Advances in Educational Technology and Psychology (2021) 5: 28-35
Clausius Scientific Press, Canada
DOI: 10.23977/aetp.2021.53004
ISSN 2371-9400

On the Unit Instructional Design of the English Subject Based on Big Ideas

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Keywords: Unit instruction, Big ideas, Backward design

Abstract: Although Curriculum Standards are advocating integrated unit instruction, there are still some problems in English classroom instruction, such as fragmented knowledge teaching, stagnant assessment and so on. Unit instructional design based on big ideas can mediate that challenge and promote in-depth learning. This paper starts with reviewing prior research about big ideas and unit instruction. Based on this, it presents a three-level framework to scaffold unit instructional design around big ideas. Then it explores how to use the framework to design unit instruction. At last, some suggestions are provided on how to design unit instruction more effectively and efficiently.

1. Introduction

Big ideas have been the guiding principles in the curriculum development of many developed countries, for instance, earlier in 2008 in Australian science curriculum, it states that big ideas play a central role in bridging the gap among scientific knowledge building, science experiences' exposure and science concepts' understanding at different levels (Australian Curriculum Assessment and Reporting Authority, 2008). Big ideas are the essential key concepts, principles, rules and theories in domains of disciplines or inter-disciplines (Harlen, 2010). In 2018, Ministry of Education of the People's Republic of China issued Curriculum Standards for Senior High Schools (Curriculum Standards) (2017 version) so as to better develop students' core competency, and big ideas were brought up for the first time in the essential English curriculum. Later the Curriculum Standards of 2017 version was modified and reissued in 2020. Both versions of Curriculum Standards explicitly clarify that the English Curriculum should take big ideas as the core, making the course content structured, theme-oriented, and contextualized to promote the implementation of core competency of disciplines (Ministry of Education, 2018; Ministry of Education, 2020). At the same time, both versions of Curriculum Standards emphasize the value of unit instruction, stating that unit is the basic elements to inquire into the thematic meaning and the learning activities should be designed systematically in the unit thematic context (Ministry of Education, 2018; Ministry of Education, 2020). The purpose of this paper is to present an instructional design based on big ideas in the unit in English classroom teaching so as to focus on long term goals and lay the foundation for students' lifelong development. This article begins with a review of why big ideas should be employed in classroom teaching. Following this, the relationship between big ideas and unit instruction is expounded by drawing on prior researchers' findings. Then a specific unit

instructional design based on big ideas is presented. At last, it ends with some suggestions on how to make big ideas more practicable for classroom teachers to facilitate student in-depth learning.

2. Big Ideas

2.1 The Importance of Big Ideas

Decades of educational experience in China has shown that what students have learned in class is piecemeal, context-bound knowledge, which cannot be transferred into other general situations to develop their problem-solving ability; while classroom teachers often overemphasize subject content and knowledge points resulting in neglecting the internal relations among knowledge and failing to recognize texts' underlying meaning (Meng, 2019; Wang, etc. 2020; Wang, etc. 2021). Big ideas provide a rationale and framework for solving the above problems existing in the classroom teaching in China (Cui, 2020; Zhao, 2020). Big ideas are the foundation for understanding in the curriculum and connect the fragmented knowledge into an integral one (Wiggins & McTighe, 2005; Chalmers, Carter& Cooper, 2017). Zong (2019) pointed out that implementing big ideas in teaching can bring about huge benefit : first of all, it is conducive for students to solve problems in real contexts, think critically and innovatively as well as train students' decision-making ability; second, it makes for interdisciplinary integration to fit in with modern education; finally, it advances students' meta cognition construct. Big ideas, on the one hand, enhances not only width but depth of knowledge of students; on the other hand, it makes teachers more confident and competent in their teaching (Chalmers, Carter& Cooper, 2017). Mitchell, Keast, etc. (2017) argue that big ideas are powerful in pedagogy; for instance, big ideas are rich, generative in contents, and offer a route to students engagement by providing some attractive activities leading to quality learning.

