quality, and thus improve students' English writing ability.

### **5.2 The Design and Implementation of Implementation Strategies and Programs**

With the continuous development of science and technology, human-computer integration has become a new way of education. Under the perspective of the new literacy theory, the human-computer integrated assessment design in the high school English writing teaching mode can help students better understand and master the skills and strategies of English

writing. In this paper, we will discuss in detail the human-computer integrated assessment design in high school English writing teaching mode, and explore its specific applications, such as the writing scoring system and the writing feedback system.

Combined human-computer evaluation design is a kind of evaluation method combining human and computer, which can help teachers evaluate students' writing ability more objectively and fairly. This kind of evaluation allows students to get timely feedback and guidance in the process of writing, so as to better improve the writing level.

Writing scoring system is an important application in high school English writing teaching mode. This system can automatically grade students' writing and provide feedback and suggestions based on the grading results. This system can avoid teachers' subjective bias and improve the objectivity and fairness of grading. At the same time, the writing scoring system can also help students better understand their own writing level and problems, so that they can make targeted improvements.

The writing feedback system is another human-computer integrated assessment design in the high school English writing teaching model. This system can provide students with timely and specific writing feedback to help them better understand their own writing content and language expression. The writing feedback system can help students improve their writing by providing them with suggestions for revision and evaluation according to the content of their writing.

In addition, the human-computer assessment design can also be applied to other aspects of high school English writing teaching, such as the design of writing teaching programs and the development of writing teaching strategies. Through the combined human-computer assessment design, teachers can understand students' writing ability and problems more comprehensively and objectively, so as to make more targeted teaching plans and strategies.

Human-computer integrated assessment design is a new educational approach that can help high school English writing teaching to play its role better. Through the specific applications of writing scoring system and writing feedback system, teachers can evaluate

students' writing ability more objectively and fairly, and help students better understand their own writing level and problems, so as to make targeted improvements.

## 6. Conclusion

From the perspective of the new reading and writing theory, this paper discusses the research on the human-computer integrated evaluation model of senior English writing. Through theoretical analysis and practical case verification, the effectiveness of human-computer integrated assessment model in senior English writing teaching is proved. It is found that the human-computer evaluation model has significant effects on improving students' writing ability, promoting students' cooperation and communication, and enhancing students' reading comprehension ability. However, in practical application, there are still some technical problems and problems such as teacher role positioning that need to be solved in order to provide more perfect theoretical guidance for the application of human-computer integrated assessment model in senior high school English writing teaching. For example, there are also some problems in the practical application of human-computer integrated evaluation mode, such as technical problems, student privacy protection and teacher role positioning. Therefore, in the future research, we need to further explore these issues in order to provide more perfect theoretical guidance for the application of human-computer integrated assessment model in senior high school English writing teaching.

## Acknowledgement

Inner Mongolia Autonomous Region Education Science Research 14th Five Year Plan Project (2022JGH031)

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