

THE CONSTRUCTION OF A DYNAMIC ASSESSMENT MODEL OF READING ABILITY IN SECONDARY SCHOOL STUDENTS' ENGLISH CLASSROOM

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Received: January 2024 / Accepted: April 2024

Abstract: Secondary school students' reading ability in English classroom is an important ability for secondary school students' English learning, and it is also highly valued by teachers, parents as well as students. Regarding the English proficiency test, the assessment of students' English reading ability is necessary. Based on this, this paper constructs a dynamic assessment model of secondary school students' reading ability in the English classroom, and through the evaluation results of the implementation of this model in secondary school students' English reading teaching, it can be seen that the dynamic assessment model can help students to master reading strategies, significantly improve their reading performance, and have a good effect of intermediary intervention.

Keywords: Secondary school students, English classroom, reading ability, dynamic assessment.

MSC: 97AXX.

1. INTRODUCTION

Dynamic Assessment (DA) is based on Vygotsky's socio-cultural theory, with the Zone of Proximal Development (ZPD) as the core, of which Interactionist is a model developed by Vygotsky's colleague, Luria, on the basis of Vygotsky's theory, as well as on Vygotsky's theory [1]. Ohta defines the zone of nearest development in the field of second language acquisition as:- "the difference between a second language learner's ability to use language independently and a potentially higher level of language, which is usually developed through collaboration with a high-level learner." Language construction in second language learning refers to the helping behaviors of high-level language learners for low-level language learners, usually referring to the supportive behaviors of high-level language learners to help low-level learners to reach higher levels of language. High-level learners can be teachers or classmates or peers with higher levels of language proficiency. Lantolf & Pehher broadly categorize the modes of dynamic assessment into two types: intervention and interactive. In intervention-based dynamic

assessment, the help provided to students is designed in advance and the form of help is standardized. It focuses on "quantitative" indicators of assessment: an index of the speed of learning and the amount of help needed by the learner to achieve pre-specified learning goals quickly and effectively. Through the above analysis, the existing literature mainly focuses on the research related to dynamic assessment and language learning, but there is a relative lack of research on the application of dynamic assessment to reading in secondary English classrooms. In this study, we will experiment with the dynamic assessment of secondary school students' reading ability in the English classroom to elaborate the construction of the dynamic assessment model and the results achieved. An innovative integration of dynamic assessment modeling with reading in secondary English classrooms. In order to be able to provide an effective method for the effective assessment of secondary school students' reading ability in the English classroom through the research in this paper, and to improve the utility of dynamic assessment in the English reading classroom, and then to improve students' English proficiency.

2. CONSTRUCTING THE DYNAMIC EVALUATION SYSTEM OF SECONDARY ENGLISH READING TEACHING

2.1. Pre-reading Phase

Before reading an article, teachers can conduct a brainstorming activity that leads students to name or write all the information they know about the reading topic and summarize everyone's information. Students can also be asked to predict what they might read. Next, stimulate students' background knowledge. If students do not have sufficient background knowledge, they should be provided with a minimum amount of background knowledge to help them understand the material they are reading.

2.2. Cooperative Reading Stage

This stage focuses on students' reading, and various forms of reading activities can be carried out, such as whole-class exercises, group exercises and individual exercises. The presentation of reading strategies can be done in two steps.

The first step is explanation. When training on reading strategies, the teacher should clearly explain the principles, benefits and steps of the strategies taught.

Step two: Demonstrate. Teacher modeling is extremely important for students to figure out how to use a reading strategy [2]. When modeling, the teacher can speak his or her thought process and strategy use process out loud as if in slow motion, based on the examples given, so that students are clear about why the strategy is being used at this time, how it helps solve the problem, and the overall process of using the strategy.

2.3. Post-reading Stage

After the reading activities, on the one hand, it is necessary to assess the effectiveness of reading and check the students' comprehension of the reading materials, which can be done through questioning or written checking, etc. On the other hand, it is necessary to assess the use of the reading strategies to see whether the students have grasped the strategies they have learned. There are various ways to assess, such as letting a group demonstrate to the class the process of using their strategies, and then the teacher asks questions about the strategies they used, so that the class can think about whether the

choice of strategies is justified, what other strategies can be chosen, whether the use of strategies can be improved, how effective the use of strategies is, and what kind of learning tasks can be utilized in a similar way, and so on.

