Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

Website: https://www.eajournals.org/

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Investigation on Junior High School Extensive Reading Teaching of the Blackberry English Reading Series from the Perspective of Big Ideas

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doi:https://doi.org/10.37745/ijelt.13/vol12n47693 Published October 21,2024

Citation: Qian Y. and Qiu Y. (2024) Investigation on Junior High School Extensive Reading Teaching of the Blackberry English Reading Series from the Perspective of Big Ideas, *International Journal of English Language Teaching*, Vol.12, No.4, pp.76-93

Abstract: Big ideas refer to the core concepts and discourse patterns that can connect and organize fragmented knowledge. This article investigates and explores teachers' comprehension of big ideas and the challenges for applying big ideas in second language (L2) classrooms among junior high school in Jiangsu Province. The findings are as follows: (1) Teachers mainly learn about big ideas through teaching research activities, expert lectures, and open classes, but most of them understand them at a superficial level. (2) The main influencing factors of teachers' big idea construction include insufficient teaching resources, limited time and energy, inadequate methodological guidance, and heavy teaching pressure. They expect to improve their ability to construct big ideas by receiving teaching resources, teaching methods, teaching experience, and teaching theories. (3) There are significant differences among teachers in southern Jiangsu, central Jiangsu and northern Jiangsu in terms of their cognitive level of big ideas, their ability to construct and apply big ideas. However, they all urgently need teaching cases, theoretical guidance, teaching discussions, and training. Pedagogical implications are provided for English teacher education on the construction of big ideas in L2 classrooms.

Keywords: big ideas; integrated unit teaching; Blackberry English Reading

INTRODUCTION

The Compulsory Education English Curriculum Standards (2022 Edition) emphasizes "the selection and organization of curriculum content should be guided by themes,

Vol.12, No.4, pp.76-93, 2024

Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

Website: https://www.eajournals.org/

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focusing on the three major themes covering human and self, human and society, and human and nature," as well as "the structure of the curriculum should be constructed based on a grading system." Serving as two core terms of the new curriculum standards, "guided by themes" and "based on a grading system" are integrated and implemented throughout the teaching process with considering "big ideas in disciplines" as extending basic.

As teachers play a leading role in the classroom, their understanding of texts and principles they uphold in teaching design directly impact the effectiveness of instruction. Therefore, before implementing the new curriculum standards and innovating talent cultivation, teachers must fully understand the essence of big ideas, leverage their power and apply them in teaching practice first. In the field of basic education, the introduction of big ideas offers a new solution to addressing the issues of fragmented knowledge and shallow thinking among students and promotes the implementation of core competencies.

By analyzing and organizing the content of unit texts based on graded reading materials, teachers can extract the thematic and linguistic big ideas of each unit, ensuring a dual focus on both content and language in second language (L2) classrooms (Duan, 2023). This paper investigates and explores teachers' comprehension of big ideas and their instructional design practices in *The Blackberry English Reading Series*, which aims to provide a more comprehensive and accurate understanding of the current state of unit whole teaching in junior high school English from the perspective of big ideas.

THEORETICAL FRAMEWORK

Big ideas refer to the core concepts and discourse patterns that enable learners to connect and organize fragmented knowledge (Whiteley, 2012). The concept of "big ideas" has the following characteristics:1) it occupies a central position in the discipline, as a highly comprehensive and critical concept; 2) it has strong applicability to different subject areas and grade levels; 3) it possesses the nature of organic growth, logically and structurally establishing knowledge connectivity to facilitate the progress of learning (Chalmers et al., 2017).

The big ideas in English language education melt language-related big ideas and content-related big ideas. The language-related big ideas encompass structures of knowledge as well as methods and strategies for understanding language during both

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Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

Website: https://www.eajournals.org/

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learning and application phases. The content-related big ideas provides contextual frameworks for students to engage with language meaningfully while embedding emotions, attitudes, and values within learning materials—thereby enabling learners to construct new understandings alongside problem-solving approaches rooted in these themes post-instruction.

Content-related big ideas are the overarching concept and language-related big ideas are the means of constructing the concept. The melt of language-related big ideas and content-related big ideas not only facilitates value extraction from thematic content but also fosters practical applications of linguistic skills and strategies. Furthermore, it establishes an organized structure for course integration while assisting students in forming coherent connections among disparate knowledge points—ultimately laying groundwork for higher-order thinking migration and innovation (Wang et al., 2020). While the language-related big ideas possess objectivity, the content-related big ideas exhibit constructive qualities.

