On English Reading Teaching in Junior High School Based on ARCS Learning Motivation Model

Guojiao Feng[1], Jingdong Zhong[2]

[1,2]School of English, Zhejiang Yuexiu University, Shaoxing, China

ABSTRACT: In the cultivation of the four basic skills of listening, speaking, reading, and writing in language learning, reading is a more comprehensive reflection of the language application process. However, there are still many problems in the current stage of English reading teaching, which affects the effectiveness of English reading teaching and the improvement of students' reading ability. Strong reading motivation is a key factor in promoting students to actively learn reading. Professor Keller, a renowned American psychologist, proposed the "ARCS Learning Motivation Model" in 1983, which starts with four elements: Attention, Relevance, Confidence, and Satisfaction, and designs corresponding motivational strategies based on the characteristics of students' learning motivation and teaching content. This study aims to stimulate students' reading motivation as a breakthrough point, apply the ARCS learning motivation model to English reading teaching in junior high school, and explore whether English reading teaching based on this model can improve students' reading motivation and thus improve their reading ability and grades. This research selected two classes in the first grade of a middle school as experimental subjects. The experimental class adopted a reading teaching method based on the ARCS learning motivation model, while the control class adopted traditional reading teaching methods. Through a one-month teaching experiment, the researchers collected and analyzed data from students, including questionnaires, tests, and interviews. Based on the analysis of the research results, this research confirms the effectiveness of middle school English reading teaching based on the ARCS learning motivation model in enhancing students' reading motivation, improving reading ability, and improving reading performance. This provides useful insights for English reading teaching in junior high school and also serves as a reference for future research in related fields.

KEYWORDS: ARCS learning motivation model, English reading teaching in junior high school English, reading motivation, reading ability.

I. INTRODUCTION

Reading is an important ability and a way to understanding. In daily English subject teaching, English reading, as the focus and difficulty of teaching, always runs through the English classroom and occupies an important position in English teaching. The development of reading ability is the foundation of other skills development and the main way of language input. Although English reading teaching in junior high school has come a long way, there is still room for improvement, which have affected the effectiveness of English reading teaching and the improvement of students' reading ability. For example, some English reading teaching models still mainly focus on vocabulary teaching and text translation. The teaching method is single, the teaching design is monotonous, the classroom atmosphere is dull, and students just passively accept knowledge (Gao, 2022). Therefore, it has become an urgent task to transform traditional reading teaching methods, stimulate students' reading motivation, enhance their reading interest, and ultimately improve their reading ability.

In 1983, American psychologist Professor Keller designed the ARCS motivation model, which consists of four motivational elements: Attention, Relevance, Confidence, and Satisfaction. After enrichment and development, it became a teaching design model centered on motivating classroom learning motivation. Xu Xiaoyan (2017) pointed out that the ARCS motivation model has proven to be a highly effective solution in arousing students' reading motivation and improving their reading ability. Ren Yajing (2021) also commented that the ARCS motivation model is an extremely effective model that can exactly offer assistance to arouse students' learning motivation. While this model has been widely used by researchers at home and abroad and has also been applied to foreign language teaching research and used in various educational settings, there is a lack of experimental studies that apply this model to English reading teaching in junior high schools.

In recent years, there has been an increasing focus on the motivation in foreign language learning among domestic scholars. Specifically, English reading motivation and performance have been the main areas of interest. Although several studies have been conducted on this topic, few have explored the application of the ARCS motivation model to junior high school English reading

teaching. Therefore, this research aims to solve parts of problems in English reading teaching by applying the ARCS motivation model to English reading teaching in junior high school in China. By offering new insights for junior high school English reading teaching and offer valuable references for subsequent researchers.

II. LITERATURE REVIEW

ARCS Learning Motivation Model

Definition of ARCS Learning Motivation Model: Ren Yajing (2021) pointed out that the ARCS learning motivation model is a theoretical model designed for stimulating learning motivation, which was put forward by J. M. Keller in 1983 based on expectation value theory the macro theory of instructional design. The model comprises four key components: Attention, Relevance, Confidence, and Satisfaction as depicted in Figure 2-1. Keller (1979) posited four techniques can boost students' learning motivation: The first method is to develop learning tasks that ignite students' curiosity, grab their attention, and create a strong desire to learn. Additionally, the learning tasks should cater to the learners' requirements and have a significant impact on their life and work. Thirdly, the difficulty of the learning tasks should correspond to the students' current level of knowledge, allowing them to complete the tasks independently. Finally, the outcomes of the learning process should generate a sense of accomplishment and satisfaction, thus that can be employed to elevate the quality of instructional design and boost students' learning enthusiasm.

Figure 2-1 ARCS learning motivation model

Components of ARCS Learning Motivation Model: The ARCS learning motivation model mainly consists of four key factors: Attention, Relevance, Confidence and Satisfaction. The following is the detailed introduction of each element:

1. Attention: Attention is the first element in the learning process for learners. In teaching design, in order to attract the attention of learners, creative and engaging teaching strategies can be used to attract their attention. These strategies include using multimedia elements such as humor, storylines, images, and videos. Meanwhile, teachers can also utilize the interests and personality traits of learners to attract their attention. The goal of attention elements is to stimulate learners' interest, enabling them to concentrate and interact with the textbook.

2. Relevance: Relevance refers to the degree to which learners judge the connection between learning content and their own goals and experiences. Learners tend to be more motivated to participate in learning when they perceive that the reading content is exactly connected to their own objectives and real-life experiences. To improve relevance, teachers can connect learning content with the existing knowledge and experience of learners, provide practical examples and application scenarios, and emphasize the importance and practicality of learning.

