

Curriculum Construction and Suggestions for High School Health Education

Haoyu Wang¹

¹ Beijing No.27 High School, Beijing, China

¹Corresponding author. Email: CHN-HaoyuWang@ieee.org

ABSTRACT

Background: This article introduces the implementation of health education curriculum construction in Chinese junior high schools based on 8 years of practical experience. It includes the design of health education curriculum, the implementation of health education curriculum, the evaluation of students' learning and teachers' teaching effectiveness in health education curriculum, and the effectiveness of health education curriculum construction. **Methods:** The experiences and lessons learned from the implementation of health education curriculum at Beijing No. 27 High School since the autumn of 2015 have been discussed, and the curriculum construction model has been explored, which will be incorporated into future curriculum practice. **Results:** After 8 years of health education curriculum construction and teaching practice, Beijing No. 27 High School has constructed a relatively complete health education curriculum framework. Through curriculum teaching practice, the teaching quality of health education curriculum has been improved, students' health concepts, knowledge and skills have been cultivated, and a large amount of health education curriculum resources have been accumulated. **Conclusion:** This brief and comprehensive report on the teaching practice of high school health education curriculum provides the possibility for studying the construction of health education curriculum in China.

Keywords: Curriculum construction, Health education, High school, Practical experience, China.

1. INTRODUCTION

The Ministry of Education of the People's Republic of China issued the "Guidelines for Health Education in Primary and Secondary Schools" and the "Guidelines for Mental Health Education in Primary and Secondary Schools (Revised in 2012)" in 2008 and 2012, respectively. (Ministry of Education of the People's Republic of China, 2018; Ministry of Education of the People's Republic of China, 2012) The issuance of these two guidelines is a work requirement for health education and further strengthens the work of health education in basic education schools. In 2016, the State Council issued the "Healthy China 2030" Plan Outline, which proposed to increase the intensity of school health education, incorporate health education into the national education system, and make health education an important content of quality education at all stages of education. (State Council of the PRC, 2016) In 2019, the "Opinions of the State Council on Implementing the Healthy China Action" was issued, and the "Healthy China

Action (2019-2030)" was introduced at the national level, which clearly proposed the implementation of the primary and secondary school health promotion action and made arrangements for the action goals and measures. (State Council of the PRC, 2019; State Council of the PRC, 2019) In 2021, the "Opinions of the Ministry of Education and Five Other Departments on Comprehensively Strengthening and Improving School Health and Health Education in the New Era" was released, which clearly requires schools to ensure the time of health education and improve the effectiveness of health education teaching. (Ministry of Education of the People's Republic of China, 2021) The introduction of policy documents on health education by various departments fully demonstrates the importance that the country attaches to the health literacy of adolescents.

Health literacy is an important component of students' comprehensive quality and core development literacy. (Rong Gao, 2017; Wenxuan Yang, 2011) Health knowledge is an important

content of school teaching,(Minhang Liu, 2006)and the comprehensive improvement of middle school students' health literacy depends on the learning of systematic health education curriculum.(Delong Pang, 2023) Middle school students are in an important stage of growing their bodies, learning knowledge, (Huiqiang Liu, 2023; Lingming Wang, 2022) and forming good behavioral habits, making them the best group to receive health education. (Guwei Huan, 2023) Through the study of health education curriculum, students not only learn scientific and systematic health knowledge and skills, (Qiaoyan Pan, 2022) but also develop good behavioral habits from an early age. (Ji Liu, 2022; Lijing Xie, 2022) These will benefit every middle school student for a lifetime and have a good impact on their parents, neighbors, friends, and society. (Xiandi Zhuo, 2022; Shaowei Pan, 2022) Therefore, from the perspective of cultivating a new generation with good physical and mental health and adaptability, in China, the true formation of everyone's awareness of hygiene, the establishment of healthy behaviors and lifestyles, the establishment of noble moral sentiments, and the promotion of social progress and spiritual civilization construction largely depend on the quality of school health education curriculum. (Xiaozan Wang, 2022; Xiaozhe Tang, 2022)

With the rapid development of technology and the continuous progress of society, the content and form of health education are being updated, and higher requirements have been put forward for health education curriculum. Beijing No. 27 High School has conducted health education curriculum construction and practice based on students' physiological and psychological characteristics, as well as the needs of life safety and disease prevention work.