Big ideas are typically implicit and abstract which necessitates elucidation. They embody a synthesis of content, process, and values—integrating fragmented knowledge to provide principles, ideas, and methodologies that illuminate the essence of subject along with its core concepts and educational values. Big ideas require thorough investigation and demand exploration and discussion. Proposing a big idea compels educators to elevate their pedagogical stance by comprehending the nature of their subject matter, integrating its core components effectively, and transforming fragmented instruction based on isolated knowledge points into cohesive unit-based teaching centered around big ideas.

Amidst initiatives aimed at reducing academic burdens ("double reduction"), designing comprehensive reading tasks based on unit big ideas stands out as a pivotal strategy for enhancing teacher efficiency while cultivating students' intrinsic quality within subjects—a goal aligned with holistic education objectives. By weaving big ideas into English curricula seamlessly connects internal logical relationships among various knowledge points whilst establishing contextually rich frameworks conducive to effective language instruction; concurrently infusing ideological education throughout all instructional facets ensures alignment with moral development goals.

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Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

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RESEARCH ON BIG IDEAS IN LANGUAGE EDUCATION

In the early 21st century, the theory and practice of big ideas in teaching rapidly developed abroad, a great deal of research results emerging. Notable works include Lynn Erickson (2009)'s Concept-based Curriculum and Instruction for the Thinking Classroom, Wynne Harlen (2011)'s Principles and Big Ideas of Science Education, and Grant Wiggins and Jay McTighe (2017)'s Understanding by Design. These books not only put forward the connotations of big ideas, laying the theoretical foundation, but also provided teaching cases to guide the teaching practice.

Scholars have tried to clarify the connotations and characteristics of big ideas from a cognitive development perspective, arguing that big ideas are cognitive frameworks that connects many smaller concepts and helps construct students' understanding. Additionally, they represent a basis for understanding, used to connect fragmented knowledge points. Big ideas come in various forms and occupy a central position within disciplines, functioning as overarching concepts that integrate and connect subject content and methods. They organize the content and processes of unit knowledge learning and lead to a deep, transferable understanding of core concepts in the subject, characterized by abstraction, generalization, permanence, and universality.

Scholars have also examined the connotations and characteristics of big ideas from the perspective of different disciplines. In social science research, scholars propose the "structure of knowledge," suggesting that conceptual learning is content-based and theme-driven. This approach not only breaks down disciplinary boundaries and promotes knowledge integration but also helps students understand social phenomena, solve social problems, and explore the rules of social development. Unlike the social sciences, conceptual learning in language and arts disciplines is more process-driven, with processes, strategies, and skills viewed as tools to help students engage with and explore learning content, known as the "structure of the process." In English teaching, scholars have explored how to construct big ideas in instructional practice (Mitchell et al., 2017) and analyzed teaching methods that integrate reading and writing in second language classrooms using big ideas (Yuan & Zhang, 2022).

The introduction and research of big ideas in China can be traced back to the early 21st

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Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

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century. Li (2000), based on other scholars' exploration of the connotation of science literacy and the reform and development of science curriculum in foreign countries, explicitly proposed the concept of "big ideas of science" for the first time.

Currently, domestic research on big ideas has begun to take shape. Related studies not only focus on defining the essence of big ideas and constructing conceptual systems in different disciplines at the theoretical level, but also on designing curriculum content and transforming unit teaching in practice. After assimilating previous research results from abroad, frontline teachers have conducted in-depth studies on the classroom practice of big ideas, while university researchers have contributed to enriching the connotations of big ideas and optimizing curriculum design, with research in the sciences significantly outnumbering that in the humanities (Zhu, 2021).

In the field of basic education in China, theoretical discussions and practical explorations surrounding big ideas in the English subject are progressing steadily. Existing research has explored the practice of unit-based teaching design in English at different educational stages based on "big ideas" and its role in cultivating students' core English competencies, highlighting the significance and value of "big ideas" in fulfilling the student-oriented goals of the English curriculum (Chen, 2023; Wang, 2020; Zhao, 2021). However, most of the existing research focuses on textbook-based classroom teaching, with limited attention paid to other foreign language readings and extracurricular reading, which warrants further investigation.

