Research on Ubd Teaching Design of Junior High School English Based on Big Concept

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Abstract

The abstract notion of a "Big Concept" is derived from specific factual and conceptual elements, serving as a link between individual concrete concepts, ultimately contributing to the development of a comprehensive understanding and framework of migration. The individual assumes the role of overseeing the organization of course content, development of teaching activities, and implementation of teaching evaluation methods. Understanding by Design (UbD) is a pedagogical framework that integrates two fundamental concepts. The focus of teaching and evaluation in the field of learning and cognition research is centered around the importance of understanding. Another aspect to consider is that the process of acquiring understanding is a continuous endeavor that contributes to the development of educational curricula. In the context of contemporary China, it is evident that certain issues persist in the realm of instructional designs within junior high schools. The lack of clear articulation of teaching objectives and the inability of traditional instructional approaches to adapt to the dynamic educational landscape are evident. The evaluation of teaching and learning is insufficient in terms of effectiveness. Understanding by Design has recently been introduced in China and has the potential to be effectively utilized in various contexts. This paper aims to examine the connotation and significance of the Big Concept and UbD teaching design. It explores the application of UbD teaching design in junior middle schools through specific case studies. The findings of this study offer novel insights into English unit design and facilitate the integration of core English subject competencies in the classroom.

Key words—Big Concept, English teaching, Teaching Design, UbD

I. INTRODUCTION

In recent years, there has been significant progress in curriculum and teaching reform, with a growing emphasis on the cultivation of students' core qualities. This objective has gained prominence in both domestic and international educational contexts. The 2017 edition of the Ordinary High School English Curriculum Standard, with a revision in 2020 (referred to as the "new standard" hereafter), introduces the use of a "Big Concept" (referred to as "Big Concept" in this paper). This new standard emphasizes the significance of subject concepts as the central focus of the high school curriculum. It organizes the course content, guides the thematic approach, contextualizes the curriculum content, and facilitates the development of core subject literacy（The Ministry of Education of the People's Republic of China.(2020)）. The field of English education in middle schools has shown significant interest in the research pertaining to Big Concepts and the promotion of curriculum reform based on Big Concepts.

Within the extensive body of literature on curriculum reform, a notable emphasis has been placed on theoretical research, while the practical application of educational concepts in the curriculum through action research remains relatively limited. The execution of the Big Concept entails a comprehensive and intricate procedure. If one solely relies on theoretical analysis and conventional teaching methods, it becomes challenging to delve into the fundamental essence and establish a training approach that holds significant value for advancement and practical application. The integration of a scientific and efficient teaching design scheme with the subject matter has emerged as a crucial approach and assurance for effectively implementing Big Concepts in the field of education. The study's background can be primarily categorized into three main aspects.

1.1 Based on the curriculum reform, implement the core quality of the discipline

Curriculum reform has emerged as a significant endeavor within the realm of primary education in the 21st century. It serves as a concentrated manifestation of the intrinsic worth of discipline-based education and represents a crucial avenue for the realization of the fundamental objective of human development. The productive accomplishments of this endeavor are of utmost importance in facilitating the advancement of educational reform within the classroom and fostering the progress of fundamental education.

The discipline core literacy serves as a crucial link between training objectives and curriculum implementation. Its primary goal is to ensure that every activity, every class, and every student actively engage with and embody the subject core literacy. This transformation of core literacy into an endless source of student growth hinges on establishing a strong connection between discipline core literacy and students. The key lies in effectively aligning students with discipline core literacy through a well-structured and integrated approach. The utilization of the Big Concept framework emerges as the most suitable strategy for achieving this objective.(Li, 2018)The new curriculum standard encompasses the fundamental structure of the subject content, ensuring that core literacy is not limited to theoretical analysis and demonstration, but also necessitates a detailed teaching process and specific steps. The Big Concept serves as a crucial foundational element for the integration of the fundamental principles of the discipline and serves as the guiding principle for curriculum development and educational reform.The unit teaching design should be examined with a focus on the underlying Big Concepts.(Wen, 2011)The deepening of the curriculum reform and the implementation of the core accomplishments of the discipline are essential and unavoidable requirements.

1.2 Develop a holistic philosophy and promote integrated teaching and learning

Unit teaching is a key link in the process of core literacy transformation and plays an important role. (Yao ;Jiang ;Ma ;Xi ;Tian; He; Zhang ; Yang 2017   ) At the level of teaching research, teachers' attention to unit teaching is constantly improving, and "unit teaching" and "unit design" have become hot topics. However, at the level of practical teaching, there are still many difficulties in unit teaching."Class doctrine" treats the teaching content as knowledge points, and lacks "overall outlook"(Zhong ,2015); Teachers lack deep thinking, especially there is a serious disconnection between the unit structure and the development of students' quality.(Wen-sen, 2018)The solution of these problems is inseparable from the disclosure of the internal connection between the teaching contents, promoting the unit teaching with integrated teaching concepts, and organizing the shallow and scattered knowledge points logically horizontally and vertically to form an interconnected network structure.

In view of its universality, network characteristics and other characteristics, the concept can highly dominate the core content of the discipline, change the traditional knowledge-centered fragmented teaching, enhance the connection of knowledge and meaning inside and outside the unit, and point to the formation of the structured concept of the discipline. The unit teaching design research around the Big Concept conforms to the requirements of the overall teaching and provides a new design idea for practical teaching.