2.4. Extracurricular Reading Stage

The improvement of reading ability must be achieved through a lot of reading practice, which requires students to do reading training after class to practice the learned reading strategies due to the limited classroom time [3]. In addition, teachers can encourage students to apply the learned strategies to other English classes. The whole mediated intervention activity should make full use of the Internet. Teachers provide students with reading materials, reading strategies, assign homework, and answer questions through the Internet, and students access learning resources, consult teachers, submit homework, and exchange learning tips and experiences through the Internet.

3. EXPERIMENTAL RESEARCH METHODS

3.1. Content of the Study

Through the study, we sought to find out whether it is feasible to conduct dynamic assessment of secondary school students' reading skills in English classroom on a classroom basis, which included the following questions:

Question 1: What is the impact of dynamic assessment intervention practice on secondary school students' use of English reading learning strategies?

Question 2: How does the dynamic assessment intervention practice affect students' English reading achievement?

Question 3: How do students evaluate the dynamic assessment intervention practice in college English?

3.2. Extracurricular Reading Stage

An experimental comparative method was used to carry out a feasibility study on the dynamic assessment model of secondary English reading teaching [4]. The researcher selected two classes with comparable levels of English proficiency, one of them as an experimental class and the other as a control class. During the two semesters of reading teaching practice activities, reading teaching experiments were conducted for students in the experimental class based on the design of the dynamic assessment reading teaching model, including systematic input of reading strategies for students in the experimental class, and systematic development of pre-reading activities, cooperative reading activities, post-reading activities and extracurricular reading activities. The control class still adopts the traditional teaching mode without reading teaching intervention.

4. RESULTS AND ANALYSIS

Reading ability mainly includes the ability to recognize and read, comprehension, evaluation and appreciation, and transfer and application, which present a progressive stage relationship, are related back and forth and complement each other, forming a complete longitudinal series of reading ability. In this paper, reading ability is quantified as indicators of the application of reading strategies and changes in reading performance.

4.1. Effects of Dynamic Assessment Practices on Students' Use of English Reading Strategies

4.1.1. Students' use of English reading strategies before the experiment

In order to determine the impact of the current dynamic assessment practice model on the aspect of students' reading activities, this study compared and analyzed the changes in students' use of reading strategies before and after the experiment in the experimental and control classes where the independent variable is the use of reading strategies at different stages.

Table 1: Results of independent samples t-test for the difference between the means of the frequency of reading strategy use in the two groups before the experiment

Program		Daily Reading	Pre-reading Stage	Reading Stage	Post-reading Stage	Overall Strategy
Control class (n=56)	averages	2.64	3.04	3.39	2.58	3.01
	standard deviation	0.55	0.75	0.48	0.75	0.44
Experimental class (n=55)	averages	2.45	3.19	3.38	2.64	2.98
	standard deviation	0.65	0.81	0.53	0.70	0.51
Difference in means T-test	T-value	-1.655	1.072	-0.115	0.379	-0.280
	P(2-tailed)	0.101	0.286	0.909	0.705	0.780

The data from Table 1 shows that the overall strategies of the control and experimental classes before the experiment were 3.01 and 2.98, respectively, indicating that the students were still aware of the use of reading strategies. An independent sample T-test of these two means showed no significant difference ($T=0.280$, $p>0.05$) [5]. In terms of reading strategy use, both the experimental and control classes used relatively few strategies in the daily reading phase, 2.45 and 2.64 respectively, which did not exceed the median value, indicating that there was still a lack of subjective awareness of daily reading and a lack of goals and planning for reading activities.

The use of strategies in the post-reading stage was also relatively low, with 2.64 and 2.58 for the experimental and control classes, respectively, indicating that students did not engage in reading-related content after the reading activities were carried out. Post-reading activities, such as summarizing and sharing, are effective extensions of the reading activities, which can consolidate students' reading strategies and help them to master and apply them correctly. The students are not highly motivated in this aspect.

Finally, the use of reading strategies in the pre-reading stage is poor in all cases. The mean values of the experimental and control classes' use of reading strategies in this stage were 2.64 and 2.58 respectively. Pre-reading activities, including the setting of reading goals and the general understanding of reading content, can lay a good foundation for formal reading. However, the students' motivation to use the strategies was not high, which could not guarantee the development of reading strategies at a later stage [6].

