# Theory and relationship analysis of course content, teaching material content and teaching content

Fu Xinyu<sup>1,a</sup>, Meng Ze<sup>1,b</sup>

<sup>1</sup>Ministry of Public Sports, Taizhou University, Taizhou, Jiangsu, China a78762968@qq.com, b1026050150@qq.com

*Keywords:* Course content; teaching material content; teaching content

**Abstract:** The literature data method and logic analysis method are used to study the basic concepts of course content, textbook content and teaching content and their similarities and differences, and reveal the relationship of interconnection and joint construction among the three. The research suggests that the course content integrates the subject knowledge, methods and processes, and the content of the subject knowledge, skills, values, methods and experience. All three are based on subject knowledge, student-centered and have consistent value pursuit. However, the orientation and focus of the three in teaching are different. They are closely linked and jointly support the smooth progress of education and teaching around the curriculum objectives.

#### 1. Preface

Curriculum content, teaching material content and teaching content have always been important areas of curriculum research, and the theoretical interpretation and applied research around the three are still continuing today. Many studies point out that, whether at the theoretical level or at the educational practice level, the understanding of the three is still unclear and confused. For example, the author tends to regard the textbook itself as a course, believing that the content of the textbook is the course content, and ignores the multi-level and multi-element attributes of the curriculum. As a result, the course content arrangement fails to reflect the structural level and the internal connection of multi-field knowledge [1]. In addition, it ignores the guiding positioning of the course content, causing the teaching content to deviate from the goal and the teaching material [2], or regards the course content, the teaching material content and the teaching content as three mutually independent links, without paying attention to the connection of mutual adjustment and support among the three. In teaching practice, it only pays attention to the selection of teaching materials and the implementation of teaching methods, and fails to give full play to the coordination and cooperation role of curriculum objectives and content on the practice link, resulting in poor teaching effect [3]. There are also some studies in China to sort out the teaching material and teaching into different curriculum relationships, and believe that the relationship between the curriculum (teaching material) and teaching is the interdependence of the coin [4]; some studies analyze the status and function of course content, teaching content and teaching content from three levels: appropriate, appropriate and practical content from the perspective of discipline [5]. However, there is not much involved in the basic concepts of the three. Therefore, this study intends to build a theoretical basis with reference value for the course research by discussing the basic theories and differences of the course content, teaching content and teaching content.

## 2. Concept research related to course content

Clarifying the concepts related to curriculum content, teaching material content and teaching content is the basis and source to deeply explore the relationship and differences among the three, to ensure the scientific effectiveness of curriculum research and the sustainable and healthy curriculum development.

#### 2.1. Course content

The word "curriculum", which is close to the modern meaning, was first put forward by Zhu Xi in Zhu Zi, which mainly refers to homework and its process. In the English system, the British educator Spencer first used the derivative curriculum from the Latin language "Currere" (track) to express "curriculum". The movement and name of "Currere" point to the two aspects of the connotation of "curriculum", namely, goal and practicality. Both the eastern "curriculum" and the western "curriculum" emerge at the historic moment with the development of education, which not only has concrete subject meanings, but also refers to the abstract thinking activities and logical arrangements of the design and arrangement of the whole educational activities. The course is not a static standard template, but needs to be constantly optimized and improved according to the needs of The Times and the society. The purpose and practicality of education determine that the curriculum contains certain course objectives, specific subject knowledge and experience methods, as well as the preset organization mode and practice process. Course content is under the specific attribute of the course, according to the education law and value orientation will course objectives into discipline knowledge, process and screening, transformation, organization and arrangement of systematic, structural, is through the course implementation process to achieve education goals and macro decision students experience what experience, through what method, the source of knowledge and experience. Therefore, the curriculum content needs to be scientifically constructed with the changes of the society and the expectation of the future. In this case, the course content should take into account the students' overall learning and development needs. In addition, the course content is diverse and flexible to meet the needs of different groups, providing students with specific course experience and personalized educational paths. This requires that in the process of constructing the curriculum system, pay attention to the close connection with the teaching practice, and use innovative teaching methods and means to ensure the actual learning effect. Compared with the traditional curriculum design and content arrangement method, the modern curriculum design emphasizes the diversity and practicality. Through specific teaching methods and means, the course content runs through the students' actual life and work, so as to provide students with targeted content and practical learning experience. For example, through multimedia teaching, online learning platform, situational teaching and other modern teaching tools, students are provided with more diversified and experiential course content. These contents include not only subject knowledge, but also information about modern technology, social significance and values that students need to master.