2.2 Big Ideas and Unit Instruction

A big idea is a "linchpin" idea, essential for understanding; connects dots of fragmented and discrete knowledge; inherently transferable, generative, and enduring (Wiggins & McTighe, 2005; Charles, 2005). Big ideas can be categorized into two complementary and interdependent sorts: content big ideas and process big ideas (Chalmers, Carter& Cooper, 2017). curriculum units contribute to deep learning and can be achieved by the use of big ideas on a continuum: within-discipline big ideas ←→ cross-discipline big ideas ←→ encompassing big ideas (ibid: 29). Big ideas help teachers target what students have already known and where they have confusion and problems and thus enhancing both lesson' and unit instruction' effect (Mitchell, Keast, Panizzon, & Mitchell, 2017). Wiggins & McTighe(2005)identified understanding by design (UbD) template as the blueprint for unit instruction based on big ideas to ensure the unit design efficient, coherent, integral, and effective. They developed a curriculum framework of UbD called Backward Design from the macro and micro view which includes programs, courses and units. This paper mainly discusses backward design in lesson plan from a micro view, i.e, unit design. Backward design encompasses three stages in a linear process to focus on big ideas: identify desired results, determine acceptable evidence, plan learning experiences and instruction. Stage1 mainly clarifies curricular priorities by identifying big ideas and targeting what students have known and are not familiar with. Stage2 deals with thinking like an assessor, i.e, how to know whether students' achievements are as desired. They have listed five assessment methods on a continuum to anchor teachers' teaching and students' learning. They are informal checks for understanding, observations and dialogues, tests and quizzes, academic prompts, performance tasks. Stage3 is time to create appropriate instructional activities according to the big ideas and assessment evidence

established in Stage1 and Stage2. Wiggins & McTighe developed WHERETO Model to build learning experiences and activities, which stands for Where/Why, Hook/Hold, Equip/Explore/Experience, Rethink/ Reflect/ Revise, Evaluate, Tailored, Organized. As a whole, these three stages are in alignment with teaching, learning and assessment and constitute a good instructional design for learning (Wiggins & McTighe, 2005: 196). Underpinned by the above backward design, this paper develops three-level framework (Figure1) to scaffold unit instructional design based around big ideas in accordance with Curriculum Standards. At the first level, according to the unit content priorities clarified, establish the theme of the unit, select big ideas, identify the unit goals. Then follows assessment evidence. At last, design appropriate learning experiences and learning activities correspondingly to promote students' learning and understanding, applying and practice, transferring and creating.

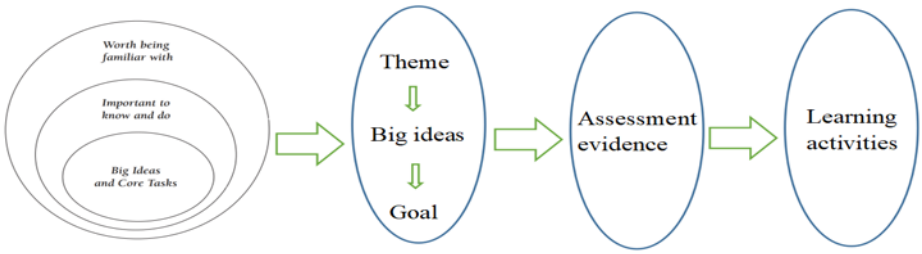

Fig.1 The Framework of Unit Instructional Design Based on Big Ideas

3. Unit Instructional Design Based Around Big Ideas According to the Framework

An example will be provided to illustrate the framework for scaffolding the unit instructional design based on big ideas in action. The example we choose is a unit focusing on sports and fitness in the senior high school textbook in china. The following shows how to use this three-level framework in detail to design the instructional lesson.

3.1 Select the Theme, Big Ideas and Identify Goals

According to the content priorities, the instructor should clarify what's big ideas, core tasks, and what's important in this unit. That means the instructor should analyze the selected material and students first, and then identify big ideas of this unit. At last, aims of the lesson are identified.

3.2 Analyze the Material and Students

The material is selected from high school textbook1 unit3 Sports and fitness Reading and Thinking (Lesson2) published by People's Education Press in 2019. As we know, unit big ideas are made up of a set of smaller big ideas (Wiggins & McTighe, 2005). Smaller big ideas are uncovered after the unit big ideas. This unit consists of seven lessons covering three main sets of big ideas (Figure2).The theme of this unit talks about sports events, understand sportsmanship and develop good life habits. In this unit, students will be able to: (1) hear and talk about sports events and sportsmanship; (2) use tag questions to make conversations properly; (3) know about two living legends Lang Ping and Michael Jordan and learn their sportsmanship. (4) learn the spirit of sports, know the meaning of fitness so as to love sports and develop good life habits.

