

## **A Comparative Study of Peer-driven and Task-driven on Reading Training**

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### ***Abstract***

*One difficulty in language learning is the training of reading ability. The improvement on this ability directly affects the process and effect of language learning. At the same time, there are numerous difficulties in actual learning and teaching. Depending on current research, there is two ideas that can utilize to enhance the reading efficiency of learners. One is to amend objective factors; the other is to change subjective factors. Compared with the two ideas, idiosyncratic factors are more manipulable and controllable, so it is more valuable to conduct researches on this. But among the many subjective factors, the degree of their effectiveness is not the same, so this article attempts to compare and analyze the driving effects of two important subjective factors (peer-driven and task-driven) on reading performance. The results show that both factors can have a positive impact on reading comprehension, but different in driving effects. The task-driven has obvious short-term effectiveness; while peer-driven needs to establish its long-term effect on the basis of early coordination and cooperation among team members. Therefore, in order to maximize the achievement of learning, it is necessary to combine strengths and avoid weaknesses according to the characteristics of two factors, so as to help learners improve reading ability most efficiently.*

**Keywords:** *Reading training, subjective factors, task-driven, peer-driven.*

### **1. Introduction**

Reading ability is a key indicator to measure a person's language ability. It combines the knowledge of vocabulary, grammar, semantics and pragmatics, so reading practice can improve the ability to master the language in multiple dimensions. However, the difficulties and obstacles in the reading process will dampen the reader's confidence and fun, so that the learner will give up further training and promotion. Therefore, it is extremely important to help readers improve the efficiency of reading.

In order to achieve this goal, it is necessary to analyze the factors that affect reading performance. Among the numerous influencing factors, they can be roughly classified into two categories: objective and subjective. Tangible factors refer to specific and stable factors, such as age, mother tongue level, language environment, educational background, etc. Compared with empirical factors, subjective factors have stronger driving force and variability, such as: learning motivation, learning interest, target pressure, etc. Therefore, subjective factors

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have more room for change, and it is closely connected with the learner's psychological state, the effective adjustment of it can stimulate students' stronger self-learning ability.

However, different subjective factors affect learners to varying degrees. Among all subjective factors, it can also be divided into active-driven and passive-driven. Since there is no research comparing these two types of driving methods currently, it is necessary to carry out an in-depth discussion and research on this topic and to find the most effective way to improve reading ability.

## **2. Background**

In language learning, both objective and subjective conditions will lead to differing impacts on learners. Compared with quantitative factors that is difficult to change, subjective factors are more malleable and controllable. According to the "Involvement Load Hypothesis" theory put forward by Hulstijn & Laufer (2001)[1], it can be observed that the influence of subjective factors of learning is very important. Although the cognitive ability of learners is objective and qualitative to some extent. However, the motivation is completely determined and controlled by learners.

Among various motivating factors, peer-driven and task-driven occupy an influential position. Up to now, a large number of scholars have conducted researches on two driving methods applied to teaching, which has improved the teaching and learning effect. Prabhu (1987)[2] is a pioneer in the development of task-based pedagogy. He improved the status of task-based pedagogy in English teaching around the world, and proposed that task-driven pedagogy can help teachers to control and manipulate students' learning processes. After using task-driven in language teaching, Nunan (1989)[3] found that under task-driven, learners will focus their main attention on meaning rather than language structure. Willis (1996)[4] is another person who has made outstanding contributions to task operations in language classes. According to the research of Willis (1996), task-driven can create specific and real purpose of language use and provide a natural context of language learning. Ruso (2007)[5] found through research that task-driven has a significant effect on promoting student motivation and efficiency.

Similarly, in terms of peer-driven teaching, Annis (1982)[6] found that through joint learning with peers, not only knowledge and experience can be shared, but also their understanding and expression can be strengthened to achieve better learning results. Morey (1993)[7] pointed out through research that students are more willing to accept help and advice from their peers due to their "empathy and identity", so the effect of peer learning is remarkable.

According to the current research status, both motivation-driven approaches (peer-driven & task-driven) have received plenty attention and application, and have played an active role in the actual teaching practice. However, at present there is no research comparing the promotion effect and degree of language learning for two factors, nor effectively combining them to maximize the learning effect. Therefore, conducting this research can help us recognize and choose a more effective motivation-driven approach in reading training.

## **3. Methodology**

In order to compare the effectiveness and difference between the two subjective factors (active and passive) that affect reading performance, variable detection experiments are needed. That is, to undertake experimental design and testing through quantitative and variable settings, and uses ANOVA to verify the experimental results. By comparing the final results of giving different variables the equal stimulation under the same conditions through One-way Analysis of Variance, so as to infer the most reasonable and effective factor.