In short, the relationship and interaction between the course content and the course objectives are inseparable. The course content cannot exist independently from the course objectives. The course objectives lead the course content, and the course content serves the course objectives.

#### 2.2. Content of the textbook

Textbook is a kind of learning materials with clear teaching purpose, comprehensive and accurate subject knowledge, universality, era and adaptability. It is one of the important tools to realize the goal of education and teaching. The content of the textbook refers to the content of the course objectives presented through the textbook, including subject knowledge, skills, values, methods and experiences. Among them, the subject knowledge is the core part of the textbook content, including the basic concepts, principles, rules, phenomena, etc.; the skills are the practice, including the discipline, the experiment, operation, application of the subject; the values are the values of the discipline, the values of the discipline, and the experience; the experience is the historical part of the textbook content, including the development course, classic cases, and successful experiences. The essence of the content of teaching materials is an information input channel, reflecting the function of teaching materials in teaching and learning. First of all, the teaching material is used for teaching practice. No matter what kind of teaching material, its content must be operable, that is, it can describe and design the practice of teaching and learning. Secondly, the teaching material is the book of teaching guidance, the content of the teaching material stipulates the direction of teaching and learning, to ensure that the subject scope of teaching and learning, so that it is not scattered or disorderly. Third, the teaching material is the basic teaching books. The content of the teaching material integrates, analyzes and arranges the direct and indirect experience of the subject, reflecting the classic characteristics and core problems of the subject. The content of the teaching material is to show the classic and core subject knowledge and experience system through the presupposition of the teaching and learning process, which helps teachers and students to grasp and solve the key problems or problems in the process of teaching and learning. Subject is the core of the textbook compilation, is the main line and theme of the content of the textbook, including the basic concepts, basic principles, basic methods, basic skills of the subject, etc. These contents are an important basis for students to have a deep understanding of the subject. The compilation of teaching materials needs to determine the subject center of the content of the textbook according to the characteristics of the subject and the learning needs of students, construct the logical system of the content of the teaching materials, and ensure the coherence and systematization of the content of the teaching materials

#### 2.3. Teaching content

Teaching is a kind of two-way interaction and cooperation between teachers and students. Through teachers' planned, regular and step-by-step teaching, students are guided to learn in subject knowledge, practical experience, value emotion and other fields. Teaching is the basic way to realize the goal of educating people, and it is an effective form to promote students' all-round development morally, intellectually and physically. There are two basic operation modes in teaching, one is direct teaching, the other is to guide inquiry. There is no doubt that teaching is a practice, teaching content in the practice, is the teacher "teaching" and students "learn" involved knowledge, skills, ideas, value itself, and connect the intermediary and carrier [6], is an important part of teaching goals, both execution significance, help students to accumulate knowledge and ability to exercise, have guiding significance, can guide students to set up the correct world outlook, the outlook on life and values. The teaching content covers a variety of subjects, such as mathematics, Chinese, natural science and other disciplines, including culture, aesthetic education, physical education, ideological and moral education. In the selection and arrangement of teaching content, it is necessary to combine various factors such as students' age, subject characteristics, teaching objectives and teaching methods. It is also because of the direct participation of teachers and students, the individual differences between teachers and students and the play of their respective

roles make the teaching content uncertain [7].

## 3. The relationship between course content, textbook content and teaching content

# 3.1. Commonality among the three

Curriculum content, teaching material content and teaching content are the three core elements in the process of school education, which have a certain connection and commonness between them.

