Effectiveness of Teaching Resource Program in Writing Evaluation

Accepted 18th March, 2013

ABSTRACT

We explored the effectiveness of Teaching Resource Program (TRP) in writing evaluation. Unlike previous research, this research demonstrated the importance of TRP in writing evaluation. In particular, we introduced the functions of Teaching Resource Program. We started with a brief introduction of Teaching Resource Program. Then we proposed hypotheses to test the validity of Teaching Resource Program. We ended the study with the conclusion that Teaching Resource Program can provide timely and accurate feedback of writing pieces to the teachers and students. We also found in our study that Teaching Resource Program can improve the students’ performance and ability in writing. Based on the results of the study, we can conclude that Teaching Resource Program should be further integrated with writing evaluation, instruction and learning.

Key words: Teaching resource program, writing instruction, writing learning, writing evaluation.

INTRODUCTION

Generally speaking, educational evaluation refers to evaluating the teaching activities, teaching process and teaching results by the methods of analyzing teaching information to provide scientific and valid foundation for promoting teaching approaches and educational quality. Popham (2008) argued that formative assessment is a planned process during which the teacher or students use assessment-based evidence to adjust ongoing learning and instruction. Formative assessment as a process used during instruction provides feedback for the adjustment of ongoing teaching and learning for the purposes of improving student achievement related to instructional objectives (Melmer et al., 2008; Dunn and Mulvenon, 2009). Formative assessment can help teachers respond effectively to students’ learning needs (Black and Wiliam, 2009). Students who experience high-quality formative assessment are more likely to transfer learning from one class to another (Cauley and McMillan, 2010). Educational evaluation is regarded as an indispensable component in the process of teaching and learning, especially in the course of the second language teaching and learning (Yu, 2009). It enriches the teaching methods and activates the students’ initiatives. It is not only treated as an important subject of modern educational science and research but also as a necessary part in the English teaching and learning process. Educational assessment is mainly intended to enhance the effect of language teaching and learning through providing teachers and learners with timely and effective feedback. From the early years of the 20th century, the importance of educational evaluation has been attached in educational measurement field and according to the previous historical literature, educational evaluation has undergone four stages from the perspective of assessment models: 1) measurement stage characterized by J. M. Rice’s Spelling test, E. L. Thorndike’s arithmetic test and T. Terman’s the Stanford-Bine; 2) description stage featured by Tyler’s evaluation approach; 3) judgment stage characterized by Scriven’s definition and distinction of formative assessment and summative assessment in his research paper “The Methodology of Evaluation” (Scriven, 1967); 4) social construction stage featured by Stufflebeam’s CIPP Model (Stufflebeam, 1983), Stake’s Countenance Approach (Stake,
With the more information technology applying in the field of education and teaching, profound changes have taken place in the aspect of teaching, learning and evaluation (Ding, 2004). Under this background, the application of modern educational technology provides more new teaching modes and evaluating methods, which, in turn, can trigger the students’ initiative, enthusiasm, and creativity. Consequently, the development and application of modern information technology provides unique conditions for developing new evaluation mode in education and teaching to improve teaching effect and efficiency. Computer-based assessment vastly expands testing possibilities beyond the limitations of traditional paper-and-pencil tests, and through these and other technological innovations, the computer-based platform offers the potential for high quality formative assessment that can closely match instructional activities and goals, make meaningful contributions to the classroom, and perhaps offer instructive comparisons with large scale or summative tests (Scalise and Gifford, 2006). With the advantages of quick scoring, instant reporting and real-time feedback by using the method of computer-based assessment, computer-based assessment technology assists to enrich educational assessment, especially in writing assessment. Therefore, educational evaluation characterized by computer-based assessment has entered the new age of information technology.

In this context, Yang Yonglin, a professor at Tsinghua University, teamed up with Higher Education Press, developed the computer-assisted Teaching Rescores Program (Yang, 2004; Yang, 2005; Yang, 2006; Yang, 2011). The computer-assisted TRP has the functions of analyzing, scoring, and commenting on the writing pieces. As shown in Figure 1 (Wang, 2013), TRP has the capacity to analyze the total number of sentences and paragraphs, mean word length, and mean paragraph length of any given e-writing pieces. Furthermore, the chart generalized by TRP can clearly show the writing information, such as, spellings, grammar, organization, and logic which are essential factors to reflect one’s writing competence.

As shown in Figure 2, TRP’s intelligent scoring can generate the mark of any given writing pieces, and the student writers’ positions in a ranking. After comparing the results of intelligent scoring of successive compositions in any given length of time, the students can form their own writing portfolios to have a better understanding of the progress they have made in writing (Kui, 2005).