2. METHODS

2.1 Phase 1: Design of Health Education Curriculum Construction

Before implementing health education curriculum, there should be an overall construction design, which includes the overall objectives of the course construction, core competencies of the course, course themes, course types, and the design of student evaluation methods.

2.1.1 Overall Course Objectives

Health education is centered around promoting students' health. By systematically carrying out school health education, cultivating students' health awareness and public health awareness, mastering necessary health knowledge and skills, promoting students to consciously adopt and maintain healthy behaviors and lifestyles, reducing or eliminating risk factors that affect health, and laying a solid foundation for lifelong health.

2.1.2 Core Competencies of the Course

The core literacy of subject curriculum is an important manifestation of the educational value of the subject.(Shanshan Chang et al., 2021) Through course learning, students gradually develop correct values, character, and key abilities. The health education curriculum mainly includes two core competencies: "health awareness" and "health behavior". Health awareness, establishing correct health concepts, and mastering health knowledge in five aspects: healthy behavior and lifestyle, disease prevention, mental health, growth and development, adolescent health, safety emergency response, and risk avoidance. Clearly, health is our responsibility, and healthcare is our obligation. Healthy behavior can apply correct health concepts and scientific methods, observe health phenomena, analyze health problems, and solve health related problems in daily life. Apply health knowledge to scientific practice and promote the harmonious development of body and mind.

2.1.3 Course Topics

The course theme is divided into five aspects, including: healthy behavior and lifestyle, disease prevention, mental health, growth and development and adolescent health, safety emergency and risk avoidance, etc. The five themes of health education curriculum are both relatively independent and mutually influencing in their internal logic (see "Figure 1").

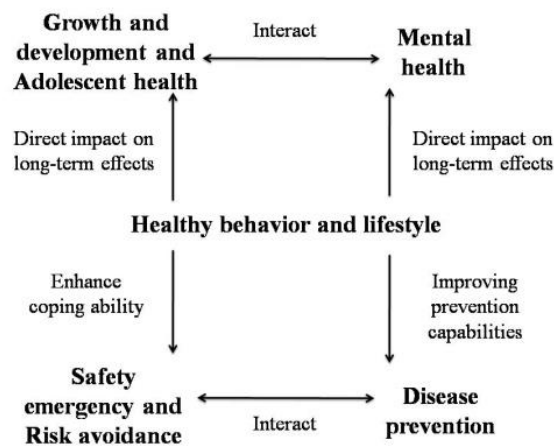


Figure 1 Internal logic diagram of five themes in health education curriculum.

2.1.4 Course Type

The course types are divided into theoretical curriculum, practical curriculum and evaluation curriculum. Theoretical curriculum aim to teach theoretical knowledge of the subject; Practical curriculum focus on cultivating students' skills; Evaluating curriculum is a comprehensive examination of students' knowledge and skills. The three types of curriculum are both independent and interrelated. Theoretical course teaching serves practical course teaching and provides basic services to cultivate students' practical abilities. Practical course teaching is established on the basis of systematic professional theory course teaching and is carried out under the guidance of professional theory. Through practical course teaching, it can make up for the lack of emotional

understanding in the theoretical course teaching process, strengthen students' re-understanding of theoretical knowledge, and solve some specific problems that have not been solved in the theoretical course teaching process. Evaluation of curriculum is an evaluation of the learning effectiveness of students' curriculum, which can test the teaching effectiveness of theoretical and practical curriculum, and even the quality of the entire subject curriculum. Through the evaluation of students' learning effectiveness, problems can be analyzed, solved, and the teaching content of theoretical and practical curriculum can be improved and enriched, providing a basis for exploring new professional theoretical and practical fields. There is a logical relationship between the three types of curriculum (see "Figure 2").