METHODOLOGY

Research Questions

Based on the theoretical framework of big ideas, this study focused on the cognition and behavior of junior high school English teachers, aiming to address the following four research questions: (1) What is English teachers' understanding of the whole unit teaching from the perspective of big ideas in junior high schools? (2) What are the implementation situations of the whole unit teaching from the perspective of big ideas in *The Blackberry English Reading Series* teaching design? (3) What are the influencing factors for junior high school English teachers to construct big ideas? (4) What are the similarities and differences in the ability of constructing big concepts among teachers

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Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

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in southern Jiangsu, central Jiangsu, and northern Jiangsu?

Participants

The participants of the questionnaire were junior high school English teachers from various grade levels in Jiangsu Province who use *The Blackberry English Reading Series* as their supplementary reading teaching materials. They are of different regions, ages, educational levels, and teaching experience, providing multiple variables for the questionnaire.

Instruments

Based on the questionnaires developed by Liu & Zhang (2021) and Duan (2023), this study divided the questionnaire into five sections: basic information about teachers, understanding of big ideas, implementation of big ideas in teaching design, application of big ideas in the teaching process, and teachers' confusions on big ideas and support needed (see Appendix). The data were subjected to reliability and validity tests, with reliability and validity coefficients of 0.805 and 0.864, respectively, and a significant value below 0.05, indicating that the data had a good overall reliability, and authenticity.

Data Collection and Analysis

The questionnaire was distributed through the "Questionnaire Star" app in the WeChat. A total of 676 questionnaires were returned, of which 555 were valid. This study utilized SPSS 27 for data analysis, conducting chi-square tests to examine the relationships between region and cognition level of big ideas, region and implementation of big ideas, region and teachers' confusions on big ideas, and region and the support teachers needed. Correlation analysis was also conducted on teacher variables and their cognition level of big ideas. Furthermore, variance and descriptive analyses were performed to investigate teachers' cognitive levels of big ideas, their understanding and implementation of big ideas, and the difficulties encountered, to explore the implementation of big ideas by teachers from different regions in their teaching practices.

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Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

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FINDINGS AND DISCUSSION

Junior High School English Teachers' Cognitive Level of Big Ideas Basic Information of Participants

The majority of the participants were from northern Jiangsu (62.87%), followed by central Jiangsu (20.86%) and southern Jiangsu (16.27%). Among the participants, 53.99% were teachers with no executive position, 32.69% served as class teachers, the largest age group was between 36 and 50 years old (60.21%), and those with over 10 years of teaching experience accounted for the highest proportion (73.08%). Most participants held a bachelor's degree (90.38%). The distribution of teachers across the three grades was relatively balanced, with 32.25%, 27.96%, and 39.79% in each grade.

In terms of teaching style, most teachers adopted a friendly and natural approach, making their classes smooth and effective (49.41%), followed by those with a serious and orderly style (27.07%) and those with a humorous and fun style (20.71%). Most classrooms were energetic (60.65%), while a smaller proportion showed lower student engagement (24.11%).

The above data indicate that the participants were middle-aged teachers with rich teaching experience who successfully fostered dynamic classroom atmospheres. They had developed effective teaching methods, creating active and enjoyable learning environments. However, after obtaining their bachelor's degrees, few had pursued further studies, limiting their exposure to more recent teaching theories.

Teachers' Cognitive Level of Big Ideas and Approaches to Construct Big Ideas

60.06% of teachers had heard of the concept of big ideas but were unable to explain it clearly, while 23.82% of teachers had heard of big ideas and could provide an explanation. 7.1% of teachers had a deeper understanding of big ideas, while 9.02% of teachers had no idea about the concept. This indicates that most teachers had a certain awareness of big ideas, but only a part of teachers could clearly explain it or had a clear understanding of it. This suggests that the essence of big ideas and its subject-specific conceptual framework need further promotion and discussion in China's basic education field.

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Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

Website: https://www.eajournals.org/

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There were diverse approaches for teachers to gain an understanding of big ideas in junior high school. Teacher-to-teacher communication and discussion among teachers (64.86%) were the most common methods for deepening understanding and application of big ideas in teaching. Expert lectures (62.52%) and model classes (60.18%) were also important sources for teachers to learn about big ideas. Besides, self-reading of literature (35.32%), teacher training and research (34.59%), and curriculum standards (24.32%) indicated the diversification and personalization of teachers' understanding channels to understand big ideas.

