The Influence of Teachers' Corrective Feedback on the Accuracy of English Writing

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Abstract: Feedback plays a vital role in writing. Corrective feedback can be defined as the feedback input of teachers to students in writing. In order to explore influence cognitive factors on students' writing accuracy under teachers' corrective feedback, this study uses sample survey, data analysis and drawing method to analyze corrective feedback and streamline the algorithm. The subjects are 66 students from the 6th class of the first high school in a certain county, and the follow-up study lasted for two months. In addition, for comparative analysis, 66 students were divided into two groups, experimental group and the control group. The results showed that most students believe that teachers' corrective feedback can improve writing accuracy, which basically realized the purpose of this study, and pave the way for further research.

1. Introduction

Generally speaking, writing is an indication of learners' language skills, but also a means to expand knowledge and improve language ability. Writing can be improved with the improvement of the other three skills, which is a relationship of coexistence and complementarity. However, in practical English teaching, students' writing is the most unsatisfactory part, especially for high school students, whose writing is slightly inferior to reading and listening, which is far from the goal of teaching. Therefore, teachers and researchers need to find new and effective ways to improve students' writing to deal with the trend of new curriculum reform.

Teachers' feedback, one of the main ways to promote students' language learning, has attracted more researchers' attention. The teacher's feedback on the evaluation and correction of students' writing is to expect students to output language in response to the information provided by the teacher, and the students' output again, not only testing hypotheses, correcting mistakes, but also learning the language again. For learners, teachers' effective feedback makes students feel that the composition has attracted the attention of teachers. It can stimulate students' interest and motivation in writing to a greater extent, and can also make students pay attention to mistakes and understand the gap between their own output and the target languages, which is more conducive to improving

English writing performance.

There are not a few studies in this direction worldwide. In 2017, Hwang's purpose was to examine the role of cognitive age in identifying differences in consumer preference values of different generations of consumers, and to examine the influencing factors of cognitive age. As a result of the research, first of all, it is found that the value pursued by consumption varies from generation to generation. Secondly, it is confirmed that there is a difference in cognitive age between the younger group and the older group. In other words, the older the age, the more consumers think they are younger than their actual age. Unfortunately, the results are not statistically significant [1]. In 2018, Park M aims to investigate the opinions of elementary English teachers and students on corrective feedback. The results and findings led to the following conclusions. First, both students and teachers believe that corrective feedback contributes to cognitive development and emotional enhancement. Secondly, both teachers and students like to give corrective feedback immediately after students make mistakes, especially in terms of grammar and vocabulary. However, such research is not convincing [2]. In 2020, Saeli H explored the emotional, behavioral, and cognitive participation of 18 Iranian EFL learners in the verbal correction of vocabulary stress errors. Data is collected through questionnaires, pre-test, post-test and interviews. The responses to the questionnaire indicated that participants held different views on direct feedback. In addition, the pre-test and post-test results show that learners who have a positive view of direct feedback have a significant improvement in the accuracy of vocabulary pressure. However, the research process is not perfect [3].

The innovations of this study are: (1) This study mainly adopts the method of follow-up investigation to study the students in the experimental group and the control group, so it has more practical significance; (2) View high school from the perspective of "development research" The accuracy of students' English writing is explored in a continuous period, and it is more forward-looking and technical; (3) Give specific solutions to the problem as a whole. Through the above work, the research results are more complete and scientific.

2. Implementation Methods Based on the Influence of Teachers' Corrective Feedback on the Accuracy of English Writing

2.1 English Writing

Writing is a common means for people to communicate. What is different from language communication is that it can express the author's thoughts and heart more effectively. The use of good writing techniques can fully express the true inner thoughts. Therefore, writing is a relative A more complicated process [4]. From ancient times to the present, looking at all good literary works at home and abroad, whether in the content of the text, the structure of the arrangement, and the accuracy of the words, they have shown great relevance. "Ling'an one word breaks down several roots" reflects the ancient scholars' pursuit of word accuracy. "One word is a thousand gold" reflects the importance of language accuracy, no more than one word and no less. Even though the connotation of the thoughts expressed is different, the requirements of the language are all the same pursuit of refinement and accuracy [5]. Regarding the accuracy of writing, Bacon once pointed out: Writing makes people precise, showing his requirements for language accuracy in writing [6]. Therefore, for high school students, mastering the accuracy of English writing can not only improve their writing skills, but also improve their writing skills, but also requires them to learn to master the knowledge.