# 3.1.1. They are all based on subject knowledge

Subject knowledge is the knowledge covered in the subject field, which occupies the most basic and important position in the whole education system, and is the common basis of the various and distinct disciplines. From the perspective of education itself, subject knowledge is the experience summary and theoretical exploration of social phenomena and natural laws. They represent the wisdom and culture of human society, and are an important medium for the inheritance and development of human civilization, including a certain amount of concepts, theories, empirical evidence and methods. In school education, subject knowledge is an indispensable basic element. Curriculum content, teaching material content and teaching content are all based on subject knowledge, which jointly constitute the content support system of school education. First of all, subject knowledge is the foundation and core of teaching activities, and is the starting point and foothold of educational and teaching activities. Secondly, subject knowledge is the foundation of fine education. Through the in-depth analysis and subdivision of subject knowledge, it is convenient for teachers to carefully design and use various educational and teaching guidance strategies in teaching, so as to improve the teaching quality and educational effect. Moreover, subject knowledge is an important basis for students' ideological understanding and ability and accomplishment. Students' full grasp of subject knowledge is an important basis for improving their overall quality and future development. Through students 'understanding and application of subject knowledge, students' comprehensive quality and innovative thinking ability can be cultivated, so as to improve students' competitiveness. In short, curriculum content, teaching material content and teaching content based on subject knowledge is an inevitable choice in education and teaching activities. This is helpful to promote the students' mastery of subject knowledge and improve their quality level. At the same time, it also provides more means and strategies for teachers, teaching subject knowledge to students through teacher teaching, so as to achieve the educational effect of opening the cognitive portal, expanding the thinking vision, enhancing creativity and innovation ability, and promoting personality growth.

Of course, from the dialectic point of view, although the three are based on subject knowledge, there are still some differences. The course content is based on the subject knowledge structure and knowledge system, aiming to enable students to understand the comprehensive and systematic subject knowledge, focusing on designing and describing the basic path of students in the learning process, and also serving as an important decision-making basis for teachers to design teaching. The content of teaching materials is the main source for students to acquire subject knowledge in the learning process, and is the content compiled according to the subject knowledge structure and educational needs. Its main function is to help teachers and students complete teaching and learning, so it must be close to the essence of subject knowledge and the application scenario of subject. Teaching content is an important way to impart subject knowledge, which usually covers the specific problems in the subject knowledge system, and is the main content of teachers' teaching in the teaching process. Therefore, the subject knowledge in the teaching content emphasizes the matching degree with the teaching scene.

## 3.1.2. Are in line with the student center concept

Student center is the student as the main body of education teaching concept and theory, is refers to the teaching and learning dominance always in the hands of students, let students dominate and control the learning process, actively participate in, explore, practice and innovation, the teacher is the guide of learning and collaborator, responsible for leading students to better explore and develop their inner potential, autonomy, initiative and creativity, encourage students to participate in learning independently, cultivate students' ability of active learning, independent thinking, self-assessment. In the field of curriculum, the student center is not limited to the teaching process, but also in the course content and teaching material design reflect the adaptability of students 'demand, better reflect flexibility, interdisciplinary and practicality, emphasize the curriculum content, teaching content and teaching content integration, to establish a set of serve the students' education teaching system. The first is to focus on the needs of students. Students are the center of education and teaching activities, and their growth needs should be one of the important factors considered in education, so as to stimulate students 'interest, enhance students' autonomy, and improve students' learning effect. Therefore, the design of course content, teaching content and teaching content needs to provide more personalized learning services for students, learning habits and life experience, for different students. Secondly, it attaches great importance to students' subjectivity. Under the concept of student-centered education, students are the main body of education and teaching, emphasizing the independent learning of students and the cultivation of creativity. Therefore, the course content, teaching material content and teaching content should be placed on the development path of students, with students' perspective, needs and experience as the center, cultivate interest, promote personality development, and better achieve the educational goals. The third is goal-oriented. The course content, textbook content and teaching content are always closely linked to the overall goal of education, emphasizing the development of students' cognition, emotion and behavior at different levels.

Three under the center of the student difference: course content is education as the theme, from the students' knowledge level, discipline ability, physical and mental development, according to the education goal to provide students with a variety of learning path and development path, reflect the student development direction and curriculum resources of various disciplines, build career learning guidance and education planning platform. The content of the teaching material is the basis of "student-oriented" for education, providing the necessary materials and materials needed in the process of education and teaching, and presenting the knowledge points in an accurate, intuitive and easy to understand way. The teaching content focuses on allowing the education and teaching theme to be deepened, refined and expanded, and takes the feedback of students as an important reference element for adjustment, so as to adapt to the learning process and needs of different students.