Teachers' Cognitive Level of Big Ideas and Individual Factors

Table 1 shows that teaching experience, academic degree, and position were not correlated with teachers' cognitive level of big ideas. Teachers were heard of the concept of big ideas but unable to explain it clearly. Most teachers had a vague understanding of big ideas, and only a few teachers had heard of it and could explain it clearly.

Teachers' cognitive level of big ideas had significantly weak negative correlation with their teaching style (r=-0.115, p=0.01) and the classroom atmosphere (r=-0.263, p=0.01). In other words, the lower teachers' cognitive level of big ideas was, the more rigorous the teaching style was; the lower teachers' cognitive level of big ideas was, the more likely the classroom atmosphere remained unchanged. This indicates that although a classroom without big ideas as the guide might be full and orderly, such teaching lacked innovation and teaching design lacks motivation. Because classrooms guided by big ideas typically designed topic-based activities, which energized the classroom environment, stimulate students' thinking, and helped them consolidate learned knowledge and solved problems in a relaxed setting.

Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

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Table 1 Correlation Analysis Between Teachers' Cognitive Level and Individual Factors

	Factors							
Cogni Teacher Individual Factors	tive Level	Completely Unfamiliar	Hear of but Cannot Explain	Hear of and Can Explain	Deep Understand ing	Correlation Analysis		
	5 years or less	11	65	29	4			
Teaching Age	6–10 year	s 7	45	19	2	r=0.044, p=0.251		
	More than 10 years	43	296	113	42			
	College degree	0	3	2	2			
Highest Education	Bachelor's degree	55	375	140	41	r=0.015, p=0.70		
Level	Master's degree	6	26	18	5	p=0.70		
	Doctorate	0	2	1	0			
Teaching	Grade 7	15	135	53	15	0.002		
Grade	Grade 8	22	112	41	14	r=-0.002,		
Level	Grade 9	24	159	67	19	p=0.951		
	Homeroon Teacher		136	50	17			
	Regular Subject Teacher	38	224	80	23			
Position	School Committee Member Head of Teaching		18	10	4	r=0.043, p=0.266		
	and Research Group	3	28	21	4			
Teaching Style	Humorous and Fun	9	79	43	9			
	Friendly and Natura	ıl 29	194	87	24	r=-0.115,		
	Serious and	20	119	30	14	p= 0.003		
	Rigorous Other	3	14	1	1			

Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

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Classroo m Atmosph ere	Energetic and Engaging Low	24	221	126	39	
	Student Engageme nt	22	110	27	4	r=-0.263, p= 0.000
	Rigid and Unchangin	2	6	0	1	
	g Other	13	69	8	4	

Teachers' Cognitive Level and Implementation of Big Ideas

Table 2 indicates that most teachers had capacity of integrating big ideas into their teaching design to different degrees. However, most teachers only "occasionally" extracted and applied big ideas in their teaching design, while those who "always" do so were relatively few. It suggests that there is space for improvement in many teachers' understanding and application of big ideas, and more training or resources are needed to enhance teachers' ability to abstract and conceptualize.

There was a significant moderate negative correlation between teachers' understanding of big ideas and their ability to accurately extract them (r=-0.431, p=0.000). In other words, the more teachers were inclined and capable of extracting the core points of text, the higher their understanding level of big ideas was. Compared to those with less understanding, teachers with a deeper understanding of big ideas or hear of and can explain big ideas were significantly more likely to "always" or "often" extract big ideas in their teaching design.

Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

Website: https://www.eajournals.org/

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Table 2 Correlation Analysis Between Teachers' Cognitive Level and Implementation of Big Ideas

Application of Big Ideas	Cognitive Level	Hear of but Cannot Explain	Hear of and Can Explain	Relatively Deep Understandi ng	Correlation Analysis
	Always	11	19	17	
Accurate Extraction of Big Ideas	Often	94	95	21	r=-0.431, p=0.000
	Occasionally	232	42	9	
	Rarely	12	2	1	
	Fragmented Teaching	47	16	2	
Structured Characteristics of Course	Structured but Still Fragmented	259	88	25	r=0.254, p=0.000
Content	Mostly Structured, Rarely Fragmentation	43	54	21	

Most teachers' teaching content exhibited structured characteristics but still contains dispersed knowledge points; a minority of teachers conduct teaching based on fragmented knowledge points. It indicates that when designing teaching plans, most teachers consciously integrated course content around a core knowledge point, with high structurization. There was a significant weak correlation between teachers' cognitive level of big ideas and the structurization level of teaching content (r=0.254, p=0.000), which indicated that the higher the teachers' cognitive level of big ideas was associated with a greater tendency and capability to outline the main points of text and formed a knowledge framework, thereby emphasizing the role of big ideas in facilitating knowledge transfer.