1.3 Transform the teaching concept and optimize the teaching design

Within the context of the ongoing educational curriculum reform, teachers' teaching design commonly exhibits certain issues attributed to the absence of discipline leadership as a guiding principle. Initially, the imparting of guiding ideology in the context of education can be perceived as a perfunctory procedure. Educators possess a limited comprehension of curriculum standards and a dearth of systematic research on cognition, thereby hindering their ability to effectively translate this knowledge into a guiding ideology that supports the design of individualized teaching approaches.(Wang; Zhou; Jiang; Yan, 2020)Furthermore, the clarity of the teaching objectives is insufficient. The conventional educational goals exhibit a lack of specificity, rendering them insufficiently actionable, and neglect to emphasize the fundamental requisites of English disciplines. Furthermore, there is a deficiency in the impact of teaching evaluations. The conventional assessment methods employed in traditional classrooms rely heavily on low-level evaluation techniques, resulting in limited development of students' knowledge transfer skills. Furthermore, the significance of students' self-evaluation, also known as metacognition, has not been adequately emphasized in the design of traditional English teaching approaches. This

lack of attention to metacognition leads to inconsistent evaluation practices and a misalignment between evaluation criteria and learning objectives. One issue that arises in teaching activities is the lack of diversity in problem situations. The problem situation encountered in traditional classroom teaching tends to be well-defined, singular, and static. In contrast, real-world problems are frequently ill-structured, multifaceted, and subject to change.(Liu,2020)To facilitate the application of acquired knowledge, it is imperative to incorporate authentic tasks into instructional design and actively foster the occurrence of transfer.

II.   LITERATURE RIEW

2.1 Big Concepts

Given the aforementioned challenges and needs, it is important to highlight that the UbD , which is grounded in standards, goal orientation, and pre-assessment, aligns well with the aforementioned issues. This approach offers a fresh perspective for the implementation of core literacy, the enhancement of comprehensive instruction, and the refinement of instructional design. The primary objective of this study is to examine the viability of implementing a UbD in the junior middle school English curriculum, with a specific focus on incorporating Big Concepts.

The English Big Concepts, also referred to as the Big Concepts, have been translated by certain scholars as well. The concept of curriculum design can be attributed to Bruner's theoretical framework encompassing pedagogy and psychology. Systematic discussion of the subject did not occur until the latter half of the 20th century. Among the early works in curriculum design, Wiggins and McTighe's (Wiggins, G. & McTighe, J.) book titled "Understanding by Design" stands out. Subsequently, a systematic examination has been conducted on the works of Erickson (Erickson, H.L.), Lanning (Lanning, L.A.), Clark (Clark, E.), Olson (Olson), Whitevery (Whiteley, M.), and other esteemed scholars.

The concept of Big Concepts can be examined and analyzed from both a comprehensive and specific perspective. The concept of Broad Big Concept pertains to the cognitive organization of ideas within the framework of curriculum design. Its purpose is to prevent the fragmentation of course content by integrating related knowledge, principles, skills, activities, and elements of course content around a central concept or abstract in the discipline. This results in the formation of a cohesive body of course content. Within the framework of overarching concepts, it is possible to incorporate subordinate or secondary ideas, thereby establishing a hierarchical system of structural content. The primary purpose of the narrow interpretation of the Big Concept is to facilitate curriculum organization and prioritize students' comprehension of the fundamental principles. This entails focusing on the rational articulation of core concepts at various levels of understanding.(Lv, 2020)

Numerous scholars in China have engaged in comprehensive discourse regarding the Big Concepts. Cui posits that the concepts can be examined from two perspectives: the intermediate level and the micro level, specifically pertaining to the development of unit or thematic instruction aligned with curriculum standards.(Cui,2015)According to Wang Qiang, a renowned English scholar in China, the Big Concept can be understood from various perspectives. Firstly, in terms of its disciplinary essence, the Big Concept represents a profound, significant, and adaptable core concept that directs attention towards the fundamental content underlying specific knowledge. It also reflects the cognitive approach and fundamental perspective of the discipline. Secondly, from the standpoint of course content, the Big Concept serves as the conceptual framework at the heart of the curriculum system. Lastly, in relation to the teaching and learning process, the Big Concept encompasses the principles and methods employed in facilitating effective instruction and learning.(Wen, 2011)

The application and guiding value of Big Concepts are significant, whether within the cognitive framework at the macro level, the cognitive clues at the middle level, or the subject teaching at the micro level.(Cui,2015) The concept of the great provides a foundational framework for unit teaching design, guiding its development through its core attributes such as network character, persistence, migration, and other relevant characteristics.

2.2 Significance of big concept to unit teaching design

The concept of unit design focused on the Big Concept entails the development of a curriculum teaching plan that

revolves around the Big Concept at the unit level, with the aim of effectively incorporating the learning objectives associated with the Big Concept. The introduction of Big Concepts offers novel concepts for the instruction of English units and holds considerable importance in the development of English unit pedagogy.(Song-lin, 2018)