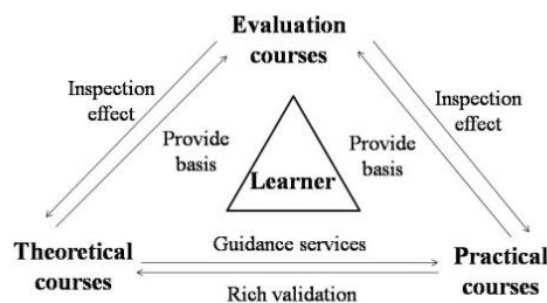


Figure 2 Internal logical relationship of course types.

Theoretical curriculum, practical curriculum, and evaluation curriculum are the forms of

implementing course theme content. During the learning process of health education curriculum,

learners comprehensively improve their attitudes, behaviors, concepts, knowledge, skills, and other aspects. There is a close logical relationship

between learners, course types, and course themes (see “Figure 3”).

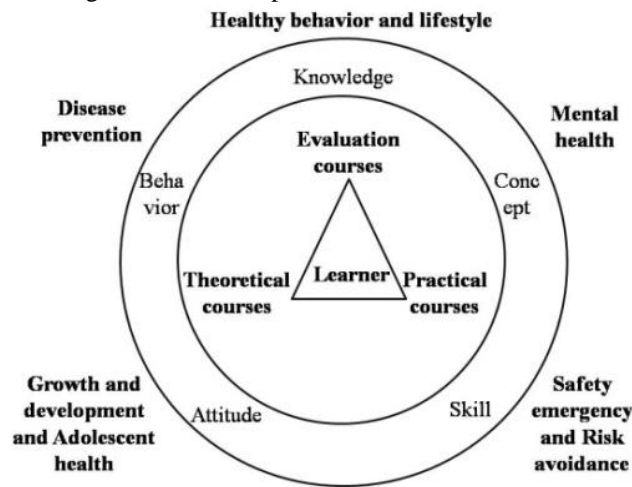


Figure 3 The logical relationship between learners, course types, and course themes.

2.1.5 Design of Student Evaluation Methods

Student evaluation refers to the value judgment made based on certain standards, using certain techniques and methods, with students as the evaluation object. The health education curriculum mainly focuses on task based assessment, emphasizing the importance of process based assessment. The maximum score for course evaluation is 100 points, with 60 points for evaluation task scores and 40 points for daily course performance scores.

2.2 Phase 2: Implementation of Health Education Curriculum

Course implementation refers to the implementation process, means, and methods of health education curriculum based on course construction design. This includes teaching guidance strategies, teaching methods and methods.

2.2.1 Course Teaching Guidance Strategy

Teachers develop teaching guidance strategies based on the planning, objectives, content, and activity methods of health education curriculum, and they can adopt a combination of "autonomy", "planning", and "purposefulness" to learn course content. "Autonomy" refers to allowing students to freely choose relevant course information that they are interested in before class. Teachers only require students to collect information extensively when

selecting information, rather than specifying a specific type of information. "Planning" refers to the ability to focus on the actual situation of school-based curriculum, reflect on students' actual situations, and collect and analyze information. "Purposefulness" refers to the process of learning course content, with clear learning objectives and corresponding specific requirements that run through the entire learning process, in order to obtain more and better course information, accumulate knowledge, and cultivate abilities.

Teachers guide students to obtain course content according to the course plan. The teaching time of health education curriculum is limited, and students' learning time is also limited. Teachers focus on helping and cultivating students' ability to independently learn course content. Choose materials that are suitable for students' actual situations and close to their daily lives, stimulate students' learning enthusiasm, and consciously analyze teaching materials from multiple perspectives to obtain knowledge nourishment. In the learning process, according to the psychological characteristics of students, choose materials with novel ideas, unique perspectives, fresh knowledge, and easy to understand as many aspects and channels as possible. Encourage students to choose materials independently, stimulate their interest in course materials, and guide their learning of course content.

