

The Dilemma and Path Improvement of Classroom Interaction Enthusiasm of Secondary Vocational School Students under Constructivism Theory

Zhang Lizhi^{1,a}, Liu Pei^{2,b}, Wei Jinliang^{3,c,*}

¹Guangxi Vocational and Technical College of Communications, Nanning, China

²Guangxi Vocational and Technical College of Safety, Nanning, China

³Guangxi University of Traditional Chinese Medicine, Nanning, China

^a18677229365@163.com, ^b2397185996@qq.com, ^c1586083391@qq.com

*Corresponding author

Abstract: Classroom teaching interaction is of great significance in promoting the cultivation of students' comprehensive ability. Therefore, how to stimulate the ability of secondary vocational students to learn independently in classroom learning and delegate the initiative of classroom learning has become an important problem to be solved urgently in the training of talents in secondary vocational colleges. So far, this paper discusses the realistic ecology of the classroom interaction enthusiasm of secondary vocational students from the perspective of constructivism theory. It is found that the interest and self-confidence of secondary vocational students in learning need to be strengthened, the interaction between teachers and students in classroom teaching is weak, and there is a lack of knowledge integration in classroom teaching. It is urgent to explore the path from the aspects of building a linkage mechanism between knowledge and learning interest, building an incentive mechanism, strengthening diversified interaction and communication between teachers and students in classroom, strengthening knowledge integration design, establishing appropriate teaching objectives and reward and punishment system and creating a suitable learning atmosphere, so as to improve the quality and efficiency of personnel training in secondary vocational colleges.

Keywords: Secondary Vocational School Students, Classroom Interaction, Constructivism

1. Introduction

To further promote the high-quality development of modern vocational education in China, the CPC Central Committee and the State Council issued the Opinions on Promoting High-Quality Development of Modern Vocational Education in October 2021. The document explicitly calls for "deepening educational and teaching reforms". It also advocates for the implementation of project-based teaching, situational teaching, and modular teaching to enhance the quality of classroom instruction^[1]. In July 2023, the Ministry of Education issued a notice on the key tasks of accelerating the construction and reform of the modern vocational education system. The notice clearly stated that it was necessary to build a first-class core curriculum for vocational education, lead the "classroom reform" of vocational education, and improve the quality of personnel training^[2]. It can be seen that the classroom teaching and education connotation of vocational education should also conform to the development trend of the times. Then, from the perspective of realistic ecology, the traditional vocational education classroom has been unable to follow the actual needs of the times for the cultivation of vocational education talents, especially the lack of enthusiasm for classroom interaction in secondary vocational education. This is because in essence, secondary vocational education is often regarded as a 'terminal education'. Its educational purpose is to carry out targeted customized training for students according to the needs of the national social economy for talents and the employment standards of enterprises^[3]. Obviously, as the reserve force of skilled talents in China, the classroom teaching interaction and students' learning inertia have become the key to restricting the education of secondary vocational colleges. It is urgent to explore the dilemma of the classroom interaction enthusiasm of secondary vocational students from the perspective of constructivism theory, and explore the optimization path based on the integration of theory and reality.

2. Academic interpretation:the connotation and relevance of constructivism theory

2.1 Constructivism theory

From the theoretical definition, constructivism is a theoretical framework involving knowledge and learning. It focuses on the active role of learners and advocates that learning is a process in which learners use existing knowledge and experience to create new meaning and understanding. According to the theory of constructivism, students do not enter the learning environment with a blank mind. They have built relevant knowledge and experience in their daily activities and previous learning experiences, and hold personal opinions on various phenomena. The teaching principle points out that students should be given the autonomy to solve problems and support them to think deeply about what they have learned and the learning process, so as to promote the development of their self-management ability and enable them to become autonomous learners. Constructivism emphasizes that with the help of teachers, learning should be learner-centered, and students are the active subjects of information processing and meaning construction. It emphasizes the active construction of the knowledge learned by the learning subject, as well as the learner's initiative and the situational nature of learning. This educational concept is in line with the requirements of the current secondary vocational education curriculum. Therefore, the decentralization of learning initiative of secondary vocational students based on constructivism is an important means to stimulate students' learning^[4].

