

Research on Self-education Innovation of Higher Vocational Colleges in China Based on Sukhomlinski's Educational Theory and History and Attribution Analysis Method

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ABSTRACT

The history of education is a dynamic and continuous development process. In 2012, a survey on students' participation in class in a higher vocational college in China showed that teachers' approachable attitude was an important factor for college students to actively participate in class learning. Taking history as a mirror and combing the historical background of education in the former Soviet Union, this paper studies the reality of Sukhomlinski's self-education theory in implementing self-education for modern higher vocational students in China. In this paper, the attribution analysis method is used to analyze the higher vocational students and their classroom participation under the background of intelligent education in modern society, and an innovative research, which is named Four-self Education-- self-respect, self-supervision, self-restraint and self-improvement, is carried out in order to provide guidance for the sustainable improvement of classroom teaching quality.

Keywords: Sukhomlinski's self-education theory, Attribution analysis, Group analysis, China higher vocational self-education, Four-self education, Classroom teaching quality.

1. INTRODUCTION

Looking at the development history of China's vocational education theory, China's vocational education is an education to train professionals and high-quality technical talents [1]. It is a realistic topic and an objective historical requirement to carry out the concept of high-quality development and ask for high quality classroom teaching. Classroom, teachers and students are the core factors affecting classroom quality, and therefore are also the focus of reform. Facing the western economic blockade and containment of China in 1950s, learning advanced educational experience from the former Soviet Union, the first socialist country in the world, triggered an objective demand for reform. Educational history is a dynamic and continuous development process. Sukhomlinski's case study on the transformation of underachievers in the former Soviet Union concludes that changing teachers' attitude towards students and arousing

students' self-education are the main factors to promote students' transformation, which triggered the historical process of the typical case experimental research in China vocational education, and also revealed the importance of educational research to arouse college students' self-education. In 2012, the Education Supervision Office of a higher vocational college in China distributed to students a questionnaire on the classroom participation of Integration of Teaching, Learning and Doing (Integration Teaching). Finally, 169 valid questionnaires from 6 classes were received. The results of data analysis show that 50% of students think that the approachable attitude of teachers is one of the important factors for college students to actively participate in the Integration Teaching classroom learning. The results of this study are consistent with those of Sukhomlinski. By reflecting on the results of this cross-country, cross-culture and cross-century convergence, this paper holds that teachers'

teaching attitude and students' learning attitude are external factors affecting the quality of classroom teaching, while the education to arouse college students' self-education is an internal factor, and external factors play a role through internal factors. It is of great practical significance to study the group characteristics of higher vocational students under the background of intelligent education in modern information society, as well as explore innovative methods to arouse modern higher vocational students' self-education.

2. HISTORICAL EVOLUTION ANALYSIS OF SUKHOMLINSKI'S EDUCATIONAL THEORY AND PRACTICE

2.1 Historical Background and Practical Significance of Studying Soviet Education Based on the Historical Analysis Method

Lenin pointed out, "From the 1940s to the 1990s, the progressive ideological circles in Russia explored, studied and experimented with incredible perseverance and self-sacrifice, and they finally found the effectiveness of revolutionary theory of Marxism after lots of suffering." [2]

When studying the historical experience of education in the former Soviet Union, it is necessary to consult historical documents, and process written and physical historical materials from a scientific point of view before selecting the materials that can best reflect the real history so that the scholars can discuss history, think about reality and look forward to the future. Engels once pointed out, "developing materialism, even if based on a single historical example, also requires a large number of critically examined and fully mastered historical materials." [3]

Looking up the educational works of Sukhomlinski in the former Soviet Union, it is found that the discussion on arousing students' self-education has historical value across times and regions. "The education that arouses people to carry out self-education is a real education." [4] "Boys and girls, you are standing on the threshold of independent life. To be an excellent person, we must educate ourselves. Think deeply about the significance of great people's exposition on self-education!" [5] In 1949, President Mao Zedong pointed out that people should educate and reform themselves by democratic methods, and he

emphasized that the purpose of self-education is to let people really know themselves, deeply examine themselves, find their own problems and change themselves on their own initiative. [6] In youth, the complex process of forming moral beliefs is manifested in the need to understand their own development ... It is for this reason that the educational task of schools has undergone essential changes: not only should students be educated, but also be attracted to the process of self-education." [7] The above discussion in the historical documents still has important practical significance for higher vocational students in China.