3. Satisfaction: Satisfaction refers to the level of learning achievement and satisfaction perceived by learners. When learners feel that they have made progress in the learning process, they will work harder to learn. Teachers can increase learners' satisfaction by providing timely and positive feedback, rewarding and praising their efforts and achievements. In addition, teachers can set specific goals and challenges for learners, stimulate their interest in learning, and provide support and assistance.

4. Confidence: Confidence is the learner's belief in their abilities and success. When learners have confidence in their abilities and learning success, they are more motivated to face new learning challenges. Teachers can enhance learners' confidence by actively encouraging and appreciating their efforts, as well as providing successful strategies and skills. In addition, teachers can provide support and assistance to learners, and boost students' confidence by providing appropriate evaluations and encouragement.

Overall, the ARCS learning motivation model helps teachers design attractive and effective teaching methods by focusing on factors such as learner attention, relevance, satisfaction, and confidence, stimulating learners' intrinsic motivation and promoting their learning outcomes.

The Current Situation of English Reading Teaching in Junior High School

Reading is a complex process that requires active thinking, understanding, and receiving information. However, despite its importance, several potential issues in reading teaching in junior high school should be addressed.

One of the problems is the traditional teaching mode that is led by teachers and is more common. While this approach is effective to some extent, it often lacks interactivity and personalized teaching. As a result, it cannot meet the diverse needs of students, and

some students may struggle to keep up with the pace. Another issue is that students lack reading motivation. Many instructional designs fail to arouse students' learning interest, resulting in a lack of enthusiasm for English reading among students, which leads to a lack of engagement and a decrease in learning outcomes. Furthermore, teachers often emphasize memorizing grammar and vocabulary, while neglecting the cultivation of reading ability (Gao, 2022). This can lead to bottlenecks in students' reading comprehension and vocabulary accumulation. Teachers need to focus on developing reading skills, including decoding, fluency, and comprehension, to help students become proficient readers.

In conclusion, teaching reading is a complex and challenging process that requires a range of strategies to meet the diverse needs of students in junior high school. By addressing the issues mentioned above, teachers can create a more effective and engaging learning environment that promotes reading and enhances students' learning outcomes.

Previous Studies on ARCS Learning Motivation Model Used in Teaching
This section summarizes the previous studies on ARCS learning model used in teaching abroad and at home, understanding the current research status of the model in both theoretical and practical aspects, in order to identify the space for this study.

Previous Researches Outside China: In the realm of research outside China concerning the ARCS learning motivation model, there is a notable emphasis on both theoretical and practical aspects. Theoretical research centers on the sources of motivation theory, basic components of the ARCS learning model, strategies for stimulating motivation, and the design process.

On the basis of integrating numerous motivational theories, Keller (1979) first advanced the design concept that involved integrating motivational elements with the learning environment to effectively boost learners' motivation, which sparked a great wave in the entire field of education. Afterwards, Keller (1987a) performed additional investigations and presented the ARCS motivation model, which comprises four components. The study also elucidated relevant motivational strategies and a motivational design process consisting of four steps: analysis, design, development, and evaluation: "The ARCS learning model provides typology that helps designers and instructors organize their knowledge about learner motivation and motivational strategies" (Keller, 1987b, p. 6). Keller and Suzuki (2004) specifically classified the ARCS motivation model's application process into ten steps, based on the initial analysis, design, development, and evaluation. Keller (2010) pointed out that motivation design is to connect teaching with students' personal needs and goals, provide students with appropriate stimuli, provide tasks that are suitable for their level, and influence students' emotional experiences after success or failure.

Foreign countries have been actively exploring the practical applications of computers, multimedia, and remote education. In recent years, foreign scholars have made significant strides in combining this model with modern teaching technology. Through their efforts, many scholars utilized the ARCS learning motivation model to flipped classrooms, leading to notable improvements in students' motivation levels and academic achievements. Li and Moore (2018) introduced the ARCS learning motivation model in MOOC to explore how to design effective motivation intervention mechanisms to improve teaching effectiveness. Furthermore, S. Karabatak and H. Polat (2019) studied the achievement of the flipped classroom model designed with the fundamentals of ARCS learning motivation model. What's more, there are many foreign scholars used the ARCS learning motivation model in science teaching, while there are few studies combining it with English teaching. Z. Molaee (2015) found that applying the ARCS learning motivation model to oral teaching can effectively improve students' oral skills, such as fluency, coherence, vocabulary, grammar, accuracy, and pronunciation. J. Munawarah et al. (2018) applied the ARCS learning motivation model to oral teaching and found that the application of this model improved students' oral abilities in five aspects: pronunciation, grammar, vocabulary, fluency, and comprehension. E. Y. Jeon (2020, p. 13) said, "The findings reflected the expertise of the best English teachers in employing motivational strategies in their classrooms; all four motivational strategies were appropriated effectively in all phases of the instruction". He explored how to use these strategies more effectively in English teaching.

The contents mentioned above highlights that early research by foreign scholars on the ARCS learning motivation model about improving and innovating motivation stimulation strategies. Foreign scholars such as K. M. Reynolds et al. (2017) believed that the application of the ARCS learning motivation model has a profound and lasting impact on academic achievements, and Li and Keller (2018) proposed that future research on the ARCS learning motivation model should focus on solving educational problems and conducting teaching research based on strategy design.

Numerous studies have been conducted by foreign scholars to evaluate the efficacy of the ARCS learning motivation model in enhancing learners' motivation. These findings provide robust support for the application of this model in English reading teaching, as explored in this study. By implementing this model, learners are expected to be more engaged in the learning process, leading to better learning outcomes and academic achievement.

Previous Researches in China: In China, Professor Gao Liming was the first to conduct relevant research, who published an article titled "The Selection of ARCS Learning Models and Teaching Methods for Motivating Learning". The four components of the ARCS learning motivation model are thoroughly explained in the article, and the application of this model in teaching design is detailed extensively (Gao, 1997). Afterward, relevant researches including theoretical and practical began to be carried out in China.