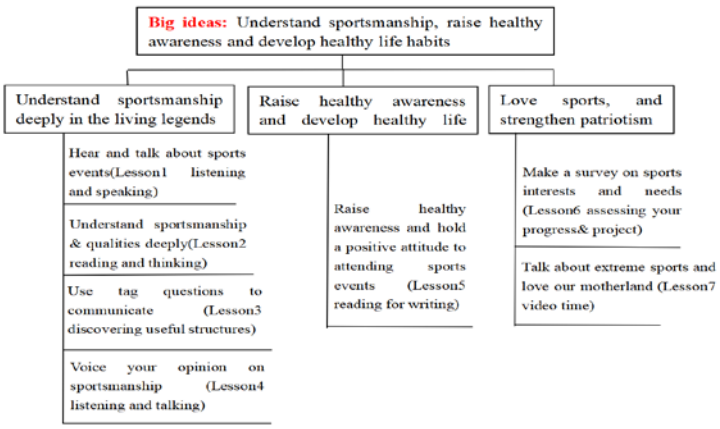

Fig.2 Big Ideas of Unit3 Sports and Fitness

After clarifying the unit objectives, the aims of this lesson should be fixed. In order to define the aims more clearly, it is necessary to have a good understanding of the discourse in Lesson2 first. The analysis of the discourse mainly focuses on three aspects: What, How, and Why.

[What]The passage is about the stories of two living legends: Lang Ping and Michael Jordan. What they have in common is that they both are masters in their fields and set good examples for others.

[How]The passage is a short and attractive narrative with pictures and subtitles, taken from a magazine. It starts with lead passage to define the living legends of sports. Then narrates Lang Ping's achievements in three different roles by parallelism and her determination by giving examples and time order, while the description of Michael Jordan becomes vivid by using figure of speech: personification, hyperbole, transitional sentence and quote. This passage shows different ways to narrate.

[Why]Students can learn that living legends not only make remarkable achievements, but also have good qualities such as strong determination, a sense of repaying society and so on.

As for the students, they have learned some sports events in the first lesson and mastered some reading skills. What they need to focus on is the writing skills of narratives and structure of this passage. According to this, students will be able to learn in this lesson: (1) to extract information through reading; analyze, infer and summarize from reading; find evidence to voice their opinion; (2) to figure out rhetorical devices such as alliteration, rhyme and so on; (3) to recommend their own stars and know how to support their ideas.

3.3 Collect Assessment Evidence

Assessments include questions, observations, dialogues, tests, performance tasks and so on (Wiggins & McTighe, 2005:152). In this class, the following tools will be mainly used.

Performance tasks: students can check whether they have achieved the objectives in this class by asking themselves these questions " Can I say something about Lang Ping & Michael Jordan? Can I tell some qualities the living legends have in common?

Did I practice my rational thinking? What can I learn from these great people ?".

Informal checks for understanding: the teacher will observe students' reactions to some questions and their responds to the exercise in class.

Test items: students will have a small test to exam whether they have mastered what they learn in class.

3.4 Design Learning Activities

Classroom teachers should design comprehensive, relevant and practical English learning activities to develop pluralistic thinking and critical thinking (Ministry of Education, 2020). According to Curriculum Standards, English learning activities include learning and understanding activities, applying and practice activities, and Transferring and creating activities. Learning and understanding activities involve Perception and noticing, acquisition and combing, generalization and integration. Applying and practice activities including description and interpretation, analysis and judgment, internalization and application. Transferring and creating activities are to infer and argue, criticize and evaluate, imagine and create.

Learning and understanding activities: (1) Show some pictures of sports to activate students' background knowledge. Then students will be asked to finish the K-W-L chart (Figure3), as it is an effective way to diagnose students' prior knowledge, potential misconception and reveal students' interest (Wiggins & McTighe, 2005). (2) try to predict the contents (Figure4), which will help students relate what they read to what you already know and to understand the new text. (3) finish the mind map (figure5) to have a global understanding of the text. Well-constructed comprehension questions can facilitate students to interact with texts and engage in reading, easy for them to be critical and creative readers (Pearson & Johnson,1978; Day & Park, 2005; Alptekin & Erçetin, 2012). Day & Park (2005) developed a framework of six types of comprehension and five forms of questions in order to make students involved in reading. The six types of comprehension are literal comprehension, reorganization, inference, prediction, evaluation, personal response while five forms of questions include yes/no questions, alternative questions, true or false, wh-questions (who/ what/ when/ where/ how/ why), and multiple choices (ibid) in order to check literal and inferential comprehension. Exercise2&3 (Figure6) in the textbook are well designed to in-depth learning. (4) then comes the summary and comparison (Figure7) to train students' ability of summarizing and critical thinking, as well as mater some writing skills.