2.2 The Significance of Studying the Case of Sukhomlinski's Underachiever Transformation in the Former Soviet Union

The theory of self-education is an important innovation which results from Sukhomlinski's educational theory and its guidance in his educational practice. By chance, Sukhomlinski took part in the invigilation of a mid-term exam instead of another teacher. Combined with the case study of his underachievers' transformation, he got enlightenment. He thinks there is a problem with the long-standing practice that invigilators always keep a straight face to monitor the students who take the exam. Closely monitoring students' every move, fearing students' plagiarism, has suppressed students' thoughts and emotions and caused great mental pressure on underachievers. In order to solve this problem, in this invigilation, Sukemulinski encouraged the student to rely on his own efforts and inspired him to mobilize his existing knowledge to complete the exam. As a result, unexpectedly, his encouragement changed an underachiever who had been in a state of failing, and correspondingly changed the preconceptions of the former teachers and classmates about the underachiever, thus greatly improving the self-confidence of the student. Based on this case, Sukhomlinski found that self-esteem, self-respect and self-consciousness are the keys to the student's transformation. Therefore, he came to the conclusion that education is to educate students to be self-confident and to believe that people can accomplish various tasks and realize people's noble ideals by relying on themselves. Education is to educate students in self-respect, self-supervision, self-restraint and self-improvement. In other words, education is to educate students to educate themselves. [8]

The experiment of Sukhomlinski's case study shows that self-education is the key factor for students to really accept education. This assertion fundamentally negates the concept of attaching importance only to educators and external conditions, i.e., it denies the behavior of simply adopting traditional methods such as coercion, repression, restriction and bondage to implement education, and re-recognizes the important role of the educated, i.e., the subjective internal mental state and positive initiative of students. Sukhomlinski's research shows that educators should fully trust students, enhance their self-confidence, and let students get self-education in self-respect, self-respect, self-consciousness and self-improvement. This is not only a change in educational concept, but also a major breakthrough in educational theory and an innovation with great theoretical significance and practical value. It also provides theoretical and practical basis for exploring ways to improve the quality of classroom teaching in higher vocational education in China.

3. RESEARCH ON SELF-EDUCATION INNOVATION OF A HIGHER VOCATIONAL COLLEGE IN CHINA BASED ON ATTRIBUTION ANALYSIS

3.1 Group Analysis of Higher Vocational Students Against the Background of Intelligent Education in Modern Information Society

Most students in modern higher vocational colleges in China live and grow up in the self-contradiction of multiple choices of intelligent education in the information society. Most vocational college students enter vocational colleges directly from middle school. Their ideas about life are diverse, but change frequently. They lack sense of purpose and responsibility, as well as the spirit of hard work. With a simple life experience and few setbacks, they have little self-management, weak ability to control their emotions and insufficient self-care ability. Their material life is abundant, but their lifestyle is simple and diverse, plus many of them are homebodies. They can get extensive and diversified information from the Internet. They have diverse lives and choices, but they are self-enclosed and at a loss. The growing process of students is very uncoordinated, which is manifested in the inconsistency between their age

and psychological maturity, that is, they are older but their psychological development is immature. Their personalities have a high adaptability, but difficult to shape. Their self-emotional management and their self-awareness are insufficient, and their ideals and world outlook are unclear. With a fragile inner world, they are not competent enough to tolerate setbacks and have a strong dependence on their families. They have less self-supervision and weak self-restraint. Their social cognition is not well recognized, and there are hidden dangers of cognitive psychological crisis, especially their indifference to law, leading to great problems in consciously abiding by laws, regulations and school rules. For example, their daily behavior is arbitrary, and the phenomenon of being late, being absent, leaving early and leaving the classroom at will occurs from time to time; they have not yet established a correct outlook on life and values so that bullying happens occasionally; influenced by wrong thoughts, some students have developed bad habits such as smoking, drinking and online gambling.

Generally speaking, the current students in higher vocational colleges pursue self-worth but lack self-awareness, advocate individual freedom but lack discipline consciousness. They have pragmatic life ideals but lack lofty aspirations. Therefore, it is of great practical significance to strengthen the Four-self Education for higher vocational students under the background of intelligent education in modern information society.

3.2 Attribution Analysis of the Survey Results of Students' Class Participation in a Higher Vocational College in China

In 2012, the Education Supervision Office of a higher vocational college adopted the method of investigation and research, and issued a questionnaire on classroom participation of Integration Teaching. Altogether 171 paper questionnaires were distributed to 6 classes, and 169 valid questionnaires were recovered. See "Table 1" for the individual results of this survey.