### **3.1 Research Problem**

The main problems faced in this experiment are to compare the active and passive impetus on reading effect and efficiency among subjective factors. Therefore, it is necessary to select the representative driving forces

of both party, namely, peer-driven and task-driven. Considering of both idiosyncratic factors, peer-driven is more inclined to learners who carry out active learning based on their subjective feelings; while task-driven needs to constantly spur on learners to conduct passive learning through external stimulation. Therefore, the principal direction of this research is to explore the difference between the effectiveness and sustainability of the two factors in reading training. And how to reasonably configure the two driving forces to achieve the best results.

### **3.2 Participants**

Since the main method of this study is to perform comparison experiments by limiting constants and setting a variable, two groups of research objects need to be designed: one group is the reference group and the other group is the experimental group, except that each contains a different variable condition, All other constant conditions need to be consistent.

Based on the above requirements, the two groups of experimental subjects in this study need to ensure that they have the equivalent English level, the same age, the same didactic input (same teacher, same learning course) and the same learning materials. The only difference is that one group of students is peer-driven, while the other group is driven by tasks.

Therefore, it is necessary to conduct an English proficiency test on all 90<sup>1</sup> students of the same grade and major (English major juniors in the School of Foreign Languages of Yunnan Minzu University). Based on the average score of 72.3 (out of 100 points), 40 students with test scores in the 70-79 range were selected (20 in each group; the highest score was 78 and the lowest score was 70). The average age of students taking part in this study is 20.3 years old. This can ensure that all participants in the research meet the same basic conditions of constant.

### **3.3 Design**

The goal of this test is to explore the efficiency (average time spent on each study) and effectiveness (correctness of the reading test) of participants in improving reading ability driven by peer and task factors. Therefore, 80 training reading articles with moderate difficulty have been selected according to the English level of the participants. Each tester in both groups needs to self-study 80 articles (20 articles per week) within 4 weeks. After the end of each week, reading materials other than the training articles will be chosen to perform a reading test for all participants.

The variable of the first group is peer-driven, so the following requirements are demanded for this group of students: a. Divide 20 students into 5 groups (4 students in each group, randomly combined by the teacher<sup>2</sup>); b. Each group of students must carry out training at the same time and the same space every day by using the Rain Classroom<sup>3</sup>, and record the daily learning time; c. Each group should complete 20 articles of study per week, but the specific study time, study content and amount of study are determined by each group.

The variable of the second group is task-driven, so the following requirements are put forward for this group of participants: a. Each student needs to use the Rain Classroom to complete the assigned articles (2-3 articles per day, 20 articles per week) within a specified time every day; b. Each student needs to conduct daily reading

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<sup>1</sup> There are 90 students in the same grade and the same major. In order to ensure that the most qualified participants can be selected, all students need to be tested.

<sup>2</sup> Although a random combination of group members is adopted in this article, due to the similar ability of students, it cannot cover the situation of other member combinations.

<sup>3</sup> Rain Classroom was jointly developed by Xuetang Online and Tsinghua University Online Education Office. Using Rain Classroom can facilitate students to learn regularly and quantitatively on their mobile phones, and help teachers to better control students' learning efficiency (time-consuming of each article) and learning effect (correct rate of answer).

training separately, and records the practice time.

For the weekly test content, in order to take into account the need for English majors to pass TEM-4<sup>4</sup> and the validity of the experimental results, the materials from the reading comprehension part of the real and simulated questions of the TEM-4 but other than the practice articles need to be selected. The weekly test paper will be produced in accordance with the question type and difficulty of the TEM-4 examination, the number of questions is 20, and the full score is set to 20 points.

### 3.4 Procedure

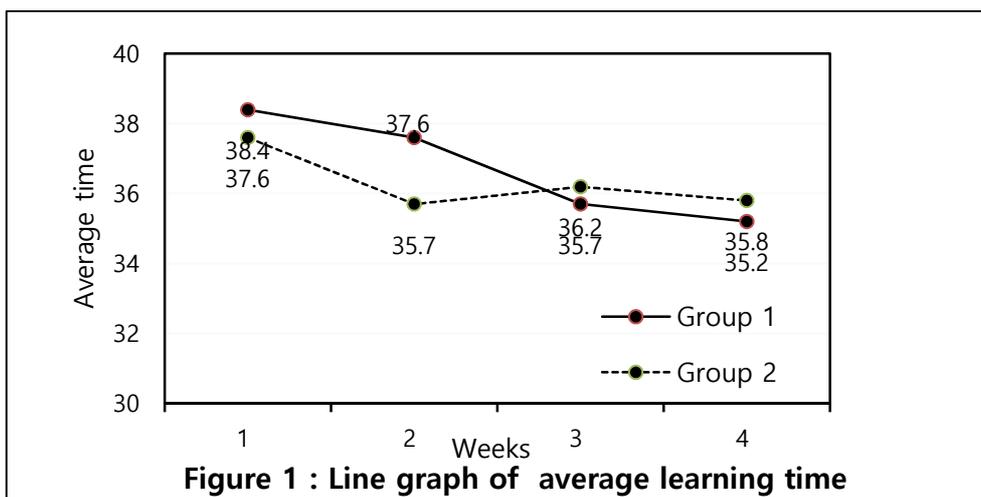
The entire research process includes three stages. First, all participants have to be trained so that they understand the learning tasks and learning methods they need to complete, so as to minimize experimental error.