In addition, as shown in Figure 3, TRP can provide high quality individual faculty feedback to both the student writers and the teachers with a high speed. TRP’s intelligent comment can give the students more time to reflect on their writing skills and methods for the reason that it can generate the faculty comment at the click of the mouse. It can also strengthen the learners’ awareness which may enhance their attention to the target and purpose of writing, and the nature of writing (Yu, 2004). TRP’s intelligent comment can automatically provide faculty comment to the students and the teachers for the further improvement in the aspects of structure, content, vocabulary, transitional words, punctuation, and clarity.

**MATERIAL AND METHODS**

This part begins with the research questions, and then gives a description of subjects, instruments for research, and the
procedures of the research. The study will adopt both quantitative and qualitative methods. Two tests were analyzed by the quantitative method, and interviews were analyzed by the qualitative method.

Research questions

The purpose of the research is to investigate and prove the effectiveness of assessment function of TRP in English writing class. According to the objectives of the research, this study puts forward the hypotheses as follows:

Firstly, whether the students’ writing ability can be enhanced by adopting assessment function of TRP in English writing class?

Secondly, whether the application of assessment function of TRP is helpful in promoting students’ scores in English writing?

Thirdly, whether the application of assessment function of TRP is more effective than traditional summative assessment by using tests?

Subjects

In this study, 60 non-English major sophomores (30 boys and 30 girls) from Mathematic Science at Inner Mongolia
University are chosen as the subjects of the research. They have the same education background, their ages varying from 18 to 20 years old. For the effect of experiment, 60 non-English major sophomores were divided into two groups: one serves as the Experimental Group (EG), and the other serves as the Control Group (CG). Each group has 30 students (15 girls and 15 boys). There are no significant differences on English writing performance between the two groups according to the data collected from the pre-test.

They were taught English writing by the same teacher by using the same teaching methods and books but different assessment approaches. The Experimental Group was conducted with assessment function of TRP, and the Control Group follows the traditional summative assessment by using tests.

**Instruments**

The instrument used in this paper is Teaching Resource Program (TRP) for assessment, completed with interviews, tests. The results were analyzed by the statistic software SPSS16.0

**Writing tests**

The Experimental Group and the Control Group are both required to take two tests: pre-test and post-test. Pre-test is taken before the experiment to check students writing performance and post-test is to evaluate if students' writing performance and ability have been improved after the application of TRP in English writing instruction. The scores of the two groups in post-test were compared to answer whether TRP is superior to the traditional summative assessment.

**Procedures of the research**

The procedures of the research mainly consist of three aspects:

Pre-test is carried out to give the teacher the general situation about the subjects. At the beginning of the research, all the subjects in the Experimental Group and the Control Group were required to write the same composition. Then, all the writing pieces were marked by TRP. The results from the pre-test prove that there were no significant differences in students' writing performances and attitudes between the two groups.

Post-test was made to check the results of the research after four-month period. Students in the two groups were required to attend post-test to write another composition also marked by using the function of TRP to check whether there were some changes and improvements concerning their writing performance after using TRP in the Experimental Group. Independent-samples T-test was adopted to analyze the results of pre-test and post-test to examine students' writing performance.

Finally, interviews with open-ended questions were conducted after the treatment of TRP concerning their attitudes toward English writing, their writing motives and performance.

**RESULTS AND DISCUSSION**

**The Results of two tests**

As shown in the Table 1, the results of pre-test can be used to have a general understanding of the subjects' writing performance and they prove that two groups have no significant differences in writing ability before the experiment. However, as shown in the Table 2, the results of post-test show that after adopting TRP as the tool of assessment in the writing instruction and learning, the students' writing performances have been improved a lot. As for the scores between the Experimental Group (EG) and the Control Group (CG), the results showed, in the significance level test, p ≤ 0.01. Namely, there exists statistically significant correlation between the students' writing performance in two groups.

The improvement in writing scores was also obvious in
the process of the study, as shown in Figure 4. It can be easily seen that the mean writing score of students in the Experimental Group (EG) after being trained by using TRP has been improved 1.36 over time, compared with the results of pre-test, while the changes in the mean writing score of the Control Group (CG) were not obvious, displaying only a slight change.

**Conclusions**

According to the results of the study, we can conclude that the quantitative findings support the first research question from the major findings, to some extent, that the learners who used TRP assessment develop better in writing performance than those who used the traditional summative assessment according to the result of the pre-test and post-test of the research. From the qualitative findings of interviews we can conclude that students' interests in English writing has been activated, especially the learners' instrumental interest (the interests in adopting TRP in the process of English writing). Based on the results of the study, we can conclude that Teaching Resource Program should be further integrated with writing evaluation, instruction and learning.

**ACKNOWLEDGEMENTS**

The web site http://v.cfl.com.cn/trp/9in1.rar provides the detailed information and demonstrations of the computer-assisted Intelligent Teaching Resource Program (TRP), which was developed by Professor Yang Yonglin at Tsinghua University, who teamed up with Higher Education Press. At the same time, An Xuehua enlightened me on the design of my paper.

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