Scholars in the domestic arena have started utilizing the ARCS motivation model in practical research, as the theory has been enhanced and developed over time. Combining the ARCS motivation model with modern educational technology for curriculum design and teaching, and applying this model to both micro-course design and flipped classrooms has been proven to effectively

stimulate students' learning motivation, enhance learning satisfaction, and improve teaching effectiveness through practice (Zheng, 2020). In high school, Yu Jianzheng (2007) pointed out that applying the ARCS motivation model to English teaching can greatly improve teaching efficiency. At the same time, this model has strong operability, practicality, and efficiency, making it highly necessary to promote it in junior high school English teaching. Niu Yumeng (2015) uses the ARCS motivation model as the teaching method and designs a thematic teaching model to guide the reading section to test whether this model can improve students' learning motivation. The feasibility and effectiveness of this teaching model have been fully demonstrated through practical research. Li Ting and Hou Yuanyuan (2016) explored how to implement reading teaching based on the ARCS motivation model in combination with reading teaching cases. In junior high school, Yang Fan (2013) applied the ARCS motivation model to English teaching, proposing that the application of this model can stimulate students' motivation, enhance students' interest, improve their learning state, and improve students' English grades. Zhu Jie (2019) elaborated on how to design corresponding teaching activities in English reading teaching to improve reading teaching effectiveness. Xu Xiaoyan (2017) believes that applying the ARCS motivation model to reading teaching can effectively cultivate students' reading ability, the implementation of the ARCS motivation model in reading pedagogy has shown promising results in improving students' reading skills. Wang Jing and Zhan Bei (2018) proposed that reading teaching based on this model can improve students' learning initiative, and thus improve the effectiveness of reading teaching. Ming Jing (2019) found that the application of this model can improve students' oral learning motivation, oral performance, and oral expression ability. Ou Guang' an and Li Rong (2021) applied this model to English grammar teaching, which can exactly enhance students' grammar learning motivation.

In terms of applying the ARCS motivation model to the English language discipline, research studies conducted in China outnumber those carried out in other countries. A significant amount of research has been conducted in colleges and vocational schools. While high school students in China experience a great deal of pressure, college students tend to be more relaxed. On the other hand, vocational college students often face challenges due to their insufficient English proficiency, low levels of motivation, and lack of self-discipline. Therefore, it is imperative to stimulate their interest and motivation to learn in the classroom. However, there is a dearth of research studies focusing on the junior high school stage, which is a critical period for students' growth and development, and lack of motivation can have a profound impact on their academic performance.

Reading teaching is of utmost importance, but there has been limited exploration into applying the ARCS motivation model to junior high school English reading teaching. The bulk of previous research has concentrated on developing teaching strategies derived from the model. It is imperative to broaden the scope of research to understand the efficacy of the ARCS motivation model in junior high school education. The purpose of this study is to examine the impact of implementing the ARCS motivation model on students' reading motivation and ability in the context of junior high school English reading instruction.

III. RESEARCH DESIGN

To better demonstrate the effectiveness of implementing the ARCS motivation model, this chapter will elaborate on the specific implementation of the experiment through five sections. This includes the research questions, subjects, and methods, and provides a detailed explanation of the research process.

Research Questions

The current teaching method of junior high school English reading has improved compared to traditional teaching, but it still focuses on sentence translation. Students lack initiative and enthusiasm in reading, resulting in low reading interest, insufficient reading motivation, and low reading ability. In order to improve the current situation of English reading teaching, enhance students' reading motivation level, and cultivate their reading ability and grades, this study applies the ARCS motivation model to junior high school English reading teaching, exploring the following issues:

1. How does English reading teaching based on the ARCS motivation model affect students' reading motivation?
2. What is the impact of English reading teaching based on the ARCS motivation model on students' reading ability?
3. What is the impact of English reading teaching based on the ARCS motivation model on students' reading performance?

Research Subjects

This study aims to conduct a fair and balanced comparative experimental research on two classes with similar grades over a period of 4 weeks, under identical conditions. Both classes will have access to the same conditions. The experimental class has 33 students, will use the ARCS motivation model for English reading teaching while the control class of 32 students will use the PWP model. The study will include 65 students, in grade one, aged between 12 and 14.

Research Instruments

In this paper, the author will use three instruments: questionnaires, tests, and interviews.

Questionnaires: Before the experiment, an English reading motivation survey questionnaire is distributed to two classes to learn about the current level of English reading motivation among students in both classes and to determine the reading motivation levels between the two classes. By analyzing the survey questionnaire data of the two classes, the impact of English reading teaching based on the ARCS motivation model on students' reading motivation was explored.

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Tests: Before the experiment, a pre-test was conducted on the reading comprehension test, and the results of the pre-test were collected from two classes. After ensuring that there was no significant gap in the scores between two classes, a teaching experiment was conducted in both classes for one month. The experimental class implements English reading teaching based on the ARCS motivation model, while the control class adopts a traditional reading teaching method. After the experiment, another set of test questions will be used for the post-test, and the results of the post-test for both classes will be collected; By comparing the reading scores of two classes before and after the test, this study explores the impact of English reading teaching based on the ARCS motivation model on students' reading abilities.

Interview: After the experiment, the author selects three students in experimental class of different levels based on their reading scores for interviews, with three students at high, medium, and low levels each. The interview will be conducted in the office in a one-on-one format. Before the interview, this study prepared corresponding interview questions and informed the interviewees of the purpose of the interview to gain their trust and alleviate their nervousness, so that the interviewees could express their inner thoughts truthfully. During the interview, timely record the information expressed by the interviewees. After the interview, conduct a detailed and systematic organization and analysis of the interview content. The purpose of the interview is, on the one hand, to supplement and explain the results of the reading motivation survey questionnaire, and to deeply explore the deeper thoughts of students. On the other hand, understanding the impact serves as a supplement and explanation to the experimental results.

