Application of ARCS Motivation Model in the English Writing Teaching in Senior High School

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Abstract: Writing is the main manifestation of students' language output ability and can also raise awareness of how language works. However, the current difficulties in English writing teaching, such as students' insufficient motivation, teachers' lack of attention to English writing teaching and imperfect English writing evaluation mechanism, have made the development of students' writing ability a major difficulty in English teaching. To address this situation, this paper attempts to integrate the four types of motivation strategies of ARCS model into senior high school English writing teaching in order to effectively motivate and maintain learners' enthusiasm for writing and improve the effectiveness of writing teaching.

Keywords: ARCS motivation model, English writing teaching, Learning motivation

1. Introduction

Writing, as one of the main means of language output, is a linguistic activity that expresses ideas and conveys information; is one of the most difficult communicative skills to acquire in English; is an important means of helping students to use language knowledge and improve comprehensive language ability. However, motivation is one of the main determinants of foreign language learning achievement, influencing learners' learning behaviour and learning outcomes as well as their ability to learn independently^[1]. Therefore, paying attention to the stimulation and maintenance of learning motivation in English writing teaching is a crucial dimension in improving students' English writing skills. The English Curriculum Standards for General High Schools (Revised 2020, 2017 Edition) (hereafter referred to as "The Standards") requires students to have "a strong interest in learning English, and a strong motivation to learn" in terms of learning ability; in writing, special emphasis is placed on "developing students' ability to express their intentions, opinions and attitudes creatively in the language they have learnt". At this stage, many senior high school students still have a certain degree of writing anxiety, resulting in a low level of motivation and poor writing skills. It has been shown that 16% to 20% or even 30% of the variance in students' academic performance is due to motivation. In view of this, this paper combines the ARCS motivation model with English writing teaching in order to address the problem of rational arrangement of writing process in English writing instructional design, while ensuring the activation of students' potential writing motivation and effectively improving the current situation of writing teaching.

2. The dilemma of English writing teaching

Students lack motivation in English writing. Motivation is an important factor affecting language learning, which is not only the source, but also the the continuous driving force of language learning^[2]. The differences in text structure and ideographic functions between Chinese and English make English writing which is originally unpopular, to be left out in the cold. In addition, the teacher-centered traditional classroom deprives students of their right to speak. Students are mostly passive in the process of English writing, and they have no choice about the content and form of the text, so it is difficult for them to take an interest in writing, which in turn makes them unable to participate effectively in learning and reduce to passive recipients of knowledge instead of active inquirers of learning.

Teachers do not pay enough attention to English writing teaching. For a long time, the research on

foreign language teaching methods has failed to provide useful guidance and inspiration for writing teaching, which makes teachers' awareness of the importance of writing teaching far less than that of reading and grammar teaching. In the process of writing teaching, teachers' teaching methods are traditional, boring and monotonous, and they do not run the work of "writing" through daily teaching, and in most cases they teach in a 'fill-in-the-blank' style, emphasizing only universal issues such as grammar and syntax and text structure, but rarely addressing students' individual problems in writing. This not only ignores the communicative function of writing, but also violates the communicative and motivational principles of writing teaching, which seriously frustrates students' motivation to write.

The evaluation mechanism of English writing is imperfect. The Standards emphasizes that evaluation should pay attention to the teaching process, be implemented in specific activities, highlight the principal position of students, and give full play to the counteracting effect of evaluation. Currently, China's teaching evaluation mechanism at the secondary education level is gradually transitioning from a single summative evaluation to co-existing with formative evaluation^[3]. However, the English writing teaching in China has serious problems such as "focusing writing results and neglecting process guidance" and "focusing on mechanical training and ignoring positive interaction". The first-line teachers fail to give full play to the role of formative assessment in promoting students' writing motivation. In short, the assessment mechanism dominated by summative assessment not only fails to accurately reflect students' mastery and application of language knowledge, but also tends to reduce students' self-efficacy and lose their confidence in English writing.