The Big Concept facilitates teachers in comprehending the fundamental nature of the subject matter and the significance of the theme, allowing them to concentrate on the objectives of unit instruction. The Big Concept is a fundamental and pivotal concept in the discipline, holding a central position within it. It serves to establish a coherent structure and logical framework for the related smaller ideas and facts. Additionally, it plays a crucial role in summarizing the teaching objectives of the unit, while encompassing the overall structure and essence of the discipline. The core concept encompasses both the guidance provided to teachers in facilitating instruction and the knowledge required to guide students in their acquisition of subject matter. (Wen, 2011) Furthermore, this concept is advantageous in providing guidance to educators in the integration of curriculum content, comprehensive instructional planning, and assessment activities. The overarching framework in the field of study establishes connections both vertically and horizontally within a specific discipline. The vertical perspective plays a crucial role in curriculum design as it pertains to the careful selection and organization of curriculum content. From a horizontal standpoint, the Big Concept network across disciplines encompasses two or more domains of knowledge, and various disciplines are formulated on the basis of a single Big Concept in order to mitigate the demarcations between them.According to Hume and Berry (2011), the utilization of this approach allows educators to move beyond the mere acquisition of fragmented knowledge. Instead, it encourages them to focus on the development of unit content and activities that are guided by a comprehensive thematic framework. The ultimate goal is to foster students' enduring comprehension and retention.(Hume, A & Berry, A. 2011)From a more elevated standpoint, educators possess the ability to organize fragmented knowledge points into coherent lines and pieces, thereby constructing a comprehensive and structured unit of knowledge system.(Cui, 2019) Furthermore, it is imperative to incorporate ongoing assessment practices within the instructional process in order to effectively achieve the desired objective.(Wang; Mi; Cai, 2021)

2.3 UbD

2.3.1 Status of foreign research

UbD, also known as "understanding through design," is a concept that is closely related to the educational framework called Understanding By Design (UbD).

The unit teaching design framework, developed by Grant Wiggins and Jay McTighe, builds upon the "goal-oriented" model of Taylor, an esteemed American educational evaluation expert, to provide a comprehensive approach to instructional design. The unit design was divided into three distinct stages: (1) the clarification of anticipated learning outcomes; (2) the identification of an appropriate evaluation methodology; and (3) the strategic planning of the pertinent learning (teaching) process. A significant development in the field of UbD involves the progression of "teaching evaluation" subsequent to "target design". Wiggins promotes the concept of adopting an evaluative mindset.(Grant; Jay, 2021)

Currently, the predominant international utilization of this theory is observed in the German model and the Canadian CBE curriculum design model. These models share a common focus on the behavioral processes involved in professional activities as the guiding principle for their design. The UbD follows a specific design template, which is outlined as follows:

Stage 1: Clarify the expected learning results	
Curriculum standards What are the content standards and	Learning transfer
	Students can apply what they have learned by themselves... What lasting and autonomous learning outcomes will students achieve?
	Understand the meaning

task objectives to be achieved in this unit? What are the thinking habits and interdisciplinary goals to be developed in this unit?	Deep and lasting understanding Students will understand...... What do teachers especially expect their students to understand? How do students connect them together?	Core problem Students will keep thinking...... What thought-provoking questions can promote students to question, understand the meaning and transfer of learning?
	Master knowledge	
	The knowledge that students should master is...... What facts and basic concepts should students master and reproduce?	The skills that the students should form are the...... What specific skills and procedures should students learn to use?

Stage 2: Determine the appropriate evaluation method		
Destination code	Criteria for assessment	
Are all of the expected learning outcomes reasonably assessed?	What criteria are used to assess the effectiveness of the expected learning outcomes? Regardless of the specific form, what are the most important essential attributes of the evaluation?	Real situational task: What performances will be used to show that students achieve understanding......? In complex contextual tasks, how do students demonstrate their own understanding (understanding meaning and learning transfer)?
		Other assessments: What other way do students have achieved the goal in "Stage 1"? What other ways will the teacher collect to show that the students have achieved the "Stage 1" goal?

Stage 3: Plan the relevant teaching process		
Target coding	Before measurement What pre-test methods will teachers use to determine the students' existing knowledge, skills, levels and potential misunderstandings?	
What is the goal (type) of each learning activity?	Pedagogical practices Students' learning transfer, meaning understanding and mastery of knowledge and skills depend on...... ☐ Are teaching activities committed to achieving three types of goals (knowledge and skills, meaning understanding, and learning transfer)? ☐ Do teaching activities reflect the basic principles of learning and the best teaching practice? ☐ Is there any consistency between stages 1 and 2? ☐Are the teaching activities attractive and	Teaching monitoring ☐ In classroom activities, how do teachers monitor students' knowledge and skills, understand the meaning and learning transfer process? ☐ What are the potential weaknesses and misunderstandings? ☐ How do the students get the necessary feedback?

During the initial phase, the anticipated learning outcomes are explicitly delineated and the learning objectives are established. During the Yuanhui Forum held at Northeast Normal University in November 2021, the speaker delineated his educational objectives into three interconnected categories: acquisition goals, comprehension goals, and transfer goals. To facilitate students' comprehensive comprehension, educators must create a "concept wall" and integrate ideas to foster a sense of "understanding". Furthermore, the individual in question categorized the fundamental issues into four distinct categories: introductory problems, guiding problems, interest problems, and basic problems. Educators assign these problem-solving tasks with the intention of fostering critical thinking and cognitive development among students.

At this juncture, it is imperative for students to attain proficiency in factual knowledge encompassing vocabulary (terminology), definitions, significant factual information, pivotal details, notable occurrences and undertakings, chronological sequencing (timeline), and so forth. Skills encompass a range of proficiencies, such as fundamental skills, communication skills, critical thinking skills, learning skills, and interpersonal skills, among others.