Research Procedure

This research conducted a four-week teaching experiment from March 2024 to April 2024. Among them, the experimental class adopts an English reading teaching method based on the model, designing corresponding reading teaching strategies from four aspects of the model and integrating the designed strategies into reading teaching. The control class still adopts general reading teaching methods. The two classes use the same English textbooks, with consistent reading hours and teaching progress.

Before the experiment, this study conductes a pre-test using a survey questionnaire and reading comprehension questions. The objective is to determine if there was a noteworthy contrast in English reading proficiency between the two classes. Additionally, it aims to gauge the existing level of reading motivation and ability among students in both classes. After analyzing the data obtained from the pre-test, it can be concluded that there is no significant discrepancy in the present level of reading motivation and ability between the two classes.

The learning characteristics and motivational factors that influence junior high school students' English reading comprehension, the proposed pedagogical approach incorporates the four components of the ARCS motivation model into the English reading curriculum. The objective is to enable students to not only acquire a solid understanding of the content and knowledge of reading within the classroom setting but also to stimulate and sustain their motivation to learn English reading. This approach aims to ensure that students comprehensively learn English reading while maintaining a high level of enthusiasm towards the subject.

This study designed teaching strategies to stimulate students' English reading motivation from four aspects of the model. The designed motivational strategies were applied to reading teaching stages such as lead-in, pre-reading, while-reading, and post-reading. This study uses an actual teaching case to demonstrate the specific implementation process of English reading teaching based on the ARCS motivation model in the experimental class:

Table 3-1: Lesson Plan of Case Study

Lesson 7 Chinese New Year		
The Instructional Design Process		Design Intention
Study Process	Student Activities	
Step 1. Lead-in Brainstorming Ask students to think about what festivals they know.	Think about what festivals they know.	Enable students to recall background knowledge about festivals.
Step 2. Pre-reading ① Ask the students to look at the pictures and then learn or review the festivals. 1) Let the students put the festivals in time order. 2) Ask the students to look at the expressions and guess what festival it is. ② Pair work Ask the students to talk about what they often do on Chinese New Year's Day.	Look at the pictures and then learn or review the festivals. 1) Put the festivals in time order. 2) Look at the expressions and guess what festival it is. Talk about what they often do on Chinese New Year's Day.	Using pictures to help students learn or review English expressions for festivals. Use sorting and guessing games to remind students of background knowledge about festivals, especially the Spring Festival. Enable students to recall background knowledge about various activities during the Spring Festival

Step 3. While-reading	① Read passage and finish the T or F.	Help students practice their ability to quickly read and grasp the main idea.
① Fast-reading	②	Enable students practice their ability to read in detail and grasp detailed information.
Read the whole passage and finish the T or F.	1) Read each paragraph carefully and answer the questions.	Help students improve their reading and reasoning abilities.
② Intensive-reading		
1) Read each paragraph carefully and answer questions.	2) Answer the question about feelings of the character and find the clues.	
2) Read the passage again and answer questions.		
Step 4. Post-reading	Invite some students to report their answers.	On the basis of completing various classroom tasks, students have gained a certain understanding of the content and structure of the article, and then make judgments about the speaker based on the speech content.
Retelling	Present some pictures and phrases to guide students retell the passages one by one.	
Work in groups of three and try to retell the three passages based on the tips.		
Step 5. Conclusion	Emphasize application of expressions.	Help students consolidate their understanding of the article and internalize language knowledge.
Have a summary of what they've learned in this lesson.		

After completing the initial experiment, it is crucial to administer the same set of reading comprehension test questions for the post-test assessment. The main objective of this study is to investigate the impact of English reading instruction based on the ARCS motivation model on students' reading motivation. This will involve examining the relationship between reading motivation and reading scores following the post-test.

Additionally, comprehensive interviews were conducted in the experimental class after the experiment to gain a thorough understanding of the effectiveness of English reading instruction rooted in the ARCS motivation model. These interviews were aimed at providing deeper insights into the influence of the teaching model on students' motivation and their overall learning experience.

IV. RESULTS AND ANALYSIS

This chapter analyzes and discusses the study results. By comparing the English reading motivation questionnaire data and scores of the tests before and after the experiment between the experimental class and the control class, we aim to explore the effectiveness of junior high school English reading teaching based on the ARCS motivation model, that is the impact of English reading teaching based on the model on students' reading motivation and reading ability. In addition, after the experiment, this study conducted interviews in the experimental class to supplement and explain the experimental results with qualitative research and quantitative research, in order to compensate for the problem of unexplainable data.

Results and Discussion of Questionnaires

In March 2024, the author distributed a total of 65 questionnaires to the experimental and control classes, and collected 65 of them. The recycling efficiency is 100%. The questionnaire survey aims to understand the learning status of English reading among students in these two classes from four dimensions of the model. The specific data is as follows:

Table 4-1: Questionnaires Data Statistics of Experimental Class

Content of the survey	Strongly disagree	Disagree	Compromise	Agree	Strongly agree
1. I am interested in English reading.	0	2	13	14	4
2. I think the reading activities in the English reading class are abundant.	1	2	11	10	9
3. I think the content of the English reading class can attract my attention.	0	3	10	11	9
4. I think the teaching methods in English reading class can stimulate my curiosity.	0	3	12	14	4
5. I try to think about the questions the teacher asks in English reading class.	1	3	13	9	8

