REVIEW

A Practical Exploration of the Holistic Module Learning Model

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Abstract*: The holistic module learning model was initially developed by the Shandong 271 Education Group as part of their efforts to reform classroom instruction. With the progress of basic education reform in China, the model has evolved into a pedagogical approach that prioritizes student-centered learning and teacher-guided instruction, with the goal of nurturing students' self-development and exploratory skills. Furthermore, the productivity of this approach has been demonstrated through experiments conducted by various schools across the nation. This study provided a concise overview of the historical development of the model and demonstrated its core elements and implementation strategies through its application in Chinese courses. The aim was to offer valuable insights into holistic module learning for the basic education community.*

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BASED on the principles of humanistic theory, the holistic module learning model is designed with the primary objective of fostering comprehensive development in students. The instructional approach under consideration comprises three fundamental components: major concepts, module learning, and holistic learning. The approach utilized in this context involves the utilization of major concepts to reintegrate the learning contents, with a particular emphasis on the integrity of learning. Additionally, the organization of learning materials is structured around holistic modules as opposed to isolated lessons. Furthermore, it is advocated that both teachers and students cultivate a systematic and holistic perspective on knowledge across all subject areas.

The concept of holistic module learning represents a novel approach that seeks to address the limitations associated with conventionally fragmented instructional methods. The approach involves the restructuring of student learning content by focusing on fundamental disciplinary concepts. It incorporates learning protocols to enhance the implementation of the national curriculum program and course standards, as well as the teaching of national uniform textbooks. Additionally, it aims to address the interplay between learning and teaching as well as learning and practice. Furthermore, it introduces innovative learning methods, such as cooperative group learning, situation-based study, and inquiry-based learning, to foster the integration of knowledge and experience and the application of learning. This article provides a comprehensive overview of the evolutionary trajectory of the holistic module learning model. It elucidates the core components and implementation strategies of this model, employing instructional practices in Chinese courses as illustrative examples.

The Background of Holistic Module Learning

The idea of module learning was introduced to China subsequent to the May Fourth Movement, a socio-political movement initiated by patriotic youth in 1919 that represented China's cultural transition into the modern era and encompassed anti-imperialist and anti-feudal sentiments. Since then, the practice of compiling textbooks by unit, which is analogous to the teaching concept of "module" in China, has persisted until the present time. However, there was a limited amount of research conducted on this particular teaching paradigm during its early stages. During the 1980s, there was a notable increase in the research conducted on module learning. In the late 1980s, the Educational Science Institute of Shandong Province conducted a study on criterion-referenced module teaching and developed a novel standard framework for implementing this instructional approach. This research has yielded substantial results through its sustained implementation (Wang & Guan, 1992). Numerous scholarly researchers have underscored the impor-

tance of module-based learning in their respective studies. Cui (2019) posited that the implementation of module learning requires an instructional design approach that encompasses holistic modules rather than focusing on isolated and fragmented learning materials. This approach should incorporate real-world situations and tasks, with the ultimate goal of enhancing the effectiveness of classroom teaching.

Shandong 271 Education Group has officially introduced the concept of holistic module learning. Because of the Group's ongoing experiments in classroom instruction reform, it has evolved into a student-centered instructional model with an emphasis on cultivating students' self-directed and cooperative learning skills. This learning model has four prevalent characteristics: task-driven learning, situational experience, autonomous inquiry, and promotional transfer (Zhao, 2022a). It facilitates students' mastery of fundamental theories, logical structure, and practical application of disciplinary knowledge and develops their thinking skills through a holistic cognitive process involving autonomous study, dialogue, critique, application, and creation.

The primary objective of holistic module learning, which is to cultivate essential competencies in students, is in accordance with the fundamental principle that underlies the recently implemented national curriculum program. This teaching method promotes the establishment of a democratic and inclusive environment within the classroom, wherein recognition is given to the unique individual traits of students and efforts are made to enhance their engagement in the learning process. Students are afforded the opportunity to cultivate their character and enhance their capabilities through engaging in dialogue, interacting with others, participating in experiential exploration, posing thoughtful inquiries, and engaging in reflective practices. Consequently, the implementation of holistic module learning has emerged as a noteworthy endeavour within the framework of the recent curriculum reform.