Table 1. Individual results of the investigation on classroom participation in the Integration of Teaching, Learning and Doing

Connotation	Average	Higher Vocational Classes	Ordinary Five-year Classes	Integration Classes
A. Every time you answer a question, you can get a normal-time score.	37.43%	32.14%	37.18%	40.00%
B. The learning results are displayed before the whole class.	23.98%	35.71%	24.36%	18.46%
C. The teacher's approachable attitude	43.27%	50.00%	50.00%	32.31%
D. When students encounter difficulties in doing, teachers can provide effective solutions in time.	28.07%	57.14%	19.23%	26.15%
E. Every learning task can solve practical problems.	14.62%	35.71%	14.10%	6.15%
F. Teachers share a lot of interesting and useful information.	8.77%	14.29%	10.26%	4.62%
G. Other	0.58%	0.00%	1.28%	0.00%

The results of data analysis show that on average, 43.27% of the respondents, including 50% of higher vocational students, think that the approachable attitude of teachers can make students participate in Integration Teaching more actively. The attribution method is used to analyze the data and the following results are obtained.

First of all, teachers' non-verbal communication in classroom teaching is an important factor affecting students' learning effect. Relevant research in the United States shows that in the information transmission between people, 7% depends on words, 38% on tone and intonation, and 55% on body language. Therefore, it is suggested that teachers should be full of emotions and passion in class, which will play a positive role in the information transmission function of emotions.

Secondly, although students are attributed to the external cause of the teacher's approachable attitude, the external cause must work through the internal cause. If students don't have the thirst for knowledge, the demand for skills and the requirement for improving their self-ability, then no matter how good the teaching attitude of teachers is, it can only play a role in students' learning in the classroom, but not in students' application of what they have learned, nor can it play a long-term role in improving their skills. The solution is to arouse students' enthusiasm, let them use the knowledge of autonomous learning to analyze and solve problems, and follow the law of cognitive development from perceptual knowledge to rational knowledge and then guide practice. They should self-examine what knowledge points and skills they have not mastered,

what doubts and problems need to be solved, and what aspects need to be improved. Only by self-examination and self-reflection in each class can students improve themselves.

In addition, 40.00% of the students in the Integration Class think that the rule that the normal daily score can be added every time they answer questions is the reason for their more active participation in Integration Teaching. That figure is 2.57 percentage points higher than the average. 26.15% of the students in the Integration Class recognize the effectiveness of this practice that when students encounter difficulties in the Doing process, teachers can provide effective solutions in time. This value is 1.92 percentage points lower than the average. 6.15% students think that the completion of each learning task can solve practical problems, which is 8.47 percentage points lower than the average. Those results show that students are more concerned about teachers' evaluation, but less concerned about whether their practical ability has been improved. That is due to students' lack of learning expectation, which needs teachers' active guidance and help. It also shows that students do not pay attention to self-evaluation. In fact, only when students reflect on their actual situation and have an objective evaluation of their learning and application on the basis of teachers' evaluation, can they truly find their problems that need to be improved in their studies and achieve self-satisfaction and self-improvement.

3.3 Research on the Innovation of Four-self Education for Higher Vocational Students

After the analysis of higher vocational students and their classroom participation under the background of intelligent education in modern society, it is concluded that there is still a lot of room for improvement in the development of Four-self Education for students in higher vocational education in China. Intelligent education in modern information society provides technical support for the realization of innovative practice methods of Four-self Education, and also puts forward realistic requirements of keeping pace with the times.

3.3.1 Carrying Forward the Excellent Tradition of Vocational Education in China and Enhancing Teachers' Four-self Education Concept

When looking back to the history of China's modern vocational education thought, Huang Yanpei (1878-1965), who was also called Huang Renzhi, is one of the most famous educators. As a democratic educator, he is also the founder and a theorist of modern vocational education in modern China, as well as the founder of China Vocational Education Association. As a real patriot, he once joined the United League of China (founded by Sun Yet-sen in 1905) and participated in the planning of Jiangsu Uprising. In 1915, he visited the United States, and after learning from the world's advanced vocational education experience, he put forward the famous vocational education theory: the ultimate goal of vocational education is to "make the unemployed have jobs and make the employed happy." He believes that vocational education is "using educational methods to make everyone get the supply and fun of life according to their personality, and at the same time do their duty to the group". The purpose of vocational education is to seek the development of personality, to prepare for personal livelihood, to prepare for service to society and to enhance productivity. [9] He devoted all his life to reforming China's vocational education and the old education system, which was based on scholar-bureaucrat education and official standard and divorced from social production and life. He made great efforts to build vocational education focusing on civilian education and mass education. He has made a very important contribution to the development and progress of vocational education in China.

It is the responsibility of vocational educators to carry forward the excellent tradition of vocational education in China, and it is an urgent task to comprehensively enhance teachers' concept of Four-self Education. Teachers should care about every student and teach them to respect themselves and others. Teachers should teach students self-supervision and self-restraint, give positive affirmation and be kind to every student who can be cautious and independent and can manage his own emotions and time. In the eyes of teachers, students should not be divided into advanced and backward. Teachers should mold every student with a kind heart, adopt a lenient and strict attitude towards naughty students, be more tolerant, encouraging and appreciative, and be less critical, complaining and accusing.