During the second phase, it is necessary to ascertain the most suitable assessment methodology. This phase primarily focuses on devising a methodology to assess the impact of student learning. The process of designing evaluation activities precedes the design of teaching activities. The primary purpose is to gather evidence of learning outcomes through the use of authentic situational tasks and other evaluation methods, including examination tests, skill assessments, academic examination questions, writing prompts, real-world tasks and projects, informal assessments of comprehension, and so on. In order to assess the extent to which students attain the objective of comprehension, McTay devised a T-shaped flow chart known as the T-Chart Process. This framework bifurcates understanding into two distinct components, namely application and interpretation. The application component encompasses the processes of application, connection, creation, criticism, prediction, questioning, resolution. On the other hand, the interpretation component involves the activities of interpretation, proof, and teaching.

During the third phase, the teaching activities are carefully devised and organized. This stage primarily entails finalizing the outline of a learning plan, referred to as a "outline" due to the module's lack of necessity for an exhaustive course plan encompassing all potential learning activities across all units. The formulation of this stage should be based on the anticipated outcomes of stage 1 in order to uphold the excellence of the optimal learning design. In order to assess the level of student engagement and instructional effectiveness during the planning phase, Wiggins and McTay devised a set of criteria known as the WHERETO elements. The objective of unit teaching should be clearly communicated to all students in order to ensure their understanding. The H (Hook & Hold) strategy effectively engages students from the outset and consistently captivates their attention. The E (Equip & Experience) component aims to furnish students with the essential experience, tools, knowledge, and specialized skills required to attain their learning objectives. The R (Rethink & Experience) approach aims to equip students with the essential experience, tools, knowledge, and specialized skills required to attain their learning objectives. In the E (Evaluate) phase, students engage in the evaluation of their learning process through various means such as conducting assessments, engaging in self-assessment, and making necessary adjustments based on formative assessments. The Tailor system applies various units to diverse student populations, with the study plan encompassing differentiation and personalization strategies while maintaining the integrity of phase 1 and phase 2. The first step in optimizing engagement and effectiveness is to organize the units in a logical sequence.

According to Grant Wiggins and Jay McTighe, the UbD process offers educators a cognitive framework for critical thinking and strategic planning, serving as a mental template to enhance instructional effectiveness. The initial stage of UbD, specifically referred to as stage one, involves the establishment of the learning objective, which is centered around the requirements of the Big Concept.(Shao; Han; Zhang, 2019)The Big Concept serves as the fundamental and central element of the entire design, and the instructional design of the subsequent two stages is built upon it. This serves as a crucial framework for our examination of the UbD for junior middle school English, centered around the Big Concept.

The UbD presents a framework consisting of three stages and provides operational suggestions. However, it also highlights certain issues. Initially, the depiction of teaching objectives lacks specificity and precision. From an English subject perspective, the fundamental components of English education primarily encompass four key aspects: language proficiency, cultural awareness, critical thinking skills, and aptitude for learning. The design emphasizes the importance of language proficiency, critical thinking skills, and learning aptitude. However, it does not explicitly address the need for cultural awareness and the development of cultural confidence. Additionally, the teaching evaluation lacks thorough assessment and subsequent utilization of collected data. Furthermore, the teaching process is incomplete, and the incorporation of "WHERETO elements" in discipline-specific teaching designs lacks flexibility.

The individual in question is Janice Skowron. The teaching design framework was modified in light of the following considerations: firstly, the initial stage 1, referred to as "content to be understood," was subdivided into two distinct components, namely "the problems to be learned" and "learning standards and performance expression." Secondly, the inclusion of "evaluation results" in stage 2 was introduced, accompanied by a discussion on "how to analyze the anticipated outcomes" and "how to utilize evaluation." Lastly, a set of concrete steps for designing teaching activities was proposed, incorporating additional elements such as "activity emergency" and "the unfinished solution" as integral components. This template enhances the design framework of UbD and offers assistance in this research endeavor.(Janis, 2018)

2.3.2 Status of Chinese research

In this study, a search was conducted in the CNKI database using the UbD (including synonymous terms) and English teaching (including synonymous terms) as search keywords. A total of 370 articles were retrieved through separate and cross-search methods. Based on the findings of the visual analysis of measurements, it is evident that the research on UbD has exhibited a notable and swift growth trajectory since 2018. Within this set, there exists a collection of 38 articles pertaining to the design of UbD English in middle school. These articles predominantly center around theoretical research.

In the realm of comprehensive system research, Ye Hailong introduced the concept of UbD as early as 2011, advocating for its implementation as a means to transition from traditional teaching methods to standard-based teaching design. This approach emphasizes the establishment of explicit and dependable learning objectives, as well as a solid foundation for critical thinking. Additionally, it prioritizes the development of evaluation frameworks prior to the design of teaching activities, with a focus on enhancing the quality of teachers' assessments. Lastly, it underscores the integration of curriculum standards, teaching materials, and teaching and evaluation practices. This study offers a significant point of reference for the localization of UbD within the context of China.(Ye, 2011)