Fundamental Elements of Holistic Module Learning

Cultivation of Student Key Competencies

The release of The National Senior Secondary Education Curriculum Program and Course Standards 2017 and The National Compulsory Education Curriculum Program and Course Standards 2022 ushered in the era of competency-based education. Holistic module learning satisfies not only the National Curriculum Program requirements but also those of the Double Reduction policy. It shifts from a focus on knowledge itself to a focus on student development; from teachers' knowledge transmission to the cultivation of students' important competencies; and from students' knowledge acquisition

to their mastery of methods for analyzing and solving problems. It encourages a student's intrinsic motivation to learn rather than forcing them to study (Zhao, 2022b).

Construction of Instructional Modules

Instead of using predetermined textbook units, holistic module learning is structured using modules. Teachers must first identify the key learning goals outlined in the National Course Standards, construct major ideas based on these goals, and then group pertinent learning resources into self-contained modules.

In a study conducted by Cui (2019), a comparison was drawn between curricular modules and building units. The author posited that the desired outcome of a module is not limited to discrete knowledge and learning techniques, much like how raw materials such as cement and steel bars are not visible in a home unit. The primary function of modules is to facilitate the development of key competencies in students as building blocks are mainly for human inhabitation. A module, which is constructed around a central concept, can be described as a self-contained collection of subject matter that emphasizes the development of one or more fundamental skills or abilities (Liu et al., 2022). The successful attainment of the module's objectives by learners signifies their acquisition of a comprehensive set of knowledge and competencies that can be effectively utilized in practical contexts (Yelon, 2015). The module within the instructional model being discussed differs from the traditional textbook unit in that it possesses a higher-order objective and there is an inherent linkage between the lessons contained within the module.

Focus on the Learning Process

The learning process is prioritized over the learning outcomes in holistic module learning. Task-driven learning, situational experience, autonomous inquiry, and promotive transfer are characteristics of a typical holistic module learning process where self-directed learning, cooperative study, and inquiry-based learning predominate. Study groups are given top priority in the classroom since encouraging students' autonomy and self-regulation in learning is one of the main goals of holistic module learning. Group study is the most fundamental structure for implementing holistic module learning, and it is also the most widely used type of cooperative learning. Until the group comes to a consensus on a particular issue or question, everyone is free to think and speak. Students' agency in classroom inquiry significantly rises when the learning process is emphasized. This also improves students' self-efficacy and aids in character development.

The two pieces "*Elderly Wang*" by Jiang Yang and "*Ah Chang and the Classic of Mountains and Seas*" by Luxun, for instance, are included in the module for the seventh-grade Chinese course's major concept of "probing into the emotional developments of the authors." In "*Elderly Wang*" and "*Ah Chang and the Classic of Mountains and Seas,*" respectively, there are two statements that are frequently cited: "That is the feeling of guilt of a lucky person towards an unfortunate one" and "O kind-hearted earth mother, may her soul rest in your arms!" Why did cerebral Jiang Yang feel bad for the old, destitute Wang, who lived by carrying the cart? Why did Luxun, the most well-known author in contemporary Chinese literature, show his affection for his childhood nanny in such a passionate and emotional manner? Students can discover similarities between the two articles by closely examining the text while keeping two concerns in mind: the authors' shifting attitudes about the protagonists as well as their genuine compassion for the oppressed.

The most remarkable event in "*Elderly Wang*" is "Wang gave Yang some sesame oil and eggs before he died," as described in the following passages:

> *"His face was deathly pale, with a layer of pannus on both eyes, making it difficult to distinguish which one was blind and which one was not. To put it a bit exaggerative, he was like a corpse poured out of a coffin, or like the zombie I had imagined, with dry yellow skin stretched over the skeleton. One single hit of a stick would make it collapse into a pile of white bones."*

> *"I accepted them. A bottle of sesame oil and eggs were wrapped in a piece of cloth. That's what he gave us as presents."*