Applying and practice activities: do exercise4 (Figure6) to develop their cooperation ability and learn these legends' good qualities.

Transferring and creating activities: students will be asked to finish exercise5 (Figure6) to practice their oral English. Then they will be asked to think about the legends in other fields (Figure8) and write a short essay about the living legend they admire.

Athlete	What do you already know?	What do you want to know?	**What have you learnt?**
Lang Ping			
Michael Jordan			

Fig.3 K-W-l Chart

Fig.4 Prediction

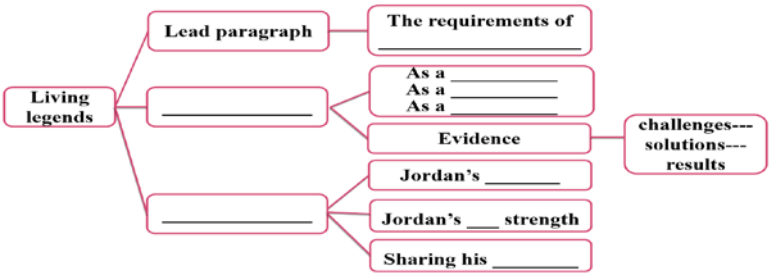

Fig.5 Global Reading

2 **Read the text and decide what is stated in the text (S), what can be inferred (I), and what you know to be true from experience (E).**

___ Lang Ping won several championships before she became a coach.
___ Lang Ping believed that her young players could win.
___ Many people in China and the US love Coach Lang.
___ Michael Jordan is loved by basketball fans around the world.
___ Before people saw Michael Jordan play, they did not know that basketball could be played that way.
___ Michael Jordan believes that it is important to help others.

3 **Read the text again and answer the questions.**

1 How was Lang Ping's determination tested in the 2015 World Cup?
2 What examples does the writer use to describe Lang Ping?
3 What does the first sentence in the paragraph introducing Michael Jordan mean?
4 Why does the writer mention "the final seconds of a game"?

4 **Work in groups. Discuss the questions.**

1 What reasons does the writer give for choosing Lang Ping and Michael Jordan? Who would you choose as another "living legend"? Give your reasons.

Yao Ming
Chinese
Basketball
2.26 m
Care for wildlife

2 What can we learn from successful athletes?

5 **Use the words and phrases below to talk about Lang Ping, Michael Jordan, and the athlete that you admire.**

athlete, injured, give up, champion, impressive, strength, determination, medal, graceful, captain, unique, failure, bring glory and honour, set a good example, lose heart

Lang Ping: _____

Michael Jordan: _____

The athlete I admire: _____

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Fig.6 Exercise in the Textbook

Structure	Main idea	Language feature	Qualities
Lead Paragraph			
 Lang Ping			
 Michael Jordan			

Fig.7 Summary and Comparison

Fig.8 Transferring Activities

4. Conclusion

Unit instructional design based on big ideas helps students engage in learning and transfer what they have learned to more general contexts. This paper presents a three-level framework to scaffold unit instructional design based around big ideas, and illustrates how to use the framework to serve classroom teaching. In order to develop students' language competence, cultural awareness, thinking quality and learning ability, classroom teachers should uncover big ideas and probe into the thematic meaning of each unit. When designing unit instruction around big ideas, teachers should first consider the content priorities so as to specify big ideas of this unit. Big ideas are often hidden and not easy to find (Shao, 2021), so teachers should frequently ponder on what they have overlooked and the reason why they choose these big ideas, rather than others/ what they choose are enduring and transferable or not (Wiggins & McTighe, 2005). After identifying big ideas and objectives, it is important to choose appropriate assessment tools to measure whether and to what degree students have arrived. At last, arrange learning activities guided by essential questions. When designing learning activities, teachers should take Curriculum Standards into consideration, making learning activities contextual, hierarchical and effective. In short, unit instructional design means classroom teaching should be students-oriented and teachers should give more time to students to have the initiative to study. When students meet some obstacles, teachers can provide some scaffolding for the new knowledge to help them connect what they have known and experienced and what they are unfamiliar with. As for the question "how to implement unit instructional design based on big ideas in classroom to develop students' core competencies", it still remains to be researched in the future.

Acknowledgement

Fund: Key Projects of 2018 University-level Teaching Reform in Gannan Normal University, Jiangxi Higher Education Teaching Reform Projects (approval number: JXJG-18-14-9) and The 2019 Degree and Postgraduate Education Teaching Reform Project in Jiangxi Province (approval number: JXYJG-2019-173).

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