3. Review of domestic and international literature on ARCS motivation model

The ARCS motivation model was proposed by Professor John M. Keller in 1983 by synthesizing multiple motivational perspectives and based on the expectancy-value theory. This model is designed from the perspective of learners and put forward relevant strategies to stimulate and maintain the motivation of learners^[4], which includes two aspects: classify the elements that stimulate learning motivation; systematically explain the steps to stimulate learning motivation. Compared with other motivation models, this model advocates the mobilization of learning motivation as a clue to guide instructional design, and pays attention to both the stimulation of motivation in instructional design and the maintenance of motivation in the learning process. Since then, in terms of theoretical research, foreign scholars (e.g. Suzuki, Visser.J, Walter Dick, etc.) have focused on optimizing the elements of the ARCS motivation model and proposed a new model for improvement based on Professor Keller's research. In terms of practical research, the model is widely used in many fields such as teacher training, courseware design, multimedia, and vocational education. Thus, it can be seen that foreign scholars have applied the ARCS motivation model to a number of fields, especially in the field of teaching and learning, and tested its feasibility through practice, which has paved the way for the application of the model to more fields.

Scholar Gao Liming first introduced the ARCS motivation model into China in 1986, which has triggered the research boom since then. The research branches of integrating the ARCS motivation model with teaching are as follows. First, scholars have integrated the model into the teaching of English listening, speaking, reading, writing, and translation. Secondly, there are also some scholars combine the ARCS model with some advanced teaching models to build a new teaching model. Thirdly, some scholars design creative and practical English learning tools based on the ARCS model.

Domestic scholars have also verified the feasibility of applying the ARCS motivation model in several fields in practice, and provided feedback to the theoretical research of the model through empirical studies, which paved the way for the further improvement and development of the model, but there are also the following shortcomings. First, although the ARCS motivation model is widely used in the field of education, the number of studies that have been combined with English writing teaching in domestic is small and not comprehensive enough. Second, the research methods are mostly quantitative, and there is a lack of multiple data sources to improve the validity. Thirdly, there is a lack of follow-up studies on the application of the ARCS motivation model in senior high school English writing instruction. It is proposed to enhance students' learning attention through optimized instructional design and learning objectives design; to enhance students' learning self-confidence through group cooperation and improved learning support; and to enhance students' learning satisfaction through learning assessment and learning application.

4. The use of ARCS motivation model in instructional design

The following is an instructional design based on the ARCS motivation model, and the contents are taken from the writing section of Unit 5 Languages Around the World, Book 1 published by People's Education Press.

The activity is entitled write a blog about English study, in which students are required to reflect on and summarize the difficulties they have encountered in English learning and actively explore solutions to them, and then complete their writing in the form of a blog. The reading text is the responses of three Internet users to Wang Le's online question "What is the most difficult part of learning English?" The responses of Liu Wen, Jia Xin and Li Rui focused on the difficulties of listening to native speakers, using English appropriately and remembering words, which are the most common difficulties encountered by students in English learning in China. In terms of language use, the language of the three online followers is simple, flexible, casual and personalized, which is typical of the informal style of online blogging. Each follower not only raises his or her own questions, but also responds to the difficulties mentioned by the previous poster, aiming to inspire students with similar confusion.

Needs analysis is the first step in instructional design. In this paper, based on the simplified model of ARCS motivation analysis, the four dimensions of learners' motivation characteristics, learning tasks, teaching media and teaching courseware are taken as the focus of the analysis of learner motivation^[5]. Taking an English writing lesson in senior high school as an example, the current situation of student motivation is analyzed as shown in Table 1, taking into account the relevant research literature on English writing teaching and the development pattern of students' learning motivation and so on.

Based on the above analysis, teachers can set the following learning objectives. By the end of lesson, students will be able to: Apply the useful expressions to write a blog about English study, including how to explain their problems clearly and to give advice properly. Use skimming and scanning skills for the organization, the specific information as well as expressions about the blog. State their problems and give advice in a logical way, and actively explore and reflect on a variety of techniques and approaches to language learning. Develop a positive attitude in language learning.