2.2 An appropriate analysis of constructivism and the enthusiasm of classroom interaction of secondary vocational school students

According to the constructivist view of students, although the results of secondary vocational students are not ideal, they have their own knowledge and experience, and have their own ideas. The learning motivation of students is the internal factor of students' active learning. In the classroom, teachers can guide students to learn according to the existing experience of students. The meaning of knowledge is a process of active construction. Secondary vocational teachers can also timely broaden the educational space according to the needs of students' overall development, provide students with different professional knowledge reserves, and make learning closer to students' life. To delegate the initiative of classroom learning, teachers need to change the traditional situation of teachers' speaking and students' listening, design a variety of interactive activities, and give the initiative of classroom learning to students, so that students can truly become the masters of the classroom.

3. Plight of reality:the current situation of classroom interaction enthusiasm of secondary vocational school students

3.1 Internal deficiencies: secondary vocational students' interest in learning and self-confidence is not high, affecting classroom interaction

Studies have shown that although many students choose to enter secondary vocational schools after the completion of compulsory education to learn professional skills and master a skill^[5], However, only a few students have relatively clear learning objectives and positive learning attitudes. Constructivism theory emphasizes that learning is a process in which individuals actively construct knowledge, which requires learners to have strong learning motivation and self-confidence. However, in the group of secondary vocational students, most students generally lack this self-driven learning motivation. Their self-confidence is weak, and it is difficult to carry out effective career planning. They also lack lasting interest in learning and have not developed good learning habits. Secondly, some students have lost their confidence and interest in learning in the previous compulsory education stage. Therefore, compared with the theoretical course content, secondary vocational students are more inclined to practical teaching content. However, in fact, constructivism theory holds that learning should be closely related to students'life experience and actual needs, so as to stimulate students' interest and motivation in learning. Furthermore, the school's non-standard and non-strict requirements for students' learning attitudes also make some secondary vocational students who are already tired of learning more unable to learn, thus aggravating their weariness and affecting the effectiveness of education.

3.2 Lack of interaction: the interaction between teachers and students in classroom teaching of secondary vocational students is weak, which affects classroom interaction

Scholars have conducted in-depth empirical research on the learning motivation of secondary vocational students. The results show that in the secondary vocational education environment, teachers often fail to pay full attention to students' subjectivity, and tend to unilaterally emphasize the teaching content, while ignoring the interaction with students. This teaching method fails to pay attention to whether students are interested in the teaching content, and also fails to ensure whether students actively participate in the learning process, which makes it difficult for students to experience the fun of learning and the satisfaction of classroom participation and integration. Jing's research reveals that up to 85% of students feel that the classroom atmosphere is dull and unattractive^[6]. In fact, constructivism theory holds that teacher-student interaction is not only a process of information transmission, but also an important way of emotional communication, value shaping and social skills training. In effective teacher-student interaction, teachers can timely understand students' learning needs and confusion, and provide personalized guidance and support; at the same time, students can also learn to listen, express and cooperate in interaction, and improve their social communication ability and team cooperation ability. However, in the current classroom teaching interaction in secondary vocational schools, these important educational goals are often difficult to achieve due to the weak enthusiasm of teacher-student interaction.

3.3 Weak Integration: Insufficient Knowledge Integration in Classroom Teaching for Secondary Vocational Students Undermines Classroom Interaction

Although teachers in secondary vocational schools often come from diverse academic backgrounds, their understanding of the goals and missions of vocational education tends to be superficial, lacking innovative pedagogical thinking. Furthermore, their teaching methods are often rigid and unvaried, relying heavily on repetitive questioning methods that lack expansive perspectives. Finally, the curriculum overemphasizes theoretical knowledge while neglecting practical application, resulting in diminished student engagement and suboptimal learning outcomes. Constructivist theory emphasizes that learning is an active process of knowledge construction, where learners continuously build and refine their cognitive frameworks through interaction with the environment. However, in current secondary vocational classrooms, insufficient knowledge integration prevents students from connecting new information with existing cognitive structures or deepening understanding through practical application. This not only compromises learning effectiveness but also restricts their holistic development and smooth transition into future career pathways.