Teachers develop teaching guidance strategies based on students and curriculum. Students can take exploratory learning as the main learning mode.

The teaching section of the new course is guided by questions, providing resources, designing activities, and allowing students to draw their own conclusions through analysis, evaluation, communication, and discussion. Teachers make full use of case method strategies, and choose materials that are suitable for students' actual situations and close to life as teaching materials. In terms of application methods, there are teacher comments, student analysis, group discussions, etc. The organic combination of autonomous learning and collaborative learning requires each student to browse curriculum resources, actively express their opinions, and give timely feedback in class. In terms of collaborative learning, students are organized to carry out group discussions, classroom exchanges, cooperative design and other learning activities.

2.2.2 Course Teaching Methods and Teaching Methods

The teaching methods used in the teaching process of health education curriculum, in addition to the conventional teaching methods, Case method, discussion methods, there are more distinctive situational teaching methods, experiential learning teaching methods, film and television integration teaching methods.

2.3 Phase 3: Evaluation of the Effectiveness of Health Education Curriculum

The effectiveness of implementing health education curriculum is a test of course construction design and implementation, consisting

of students' learning outcomes and teachers' course teaching outcomes.

2.3.1 Evaluation of Student Learning Effectiveness

The evaluation of students' knowledge, through learning the course content, enables them to have a correct understanding and understanding of the knowledge of health education curriculum, establish a healthy concept, and achieve the expected results through testing the phased knowledge objectives of students. The practical evaluation of students is that after learning the course content, they can apply the content learned in class in real life, and can correctly and scientifically apply health knowledge and skills. Teachers evaluate students' daily classroom performance. During the course of teaching, students actively interact with teachers, and can engage in independent exploratory learning before class. Students can divergent thinking, draw inferences from each other, be good at thinking, actively participate, and have good daily classroom learning performance. The daily classroom performance of students affects their knowledge learning and practical behavior. The learning and practical behavior of knowledge also reflects students' daily classroom performance, and the three are interrelated and interactive. There is an inherent logic among the evaluation of students' knowledge, practice, and daily classroom performance (see "Figure 4"). The evaluation of students' learning effectiveness is conducted through specific assessments of the teacher's record of students' course notes, school reports, group learning, experiments, and performance in both on and off campus practical teaching processes.

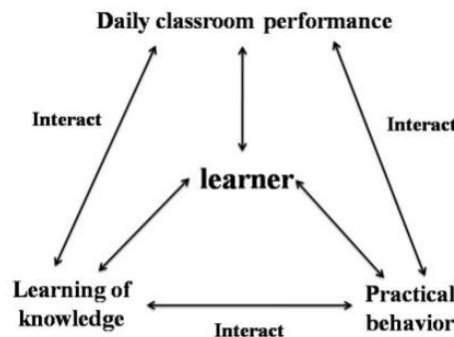


Figure 4 The inner logic of evaluating student learning effectiveness.

2.3.2 Evaluation of the Teaching Effectiveness of Teachers' Curriculum

The completion of teaching objectives, in accordance with the plan of course construction design, has completed the course objectives, explained the difficult points of the course thoroughly, clarified the key points of the course, and completed the teaching tasks within the specified time. The completion of the course teaching content is based on the characteristics of students' physical and mental development, as well as the actual situation of students in learning the course. The course content is set up, and teaching materials that are closer to students' lives are selected for teaching. The implementation of the course teaching process is relatively smooth, and the course teaching process conforms to the basic theories of teaching, achieving the expected course teaching effect. Students can master the teaching content, and the teaching methods and guidance strategies adopted meet their requirements. The implementation effect of curriculum teaching strategies is achieved by reflecting on the actual situation of students, identifying and analyzing their problems, and improving curriculum teaching in response to these problems, making students feel that the curriculum is closer to life, stimulating their interest in learning, and mastering the content of the curriculum. The effectiveness of students' learning is tested through their course learning, which tests their mastery of knowledge and skills in the course. Students can basically apply the knowledge and skills they have learned to practical life.