Simultaneously, numerous scholars in China have conducted studies on the UbD from various perspectives. According to Cui Yun Rong et al., UbD can be classified as a task-oriented or result-oriented teaching design approach, as evidenced by a collection of research findings that adhere to established standards. According to Shao Chaoyou et al., the evaluation of UbD incorporates both summative and formative evaluation, thereby striking a balance between assessing learning outcomes and facilitating learning progress. When conducting evaluation activities, it is imperative to consider three key factors: Firstly, it is important to establish a connection between learning activities in order to create a mutually nested learning and evaluation process. Secondly, it is recommended to incorporate performance evaluation or authenticity evaluation methods to assess student progress. Lastly, it is crucial to gather ample evidence of students' learning outcomes.(Shao; Han; Zhang, 2019)This document outlines the precise criteria for the integration of evaluation practices within the educational setting of Chinese classrooms. The application of existing foreign research in China still faces challenges in terms of applicability and effectiveness, as observed from a framework application perspective. Ye Hailong developed a teaching plan template for mathematical UbD based on the principle of UbD. The individual in question further developed the anticipated outcomes into a comprehensive comprehension, fundamental issues and educational goals, and provided a thorough description of the performance criteria within the applicable standards.(Ye, 2011)Zhao Yulian conducted a comparative analysis of the three objectives of UbD and the six dimensions of

"understanding," in conjunction with the four aspects of the core literacy of the English subject. The study revealed that both UbD and the core literacy of the English subject share a common goal.(Zhao, 2018) Additionally, the research highlighted the application of UbD in English classes.

2.4 Theoretical basis

The UbD approach encompasses the fundamental principles of constructivism and places significant emphasis on the central role of learning. The "WHERETO elements" of UbD encompass the promotion of students' enthusiasm for learning, the recognition of the significance of self-assessment and reflection among students, as well as the incorporation of peer evaluation and feedback. Regarding the Big Concept, it can be understood as a comprehensive and advanced form of knowledge that facilitates the transfer of learning and is closely associated with constructivism in two key dimensions. In order to achieve proficiency in Big Concepts, it is imperative for students to establish connections between prior and current knowledge, acquire comprehensive understanding through deep learning, and subsequently employ this knowledge adaptively in specific contexts. This statement is indicative of the principles of constructivism, which emphasize the need to approach complex and challenging problems by refraining from relying solely on pre-existing solutions. Instead, it is necessary to engage in a thorough analysis based on prior experiences and employ advanced knowledge to develop novel methods and solutions for understanding. Furthermore, in order to fully comprehend the fundamental concepts, learners frequently need to engage in discourse with fellow community members. This observation also directly aligns with the underlying principles of constructivism, which emphasize the importance of students independently developing and defending their own perspectives, demonstrating respect for the viewpoints of others, and engaging in collaborative negotiation to collectively construct meaning.(Shao; Han; Zhang, 2019)

III. OBJECTIVES

The purpose of this study is to investigate the significance of incorporating Big Concepts into English unit teaching. It aims to identify the challenges in the design and implementation of unit teaching and analyze the underlying factors contributing to these challenges. Additionally, this study seeks to develop a framework for UbD in junior middle school English, centered around Big Concepts, with the goal of enhancing students' core literacy skills.

3.1 Study content

Based on the aforementioned three research inquiries, this investigation will concentrate on the subsequent five primary research facets:

The study of the Big Concept primarily encompasses the examination of the implications of the Big Concept and its relevance to the instructional design of English units.

Furthermore, the examination of UbD primarily encompasses the theoretical framework proposed by Wiggins and MacTai, along with the research conducted by both domestic and international scholars in relation to this particular theory.

The primary focus of the study on unit teaching design pertains to the issues that arise in the design and execution of English unit teaching in junior middle school. It involves an analysis of the underlying causes of these issues and aims to establish a procedural framework in preparation for the development of solutions.

The present study aims to examine the framework for UbD in junior middle school English, with a specific focus on the Big Concept. Drawing on the UbD proposed by Wiggins and MacTai, as well as other pertinent studies, a systematic framework template will be developed.

In addition, this study aims to validate the design framework of UbD in the context of junior middle school English, with a specific focus on incorporating Big Concepts. In conjunction with the assessment of experts, a series of classroom teaching action research iterations are undertaken to validate the viability of the design framework in the context of teaching practice.

3.2 Research questions

This study will focus on the English curriculum and the English unit, and answer the following three questions:

1) What are the problems in the design and implementation of English unit teaching in junior middle school?

2) How to construct the "action plan" of UbD English in junior middle school based on Big Concepts?

3) How to implement the "action plan" of UbD English in junior middle school based on Big Concepts in the classroom?

IV. METHODOLOGY

This study aimed to investigate the current state of English unit teaching in junior middle schools through a questionnaire survey of 2000 junior high school students from five schools in Jinhua city, Zhejiang Province. Additionally, interviews were conducted with 50 English teachers from a middle school in Jinhua City to gather further insights. The research methodology involved field investigation and data analysis. Simultaneously, this research focuses on junior high school students from a middle school in Jinhua city as the subjects of investigation in the context of classroom teaching. By means of long-term observation and tracking records, the aim is to enhance and refine the instructional design.

This study employs a scientific approach to construct a design framework for UbD in junior middle school English. The framework is developed through the utilization of literature research method and expert evaluation method. Subsequently, specific teaching design schemes are designed based on the distinctive characteristics of various courses. This study aims to investigate the challenges associated with unit teaching design by employing a research methodology that involves conducting interviews and administering questionnaires. Ultimately, the teaching practice is implemented in order to assess the efficacy of the UbD framework via the means of classroom observation.