For Chinese, English writing is a complicated process. The evaluation of writing results also

needs to be objective, and only an objective and fair evaluation of the composition can improve credibility. Usually speaking of language standards, the most common standards are language accuracy, fluency and complexity. These three standards are often used to evaluate students' writing ability [7].

2.2 Corrective Feedback

Research on corrective feedback varies greatly among scholars at home and abroad. Some scholars believe that the purpose of corrective feedback by teachers is to attract the attention of students. Therefore, teachers should continue to maintain regular corrective feedback in the normal teaching process to enable students to increase their attention and discover the existence of different languages. It is also believed that corrective feedback refers to the comments on non-standard language usage of learners in the process of second language acquisition. At this stage, S's definition of corrective feedback is commonly used. He believes that corrective feedback is mainly used in the teaching process of the second foreign language. He also pointed out that corrective feedback is particularly easy to confuse with "negative feedback", but he emphasized that negative feedback is The second foreign teaching pays more attention to the use of cognitive psychology, so it is not the same as corrective feedback. Written corrective feedback is directly related to foreign language writing, and it is a focus issue that scholars of second language studies have been more enthusiastic about in recent years. Generally speaking, there are two different directions: teacher research focuses on the methods and specific content of corrective feedback; while scholar research pays more attention to the effect of feedback, that is, whether it can effectively improve the learning ability of students and whether it helps them Acquisition of English. This issue has caused intense discussions on second language writing [8].

According to the above definition, it can be known that corrective feedback is a kind of input information given by the teacher to learners, which prompts the learners to notice the errors in the composition, and modify the errors in the composition to improve the level of the composition, and continue to modify the error process In, you can know the distance between the composition expression and the target language, and the ultimate goal is to better express the target language.

2.3 Related Algorithms

We need to evaluate the final writing accuracy results, and the particle swarm algorithm can help us very well [9].

Particle swarm algorithm is a random global search algorithm that simulates group behavior and wisdom in nature. Because of its inherent parallelism, robustness, simple operation, and fewer required parameters, it has received widespread attention. When the particle swarm algorithm solves the optimization problem, the more important thing for the population in the early stage of the search is to explore new areas in the entire feasible region. A relatively large inertia weight will benefit the group's exploration ability; in the later stage of the population search, the inertia weight should gradually decrease, the population will have stronger local development capabilities, which improves the convergence speed and solution accuracy of the algorithm [10]. -The linear change of the general inertia weight α is as follows:

$$\alpha = \alpha nxa - \frac{(hnxa - s)*(\alpha nxa - \alpha nuo)}{hnxa} \tag{1}$$

Where αnxa and αnuo are the maximum inertia weight and the minimum inertia weight,

$$t = \left| \frac{\max(lhgood.l_s)}{\min(\lg ood.l_s)} \right| * \sum_{max}^{min} l_u^s \qquad (2)$$

$$\alpha_u = l(g_u(s)t) + \coprod_{s_1}^{u=1} \xrightarrow{t_1} \overline{\beta} \qquad (3)$$

The particle swarm optimization algorithm that introduces the two parameters of l and t has a good search speed and the ability to jump out of the local optimum, which improves the convergence speed and accuracy of the algorithm.

3. Experiments and Conclusions Based on the Design and Realization of the Influence of Teachers' Corrective Feedback on the Accuracy of English Writing

3.1 Research Subjects

The research subject of this experiment is the 6th class of a high school in a county, with 66 students, followed up and researched for two months, each with about 10 essays. In addition, for comparative analysis, 66 students were divided into two groups, one of which was used as the experimental group, and the second group was used as the control group. For the students in the control group, the teacher gave corrective feedback on their English composition; while the students in the experimental group chose to use the corrective feedback from the teacher and the group mutual evaluation feedback to the students in the experimental group (for a comprehensive to verify the impact, the students in the control group only participated in the subsequent group mutual evaluation experiment), after 2 months, the experiment composition was revised and written twice, and the experimental results were inferred through the results of the experiments before and after, which are very specific. Details can be seen in Table 1.