Elements Dimensions	Motivation characteristics	Learners' attitudes towards learning tasks and activities	Learners' attitudes towards teaching materials and media
Attention	Unstable	Interested in new content	Interested in animations, sounds and videos
Relevance	Enjoy authentic writing	Writing activities based on situational assumptions are difficult for learners to acquire authentic motivation	Low relevance of multimedia-presented scenarios to learning content; haphazard production of courseware
Confidence	•	Text structure, grammar and syntax are considered to be barriers to successful English writing	The speed at which content is presented is not fully aligned with learner receptivity
Satisfaction	intrinsic motivation	A summative assessment-based assessment mechanism does not accurately reflect students' acquisition of language knowledge	Multimedia hinder teacher-student interaction; some students do not interact with the media

 Table 1: An Analysis of Senior High School Students' Motivation in English Writing from the Perspective of ARCS Model

4.1. Attention

Attention strategies include perceptual arousal, inquiry arousal and variability. Attention is the primary factor and prerequisite to stimulate and maintain learning motivation. To motivate students, their attention must first be aroused and maintained. In order to elicit students' intentional and post-intentional attention, teachers should pay attention to the following points during the bridge-in: Firstly, the activity is related to the theme of writing. It is a good way to motivate students and the

learner's motivation can be carried over into the overall teaching at the end of the activity. Secondly, the activity is designed to be appropriate to the receptiveness of the students. Thirdly, the amount of motivating information should be appropriate. Too much or too little information will not sustain students' motivation. Therefore, teachers should balance the 'quality' and 'quantity' of motivation when creating a gentle, enjoyable and effective motivational stimulus for students.

Perception is the reflection in the brain of the whole of something that acts directly on the sense organs, and is the process of organizing and interpreting sensory information. Only by activating students' perceptions in teaching can students' emotional awareness and desire for knowledge be triggered, the spark of students' thinking be ignited, and students be motivated to participate in English classroom teaching and eventually achieve the learning objectives successfully^[6]. In lead-in, the teacher shows the English interview video "Difficulties encountered by people in language learning around the world" and asks students to pay attention to the difficulties encountered by people from different countries in learning a foreign language. Contextual introduction is one of the most common and important methods of introducing new knowledge in English teaching. Most of the teaching content in the new version English textbook appears in certain specific contexts, so teachers can use pictures and videos to enable students to relate to their real life experiences. With the help of modern information technology, the teacher introduces the topic with dynamic videos to attract students' unintentional attention. In addition, the videos focus students' attention on the activity through visual and auditory stimulation and mobilize students' intentional attention so that they become aware of participating in learning. From unintentional to intentional attention, students' attention is always focused on the teaching and learning activities.

The Standards require teachers to "guide students to adopt an independent and cooperative learning style and participate in thematic inquiry activities, from which they can learn language knowledge, develop language skills, draw cultural nutrients, promote diversified thinking, build good character, optimize learning strategies, and improve learning efficiency". Inquiry-based teaching is a form of teaching activity in which teachers and students interact and participate together. Teachers should base on the teaching materials, refer to the actual living environment of students, and train students to use the knowledge they have learned to solve practical problems in life. After the video, students discuss the difficulties they encounter in learning English in groups of four with reference to the language expressions in the video, and discover the commonalities of language learning by comparing the language learning difficulties mentioned in the video, so as to reduce students' anxiety in English learning difficulties they encountered, and the teacher guides students to actively face their language learning difficulties and discuss the solutions together. At this point, the subject of the behavior is the students rather than the teacher, and the initiative of learning is given to the students, which helps them give full play to their initiative and stimulate their desire to explore knowledge.

As instruction continues, students are prone to perceptual fatigue, so teachers should maintain their interest after arousing their attention. Teachers have to understand and master the versatility of "motivation", and keep students' motivation in a good state from the perspective of teaching style, teaching equipment, communication style, and students' space of movement. Therefore, according to the teaching needs, teachers could enrich the teaching activities with changes in diagrams, tables, and educational media and change the style of expression and the tone to keep students' attention. After using the video to bridge in, students' interest is aroused, but by this time some students have begun to get caught up in the learning frustrations they have experienced or in discussions with others. At this point, the teacher uses a brainstorm activity to get students to come up with ideas for other people's English learning problems, so that students' motivation get maintained and their attention is quickly captured.