4.1 Literature analysis method

Initially, researchers conduct both domestic and international searches using academic databases such as CNKI and JSTOR to explore relevant scholarly works and literature pertaining to Big Concepts. The objective is to examine the importance of Big Concepts in the context of unit teaching. Next, we will delve into the theoretical underpinnings of Wiggins and McTighe's UbD. Furthermore, both domestic and international research on the UbD has extensively examined its merits and drawbacks, thereby offering theoretical backing for the investigation of the UbD framework.

4.2 Questionnaire survey method

The primary focus of this questionnaire survey revolves around the existing challenges in unit teaching design and implementation, as well as the UbD framework. The research subjects include students and teachers. The questionnaire is designed to gain insights into how teachers and students perceive the attainment of teaching goals and unit teaching design and implementation. The aim is to identify potential issues in current English teaching design and analyze the underlying causes. By systematically gathering the perspectives of experts, the design scheme can be iteratively refined and adapted.

4.3 Interview survey method

The interview survey method is a research approach wherein researchers engage in oral conversations with respondents to collect survey data, resulting in a more comprehensive and in-depth understanding of the subject matter. This study primarily encompasses three key components of the interview process. Interview 1: Conduct interviews with experts, scholars, researchers, and teachers to gather their perspectives on the process of designing and implementing English units for junior middle school students. These interviews can be conducted either face-to-face or via email communication. Interview 2: Examining Teacher Performance from the Teachers' Perspective Interview 3 involves conducting interviews with teaching research staff or front-line teachers to gather

feedback and insights on the teaching design. This feedback will be used to verify, revise, and enhance the framework of the UbD for junior middle school English, which is based on the concept of Big Concepts.

4.4 Classroom observation method

The present study employed non-participatory classroom observations. The researchers gather data from the classroom environment using their own sensory perception and relevant tools such as observation tables, audio and video recording equipment. They then conduct research based on the collected data. To adequately assess the efficacy of the UbD English in junior middle school English, which is based on Big Concepts, it is imperative for the research to conduct extensive and prolonged observations and record-keeping of students. The primary focus of these observations and records should be on students' classroom behavior, teacher-student interaction, and students' collaboration, among other pertinent factors. Based on extensive classroom observation, the classroom teaching video is transcribed into a written transcript. Through coding analysis of teachers' and students' performance during instruction, this study aims to provide empirical evidence supporting the effectiveness of the UbD.

V. RESULTS

Based on the findings derived from a questionnaire survey and subsequent interviews, several issues have been identified in relation to the design and execution of English negotiation practices in China. English educators often possess limited understanding of the intricate nuances of national educational policies, thereby encountering challenges in effectively integrating macro-level educational policies into their instructional methods.In the instructional design, there is a lack of clarity in the teaching objectives and evaluation, resulting in suboptimal learning outcomes for the students.In the conventional pedagogical framework, educators tend to overlook the importance of incorporating practical tasks within the instructional context, thereby restricting students' opportunities for language utilization.

Based on expert evaluation and action research, we made adjustments and optimizations to the UbD proposed by Wiggins and MacTai, and integrated it with the English discipline. After undergoing numerous revisions and extensive practice, we have successfully developed an English UbD framework that is tailored to the specific circumstances and requirements of China.

The researchers discovered, through expert evaluation and non-participatory classroom observations, that the implementation of the "action plan" devised by experts and English teachers necessitated several iterations of classroom observations in order to align with the actualities of teaching and learning in Chinese middle schools, as well as cater to the students' requirements. Following extensive classroom practice and thorough analysis of coding, the researchers made adaptations and optimizations to the UbD framework developed by Grant Wiggins and Jay McTighe. The integration of the English discipline was undertaken, followed by multiple revisions and practices, resulting in the development of an English UbD framework that is deemed appropriate for the Chinese context. Please refer to the Appendix for further details. This template may serve as a valuable resource for the development of unit instructional design. In the context of instructional design, it is essential to tailor the specific approach to the teaching content and the unique teaching situation at hand.

VI. DISCUSSION

This study seeks to examine the challenges associated with the design and implementation of unit teaching in order to develop and execute a "action plan" for the UbD of English teaching in junior middle schools, with a focus on Big Concepts. This will offer valuable experiential knowledge for the implementation of significant concepts and the enhancement of instructional design and implementation, thereby carrying both theoretical and practical significance.

6.1 Theoretical significance

Firstly, it is advantageous to engage in a comprehensive analysis of significant concepts and establish a correlation

between these concepts and the instruction provided in the course. The majority of existing studies primarily examine and analyze Big Concepts from a broad perspective. However, there remains a dearth of comprehensive research on specific strategies for interpretation. Consequently, theoretical research encounters challenges in effectively addressing practical teaching methods. This study thoroughly examines the practical demands of the Big Concept in classroom instruction while designing the UbD for English in junior middle school. By doing so, it aims to elucidate how these demands can be addressed in the specific teaching design and practice, thereby facilitating the development of students' core discipline literacy.

Furthermore, it is advantageous to establish a theoretical framework for the implementation of UbD. The concept of UbD has been put forth by experts in the field of American education. The majority of domestic studies in the field of English education in junior middle schools in China tend to adopt an American perspective, focusing on the explanation of UbD. However, these studies often lack a comprehensive integration of theoretical interpretation with the practical aspects of English teaching. The implementation of the UbD by frontline English teachers has yet to be established. This paper integrates education policy, curriculum standards, and the current state of English teaching. It explores the integration of English classes and UbD as a means to promote the adoption of UbD in English instruction in China. The aim is to enhance the interpretation and implementation of UbD, and establish a theoretical foundation for its application in English teaching. Ultimately, this research contributes to the advancement of English curriculum reform.