The questionnaire showed that over 59% of teachers frequently designed thematic activities to guide students' discussions, while 39.28% of teachers occasionally

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Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

Website: https://www.eajournals.org/

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designed such activities. This demonstrates that integrating thematic activities into teaching design is a common practice and widely accepted by educators. However, in practical teaching, thematic activities have certain flexibility and selectivity in teaching design, and teachers can flexibly choose whether to design thematic activities based on factors such as teaching content and student characteristics to achieve better teaching effects. In addition, more than 64.87% of teachers' teaching plans were collectively formulated by the group, which indicates that teaching design is sometimes inspired or constrained by the school's teaching system.

Factors Influencing Teachers' Construction of Big Ideas in Junior High Schools

When designing unit-based whole-curriculum teaching from the perspective of big ideas, teachers encountered the following difficulties, including constructing knowledge frameworks to extract the connections between knowledge (66.67%), creating unit situational activities (63.78%), breaking away from traditional teaching (60.54%), determining the theme of the text (45.95%), and extracting key words of the text (43.06%).

The main factors influencing Junior High School English teachers' construction of big ideas in the unit-based whole-curriculum teaching were the lack of corresponding teaching resources (70.09%), insufficient time and energy (70.09%), lack of methodological guidance and training (70.45%), and high teaching pressure and fear of affecting teaching progress (66.49%). In addition, the high professional requirements for teachers (47.93%) and the teaching environment (28.47%) also affected the implementation of big ideas-based unit-based whole-curriculum teaching.

This indicates that, when implementing big ideas-based unit teaching, relevant departments need to pay attention to the acquisition and allocation of teaching resources, provide appropriate guidance and training, and offer necessary support to reduce teachers' pressure. There should be a focus on teachers' professional development and updating teaching philosophies to facilitate their growth and progress. Teachers themselves should also follow their development and manage their time and energy effectively.

To overcome these difficulties, the relevant departments need to strengthen the

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Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

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construction of teaching resources, pay attention to the acquisition and allocation of teaching resources, provide guidance and training to reduce teachers' pressure. Teachers need to pay attention to their own professional development, update their teaching concepts in time, and reasonably allocate time and energy. Education management departments, schools, and teachers should jointly promote teaching growth and progress.

The main ways to improve the ability to construct big ideas included obtaining authentic case studies or video materials of unit-based teaching (90.27%), organizing collective lesson planning (62.7%), and attending expert lectures to obtain professional guidance and advice (60%). In addition, conducting off-campus training and mastering relevant theories through reading books, articles, and other theoretical materials were also important ways to improve teachers' ability to construct big concepts. The above data showed that teachers tended to improve their ability to construct big ideas by providing and receiving teaching resources including teaching cases, teaching methods, teaching experience, and teaching theories.

Teachers expressed a preference for the following methods to improve their ability to apply big ideas in their discipline teaching (Figure 6). The most needed resource is exemplary real case studies or video materials of unit teaching from the perspective of big ideas (90.27%). This suggests that teachers believe specific teaching cases and videos are highly beneficial for understanding and applying big ideas-based reading teaching. Teachers also regard collaborative lesson planning for unit teaching (62.07%) as an important means of improving teaching effectiveness and quality. Through collaborative planning, teachers can study teaching methods, share experiences, and exchange resources to better conduct reading teaching under the big ideas framework. Additionally, teachers are inclined to seek professional guidance and advice by inviting experts to give lectures (60%) to gain a deeper understanding and application of the big ideas approach in reading teaching. Participating in external training programs and learning through reading books, academic papers, and other theoretical materials are also important ways to enhance teachers' ability to employ big ideas.

Teachers' preferences for improving their reading teaching skills mainly focus on obtaining exemplary real case studies or video materials of unit-based teaching from

Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

Website: https://www.eajournals.org/

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the perspective of big ideas. They also recognize the importance of teamwork and support. Therefore, to better implement Blackberry reading teaching from the big ideas perspective, it is crucial to emphasize not only theoretical learning and expert lectures but also practical teaching elements, such as real case studies, video materials, and organized collaborative lesson planning.