6. I will use my spare time to read.	2	3	16	8	4
7. I think learning English reading is just to get good grades.	1	4	11	13	4
8. I believe that learning English reading can improve my reading skills.	0	1	8	15	9
9. I believe that learning English reading can enrich my knowledge reserve.	1	1	5	17	9
10. I speak actively in the English reading class.	2	4	14	7	6
11. I often get praise and recognition from my teacher and classmates in English reading class.	1	5	14	7	6
12. I would be more willing to learn English reading if the teacher praises and encourages me.	1	1	11	8	12
13. I get a great sense of achievement in learning English reading.	1	3	13	9	7
14. I am satisfied with my performance in English reading comprehension.	2	8	15	3	5
15. I believe that I can learn English reading well if I work hard.	0	2	11	12	8
16. I have confidence in my learning English reading in the future.	0	2	10	11	10

Table 4-2: Questionnaires Data Statistics of Control Class

Content of the survey	Strongly disagree	Disagree	Compromise	Agree	Strongly agree
1. I am interested in English reading.	1	1	12	12	6
2. I think the reading activities in the English reading class are abundant.	0	1	10	10	11
3. I think the content of the English reading class can attract my attention.	1	2	10	12	7
4. I think the teaching methods in English reading class can stimulate my curiosity.	1	2	11	11	7
5. I try to think about the questions the teacher asks in English reading class.	1	2	11	11	7
6. I will use my spare time to read.	0	5	14	11	2
7. I think learning English reading is just to get good grades.	1	3	11	12	5
8. I believe that learning English reading can improve my reading skills.	1	0	10	15	6
9. I believe that learning English reading can enrich my knowledge reserve.	0	1	5	15	11
10. I speak actively in the English reading class.	1	2	14	9	6
11. I often get praise and recognition from my teacher and classmates in English reading class.	0	3	17	7	5
12. I would be more willing to learn English reading if the teacher praises and encourages me.	0	1	9	8	14
13. I get a great sense of achievement in learning English reading.	1	2	12	9	8
14. I am satisfied with my performance in English reading comprehension.	2	6	18	3	3
15. I believe that I can learn English reading well if I work hard.	0	1	12	10	9

16. I have confidence in my learning English reading in the future.	1	2	10	12	8

After analyzing the results of the questionnaires, the author found that the two classes share similar perspectives and challenges regarding English reading learning.

Firstly, regarding the aspect of attention, it has been determined that most students in both classes are interested in English reading. However, their excitement towards the subject could be improved. To increase engagement and interactivity in English reading classes, incorporating more creative and innovative teaching methods is recommended. Presently, the class activities lack diversity and interest. To enrich the learning experience, teachers could utilize various techniques such as multimedia resources or group discussions. By implementing these methods, students' interest in the subject can be sustained, and the classes can become more engaging.

Secondly, from the perspective of relevance, there are not enough students in both classes who actively read in their spare time. More than 70% of the total population believes that learning English reading is only for improving grades. Meanwhile, most students also believe that learning English reading can improve reading ability and enrich knowledge reserves. All of these indicate that students have a clear understanding of the purpose and significance of learning English reading.

In addition, from the perspective of confidence, based on the data displayed in the table, it is apparent that a mere 30% of students feel confident in their ability to read English. Nonetheless, providing students with encouragement and recognition during their studies can serve as a powerful motivator to improve their English reading skills. As such, teachers should offer appropriate praise and encouragement, particularly when students excel, to foster self-assurance and cultivate an interest in English reading.

Finally, in terms of satisfaction, based on data, it has been found that only a small number of students are entirely satisfied with their English reading learning, while most students believe that with hard work and dedication, they can improve their English reading ability. This indicates that students face difficulties in learning English reading and have not been able to achieve satisfactory results. However, they are all willing to put in the effort to enhance their English reading abilities. Therefore, teachers should assist students in finding appropriate learning methods based on their situations, and help boost their confidence, which will ultimately lead to an improvement in their academic performance.

Results and Discussion of Tests
The content in the following two tables respectively shows the average scores of students in two classes who conducted pre-test and post-test.

Table 4-3: Average Scores of Pre-test

Type of Class	Number of People	Average Scores of Pre-test
Experimental Class	33	7.9
Control Class	32	7.7

Table 4-4: Average Scores of Post-test

Type of Class	Number of People	Average Scores of Post-test
Experimental Class	33	8.9
Control Class	32	7.9

After conducting a comprehensive analysis of the test scores obtained from the two classes, it was discovered that the experimental class exhibited remarkable progress in their learning techniques and reading proficiency. The rigorous four-week study period had a favorable impact on their overall academic performance, with a significant majority of students demonstrating marked improvement. Conversely, the control class did not demonstrate any substantial enhancement in their English reading skills, despite being subjected to the same duration of study.

These findings strongly suggest that the teaching methods employed by the experimental class were highly effective in augmenting the students' reading abilities. The implementation of these methods resulted in significant advancement in the students' comprehension and application of English reading skills. Conversely, the control class's lack of progress may indicate a need for supplementary support and alternative instructional strategies to achieve comparable outcomes.

Results and Discussion of Interview
At the end of the experiment, the author randomly selects three students from experimental class for having a more comprehensive realization of the effectiveness of ARCS motivation model. Detailed questions are given in Appendix IV.

Q1. From your personal experience, is there any difference in the English reading class during this period compared to previous reading classes? If so, what are they?

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Student1: During this period, the English reading class has been very different from previous reading classes. In the past, when we were in reading classes, the teachers mostly led us to recognize words first, and then read the text directly. The classroom atmosphere was not very good. However, during this period, the teachers not only helped us recognize words and read the text, but also led us to play many small games and even showed relevant videos of the text, which enhanced our learning interest and helped us better understand the content of the text.

Student2: Compared to previous courses, I think the recent reading class is livelier and more interesting. For example, displaying some pictures and videos related to the learned content can help us understand the content of the text.

Student3: I had difficulty understanding English reading before, which led to my lack of confidence in learning English reading. During this period, I have become more interested in English reading and have become more motivated.

Q2. What were the problems with your English reading before? For example, problems such as difficulty concentrating in the class and linking new knowledge with old knowledge? Has the new English reading class helped you improve or solve these problems?