Furthermore, there are advantages to enhancing the instructional framework of English courses and expanding the theoretical investigation of UbD. From an English subject research standpoint, the current body of relevant research shows limited emphasis on the development of a teaching design framework. Furthermore, the existing accomplishments may not constitute a comprehensive, coherent, and practical reference model. Hence, through the systematic organization of current UbD methodologies, including the processes of screening, creation, implementation, and ongoing improvement, a comprehensive framework for UbD specific to English subjects can be established. This framework aims to expand the scope of UbD theory.

6.2 Practical significance

To begin, it is advantageous to establish a structured framework that can serve as a guide for implementing the UbD in English classes at the junior middle school level. The current body of research does not include a framework template for the implementation of UbD in English classrooms, thereby impeding the successful integration of UbD with English instruction. This paper presents a framework template for junior middle school English UbD, based on the existing template of UbD and the requirements of junior middle school English. The development of this framework template holds significant importance in guiding the practical teaching of junior middle school English UbD.

Furthermore, it is advantageous to enhance the efficacy of instruction and address the issues prevalent in the present English curriculum design. This study focuses on the development and refinement of a UbD English framework, centered around the Big Concepts. Through this process, the study aims to identify and address the issues that arise in English unit teaching design. Initially, it is essential to conduct a comprehensive analysis and interpretation of the subject concept in order to establish teaching objectives that are more focused and attainable. Furthermore, the evaluation methodology employed in UbD serves to advance the targeted objectives of instructional activities. It employs both learning evaluation and learning evaluation methods to enhance the efficacy of evaluation and foster profound learning among students, thereby enhancing the overall effectiveness of teaching.

Moreover, the acquisition of Big Concepts and the promotion of students' core literacy are advantageous for students. The UbD is centered around the concept of Big Concepts, with the activities at each stage serving to facilitate comprehension and practical application of these Big Concepts. Students consistently enhance their comprehension of significant concepts through engaging in learning activities, thereby facilitating their acquisition of a comprehensive understanding of said concepts. The implementation of Big Concepts in classroom teaching serves as the central focus of the course unit, facilitating the enhancement of students' fundamental subject-specific

skills.

VII. CONCLUSION

The study demonstrates that the UbD theory proposed by Wiggins and Tektai holds significant value in terms of research and practical application within the context of Chinese education policies and regulations. The study identified several unresolved issues pertaining to the design of Chinese language instruction.

The level of comprehension among Chinese educators regarding the new curriculum standards is comparatively shallow, impeding their ability to seamlessly integrate these standards into their instructional methodologies. It can be argued that there exists a certain disconnect between certain policies and practices within the realm of English education, particularly among English teachers. The teaching objectives and evaluation methods employed by teachers tend to be broad in nature, resulting in limited effectiveness in terms of practical application. The teaching design exhibits a limited range of problem situations in teaching activities, resulting in a deficiency of authentic tasks. Consequently, students are unable to effectively transfer their learning. Furthermore, this study acknowledges certain challenges in the current unit teaching design in China. However, it also identifies that the integration of UbD with Chinese teaching practice has garnered significant recognition from English teachers. Through rigorous expert evaluation and iterative classroom teaching practice, we have continuously refined and enhanced the initial teaching design framework. This process has involved a gradual integration with local teaching practices, ultimately resulting in the development of a teaching design framework that aligns with the specific educational context in China. This framework aligns with the current state of education and teaching in China, making it more readily embraced by English teachers. In the present investigation, the efficacy of the program was examined through an action study. The findings of this study indicate that the enhanced UbD framework exhibits the potential to enhance teaching efficiency and facilitate the advancement of students' comprehensive English literacy. These outcomes align with the objectives set forth by China's new curriculum reform.

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Appendix

The framework design of junior middle school English based on Big Concepts

This study aims to explore the construction of an action plan for UbD English teaching in junior middle school, specifically focusing on the integration of UbD and the English subject. The research conducted in this study will provide insights into how to effectively implement UbD in the context of English education, with a particular emphasis on incorporating Big Concepts.This study aims to address a research problem by conducting an analysis of the benefits and drawbacks associated with the stage program and framework template utilized in previous research. The objective is to enhance the existing program and framework, ultimately resulting in the development of a stage program and framework template for this study.

First, stage procedures

1. Stage 1 a clear guiding ideology, establish the Big Concept

① Analysis of teaching design resources. Based on teachers 'experience, students' learning situation, textbook content, examination syllabus and teaching design reference, etc.

② Subject curriculum standard analysis. To lay the groundwork for the next transformation, interpret the English curriculum standards and organize the specific description of the teaching objectives, teaching evaluation, teaching activities, and other requirements of the Curriculum Standards.

③ Clear unit Big Concept. From the perspective of course content, teachers examine the entirety of the unit's content, refine large and small concepts and establish associations, construct the unit's overall framework map, and establish the unit's teaching objectives.

2. Stage 2: set the unit teaching objectives and expect the expected learning results

③ Set the teaching objectives. Teachers examine discourse content from the three vantage points of subject essence, curriculum content, and curriculum implementation; sort language knowledge, text structure, and rhetorical devices; form structured knowledge; and comprehend core values by mining and refining the large concept of units. The unit's teaching objectives are derived from four facets of language ability, cultural awareness, thinking quality, and learning ability, and the unit's expected learning outcomes are also determined. Simultaneously, the teaching objectives and the six dimensions understood in the UbD are described (see Table 3).