Table 1: Descriptive statistics of research objects

Composition level	Experimental group (number of people)	Natural group (number of people)	Correct rate
excellent	4	7	91.5%
Good	8	10	96.5%
Pass	12	11	94.6%
failed	4	10	97.5%
Total	28	38	95%

3.2 Research Questions

1. What are the students' attitudes towards teachers' written feedback and their current needs?
2. Can teachers' written corrective feedback improve students' English writing accuracy?

3.3 Research Instrument

The composition scoring standard adopted by this research is the Chinese college entrance examination composition scoring standard. The college entrance examination composition is 25 points, divided into five grades. Each grade has a detailed classification of the content, vocabulary, and grammar of the composition. The composition is graded according to the grading standard. The pre-test and post-test essays are marked by the researcher and two English teachers. There are three review teachers (including the researcher). The two teachers are ones with more than ten years of teaching experience. They have rich experience in essay correction and guarantee the score of the

composition.

3.4 Survey Samples and Analysis

After nine essay guidance, the author investigated the results of corrective feedback from students to teachers, mainly investigating the "vocabulary problems", "spelling problems", "grammatical problems", "character coherence problems" and "sentence problems" in the corrective feedback to students' writing. The effectiveness of "long and difficult sentences"; the experimental group uses corrective feedback to guide students' writing, while the natural group uses evaluative feedback to guide students' writing. The data collection and analysis are shown in Figure 1:
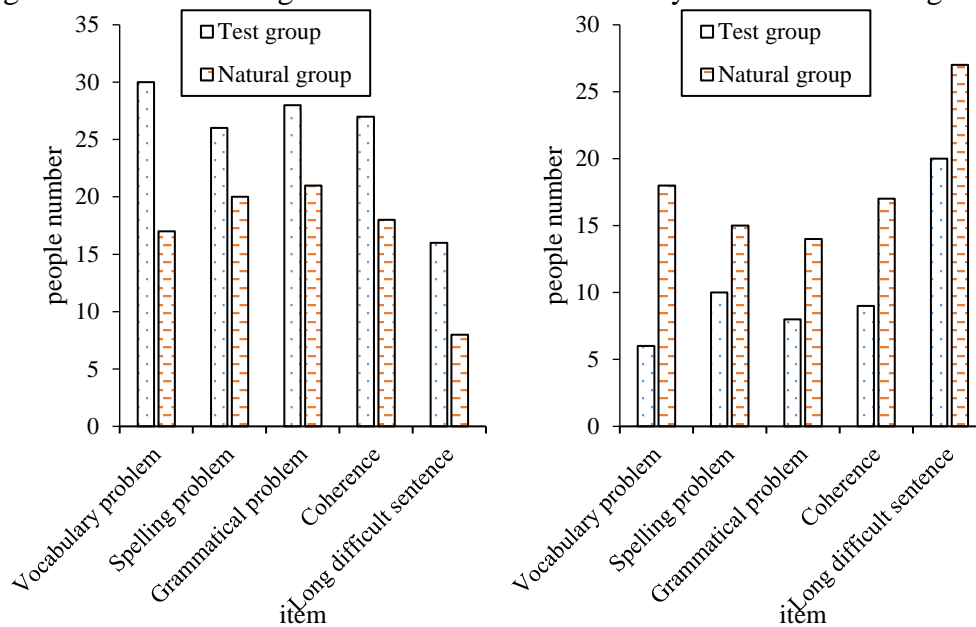

Figure 1: Statistics on the influence of teachers' corrective feedback on language accuracy

It can be seen from Figure 1 that, on the whole, the teacher's corrective feedback is significantly more effective in guiding language accuracy than the evaluative feedback. 30 students think that the teacher's corrective feedback is useful for solving grammatical problems, and only 5 students think it is not very useful. This shows that most students believe that corrective feedback can improve language problems in writing.