> *"He quickly stopped me and said, 'I don't want any money.'"*

> *"I hurriedly opened the door for him and stood at the landing, watching him descend step by step with a worry that he would fall halfway down the stairs. When I got back to my room, I felt sorry that I had not asked him to sit down and have a cup of tea."*

The following are some questions that the teacher can help students consider: What would Yang have done and said if the guest had been one of her family members? Sesame oil and eggs were considered luxuries rather than everyday foods during those times; possibly these were the only precious assets old Wang had when he passed away. Yang spoke about her interactions with him in hospitals and at her house when her husband was very ill and on the day before Wang passed away. She recalled his constant regard for her and his real and helpful demeanor. Via this analysis process, students learn to comprehend Yang's emotional shifts, which lead to her feeling ex-

tremely remorseful for the lonely, poor man. The same examination of "Ah Chang and The Classic of Mountains and Seas" will enable students to comprehend how Luxun modifies his affectionate feelings for Ah Chang, his humble childhood nanny.

Implementation Strategies for Holistic Module Learning

Well-crafted Learning Protocols

Well-designed learning protocols are essential to the execution of holistic module learning. Teachers create the learning protocol based on course standards, textbook content, and student learning conditions. A typical holistic module learning protocol includes learning objectives, tasks, scenarios, and evaluation for a particular module. The objectives for learning are determined in accordance with the module's central idea. They are to be attained with the aid of a standard classroom procedure consisting of four phases: overall perception, inquiry and construction, application and transfer, and reconstruction and expansion.

In order for students to genuinely experience the context of learning activities and be self-motivated to pursue further inquiry, teachers typically give or create real settings for learning materials during the initial stage of overall perception. Students identify the knowledge, techniques, and skills that should be learned in the current module through self-directed and cooperative learning in the second stage of inquiry and construction. They create the crucial links between information and skills on their own. Students examine the rationale underlying the information based on that foundation. The learning protocol contains learning activities created to address real-world issues in order to facilitate knowledge application and transfer. Students continually review previous lessons as they complete assignments and refresh their knowledge, strategies, and abilities to develop new ones. They also discuss how to use newly acquired information, techniques, and abilities in social settings to address novel issues. Such understanding-generation cycles have the potential to continuously produce stronger understandings of the module's fundamental ideas. The final stage of reconstruction and expansion involves students reviewing what they have learned, evaluating if the module's learning objectives have been reached, and summarizing various approaches to solving problems. Students reconstruct their knowledge structures, create mind maps, and optimize learning strategies throughout the full curriculum by looking at completed assignments, solved issues, and new learning.

The seventh-grade Chinese course incorporates the module entitled "Scientific Imagination and Exploration," which comprises the lessons "A

Great Tragedy," "With Her Eyes," "One Day in Space," and "Typographs." The learning protocol for this module follows a designated procedure, outlined below.

Step one: Using the requirements of the National Course Standards and the information in the textbook, determine the module's major concept and the pertinent core competencies that need to be developed.

  i. The Course Standards' Requirements that Pertain to this module are:
- Acquire personal emotional experience in the appreciation of literary works and comprehend their underlying meanings to comprehend their implications for nature, society, and human existence; examine the work's evocative language and demonstrate one's own comprehension of its impressive characters and situations.
- Focus on the scientific spirit and methods of thinking conveyed when reading about science and technology events to develop evidence-based, truth-loving scientific attitudes.

  ii. The Major Concept of the module is the significance of expeditions and scientific imagination in the history of scientific development.

iii. Relevant Key competencies are rigorous attitudes towards science and a willingness to explore uncharted territory.

Step two: Establish the module's learning objectives in accordance with the criteria of the course standards and the major concept.

  i. Identify the essential information in the four stories by scanning the text, provide concise descriptions of the explorations in the stories, and discuss scientific imagination with the class.

  ii. Examine the characterization techniques employed by the authors through intensive reading and summarize the common characteristics of the explorers.

iii. Use the writing techniques presented in the text to compose a minimum of 800 characters on a scientific topic such as aerospace, biology, computer science, or new energy.

iv. After studying the module, reconstruct one's existing knowledge structure regarding genres, characterization, and artistic expression. Through extensive reading of science fiction and expeditions outside of class, one can increase his or her comprehension of scientific imagination and exploration.