Student1: When I used to learn English reading, it was difficult for me to focus and understand the text correctly. The newly opened English reading class has very interesting teaching content, and I can concentrate more when reading. Moreover, I have found methods that are suitable for me to understand the content of the text in the new course, which has brought great help to my learning.

Student2: I think the previous English reading classes were a bit dull, and it was even harder to concentrate on uninterested content.

Student3: I often found it difficult to arouse my interest in reading in the past. The newly opened English reading class has a rich and interesting activity, and the classroom atmosphere is also very relaxed and active, which makes me more interested in English reading.

Q3. What activities and content do you enjoy in English reading classes? Do you think these activities and content are helpful in solving your problem? Please provide an example for explanation.

Student1: My favorite activity in reading class is to collaborate with classmates in small groups to interpret the protagonist's activities in the text. For example, in a recent class on spiritual enlightenment, the protagonist is Helen Keller. The teacher asked us to learn from Sally's teaching method for Helen Keller in the text, using body language to convey information to classmates. This activity is very interesting. It not only enhances my interest in learning, but also deepens my understanding of the content of the article. It also deepens my memory of new words during the game process.

Student2: I enjoy role-playing and group discussion activities in reading classes. Role-playing can make me more interested in reading content, and group discussions can make me learn about the different perspectives of other classmates and help me understand the reading content.

Student3: I like the part of the course where pictures and videos are displayed because this format allows me to learn based on a simple understanding of the content I have learned, and it gives me more confidence to be able to read and understand the reading content.

Q4. Do you have any difficulties in understanding during the reading learning process? What aspects would you like the teacher to supplement or set up in the subsequent teaching?

Student1: In the process of reading and learning, I often find it difficult to understand the correct semantics of the entire sentence due to the difficulty in understanding the meaning of words expressed in the sentence. I hope the teacher can provide more content related to word memory and understanding in the following teaching.

Student2: My problem in the process of reading and learning is not understanding some difficult vocabulary and sentences. I hope the teacher can set up some interesting activities in teaching to help us understand and remember words and sentences.

Student3: In terms of understanding, due to my lack of familiarity with many words, it is difficult for me to fully understand the content. In addition, my grammar also has significant problems, making it difficult to understand long and difficult sentences in the reading. I hope that in the upcoming courses, the teacher can supplement some grammar knowledge and expand more extracurricular knowledge.

Q5. Do you feel that you have gained anything from this period of reading classes? What are the specific gains? Has your English reading ability improved?

Student1: The reading class during this period has benefited me greatly. In the past, when I was reading English, I always mechanically memorized words and read texts, so it was difficult to improve my learning efficiency and the learning effect was not good. After this period of learning, I experienced the joy of English reading and found a suitable learning method, which greatly improved my English reading ability.

Student2: I feel more interested and motivated in learning English reading, and I have made significant progress in doing reading exercises, resulting in improved reading scores.

Student3: I believe that through this period of learning, my English reading ability has improved and I have become more confident in learning English reading.

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The interviews conducted with students revealed that English reading has been a challenging subject for them in the past. More specifically, students mentioned various difficulties they faced in reading English, such as difficulty in focusing, lack of interest, inadequate comprehension of the text, lack of mastery in reading skills, low confidence, and inability to achieve good grades.

However, through exposure to different forms of reading courses, students have gained valuable insights and skills to improve their English reading abilities. They have learned various reading techniques, such as skimming and scanning, to help them read more efficiently and accurately. Additionally, they have become familiar with different forms of reading materials, such as short stories, news articles, and novels, which have helped them to develop a better understanding of the English language.

Furthermore, students have found that incorporating different forms of English reading teaching, such as group discussions, interactive activities, and multimedia materials, has enhanced their interest in the subject. This approach has not only improved their English reading ability but also their overall performance in the subject. Students have reported a boost in their confidence levels, which has led to more positive outcomes, such as better grades and a more positive attitude towards learning English.

CONCLUSIONS

The author has adopted a practical research-oriented attitude during the four-week research of application and arrives at the following conclusions:

(1) English reading teaching based on the ARCS motivation model can improve students' reading motivation levels. There was a significant difference in reading motivation levels between the experimental class and the control class after the experiment. Compared to the control class, the reading motivation level of students in the experimental class has significantly improved. The overall reading motivation level of the experimental class, as well as the reading motivation levels have significantly improved. This indicates that compared to traditional English reading teaching, English reading teaching based on the ARCS motivation model can effectively improve students' overall reading motivation as well as their reading motivation levels in the four dimensions of the model.

(2) English reading teaching based on the ARCS motivation model can improve students' reading ability. After the experiment, the total reading scores and abilities of the experimental class students significantly improved. The reading abilities of detail comprehension, reasoning judgment, and summarizing the main idea were significantly improved, while the improvement in word meaning guessing scores and word meaning guessing abilities was not significant. This indicates that English reading teaching based on the ARCS motivation model can effectively improve students' reading ability.

(3) Based on various comparisons and observations, for the first experimental question, after the experiment, the reading motivation of the students in the experimental class significantly improved; For the second experimental question, after the experiment, there was a significant positive correlation between the reading motivation and reading ability of the experimental class students; For the third question, the reading scores of the experimental class students have significantly improved. Therefore, English reading teaching based on the ARCS motivation model can improve students' reading motivation, and reading ability, and thus improve their reading performance.

Based on the conclusions drawn from this study, the following suggestions are proposed for current junior school English reading teaching:

(1) Teachers should make more use of teaching aids in the daily English reading learning of junior high school students, and learn to combine them with advanced information methods to stimulate and strengthen students' motivation to learn English reading. By utilizing the four factors of the model, corresponding measures are taken in the teaching process, and adjustments are made promptly based on feedback provided by students in the classroom. Targeted solutions to address issues related to students' learning interests and motivation levels, and to bring the classroom teaching atmosphere into a relaxed and rigorous state.