In addition, students in the experimental class and students in the control class used more reading strategies in the reading stage, with 3.38 and 3.39 respectively, indicating that students were able to master certain reading strategies at this stage, which provided a certain guarantee for the improvement of the efficiency of reading activities [7].

4.1.2. Analysis of students' changes in using English reading strategies after the experiment

After two semesters of practice in dynamic assessment of secondary school English reading teaching, during which the reading strategy interventions in classroom teaching were constantly adjusted according to the overall learning situation of students in the experimental class, and personalized tutoring was provided to some students according to their actual situation. At the end of the experiment, the researcher again analyzed the experimental and control classes. The results are shown in Table 2.

Table 2: Results of the paired-sample t-test for the difference in the mean value of the frequency of reading strategy use between the two groups of students after the experiment

Program		Daily Reading	Pre-reading Stage	Reading Stage	Post-reading Stage	Overall Strategy	
Control class (n=56)	Pre-test Strategy	averages	2.64	3.04	3.39	2.58	3.01
		standard deviation	0.531	0.758	0.483	0.726	0.455
	Backtest Strategy	averages	2.59	3.05	3.34	2.76	3.01
		standard deviation	0.549	0.648	0.432	0.631	0.418
	Difference between the mean values of the pre and post-test strategies	T-value	0.619	-0.052	0.421	-1.439	-0.050
		P(2-tailed)	0.539	0.959	0.676	0.142	0.960
Experimental class (n=55)	Pre-test Strategy	averages	2.45	3.19	3.38	2.64	2.98
		standard deviation	0.648	0.806	0.527	0.698	0.506
	Backtest Strategy	averages	2.73	3.35	3.5	3.06	3.20
		standard deviation	0.625	0.804	0.605	0.818	0.566
	Difference between the mean values of the pre and post-test strategies	T-value	-3.537	-1.381	-1.472	-3.167	-2.972
		P(2-tailed)	0.001	0.173	0.147	0.003	0.004

According to the data in the table, it can be seen that the students in the control class increased the mean value of the frequency of reading strategy use in both the pre-reading and post-reading stages, but the mean value of strategy use in the daily reading and reading stages decreased [8]. Whereas, the experimental class gained an increase in the mean value of all reading strategies. Overall, the overall reading strategy mean of students in the experimental class increased from 2.98 before the experiment to 3.20 after the experiment, while the overall reading strategy mean of the control class did not change significantly. This fully demonstrates that the frequency of using reading strategies has increased at all stages of reading activities under the dynamic assessment framework, and the students' reading strategy training has achieved good results [9].

4.2. Effects of Dynamic Assessment Practices on Students' Reading Achievement

4.2.1. Comparative analysis of English reading achievement of students in the experimental and control classes before the experiment

It can be seen from Table 3: The English reading scores of the students in the experimental class and the control class before the experiment are both relatively low, with the average scores of 59.82 and 59.29 respectively, both of which are close to the passing score. In terms of individual students, the difference between the highest and lowest scores of the two classes is as much as 60 points. An independent samples t-test on the means of the two groups' scores showed that there was no significant difference between the pre-test scores of the two classes ($T = 0.270$, $df = 110$, $p > 0.05$). This indicates that there is no significant difference between the reading levels of the two classes before the experiment [10].

Table 3: Independent sample t-test results of pre-test scores of the experimental class and the control class

Program	Class	Mean	Maximum	Minimum	Extreme Variation	Standard Deviation	T-value	P (two-tailed)
Pre-test results	Control class	59.36	85	20	65	13.779	0.270	0.853
	Experimental class	59.82	85	20	65	16.386		
post-test score	Control class	69.09	85	25	60	13.760	3.809	0.000
	Experimental class	69	90	45	45	10.558		

4.2.2. Analysis of changes in English reading scores of students in the experimental and control classes after the experiment

As can be seen from Table 4, the reading scores of the students in both classes improved, from 59.36 to 60.09 in the control class, and from 59.82 to 69.00 in the experimental class. The results of the paired samples t-test showed that there was no significant difference between the pre- and post-test reading scores of students in the control class ($T = -0.309$, $p > 0.05$), while the difference between the pre- and post-test scores of students in the experimental class was very significant ($T = -4.469$, $p < 0.05$). An independent samples t-test was conducted on the means of the posttest scores of the two classes, and the results showed that the difference was highly significant ($T = 3.809$, $p < 0.05$). This suggests that after two semesters of secondary English reading teaching practice, students in the experimental class made more progress in reading compared with students in the control class, proving that the exploration of the dynamic assessment of reading teaching practice model is successful [11]. This shows that it is feasible to conduct dynamic assessment activities of reading teaching on a class basis.