Step three: Create learning activities and situational tasks for each of the four steps in the classroom procedure. For instance, the following is how the learning protocol for the process of overall perception is created:

i. Situational Assignment: The school prepares an essay solicitation with the theme "Adolescents' Marvelous Adventures" for the following week to ignite students' interest in exploring natural and scientific domains and to encourage their passion for the unexplored terrain. The current module must be thoroughly researched by the students to prepare them for the "Adventures".

ii. Learning Activities
   - Scan the four stories for key facts; express the characters' inquiries in your own words; and recognize humanity's physical weakness and spiritual brilliance.
   - Read the text carefully to find sentences that convey the explorers' emotional reactions to the challenges they face.
   - Share your thoughts about the value of imagination based on your own life experiences with the class.

Step four: After completing the four-step classroom procedure, evaluate the students' learning outcomes using assignments requiring both individual and group work.

i. "One Day on the Space" aims to elucidate the reasons behind the commendation of Liwei Yang as an esteemed figure in the field of aerospace, commonly referred to as an "aerospace hero." What topics would you inquire about during a potential visit by Yang to your educational institution, where he engages in dialogue with both faculty members and students? Please ensure that you have formulated your questions in advance.

ii. In the lesson "A Great Tragedy," Robert Scott penned his final sentiments to the British populace within the frigid confines of his tent as he neared the conclusion of his existence. The noble attributes exhibited by him have elicited admiration and resonance among individuals globally, persisting throughout time. Compose a critical analysis of the narrative in order to demonstrate comprehension of the protagonist's behaviour and choices.

iii. According to Albert Einstein, the significance of imagination surpasses that of knowledge due to its boundless nature, in contrast to the limitations inherent in knowledge. Imagination possesses the capacity to encompass all aspects of the world and serves as the wellspring from which knowledge originates. Through the utilization of imaginative faculties, individuals can attain the long-desired realm they have sought after. Examine the literary techniques employed in the four given texts and select a subject of personal interest from scientific domains encompassing aerospace, biology, computer science, and new energy. Compose a fictional

narrative, comprising a minimum of 800 characters, which portrays an exploration of an imaginary realm.

iv. Please distribute your composition among the members of the study group. Enhance and refine the text by incorporating the feedback and recommendations provided by members of the group, resulting in a well-crafted narrative with suitable literary techniques and an imaginative and captivating theme.

A Multidimensional Evaluation System

A crucial educational tool for directing, controlling, and motivating student learning is the school evaluation system. The holistic module learning approach utilizes a multidimensional evaluation framework that includes student academic performance, physical and mental healthiness, personality development, social skills, and more to enhance student all-round development. This is distinct from the conventional approach to evaluating education, which relies solely on exam outcomes.

In holistic module learning, both formative and summative assessments carry equal weight. The overall performance evaluation of a student during a term consists of module assessments, monthly performance reports, and terminal exams. The model's multi-level assessment consists of a national uniform examination, city-level exams, and school-, class-, and subject-based evaluations to evaluate every aspect of student development. In addition, multiple evaluators, including teachers, parents, peers, and the community, participate in this evaluation system. In addition, it is a merit-based evaluation system designed to emphasize the unique strength and talent of each student, as examination results alone cannot fully reflect students' attitudes, commitments, learning styles, innovative dispositions, and practical skills. Such a student-cantered, scientific, and multidimensional evaluation system plays an essential role in promoting competency-based education and fostering the holistic development of students.

Conclusion

Holistic module learning is a goal-directed learning model whose primary educational objective is the development of students' essential competencies. According to the competencies to be fostered, major concepts in each discipline are identified and used to organize modules for implementing structured, integrated instruction. The development of students' higher-order skills, such as self-directed learning, independent inquiry, and creativity, is facilitated by protocols for holistic learning that are thoughtfully designed. Its multidimensional evaluation frameworks encourage students' holistic development. Consequently, it is a student-cantered instructional approach in

which the learner is viewed as an end rather than a means. The effective implementation of the new National Curriculum Program and Course Standards will be facilitated by an instructional model exemplified by the successful application of holistic module learning.

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