(2) In English reading teaching activities, teachers should not only focus on stimulating and maintaining students' English reading learning motivation, but also closely pay attention to the inevitable connections that affect motivation levels. Based on the different stages, states, and feedback of students learning English reading, guide their English reading learning, improve the efficiency of English reading learning, and enhance their self-learning ability in English reading. The ARCS learning motivation model is just a teaching inspiration model that provides a systematic and complete set of guiding theories and methods on how to stimulate and maintain students' learning motivation. Therefore, in the actual process of English reading teaching, teachers should flexibly apply this set of strategies in English reading classrooms, taking into account the learning habits, psychological characteristics, differences in learning abilities, differences in subjective initiative in learning, as well as the characteristics and focus of textbooks, to achieve the expected results.

(3) The implementation of the ARCS learning motivation model in junior high school English reading teaching has put forward higher and updated requirements for the subject literacy and teaching ability of high school English teachers. As an English teacher in the new era, we must constantly learn professional knowledge, improve our teaching and learning abilities, and possess a certain spirit of research and research awareness to adapt to the reform of textbooks and the reform and transformation of exam requirements.

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REFERENCES

1) Jeon, E. Y. (2020). What makes them the best English teachers? An analysis of the motivational strategy use based on ARCS model. *Educational Research for Policy and Practice*, *20*(3), 1-16.
2) Keller, J. M. (1979). Motivation and instructional design: A theoretical perspective. *Journal of Instructional Development*, *2*(4), 26–34.
3) Keller, J. M. (1987a). Development and use of the ARCS model of instructional design. *Journal of Instructional Development*, *10*(3), 2–10.
4) Keller, J. M. (1987b). Strategies for stimulating the motivation to learn. *Performance and Instruction*, *26*(8), 1-7.
5) Keller, J. M. (2010). *Motivational design for learning and performance: The ARCS model approach*. New York: Springer.
6) Keller, J. M. & Suzuki, K. (2004). Learner motivation and e-learning design: A multinational validated process. *Journal of Educational Media*, 29(3), 229–239.
7) Karabatak, S. & Polat, H. (2019). The effects of the flipped classroom model designed according to the ARCS motivation strategies on the students' motivation and academic achievement levels. *Education and Information Technologies*, *25*(2), 1475–1495.
8) Li, K. & Keller, J. M. (2018). Use of the ARCS model in education: A literature review. *Computers & Education*, *122*(3), 54–62.
9) Li, K. & Moore, D. R. (2018). Motivating students in massive open online courses (MOOCs) using the attention, Relevance, Confidence, Satisfaction (ARCS) model. *Journal of Formative Design in Learning*, 2(2), 102–113.
10) Molaee, Z. & Dortaj, F. (2015). Improving L2 learning: An ARCS instructional motivational approach. *Procedia - Social and Behavioral Sciences*, *171*(1), 1214–1222.
11) Munawarah, J., Kasim, U., & Daud, B. (2018). Improving speaking sub-skills by using the attention, relevance, confidence and satisfaction (ARCS) model. *English Educational Journal*, *9*(3), 356–376.
12) Reynolds, K. M., Roberts, L. M, & Hauck, J. (2017). Exploring motivation: integrating the ARCS model with instruction. *Reference Services Review*, *45*(2), 149-165.
13) Gao, L. M. (1997). The selection of ARCS models and teaching methods for motivating learning. *Journal of Tianjin Radio and Television University*, (3), 13-16.
14) Gao, Z. C. (2022). Research on middle school English reading teaching based on ARCS motivation model. Qufu: Qufu Normal University.
15) Li, T. & Hou, Y. Y. (2016). A study on the strategies of the ARCS learning motivation model in high school reading teaching. *Contemporary Education Theory and Practice*, (5), 24-26.
16) Ming, J. (2019). The application of ARCS motivation model in middle school English oral teaching. Xi'an: Xi'an Foreign Studies University.
17) Niu, Y. M. (2015). Research on theme based reading teaching in high school English based on ARCS model: Taking Oxford module three as an example. *Contemporary Education Theory and Practice*,*7* (8), 37-40.
18) Ou, G. A. & Li, R. (2021). The application of ARCS motivation model in middle school English grammar teaching. *Journal of Education College of Xinjiang Production and Construction Corps*, *31* (1), 73-77.
19) Ren, Y. J. (2021). Research on the application of ARCS motivation model in middle school English reading teaching. Taiyuan: Shanxi Normal University.
20) Wang, J. & Zhan, B. (2018). The application of ARCS learning motivation model in middle school English reading teaching. *English Teacher*, (24), 119-124.
21) Xu, X. Y. (2017). Exploration of middle school English reading teaching based on ARCS motivation model. *English Teacher*, *17* (8): 60-64.
22) Yang, F. (2013). Research on middle school English classroom teaching based on ARCS motivation model. *Education Observation*, *2*(3), 41-43.
23) Yu, J. Z. (2007). The application of ARCS mode in high school English teaching. *Journal of Shandong Normal University*, (1), 34-38.
24) Zheng, Y. L. (2020). Teaching design and practice of flipped classroom from the perspective of ARCS model. *Modern Distance Education*, (3), 18-23.
25) Zhu, J. A. (2019). Study on middle school English reading teaching based on the "ARCS Learning Motivation Model" : Taking the Yilin version of English 7B unit 7 abilities as an example. *Middle School Teaching Reference*, (1), 35-36.