4. Rescue: the optimization path of secondary vocational school students' classroom learning initiative decentralization

4.1 Build the linkage mechanism of knowledge and interest in learning

Secondary vocational students prefer practical, operational and knowledge-based learning methods, that is, applied learning methods, and least like theoretical learning methods^[7]. Application-oriented learning methods can effectively impart new knowledge, new theories and new technologies to students through practical operation, teamwork and other forms, and students can also gain new knowledge and new skills in a vivid learning atmosphere. The theoretical learning method focuses more on logical thinking and understanding of conceptual knowledge, emphasizing multi-dimensional in-depth learning based on the theoretical paradigm. Usually, the theoretical courses are boring. Obviously, this learning method is not suitable for the teaching mode of secondary vocational students. Compared with theoretical learning, secondary vocational students prefer to obtain the understanding and application of knowledge through the curriculum setting of practical operation. Therefore, in order to mobilize students' interest in learning and fully combine knowledge with students' interest, teachers must innovate traditional teaching methods and learn to creatively integrate theoretical knowledge into practical operation. For example, through vivid practical operation links, case analysis, group activities and other forms, the learning motivation of internal secondary vocational students can be stimulated, so as to promote them to continuously improve their knowledge reserve and skill mastery level. As good as the story, touching story, if not immersed in it, it is difficult to read a novel^[8]. Therefore, it is very important to build the internal relationship between knowledge and learning interest.

4.2 Build incentive mechanism to shape students' self-confidence

Based on the background that the society generally has low expectations for secondary vocational students and low academic qualifications, it is believed that only highly educated intellectuals are the backbone of future social and economic development, resulting in more sensitive psychology of secondary vocational students. They are not confident in their studies, and their self-identity is getting lower and lower in the learning process, and there are obvious unconfident behaviors. Therefore, in the curriculum teaching objectives of secondary vocational schools, we should not only stop at spreading knowledge and acquiring skills; it should be one of the teaching objectives to promote the all-round development of students' physical and mental health in teaching. This requires that teachers must learn to adjust their classroom skills and learn to build and operate a teaching practice system that is more effective in motivating students in the classroom teaching process. In the process of teaching and educating people, "teachers always play a very important role in leading by example. By adopting teachers' own methods of setting an example, naming and praising, and actively guiding, we will constantly guide students to build confidence and strengthen their internal driving force of learning. For example, teachers can use the method of asking questions by name to train students' self-expression ability, and at the same time actively correct students' standing questions in the process of answering, that is, facing most people, so that as many students as possible in different positions can learn different angles and ways of standing in the classroom. At the same time, students are asked to answer the questions with 'I answered, thank you!' At the end of the sentence, other students need to give a warm applause to the students who have answered the questions. Based on the public encouragement of this kind of classroom, students can be constantly trained to answer teachers' questions confidently and calmly in front of everyone, train their ability to express their thoughts in public, and constantly shape the self-confidence and expression ability of secondary vocational students.

4.3 Strengthen the diversified interaction between teachers and students in the classroom

In the practice of education and teaching in secondary vocational schools, classroom conflicts between teachers and students are common. Although they are well handled afterwards, the harm to teachers and students is still difficult to eliminate^[9]. Therefore, positive and diversified teacher-student interaction activities can effectively improve the teacher-student classroom relationship and alleviate the original conflicts and misunderstandings. First, a set of instructional gestures should be established for classroom use. In the interactive classroom, teachers can set up some simple gestures to make students better express their learning situation. The teacher needs to carry out special pre-class training and practical exercises on the classroom sign language before the beginning of the class, so that students can listen to the command neatly. For example, when the teacher asks the student whether he understands, he can ask the student to extend his left hand, the palm of the hand towards the teacher indicates that he understands, and the back of the hand towards the teacher indicates that he does not understand. The setting of gestures is conducive to teachers' understanding of students' mastery of knowledge points, and can also effectively avoid the confusion of classroom discipline caused by students' answering in unison. Through the pre-agreed classroom sign language, the atmosphere of classroom teaching can be reconciled, and all students can be mobilized to participate in it to further strengthen the tacit understanding and interaction between teachers and students in classroom interaction. Secondly, integrate the strategy of positive psychological suggestion as a foundational element. The premise that positive psychological suggestion can play a role smoothly is the establishment of classroom rules, and rules are a vital part of the activity. On the whole, teachers can motivate them through the words of positive psychological hints, that is, they need to innovate the original traditional way of greeting before class. That is to say, before class, the teacher bows and says 'good classmates' first, and then stands up by all the students, bows and says 'good, good, I'm good' from the heart. Through the edification of this pre-class culture, it can not only enhance the interaction between teachers and students, but also constantly positive self-psychological hints, and establish the self-confidence of secondary vocational students. Finally, teachers should actively integrate into the student group in class. Actively walking to the students' side for interactive questioning or body language communication can strengthen the integration of teacher-student relationship and promote the further development of students and teachers' emotions. At the same time, teaching in-depth into the student group can also strengthen the appeal of the teacher's classroom and mobilize students' participation in the classroom.