4.2. Relevance

Relevance strategies include goal orientation, motive matching and familiarity. Relevance is divided into purpose relevance and process relevance. After their curiosity has been aroused, students want to continue to understand "Why do I have to learn the content?" "What does this content have to do with me?" and so on. They need to know if what they are going to do or accomplish is relevant to them or if it will help them achieve their personal goals (purpose relevance). If the content is relevant to them, and the learners experience value in the learning process (process relevance), they will show more interest in learning and thus motivates positive learning motivation.

Learning objectives are the starting point and the destination of teaching. The objectives should be

determined in accordance with the actual level of students, but also higher than their current level and extended to their potential development level. According to The Standards, teachers set learning objectives in a comprehensive way from five dimensions: language skills, language knowledge, emotional attitudes, learning strategies and cultural awareness. Clarifying the purpose of learning is an important condition for arousing and maintaining students' intentional attention. With a clear goal, attention has a clear direction and focus. The clearer the goal and the more specific the task, the better it is for students to maintain steady attention, and it will attract students' attention like a magnet. Before a lesson begins, teachers can first show students the learning objectives to motivate them strongly to achieve the objectives, so that they can devote themselves to learning without external distractions. Before reading the blog, the teacher presents the learning objectives to the students using multimedia. After that, the teacher opens the class web-page and presents the students with the topic "The difficulties in English learning" created in advance. Since the topic is highly relevant to students' learning experience, students are interested in discussing it.

Need is an internal state in which individuals feel a certain lack in life and strive to obtain satisfaction, and is the source of individual behavior motivation. In teaching activities, teachers consciously make students aware that the learning activities they are engaged in are relevant to them, driving them toward the set learning objectives and ultimately facilitating learners to reach the learning objectives. Before reading the blog, students already know they need to learn to write blogs with the correct format and appropriate language to accurately describe their English learning problems and provide advice to others. Therefore, the teacher gives the question before skimming: "What two parts make up the blog? How is the problem described? How are the suggestions provided?" At this point, students have acquired the basic structure of a blog, how to describe English learning problems and provide advice. These questions are essential for students to know about blog writing. With these questions in mind, students engage in careful reading. Students then need to read the blog carefully to identify the English learning problems and related suggestions mentioned in the text to fill the table, as well as to accumulate useful expressions for describing the problems and making suggestions.

It is necessary for teachers to design teaching activities from students' real life experience, reproduce life situations in teaching, meet students' cognitive development level, let students explore the unknown from the known, use the language they learn to express themselves in English, and make them experience the practical application of English in life, so as to better stimulate students' interest and motivation, and develop their inquiry ability. After close reading, the students realize that there was no one in the text to offer suggestions for Li Rui's problems. Therefore, the students are invited to work in small groups to come up with ideas for Li Rui based on their own experiences. English vocabulary learning problem plagues the students at different stages, so the students are willing to express themselves on this topic.

4.3. Confidence

Confidence strategies include learning requirement, successful opportunities and personal responsibility. Self-confidence is a psychological characteristic that reflects an individual's degree of trust in his or her ability to successfully complete an activity and is a positive psychological state. Teachers should look for students' nearest developmental zone based on their current learning level and reasonably scaffold them in the teaching process, so that every student has the opportunity to be motivated to complete learning tasks and gain a sense of achievement and self-confidence.

American psychologists Rosenthal and Jacobson proposed the Pygmalion effect, in which people form an expectation or prediction based on their perception of a situation, which causes that situation to have the effect of adapting to that expectation or prediction. In the writing teaching, teacher breaks down the total teaching objectives, reduces the learning difficulty and enhances students' confidence in learning, and divides the writing process into five steps: clarifying the structure, accumulating expression sentences, establishing the main problem, collecting suggestions, and exchanging writing.