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APPENDIX

English Reading Motivation Questionnaire

Dear Classmate:

Hello! Thank you very much for participating in this questionnaire. This questionnaire aims to practically understand the situation of junior high school students' English reading learning, the current situation of junior high school student' English reading learning interests, strategies and abilities as well as the factors affecting junior high school students' motivation to learn English reading. There is no right or wrong in your answers and the results of the questionnaire will be used only for scientific research and will never be leaked, so we hope that you will not have any worries and will fill in the questionnaire according to your own real situation and ideas and put a "√" in the blank. In order to ensure the authenticity of the survey, please make questions independently and do not discuss with each other.

Thank you again for your positive co-operation!

Content of the survey	Strongly disagree	Disagree	Compromise	Agree	Strongly agree
1. I am interested in English reading.					
2. I think the reading activities in the English reading class are abundant.					
3. I think the content of the English reading class can attract my attention.					
4. I think the teaching methods in English reading class can stimulate my curiosity.					
5. I try to think about the questions the teacher asks in English reading class.					
6. I will use my spare time to read.					
7. I think learning English reading is just to get good grades.					
8. I believe that learning English reading can improve my reading skills.					
9. I believe that learning English reading can enrich my knowledge reserve.					
10. I speak actively in the English reading class.					
11. I often get praise and recognition from my teacher and classmates in English reading class.					
12. I would be more willing to learn English reading if the teacher praises and encourages me.					
13. I get a great sense of achievement in learning English reading.					
14. I am satisfied with my performance in English reading comprehension.					
15. I believe that I can learn English reading well if I work hard.					
16. I have confidence in my learning English reading in the future.					

Test (Pre-test)

Read the following passage and choose the best option from the four options given in each question. (5 questions in total; 2 points per question; full marks are 10 points)

Some birthday customs (风俗) are quite the same in many parts of the world—birthday candles, birthday games, and birthday cakes. But some customs are special in some countries. In China, many people eat long noodles and eggs on their birthday. They are a symbol of long life and good luck. Here are three pen pals of Li Wei talking about their customs.

Linda: I am fourteen. I come from Aruba. In our country, children take something special to school for their classmates and all teachers. Each teacher gives the birthday child a small gift like a pencil, an eraser or a postcard. The birthday child can wear special clothes, he or she needn' t wear the school uniform.

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Lucy: I am a fifteen-year-old girl. Denmark is my country. A flag is flown (飘) outside a window to show that someone who lives in that house is having a birthday. Parents put the presents around the child's bed while they are sleeping so they will see them at once when they wake up.

Tom: I am as old as Linda. I am from Brazil. The birthday child gets a pull on the earlobe (拉耳垂) for each year in my country. The birthday person also gives the first piece of cake to his or her most special friend or relative (亲戚), usually mom or dad.

1. What do people have on their birthday in many parts of the world?
    A.Birthday cakes.   B.Long noodles.
    C.Special clothes.   D.Birthday flags.
2. What do birthday children take to school in Aruba?
    A.A birthday cake.   B.Something special.
    C.A small gift.   D.A postcard.
3. Where is Lucy from?
    A.China.   B.America.   C.Denmark.   D.Brazil.
4. Who can see presents around his or her bed on the birthday morning?
    A.Li Wei.   B.Linda.   C.Lucy.   D.Tom.
5. Who can get the first piece of birthday cake in Brazil?
    A.The birthday person.
    B.Old people.
    C.Young children.
    D.The most special friend or relative.
Test (Post-test)
    Read the following passage and choose the best option from the four options given in each question. (5 questions in total; 2 points per question; full marks are 10 points)
    In Britain, Australia, Canada and a few other English-speaking countries, people don't stop celebrating when Christmas Day is over. they also celebrate the following day, known as Boxing Day. It is a popular day for giving additional (另外的) gifts. It has been celebrated for so long, but nobody exactly knows how it started.
    Some people believe Boxing Day began in the Middle Ages. In those days, in some special places there were special collection boxes where people threw money for the poor. The day after Christmas the boxes were opened, and the money was counted. Then the money went to helping the poor in the area.
    Others believe Boxing Day started about 300 years ago when some rich people had Christmas feasts (盛宴). they offered lots of food to their guests. Because many servants (仆人) were needed to make and serve the food, they could not celebrate Christmas with their families. To thank them, the rich people would put food into boxes for their servants to take home.
    Now Boxing Day has become a public holiday in some countries. Some people spend the day boxing up old or unwanted things and donating (捐赠) them to the poor. Many people are active in helping service organizations (组织) like the Red Cross.
    No matter how Boxing Day got its start, it's a wonderful time to donate things or give small gifts to people. By doing so, you can make someone's holiday much happier.
34. From the first paragraph we know that Boxing Day _____.
    A.has a long history
    B.is before Christmas Day
    C.is celebrated in only three countries
    D.is the day for buying gifts
35. In the Middle Ages people put _____ into the boxes.
    A.unwanted things   B.food
    C.old things D.money
36. What did the servants mainly do on Christmas Day?
    A.They took the food home.
    B.They had Christmas feasts.
    C.They made and served the food.
    D.They celebrated with their families.
37. Today Boxing Day is a time _____.
    A.to thank the rich people
    B.to make the guests happy
    C.to give people help or small gifts

D.to remember the old days

38. What's the best title (题目) for the passage?

    A.Christmas Day   B.Boxing Day   C.The Red Cross   D.The Middle Ages

Interview Outline

1. From your personal experience, is there any difference in the English reading class during this period compared to previous reading classes? If so, what are they?

2. What were the problems with your English reading before? For example, problems such as difficulty concentrating in the class and linking new knowledge with old knowledge? Has the new English reading class helped you improve or solve these problems?

3. What activities and content do you enjoy in English reading classes? Do you think these activities and content are helpful in solving your problem? Please provide an example for explanation.

4. Do you have any difficulties in understanding during the reading learning process? What aspects would you like the teacher to supplement or set up in the subsequent teaching?

5. Do you feel that you have gained anything from this period of reading classes? What are the specific gains? Has your English reading ability improved?