Contrastive Study on Teachers' Ability to Construct Big Ideas in Southern, Central, and Northern Jiangsu

There were significant differences in the cognition level of big concepts among teachers in southern Jiangsu, central Jiangsu, and northern Jiangsu ($\chi 2=20.583$, p=0.002). Teachers in southern Jiangsu had the highest cognition level, with minimal differences among teachers (M=1.5, SD=0.71). Teachers in central Jiangsu ranked second, while teachers in northern Jiangsu had the lowest cognition level. ANOVA (Table 3) showed that there was a significant difference in the cognition level of big ideas between teachers in southern Jiangsu and northern Jiangsu (MD=0.27, p=0.001), with teachers in southern Jiangsu having a higher cognition level than those in northern Jiangsu. There was no significant difference between teachers in southern Jiangsu and central Jiangsu, or between teachers in central Jiangsu and northern Jiangsu.

Table 3 ANOVA on Teachers' Cognition Level of Big Ideas in Southern, Central, and Northern Jiangsu

Region A	Region B	Mean Difference (β-J)	Standard Error	Significance	Lower Limit of 95% CI	Upper Limit of 95% CI
Central Jiangsu	Southern Jiangsu	16667	.09408	.216	3929	.0595
Northern Jiangsu	Southern Jiangsu	27882	.07616	.001	4625	0951
Northern Jiangsu	Central Jiangsu	11216	.07344	.337	2888	.0645

There were significant differences in the implementation of big ideas among teachers in southern Jiangsu, central Jiangsu, and northern Jiangsu (χ 2=24.456, p<0.001). Teachers in northern Jiangsu had the highest implementation level, with minimal

Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

Website: https://www.eajournals.org/

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differences among teachers (M=1.8, SD=0.70). Teachers in southern Jiangsu ranked second, while teachers in central Jiangsu had the lowest implementation level. Welch's test indicated that there were significant differences in the implementation level of big ideas among teachers in southern Jiangsu, central Jiangsu, and northern Jiangsu (t=9.15, p<0.001). ANOVA (Table 4) showed that there was a significant difference in the implementation level of big ideas between teachers in central Jiangsu and northern Jiangsu (MD=-0.3, p<0.001), with teachers in northern Jiangsu having a higher implementation level than those in central Jiangsu. No significant differences were found between Southern and Central Jiangsu, or between Southern and Northern Jiangsu.

Table 4 ANOVA on Teachers' Implementation of Big Ideas in Southern, Central, and Northern Jiangsu

Region A	Region B	Mean Difference (β-J)	Standard Error	Significance	95% Confidence Interval
Central Jiangsu	Southern Jiangsu	13867	.09022	.332	(3557, .0783)
Northern Jiangsu	Southern Jiangsu	.16579	.07147	.063	(0064, .3380)
Northern Jiangsu	Central Jiangsu	30446	.07505	<0.001	(.1238, .4852)

Table 5 showed that teachers in southern Jiangsu, central Jiangsu, and northern Jiangsu had significant differences in the difficulties they encountered in constructing big ideas in three aspects of "lack of appropriate teaching resources, lack of methodological guidance and training, and unsupportive teaching environment" (p<0.05). The proportion of teachers in northern Jiangsu who chose "lack of appropriate teaching resources" was significantly higher than those in southern Jiangsu and central Jiangsu. The proportion of teachers in northern Jiangsu who chose "lack of methodological guidance and training" was significantly higher than those in southern Jiangsu and central Jiangsu. The proportion of teachers in northern Jiangsu who chose "unsupportive teaching environment" was significantly higher than those in southern

Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

Website: https://www.eajournals.org/

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Jiangsu and northern Jiangsu. These data indicated that the imbalanced teaching resource in the three regions had a significant impact on teachers' construction of big ideas, and teachers in northern Jiangsu encountered more difficulties in terms of teaching resources, theoretical training, and teaching conditions than those in the other two regions.

There was no significant difference in the needs of teachers in southern Jiangsu, central Jiangsu, and northern Jiangsu in terms of improving their ability to construct big ideas, indicating that the needs of teachers in the three regions were consistent and they all urgently needed teaching cases, theoretical guidance, teaching discussions, and teaching training.