3. RESULTS

After 8 years of health education curriculum construction and teaching practice, Beijing No. 27 High School has constructed a relatively complete health education curriculum framework. Through curriculum teaching practice, the teaching quality of health education curriculum has been improved, students' health concepts, knowledge and skills have been cultivated, and a large amount of health education curriculum resources have been accumulated.

3.1 Having Constructed a Relatively Complete Framework for Health Education Curriculum

Promoting the healthy development of adolescent students is the historical mission and positioning of school health education curriculum.

Students are the starting point and foothold of school work, and student health education is an important component of school work. Through 8 years of teaching practice and improvement, the framework of school health education curriculum has been continuously improved. The health education curriculum, from the establishment of subject core competencies, curriculum objectives, curriculum themes and content, to the continuous exploration of curriculum teaching and learning strategies and methods, to the improvement of student evaluation, the development of curriculum resources, and the guarantee of curriculum implementation, has established a relatively complete health education curriculum framework in schools.

3.2 Having Improved the Teaching Quality of Health Education Curriculum

The health education curriculum of Beijing No. 27 High School has been a key school-based curriculum since 2015, with a total of 1158 students teaching it. The curriculum construction has been highly valued by the school leaders, and has achieved good construction results. Significant achievements have been made in the standardization of teaching content, progressiveness of teaching methods and means, teaching management and teaching reform, and the teaching quality has been continuously improved. In order to complement the learning of the course content, the school organized students to go to the practice base for experiential and immersive learning, enhancing their practical abilities. Through course construction, students can master health knowledge and skills through the study of health education curriculum, and have the ability to handle practical health problems, in order to adapt to the needs of modern healthy life and become students with harmonious physical and mental health.

3.3 Having Cultivated Students' Health Concepts, Knowledge and Skills

The curriculum explores diverse teaching modes, which are beneficial for students to combine theoretical knowledge with practical experience. Teachers can utilize case analysis, scenario simulation, immersive experience, etc. to effectively teach students about actual health issues they may encounter, and achieve course teaching objectives. Emphasis should be placed on acquiring knowledge and skills through participation, utilizing curriculum practice activities to enable

students to apply the knowledge learned in school to practical life. Teachers let students personally engage in practical training, promptly identify and solve problems in their practice, and focus on cultivating their abilities. Teachers and students should have cross experience and share with each other during and after class, ensuring that practice runs through the entire teaching process.

3.4 Having Accumulated a Considerable Amount of Health Education Curriculum Resources

The basic materials for course construction are complete and standardized, and the effectiveness of course construction is significant. The course construction resources include course construction plans, multimedia courseware for course teaching, course teaching cases, teaching videos, health knowledge databases, etc. In particular, according to course needs, teachers have edited, written, and published course materials to enrich health education course resources.

4. CONCLUSION

The health education curriculum is an important component of the national curriculum, which has significant significance and role in the growth of middle school students. It is an important carrier for improving students' core literacy. The study takes the construction and practice of the health education curriculum in Beijing No. 27 High School as an example, and elaborates on the design of curriculum construction through sorting out the core competencies, curriculum themes and content, as well as the types of curriculum in the curriculum construction. This article introduces the implementation of curriculum from the perspectives of teaching guidance strategies, teaching methods and means, and the implementation of types of curriculum. The effectiveness of curriculum construction is reflected in the construction of a relatively complete framework for health education curriculum. The curriculum construction has improved the teaching quality of health education curriculum. The curriculum has cultivated students' health concepts, knowledge, and skills. The curriculum construction has enriched practical teaching of health education curriculum. This study is based on 8 years of practice in China and provides a basis for subsequent research.

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