In the second stage, it is necessary to conduct statistics and analysis of the students' learning results fed back by the system every day. Each article that students study has corresponded practice questions. After the student completes the exercise in the mobile terminal, the answer will appear immediately, and the status of students answering questions can be counted by the system. However, the score of these practice questions will not be accepted in the weekly test score statistics. These grades are just to help teachers grasp the status and fluctuations of students in their daily study.

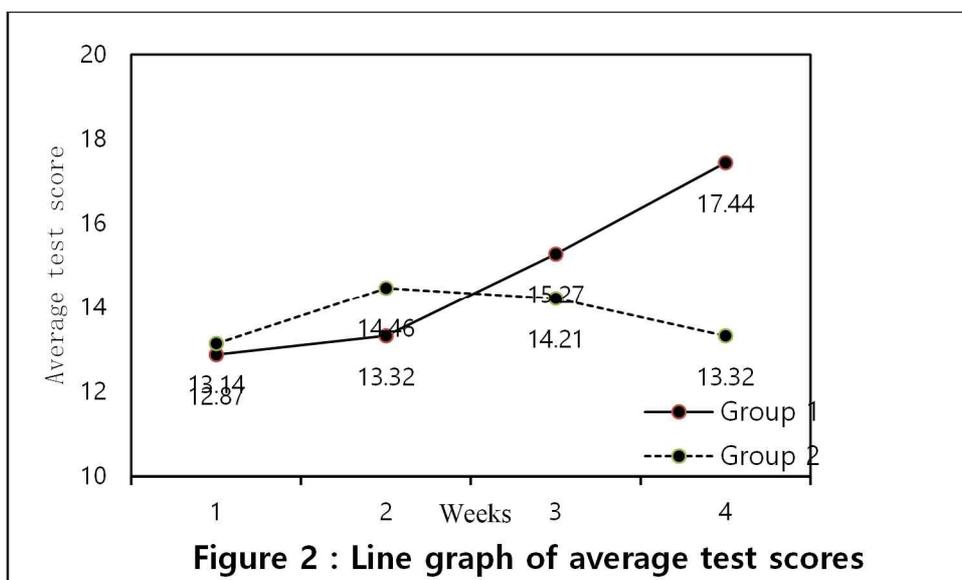
The final stage is to calculate the ultimate consequences. Two factors need to be counted. One is the average weekly study time of each group of students; the other is the average of the weekly test scores of the two groups of students.

## 4. Results and Discussion

First of all, through the statistics of the average learning time and test average score of all the participants in two groups (group 1 is the peer-driven group; group 2 is the task-driven group), the following line charts can be obtained:



<sup>4</sup> TEM-4 is the abbreviation of Test for English Majors-Band 4. It has been implemented by the Ministry of Education of Mainland China since 1991 and examines the English ability of English major students in comprehensive universities nationwide.



It can be clearly seen from the graph in Figure 1, in terms of the average time spent on reading, group one, the peer-driven group, showed a downward trend, but group two, the task-driven group, was relatively stable and did not change significantly. Therefore, it can be observed that peer learning can greatly shorten the learning time and improve learning efficiency; while individual learning has no significant effect on enhancing the learning speed. But gradually, the learning time of both groups tends to the same value.

In the graph of Figure 2, by observing the average test scores of the two groups, the results of the first week were basically the same, and then the task-driven group showed a continuous decline after a slight rise, but the peer-driven group has continued to improve.

According to the comparison of the above two figures, it can be clearly seen that the peer-driven group has a clear advantage in learning efficiency and learning effect compare with task-driven group. However, in order to verify the reading improvement effect of the two study groups more accurately and intuitively, more authoritative data analysis is needed. After four weeks of training in reading, all students took the 2019 National TEM-4 exam, and then the test score of the reading part (the total score of the reading section is 20 points) of the two groups of participants was recorded.