Teachers should understand students' needs and ideas, communicate with students more, and encourage mutual understanding instead of forcing students to do things. Teachers should adopt the principles of trust and respect, care for every student and treat everyone equally and sincerely. "One child has achieved good results in his own mental work, while another child can't do it for the time being." "What one child gets is exactly what the teacher wants to teach him, but another child hasn't got it yet. However, it doesn't mean the latter doesn't want to learn." [10] Teachers should believe from the heart that "everyone can become a talent and give full play to their talents". [11] Teachers should believe that every student can become a talent. They have the desire to be a good student and have the potential of active learning and healthy growth. The role of Four-self Education should be brought into full play and a harmonious teacher-student relationship, where the teachers and students firmly believes in each other's good intentions, should be established. [12] It is a phenomenon that has never happened in human history to give full play to students' subjective initiative and self-education ability so as to truly realize harmonious education, which is also a great welfare of socialism. Chinese society must make all young people aged seven to seventeen sit behind desks without exception (in fact, there are millions of young people aged eighteen to twenty-five in universities), because without universal education, it is impossible to obtain qualified workers and all-round development people. [13] Therefore, it is of great significance to improve teachers' concept of Four-self Education.

3.3.2 *Innovating Modern Self-education Methods and Improving Students' Comprehensive Quality Level*

The development of higher vocational education has dual value goals: employment-oriented skills education and high-quality development-oriented education. Subject education is the foundation, and its fundamental purpose is to lay a solid foundation of knowledge. Skills education is based on subject education and its main function is to apply what you have learned in breadth and depth and skillfully use it. Subject education belongs to the scope of all-round development, which is a common requirement for all students and plays a common role. The mastery and application of skills belong to the category of ability and talent. Although skills have technical standards, the situation of applying what have been learned varies from person to person, which has the nature and function of personality. The mastery and application of skills not only have the basis, or commonness, of skills, but also show obvious characteristics because of individual proficiency. Just like the production of China's famous Langhao brush, even though the material of Langhao is the same, each Langhao brush has subtle differences. There are no two identical leaves and no two identical products in the world. Even if the same spare parts are produced according to unified standards on the production line, there will be differences between post-processing and sales packaging. Higher vocational education is an education to cultivate high-quality skilled talents, which has both the characteristics of vocational education and higher education. Higher education has an advanced nature, and it is a common requirement for all students. Vocational education highlights the nature and role of occupation in the breadth and depth of skill mastery and application, and enables students to be more professional. Advanced nature lies in professionalism, and professionalism plays a role through advanced nature.

Higher vocational education should innovate modern self-education methods and attach importance to the improvement of students' self-education level. Firstly, an intelligent education that applies modern digital technology should be constructed under the background of information education, so as to provide diversified development opportunities for vocational school students. This kind of intelligent education should be multi-selective, suitable for students of different ages, suitable for different learning methods online and

offline, and meet the different development needs of students. Secondly, the traditional teaching method of attaching importance to theory over skill should be reformed. The new method of theory plus practice, or Integration of Teaching, Learning and Doing, which has the characteristics of digitalization, personalization and individuality, should be adopted. Thirdly, the summative assessment system should be reformed and the formative assessment system, including credit bank and other measures, should be established. Knowledge assessment should be combined with students' self-education achievements and volunteering activities to serve society, giving students the opportunity of being evaluated by both knowledge and quality. The evaluation method which attaches importance only to scores and skill certificates should be put to an end. Fourthly, the simultaneous development of students' professional skills and comprehensive quality, which is also a dual-cycle development that not only attaches importance to the improvement of practical employment skills but also the future career of vocational students, should be realized.

4. CONCLUSION

The vivid image of the ideal life and the beauty of moral feats should not dazzle the teenager, but should illuminate his path and make all the good things in his heart clearly stand out. This is exactly what people have to do, pointing out the way to the ideal for young hearts. [14]

Three guiding objectives of higher education to meet the new changes in the world are pertinence, quality and internationalization. [15] By studying the case of underachievers' transformation in the former Soviet Union and the investigation results of students' classroom participation of Integration Teaching in a higher vocational college in China, it is concluded that students' self-education is extremely important. The modernization of education needs the modernization of talents. Under the conditions of digital education and educational modernization today, on the basis of combing the historical experience of education in the former Soviet Union, studying Sukhomlinski's achievements in education, and carrying forward excellent tradition of vocational education in China, it is known that it is of great practical significance to innovate modern self-education methods, promote Four-self Education, ensure the implementation of educational laws, regulations, rules and national educational principles and

policies, implement quality education, improve educational quality, and promote the scientific development of education.

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