#### 3.1.3. Consistent value pursuit

The course content, teaching material content and educational content are all committed to improving students' knowledge level and ability, so as to help them make greater contributions to the society and realize their own life value. First of all, the course content starts from the perspective of discipline and comprehensive ability, providing students with a wide and systematic knowledge system, practical skills and social orientation, with cultivating students' comprehensive knowledge and skills as the main goal. The content of the teaching material is the specific presentation way of the course content. Through the systematic, comprehensive and scientific content arrangement, it helps students to understand the complex concepts and knowledge, improves their thinking ability and practical ability, plays an important role in guiding students' learning, and can help students to learn something. The teaching content not only reflects the course

content and the textbook content, but also contains the teachers' educational ideas, educational methods and educational goals. To have a comprehensive and subtle influence on students, and guide students to study independently, self-inquiry and self-development. Secondly, the curriculum content, teaching material content and educational content are all important means to cultivate students' comprehensive quality. The course content defines the subject knowledge, moral cultivation and social adaptability that the students should have from multiple dimensions and perspectives to optimize the learning process and effect of the students; the teaching content is based on the above two to improve the students' knowledge and ability, including proper autonomy, healthy self-awareness and certain responsibility.

# 3.2. The differences among the three factors

In teaching design and implementation, curriculum content, teaching material content and teaching content is three important teaching level, can play a different function, because the meaning and cover the content is different, so need to clearly distinguish in education teaching, according to the actual situation and need to differentiate design and implementation, in order to realize the maximum benefit of education teaching work.

# 3.2.1. Different positioning

First of all, the course content is aimed at the education object, discipline and comprehensive ability of the target content, including education objectives, education requirements, discipline knowledge, methods, is a kind of macro level discipline planning and design, can provide a guiding framework for teachers, so that they better play a teaching function in teaching. The purpose of the course content is to provide a reasonable, systematic and comprehensive educational program, combined with class hours, teaching forms and teaching resources.

Secondly, the content of the textbook is to classify and layer the contents of the curriculum, including a series of contents such as chapter division, knowledge point induction and arrangement, interpretation, example questions, and a presentation of examples. The content of the teaching material is processed twice on the basis of the course content, which can clearly show the knowledge system and key points of each subject to students, so that students can easily understand and master the knowledge conveyed by teachers, improve students' learning effect and subject quality, and provide material support for the successful implementation of education and teaching.

Finally, the teaching content is the specific content, teaching methods and strategies adopted by the teachers to implement the teaching in the classroom, which is the sum total of the subject education activities at a specific operational level. Teaching content including teachers 'teaching strategies, teaching steps, teaching methods, etc., it can according to the specific teaching environment and students' learning characteristics, flexible application of various teaching methods and strategies, to improve the students' participation, learning effect and interest, make the students in a relaxed and pleasant environment to obtain the improvement of comprehensive quality.

## 3.2.2. Different priorities

Course content is mainly focused on discipline ability and quality development, is to improve the students' core literacy guidelines, including learning objectives, implementation approach, evaluation standards, etc., is education as the core from the content of the macro level design and planning, is an important foundation of education teaching work, the purpose is to provide students with a scientific, systematic and comprehensive education environment, form the comprehensive quality and discipline ability of talent.

The content of the textbook mainly focuses on learners' understanding and mastery of knowledge.

In order to impart knowledge more effectively, we can help students improve their learning effect through effective expression of language symbols. The content of the textbook is designed and compiled according to the needs of the subject and the characteristics of students, and reflects the course content in detail and detail. It is an important teaching material. Based on the subject knowledge, it clearly reflects "what teachers" teach "and" what students learn ", so that students can better master knowledge and skills under the guidance of teachers.

The teaching content pays attention to the quality and efficiency of classroom teaching in the teaching process, so as to create a good teaching environment and improve students' interest and effect in learning. The teaching content is mainly reflected in the classroom teaching link, which is the arrangement and implementation of the teaching materials, their methods, strategies, skills and other aspects used by teachers in the teaching process. The teaching content takes the classroom teaching as the background, which not only pays attention to the teachers 'own teaching quality, but also pays attention to the students' learning habits and self-development, and strives to help the students achieve the best learning effect in the teaching practice.