4.4 Trinity, strengthen knowledge fusion design

Traditional teaching methods are more simple closed-loop questions at the knowledge level, lacking

openness and thematicity. The setting of effective classroom questions should be open and distinctive. The setting of such questions can greatly promote students' active thinking and heated discussion. This requires teachers to clearly and carefully locate the main line of knowledge, theme content and interactive mode of the teaching content in this section before class, give full play to the setting role of open questions, mobilize students to think actively, and delegate the initiative thinking right of secondary vocational students to students, so as to make them play the driving force of internal problem thinking. First of all, the setting of open questions must be based on the deep understanding and combination of the main line of teaching content knowledge. Compared with blind problem construction, purposeful learning can fully stimulate students' thinking on problems. Therefore, the design of the problem must be the most core knowledge entry point in this course. Secondly, open questions should be infectious. Infectious open questions can effectively substitute students into the situation of problem thinking, make students immersive, and change the defects of the original closed-loop problems.

Einstein once said: 'Asking a question is often more important than solving a problem. In view of the secondary vocational school students in the past learning experience often academic performance is not ideal, resulting in them in the classroom to answer questions when not confident. Setting open questions in the classroom can not only enable students to develop the ability to think independently, but also enable secondary vocational students to establish self-confidence and stimulate their desire to actively answer questions. The characteristics of open questions are that there is a guiding direction but no standard answer, which can be discussed and shared and discussed in groups. In fact, students' ability to answer questions shows that they have thought deeply about knowledge and its internal relations, and have begun to learn actively. Setting open questions helps secondary vocational students to understand the knowledge they have learned to a certain extent, thus enhancing their interest in learning professional disciplines. Secondly, the best solution after setting up open questions is to hold a group discussion, then sort out the answers, and then speak by the group representatives. In the process of group discussion and learning, the learning methods and solutions of the same group of students can communicate and learn from each other. Teachers can guide them in a timely manner and build a knowledge framework, so that secondary vocational students can deal with practical problems through thinking, analysis and trying, and then make them open and enlightened, insightful, so as to deeply understand and flexibly use the knowledge they have learned. This is the essence of 'heuristic teaching'.

4.5 Establish appropriate teaching objectives and reward and punishment system

The formulation of a balanced assessment and feedback system serves to promote academic engagement and motivation in secondary vocational students. First of all, establishing teaching objectives is an important step before classroom teaching. The teaching objectives include three levels: mastering knowledge and skills; learning process and methods; cultivate emotions, attitudes and values^[10]. In fact, the goal of classroom teaching is the specific dismantling and implementation of the overall goal of the curriculum. Therefore, teachers must clarify the goal of curriculum teaching before the beginning of the curriculum, which helps students to understand the learning tasks and knowledge points of this class. Secondly, a reward and punishment system should be established before classroom teaching. Secondary vocational students are in adolescence, will have a strong self-esteem, eager to others to their affirmation. On this basis, teachers can establish many incentives. A potential mechanism involves implementing a merit-based point system where each student has a personal account. Within a structured framework, students earn points for honors, fostering continuous engagement through cumulative rewards, with results displayed on a public scoreboard each semester. For students who rank before the exam, they can give honor certificate encouragement or praise by name in front of class members. On the contrary, if a student violates classroom discipline in the classroom, the teacher reminds him in the classroom, educates or punishes him alone after class, but not directly criticizes him in the class. Education or even direct punishment, because for secondary vocational students in adolescence, direct punishment in public will have a negative effect and cannot achieve the effect of the original education. Therefore, when carrying out education and punishment, we should fully consider the self-esteem of students and reduce the psychological burden of students as much as possible.