Therefore, students from two classes were selected as the survey subjects, and a total of 90 test copies were issued, with 90 valid copies. This test is divided into two parts. The first part is a survey of students' attitudes towards corrective feedback on teachers' written writing, and the second part is a survey of students' needs for teachers' written feedback on writing. The specific results are shown in Figure 2:
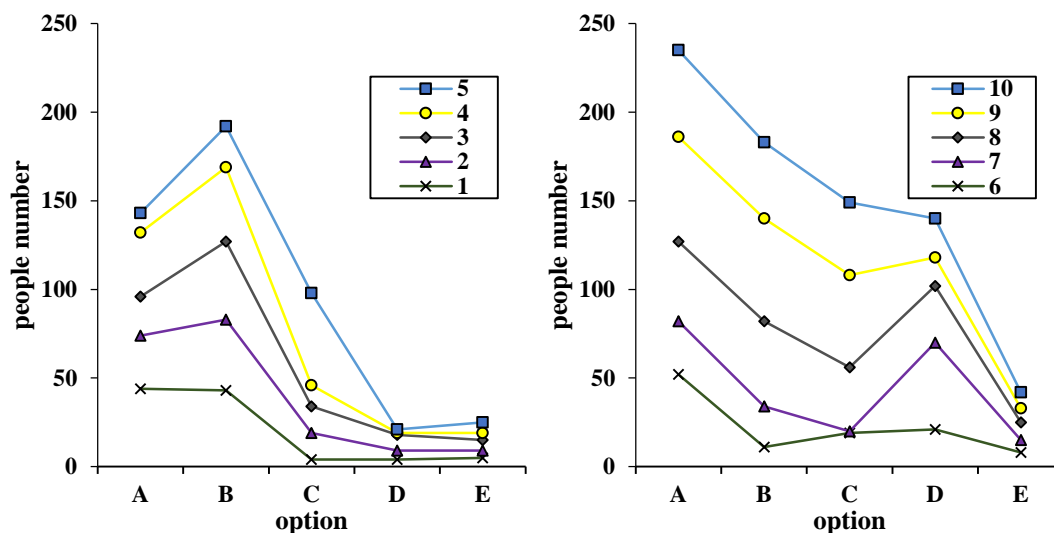
Figure 2: Survey results of students' attitudes towards teachers' written feedback

It can be seen from Figure 2 that regarding question 1, 88% of the students agreed with the teacher's feedback on the writing problem. Regarding the second question, 86% of the students believe that the feedback should be specific rather than general. Students hope that the teacher will give more detailed feedback so that they can know the error more accurately and improve their writing performance. For Question 3, 80% of people think that encouraging feedback is more beneficial to their writing. Blindly critical feedback may dampen the enthusiasm of writing. For question 4, 90% of students believe that corrective feedback is necessary for writing, but according to the actual teaching situation, the feedback given by teachers is relatively scarce. Students think that writing feedback does not have to be one-to-one, as long as the teacher gives appropriate written feedback on the assignment. In summary, students are more supportive of corrective feedback and believe that teacher's writing feedback can promote their writing.

4. Discussion

In the research process, the teacher's role is manifested in the guidance of students' learning on the one hand, and the expansion of students' thinking on the other, so as to further enable students to improve their ability to independently discover and solve problems. At the same time, teachers must organize a good group of students. Through the above analysis, it is found that under the premise of combining group mutual evaluation, the two groups of students' attitudes towards teachers' corrective feedback have undergone major changes. The change from negative response to active cooperation shows that students' corrective feedback on English writing has new most students have doubled their confidence in English writing, thus enhancing the integration of English writing learning, which just confirms the viewpoints of social cultural theory.

5. Conclusions

This study uses an experimental method to carry out case analysis, with the purpose of investigating the influence of teachers' corrective feedback on the accuracy of high school students' English writing. In order to achieve the research purpose of this article, this article uses a variety of

scientific methods, such as the test, and a more streamlined algorithm. Students from two classes were selected as the survey subjects, and a total of 90 test copies were issued, with 90 valid copies. We found that 88% of the students agreed with the positive influence of teacher's feedback on writing accuracy. Students are more supportive of corrective feedback, and believe that teacher' s writing feedback can promote their writing. The shortcomings of this study are: firstly, the research time is limited. If you want to get more accurate data, it may take longer; secondly, this research only focuses on a few classes in the first middle school of a certain county, and the sample size is relatively small. Therefore, in future research, expanding the number of samples and extending the experimental time are our key directions, so as to improve our research and make it more rigorous.

Acknowledgments

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