## 3.3. Interconnection and joint construction of the three parties

Every teaching link should be closely related to the curriculum objectives, according to the subject knowledge, using the appropriate teaching methods, to achieve the teaching results. The course content, teaching material content and teaching content are interrelated and closely connected in the education link, and play their respective functions in different levels and different fields. In order to correctly use course content, teaching material content and teaching content, it is necessary to determine the course objective: course objective is the general direction of course design, teaching material compilation and teaching activities, which needs to be clarified according to the educational law and students' needs, to provide guidance and norms for course content, teaching material content and teaching process. Followed by scientific design of curriculum content: course content is planning teaching task, clear the basis of learning content and teaching objectives, the design of the course content needs to follow the education teaching rules and curriculum system, reflect the logic and level of discipline, consider the students' cognition and interest, to ensure the organic integration of subject knowledge, build student-centered education teaching resources system. The third is to carefully compile high-quality teaching materials: the content of teaching materials is the carrier of course content, is the main way for students to obtain subject knowledge. The content of the teaching material is still authoritative and scientific. Through concise and clear language symbols and practical cases, the profound understanding of the subject is demonstrated, which can meet the actual needs of teachers "teaching" and students' "learning". The fourth is to adopt diversified teaching methods: teaching content is the embodiment of teaching activities and teaching methods, teaching content needs to choose the appropriate methods and strategies according to the course content and teaching materials content, innovative teaching means, to achieve the teaching objectives. To sum up, the course content is responsible for the course objectives, the teaching material content is responsible for the subject knowledge, and the teaching content is responsible for the teaching process.

Of course, it cannot be simply understood as the one-way linear logic of "course objective ——course content ——textbook content ——teaching content". The relationship between course objectives, course content, textbook content and teaching content is not a simple one-way linear logic. In fact, they are dynamic systems that interact and influence each other. In the teaching process, the formulation of curriculum objectives needs to consider the students' learning needs and ability level, as well as the rules and requirements of education and teaching. The design of the course content should be consistent with the course objectives, which should not only fit the logical

structure of the subject knowledge, but also pay attention to cultivating students' thinking ability and practical ability. The compilation of teaching materials should be based on the principles of scientificity, systematization and practicality, which should not only have the depth and breadth of subject knowledge, but also be close to the actual life and learning needs of students. The organization and implementation of the teaching content need to choose the appropriate teaching methods and strategies according to the course objectives, course content and teaching material content, so as to stimulate the students' interest and potential in learning. The relationship between curriculum objectives, curriculum content, teaching material content and teaching content should complement and promote each other. They are not only the main elements in the teaching process, but also an important tool for teachers and students to explore and realize the teaching goals together. Only on the basis of fully understanding and using them, can teachers really play the teaching effect, and students can obtain better learning experience and learning results.

#### 4. Conclusion

Educators should be aware of the close connection between curriculum content, teaching material content and teaching content, and use it flexibly in teaching to promote students' comprehensive development and quality improvement. Only in this way can we achieve real teaching success.

# Acknowledgement

Project: Philosophy and Social Science Research Project of Jiangsu Province: Research on the Construction of Content System of Physical Sport Option Course in General Universities (No.: 2020SJA2137).

#### References

- [1] Wolf M. A. & Borrelli M. A. (2019). Strategic planning for personalized teacher professional development. Journal of Research Initiatives, 4(3), Article 4.
- [2] Wagner C. N., & Slepkov A. D. (2020). Enhancing student learning through selection and use of effective instructional strategies. Journal of Educational Issues, 6(2):19-28.
- [3] Jan A. U., & Singh S. (2020). Teacher care and support for students' wellbeing in Pakistan. International Journal of Research in E-learning, 2(1), 85-94.
- [4] Xu Wenbin, Luo Ying. Discrimination of the relationship between curriculum, teaching materials and teaching—Based on the analysis of curriculum form [J]. Journal of Beijing Institute of Education, 2022. 6, 36 (3): 47-53.
- [5] Lei Zhang. Several core concepts of physical education curriculum and teaching content field [J]. Physical Education Research, 2021, 35 (6): 63-69.
- [6] Yu Sumei. The construction of the integrated physical education curriculum content system [J]. Journal of Physical Education. 2019. 7, 26(04):16-21.
- [7] Zhong Qiquan. Analysis of modern subject pedagogy [M]. Xi 'an: Shaanxi People's Education Press, 1993. 18. 7