**Table 1. TEM-4 reading test scores of participants**

No.	TEM-4 reading scores of peer-driven group (group 1)	TEM-4 reading scores of task-driven group (group 2)
1	12	11
2	11	8
3	9	10
4	9	9

5	9	7
6	9	10
7	11	9
8	12	9
9	10	8
10	9	13
11	10	9
12	14	8
13	11	8
14	12	11
15	10	9
16	11	10
17	12	13
18	11	9
19	9	11
20	10	9

In order to test whether peer-driven and task-driven factors have an impact on the TEM-4 reading test scores, the above results need to be analyzed by Analysis of Variance, which is referred to as ANOVA (assuming the significance level  $\alpha$  is 0.05), the results are as follows:

**Table 2. Covariance analysis of TEM-4 reading test scores**

Team	Number	Sum	Mean	MS		
Peer-driven group	20	211	10.55	1.944737		
Task-driven group	20	191	9.55	2.576316		
Source of difference	SS	df	MS	F	P-value	F crit
SSA	10	1	10	4.423749	0.042118	4.098 172

SSE	85.9	38	2.260526			
SST	95.9	39				

On the basis of ANOVA on the TEM-4 reading scores of the two groups of students with diverse driving methods, it can be seen that different driving methods have a significant impact on reading scores.

By analyzing the above data, the following four conclusions can be drawn. First of all, according to two line charts (Figure 1 and Figure 2), the third week is a turning point in the learning effect. That is, around the third week, the peer-driven group and the task-driven group showed different trends in terms of learning time and test performance, so it can be observed that the short-term effectiveness of task-driven is greater than that of peer-driven.

Secondly, depending on the line graphs of learning time (Figure 1) by peer-driven group and task-driven group, in the first two weeks, the reading time of the peer-driven group was longer than that of the task-driven group, but the average learning time of both groups gradually approached a reasonable value. Therefore, in terms of learning time, the degree of influence of the two driving factors is not significantly different.

In addition, by comparing line graphs of peer-driven and task-driven groups under the indicator of learning performance (Figure 2), it can be seen that the curve formed by peer-driven group is close to a positive correlation; in contrast, the line chart of task-driven group shows a slightly negative curve correlation. Therefore, it can be inferred that the long-term application of peer-driven can effectively improve test performance, but the task-driven is less persistent.

Finally, according to the ANOVA of the TEM-4 reading scores (Table 2) of the two groups of students, peer factors and task factors have significant differences in improving students' reading performance, and the performance of the peer-driven group is better.

The reasons for the above results can be consulted from the influence of peer-driven and task-driven factors on students' psychology. First of all, task-driven will make students feel more pressure from teachers, so the short-term effectiveness is stronger, but single factor stimulation will gradually make the receptors tolerant, so the long-term effect is not good. Secondly, peer promotion requires a period of mutual adaptation and coordination at the beginning, so the collaboration and cooperation among peer members play a vital role in the progress of the entire team. Once the group members gradually adapted to each other and collaborate efficiently, both learning efficiency and effectiveness can be continuously improved.

## 5. Conclusion

Based on the definitive experimental results, we can see that both peer-driven and task-driven can provide learners with a upbeat and positive role in learning. However, the two have different characteristics and different influences on improving reading ability. Task-driven can put a certain pressure on learners, which can help learners to study in a targeted and planned manner. However, task stimulation will reduce the learner's awareness of autonomous learning, resulting in a low driving continuity of this factor. Peer-driven can effectively and continuously stimulate learners, but the effectiveness of peer-driven is closely related to cooperation and mutual assistance among team members. The degree of collaboration between members directly affects the quality of group learning effectiveness.

To sum up, in order to achieve the best learning effect, both task and peer factors needs to be utilized, rather than a single factor. Therefore, it is necessary to combine each factor in terms of its characteristics. For example,

in the early stage of group learning, more specific and intensive tasks can be added appropriately to help group members adapt to teamwork and cooperate with each other as soon as possible. After students gradually adapted to learn together, teachers can gradually decrease the frequency of task-driven, so that students can independently arrange study time and make learning plans, so as to effectively improve students' motivation and effect of autonomous learning.

In addition to the results and findings obtained above, this study still has some deficiencies and limitations. First of all, the style of the training articles used in the experiment is relatively limited. In order to be consistent with the reading passages of the TEM-4 examination, the expository essays were basically selected. Therefore, there is no guarantee whether the above conclusions are valid for articles in other styles. Second, the level of students participating in the experiment is basically concentrated at the intermediate level, so the experimental data cannot represent all students at different levels. Finally, further research and data are needed to illustrate the specific details of combining these two factors in actual operation.

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