3. Stage 3: the design and evaluation scheme

This stage is mainly divided into two parts: "evaluation of learning" and "learning of evaluation" for evaluation, and four types of evaluation tools of Li Gang and Lu Lijie: CPRD (Collect-Present-Represent-Demonstrate) are used to form a system evaluation.(Li; Lu, 2018)

④ Evaluation of learning. Teachers monitor the Big Concept generation process by focusing on Big Concepts, assigning real-world tasks, emphasizing Big Concept mastery, assigning expressive tasks (such as mind mapping, group display, collection of works, etc.), open questions and answers, paper and pen tests, etc.

⑤ Evaluation of learning."Learning from evaluation" refers to the evaluation of self, emphasizing the selection of appropriate ideas in teaching activities, activating the prior, considering the degree of its application, and then modifying and enhancing their own understanding based on the circumstances.(Stern, J.S., et al.2017)Students' self-evaluations and peer evaluations were used to collect and assess performance data pertaining to the teaching objectives.

4. Design of stage-four teaching activities

⑥ Highlight the process design of teaching activities. Teaching activities are designed according to the multidimensional "WHERETO elements", screened and organized according to the specific situation of the class hour arrangement, and the activities are filled according to the design intent of various links such as introduction, process, and conclusion.

5. Reflection on stage-five teaching design

⑦ Evaluation the implementation effect. Through statistical analysis of the data collected by various evaluation methods, the behavior of students during the teaching process is comprehended, and an individual and global evaluation and analysis of the achievement of teaching objectives is conducted.

⑧ Reflect on the teaching process. Teachers should evaluate and summarize their own performance during the teaching process (including teaching tact, improvisation, etc.) and other situations affecting teaching in order to gain experience for future teaching design.

⑨ Collect student feedback. At the end of class or after class, students' opinions and ideas regarding this class are compiled through conversation and writing, forming parallels with stage one and a complete unit of teaching design.

Understand	Meaning
Explain	Ability to use their own language to explain concepts, rules, and the ability to conduct logical reasoning and argumentation
Explain	Use graphics, analogy, stories, and models to interpret data, text, and content
Apply	Be able to use the knowledge and skills learned to solve problems in real life
See clearly	The judgment and observation of things
Empathy	Integrate the emotions and values of others through keen perception
Autognosis	With the help of good thinking habits, reflect on learning activities and summarize learning experience, so as to obtain self-cognition of self

Table 3 understands the six major dimensions

2. Framework template

Based on the above stage program analysis, this study proposed the framework design template of UbD English teaching in junior middle school based on Big Concepts (see Table 4).

Phase 1 Design preparation			
Analytic target		Analyze the content	Matters need attention
Junior High School English Curriculum Standard 2017	Subject core literacy and curriculum standards		1. Combine with the content of the textbook to interpret
	course content		2. Focus on key, recurring words
	Academic quality		3. A single run does not involve a long-term, overall analysis not mentioned in the Standard
	Implementation recommendations		
	Division of discipline literacy level		
Learning situation analysis	The overall situation		From the perspective of the overall level of the school, class and students
	individual difference		Before or after class; talk, text, etc
	Self / peer experience		
	examination outline		
	Teaching design reference		
Big Concept	Unit discourse content		The whole study, establish the big, small ideas
Stage 2 teaching objectives			
Objective: Standards for student development			
	Category entries	Content	Students need
	(New curriculum standard) Curriculum objectives		"What knowledge and abilities do you want to master?"
Overall objective	Basic questions (distributed by the issue)	the gift of tongues		
		learning ability		
		trait of thinking		
		culture consciousness		
Key competence	short-term goal		Refer to the "Six Dimensions of understanding" for design / presentation
	long-term objectives		
Phase 3 evaluation scheme			
Category entries		Content	Point to the target	Target

Evaluation scheme	evaluation tool	Performance task		Corresponding to the overall goals and core literacy	Students' behavior and performance
		Open question and answer			Students' thinking performance and cultural consciousness
		Test			Need a familiar basic knowledge or an important part of the transfer
	Evaluation method	Student self-evaluation			All aspects of the performance in the student activities
		Peer mutual evaluation			
	Growth record bag				Long-term, sustained behavioral performance

Stage 4 teaching activities
1. Pre-planning: According to the teaching objectives, evaluation programs, combined with the needs of students, various teaching activities based on "WHERETO elements" for selection.

Specific activities	Corresponding to the "WHERETO element"	Corresponding teaching content

2. Teaching links (teachers choose the necessary activities from the advance plan to organize and complete the teaching links according to the teaching and learning situation analysis)

Import (to stimulate students' interest)	Select the desired activity from pre-planning
Introduce target requirements and evaluation programs	Necessary links; short-term, long-term; importance from high to low
teaching process	Teachers re, combine and optimize the combined teaching activities

Stage five teaching design reflection

Reflect on the object		Reflect on the results	Matters need attention
Assess the implementation effect	behavioral expression		1. Focus on the whole and the individual 2. Results are kept in the growth record bag
	Think about the situation		
	Test results		
Reflect on teaching process	Teaching wit		Keep the growth record of teachers
	Impresence situation		
Collect students'	Affirmed opinion		1. Use conversation, writing and other ways

opinions	Improve the opinion		2. Record the improvement comments and echo phase 1

Table 4 Framework template of UbD teaching in junior high school English base

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