4.6 Situations shape people and create a suitable learning atmosphere

Constructivist learning theory holds that knowledge is not simply imparted by teachers, but acquired in a specific context and socio-cultural context through the cooperation of learners with others (including teachers and peers), the use of necessary learning resources, and the construction of meaning. Under this theoretical framework, 'situation', 'collaboration', 'conversation' and 'meaning construction' constitute the

four core elements of the learning environment^[11]. The learning of knowledge and skills is inseparable from situational teaching. Whether the situational design is vivid or not will directly affect the effect of situational teaching. The smooth development of situational teaching in the classroom puts forward higher requirements for teachers, and any material resources cannot be directly used. First of all, the creation of the situation should be based on the curriculum materials, combine knowledge with situational materials, and teachers need to do a good job in the choice and change of the situation; secondly, teachers should think and understand the situation from the perspective of students, and the difficulty of situation design should be moderate, so that students can speak and do things in the situation, create a situation that is consistent with the personality characteristics and learning characteristics of secondary vocational students, anticipate possible problems in advance and find solutions to ensure the smooth implementation of situational teaching; finally, the creation of the situation should be novel and interesting enough to attract students' attention. In order to be closer to the taste pursuit of secondary vocational students, teachers should communicate with students more, go into their hearts, explore things that students are interested in, and carefully create teaching situations with this as material.

Acknowledgements

In 2022, the key project of education and teaching reform and research of Guangxi University of Traditional Chinese Medicine's key project 'Sports is a good doctor', the innovation and practice of micro-course teaching of Taijiquan course under the concept of sports is a good doctor'(2022B067); Research on the theory and practice of ideological and political education of college students in Guangxi in 2025 College-level project of Guangxi Vocational and Technical College of Safety Engineering : Exploration and innovation of the professional development path of ideological and political education integration of counselors in higher vocational colleges from the perspective of generative AI (GAZY2025SZ010)

References

- [1] General Office of the Central Committee of the Communist Party of China, General Office of the State Council. *Opinions on promoting the high-quality development of modern vocational education*[EB]. Central People's Government of the People's Republic of China. (2025-05-05). https://www.gov.cn/gongbao/content/2021/content_5647348.htm.
- [2] Ministry of Education, *Notice on Accelerating the Construction and Reform of Modern Vocational Education System*[EB]. Central People's Government of the People's Republic of China. (2025-05-05). https://www.gov.cn/zhengce/zhengceku/202307/content_6892671.htm.
- [3] Fan Wei, Lu Suju. *The development experience of comprehensive high schools in Japan and its enlightenment to the reform of secondary vocational schools in China*[J]. *Vocational Education Forum*, 2010(19):89-91.
- [4] Wei Na. *Research on the promotion of learning motivation of secondary vocational students based on constructivism*[J]. *Overseas English*, 2017(08):14-15.
- [5] Zhang Wenlong, Liang Chengai. *Investigation and analysis of learning motivation of secondary vocational school students under the background of education '9+3' plan*[J]. *China Vocational and Technical Education*, 2015(23):62-64.
- [6] Jing Xuwei. *Research on improving the effectiveness of classroom teaching of public basic courses in secondary vocational schools*[J]. *China Vocational and Technical Education*, 2016(07):81-85.
- [7] Liu Songlin, Xie Limin. *Research on the preference of higher vocational students' learning style*[J]. *Journal of Capital Normal University (Social Science Edition)*, 2014(03):143-148.
- [8] Xue Xiaohuai, Zhang Naifang, Chen Qiulong. *How to increase the enthusiasm of students in professional classrooms*[J]. *Research on Higher Engineering Education*, 2021(S1):21-23.
- [9] Wang Xueqin. *Research on the causes and countermeasures of classroom conflict between teachers and students*[J]. *China Vocational and Technical Education*, 2010(08):16-20.
- [10] Blum. *Taxonomy of Educational Objectives*[M]. Foreign Language Teaching and Research Press. November 2009, 1st ed. 25-30.
- [11] Wang Jinhui. *Give students the initiative to learn-take "how to understand the region" as an example* [J]. *Basic disciplines*, 2019, (9), 144-145.