The nearest developmental zone theory believes that teaching is only good if it goes ahead of the current developmental level. The teaching should focus on the students' nearest developmental zone, provide students with challenging content, motivate them, realize their potential, go beyond their nearest developmental zone and reach the next developmental level, and then build on it to the next developmental zone. Some writing tasks in the textbook may not be well suited for motivating students to write for reasons such as layout logic. In practice, teachers should adapt the textbooks appropriately based on students' needs. Before starting the blog writing, students work in groups to share their English learning problems and make suggestions for others, taking notes of their suggestions. After the

discussion, and based on what they have learned in this lesson, students begin writing the first part of the blog, which is to describe the problem. They then exchange compositions with their peers and continue to complete the second part of the blog, which is to provide solutions. Students of different levels can complete writing tasks of different levels of difficulty. Higher level students can complete the blog on their own, while lower level students can use the writing template provided by the teacher to complete their writing. Students will experience the satisfaction of successfully completing the writing task and will also feel the joy of helping others.

Attribution is the process by which people make inferences about the causes of other people's or their own behaviour. The psychologist Weiner found that a student's attributions of high or low academic achievement are not only based on how well he scored in his own exams, but are also influenced by the feedback given by his teachers on his performance. Teachers should therefore help students to attribute success correctly through verbal motivation, emotional rewards and small amounts of material rewards to shape their behaviour and create positive motivation for learning. After the writing is completed, teachers should guide students to attribute their success in blog writing to their own learning abilities and efforts.

4.4. Satisfaction

Satisfaction strategies include intrinsic reinforcement, extrinsic rewards and equity. Satisfaction is the positive psychological feeling that occurs when a learner achieves a learning outcome that matches the desired outcome. Motivation for learning relies on learners being able to derive satisfaction from their learning experience.

An effective behaviour must be informed by some kind of feedback process to see if the purpose has been achieved. As the controller of the teaching and learning process, the teacher must use feedback to facilitate teaching and learning that is appropriately suited to the learning level of the students, so that their curiosity and desire for knowledge can be stimulated in the context they have set themselves, thus presenting the best of teaching and learning. A variety of approaches such as questioning, accompanying tests and reflecting can be used to organize and implement reinforcement and feedback strategies in the English writing teaching. During the evaluation session, the teacher organizes a further exchange of students' compositions for mutual evaluation. Students are then invited to share which one they think is outstanding and to elaborate on what makes it stand out, while the teacher provides as much positive feedback and positive reinforcement as possible on the students' work.

While it is vital to focus on motivating students intrinsically, the role of external rewards should not be overlooked. Proper assessment and the appropriate use of praise and criticism by teachers is also an effective means of motivating students. To effectively motivate students to write in English in the future, the teacher displays the best blog essays in class for mutual learning or reads out students' essays orally. The teacher should consciously help students to build up their self-confidence and sense of satisfaction, and give them positive comments and feedback whenever possible to motivate and maintain their motivation to write.

Assessment is an important part of the curriculum and a scientific assessment system is an important safeguard for achieving the objectives of the curriculum. Through assessment, students continue to experience progress and success in the process of learning English, to understand themselves, to build self-confidence and to promote the overall development of comprehensive language skills. Teachers can also obtain feedback on their English teaching, reflect on their own teaching and make appropriate adjustments to facilitate the continuous improvement of their teaching. In the English writing teaching, the teacher takes the initiative to build an English writing assessment system in which formative assessment is the mainstay and summative assessment is the supplement, insist on diversifying the subjects of writing assessment, and return teaching to the true qualities of collision of ideas and multi-dimensional interaction. The teacher should not only seize the opportunity to stimulate and sustain students' motivation in the process of teaching blog writing, and use motivation to drive students' long persistence and progress in writing, but also allow students to grow in self-assessment and group mutual assessment, so as to enhance students' sense of acquisition and satisfaction in learning to write.

5. Conclusion

As one of the important components of language, writing plays a crucial role in developing students' thinking ability and improving their comprehensive language skills. This paper integrates the ARCS motivation model into the English writing teaching in senior high school, focusing on one of the main reasons for the lack of learning motivation of learners in traditional English writing teaching, hoping to improve the current situation of writing teaching and promote the development of students' thinking ability and comprehensive language skills by effectively stimulating and maintaining students' learning motivation in English writing.

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