Table 4: Pre- and post-test scores of the experimental and control classes

Program	Class	Mean	Standard Deviation	T-value	P (two-tailed)
Control class (n=56)	Pre-test results	59.36	13.779	-0.309	0.758
	post-test score	69.09	13.760		
Experimental class (n=55)	Pre-test results	59.82	16.386	-4.469	0.000
	post-test score	69	10.558		

4.3. Evaluation of dynamic assessment mediated intervention activities by students in the experimental classes

In order to determine the facilitating effect of dynamic assessment-mediated intervention activities on developing students' reading skills, students were surveyed and the results of the statistical analysis are as follows:

Table 5: Feedback on the effects of intervention activities in teaching English reading in secondary schools (%)

Intervention		Helped a lot	More helpful	General	Helped a little	Not helpful
Pre-reading stage	Background Knowledge	20.0	49.0	23.6	7.4	0.0
	Pre-reading strategy instruction	34.5	47.3	14.5	3.6	0.0
Reading Stage	Classroom Reading Strategy Training	51.0	32.6	10.9	5.5	0.0
	Cooperative Reading in the Classroom	36.4	38.2	18.2	7.3	0.0
post-reading stage	Evaluating Reading Effectiveness	47.3	36.4	10.9	5.5	0.0
	Extracurricular reading training	38.2	45.5	10.9	5.5	0.0
	Extracurricular reading materials	36.4	50.9	9.1	3.6	0.0
	Internet and other reading resources	34.5	30.9	23.6	10.9	0.0

As far as the activities conducted before reading are concerned, 69% of the students found it helpful to gain background knowledge related to the text by conducting brainstorming activities before reading, compared to more students (81.8%) who found the teacher's explanation and modeling of reading strategies before reading helpful. This suggests that the input of background knowledge before reading was necessary, but the reading strategies were more helpful to the students.

As far as the activities in the reading stage are concerned, the students practiced the reading strategies taught by the teacher in the classroom by carrying out cooperative reading, and 51% of the students thought that it was very helpful to them, and 32.6% of the students thought that it was more helpful to them. This shows that people like to learn, explore and improve together in a relaxed and pleasant cooperative atmosphere [12].

As far as the activities in the post-reading stage are concerned, the vast majority of students (84.7%) thought that evaluating their own reading effectiveness after reading and discussing the use of reading strategies with their classmates were very helpful to them. In addition, 87.3% of the students thought that the extracurricular reading materials provided by the teachers were very helpful to them. In comparison, only 65.4% of the students thought that other reading resources on the Internet were very helpful to them, which indicates that some students did not make full use of the Internet resources to actively carry out extracurricular reading after completing the reading tasks assigned by the teacher.

In terms of dynamic assessment of reading teaching practice as a whole, students were satisfied with the implementation of various activities, believing that these activities

helped to increase their motivation to read and promote the improvement of their reading level. In other words, the activities carried out in the dynamic assessment of reading teaching practice were effective.

5. CONCLUSION

This paper takes a middle school as an experimental subject, applies the dynamic assessment model to English reading classroom teaching, and observes its impact on students' learning. Through the teaching experiment, the changes in reading strategy, reading achievement, intervention and other indicators in the pre and post-tests of the experimental and control classes are compared. The results show that the mastery of reading methods of the students in the experimental class is significantly improved. Meanwhile, the students in the experimental class made greater progress in reading achievement. The students were highly satisfied with the activities organized by Dynamic Assessment, and believed that these activities helped to increase their motivation to read and promote the improvement of their reading level. However, due to the relatively small sample data and the short research time, the conclusions drawn are somewhat limited. Therefore, in the process of future research, the scope of sample data will be expanded and the research time will be increased, so as to obtain more detailed data information.

Funding. This research received no external funding.

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