Table 5 Analysis on the Needs of Teachers in Southern Jiangsu, Central Jiangsu, and Northern Jiangsu

	Areas				
	Southern Jiangsu	Central Jiangsu	Northern Jiangsu	x^2	p
Lack of appropriate teaching resources	75(72.8%)	73(60.3%)	241(72.8%	7.03	0.03
Lack of time and energy	77(74.8%)	81(66.9%)	231(69.8%	1.65 7	0.43 7
Lack of methodological guidance and training	65(63.1%)	80(66.1%)	246(74.3%	6.14 1	0.04 6
High demands on teachers' professional capabilities	50(48.5%)	52(43%)	164(49.5%	1.55	0.46
High teaching pressure and fear of affecting teaching progress	69(67%)	76(62.8%)	224(67.7%	0.95 5	0.62
Unsupportive teaching environment	24(23.3%)	22(18.2%)	112(33.8%	12.3 22	0.00
Other	0(0%)	3(2.5%)	12(3.6%)	6.63 8	0.06 7

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Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

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CONCLUSION

This article investigates and analyzes the cognitive level of big ideas and its influencing factors among junior high school English teachers, and conducts a contrastive study on the ability of constructing big ideas among teachers from different regions. It is found that most teachers have a basic understanding of big ideas, but it remains relatively superficial. Teachers have diverse ways of understanding and construct big ideas, but they still face many difficulties. It is hoped that by sharing teaching resources, teaching methods, teaching experiences, and teaching theories, the ability of constructing big ideas can be improved. Although there are significant differences in cognitive level of big ideas, ability to construct big ideas, and teaching designs based on big ideas among teachers from southern Jiangsu, central Jiangsu, and northern Jiangsu, all three regions' teachers urgently need teaching cases, theoretical guidance, teaching discussions, and teaching training. Looking to the future, educational departments, schools, and teachers need to work together to give greater emphasis to big ideas in teacher education and enhance teachers' awareness and ability to teach with big ideas.

Acknowledgements

This study was funded by a grant by the Jiangsu Primary and Secondary Education Research (funding reference number: 2023JY15-GX-L24) and a grant by Huaiyin Institute of Technology for college student innovation and entrepreneurship training project.

REFERENCES

- Chalmers, C., Carter, M. L., Cooper, T., & Nason, R. (2017). Implementing "big ideas" to advance the teaching and learning of science, technology, engineering, and mathematics (STEM). *International Journal of Science and Mathematics Education*, 15(1), 25-43.
- Chen, Y. H. (2023). The Logical Connection and Implementation Path of Big Ideas and Integrated Unit Teaching. *Journal of Shanghai Educational Research*, (5): 73-78.
- Duan, R. Y. (2023). A Survey Study of Integrated Unit Teaching in Junior High School English from the Perspective of Big Ideas. Sichuan Normal University.
- Erickson, H.L. (2009). Concept-based Curriculum and Instruction for the Thinking

Print ISSN: 2055-0820(Print)

Online ISSN: 2055-0839(Online

Website: https://www.eajournals.org/

Publication of the European Centre for Research Training and Development-UK

Classroom (Multimedia Kit). Thousand Oaks, CA: Corwin.

- Harlen, W. (2011). *Principles and Big Ideas of Science Education*. Beijing: Science Popularization Press.
- Li Jun. (2000). The Development of Science Curriculum Content. *Curriculum, Teaching Material and Method*, (01): 9-12.
- Mitchell, I., Keast, S., Panizzon, D., & Mitchell, J. (2016). Using "big ideas" to enhance teaching and student learning. *Teachers and Teaching*, 1-15.
- Wang, Q., Zhou, M., Jiang J. L., Yan, C. B. (2020). Analysis of English Discipline Teaching Design Based on Big Ideas. *Curriculum, Teaching Material and Method*, (11): 99-108.
- Whiteley, M. (2012). Big ideas: A close look at the Australian history curriculum from a primary teacher's perspective. *Agora*, 47(1), 41-45.
- Wiggins, G., & Mctighe, J. (2017). *Understanding by Design (expanded 2nd Edition)*. Shanghai: East China Normal University Press.
- Yuan, Z., & Zhang, T. F. (2022). Applying Big Ideas to Facilitate Reading-Writing Integration in Language Classrooms. *Journal of Second Language Writing* 58, 100949.
- Zhao, L. J. (2021). The Construction Path and Case Analysis of Big Ideas in the English Discipline. *The Inservice Education and Training of School Teachers*, (11): 40-43.
- Zhu Qian. (2021). A Review of the History and Practical Prospects of Big Ideas Teaching in China: Based on a Study of 61 Core Papers from 2000 to 2020. *Shanghai Educational Research*, (06): 18-23.