The Large Unit Teaching in Primary School from the Perspective of the New Curriculum Standards - A Case Study of Lu Ming primary School In China

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Abstract

This study investigated the implementation of education at Lu Ming primary school in Shanghai China, employing a quanlitative methodology through questionaire and statistical analysis to achieve two objectives: 1) to indentify existing problems, and 2) to improve the large unit teaching model for the school's Chinese classroom. The quantitative methodology was applied to the research population that consisted of teachers and students from Lu Ming School, Shanghai, China, totaling 650 participants during 2023 academic year. The tools of data collection were interview and questionnaire. The number of valid sampling size was 160, for which the stratified sampling was combined with simple rondom sampling to collect data.

The findings revealed that: 1) The application of large unit teaching lacked depth, and 2) Learning motivation and outcomes were immensely influenced by the teachers' professional literacy and the design of the curriculum. Forthermore the application

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of the large unit teaching method in Chinese for primary schools could tremendously reinforce student's learning interest and academic performance. This finding has sufficiently demonstrated the positive role of large unit teaching in Chinese language classrooms. The research recommended the targeted and well-defined strategies, including strengthening understanding and providing teaching resources for large units on the basis of actual situations.

1. Introduction

This study takes the language teaching practice of Shanghai Lu Ming Primary School as the background to explore the large-unit teaching of elementary school language under the vision of the new standard. The whole text is developed in five dimensions: Desired condition, Actual condition, Problems, Research gap and Rationale.

1) Desired condition: The Curriculum Plan of Ordinary Primary Schools (2017 Edition 2020 Revision) clearly points out that "take the big concept as the core, structure the curriculum content, and push ahead the implementation of core literacy", which provides a reference for the revision of Chinese curriculum standards. As exhibited in the above discussion, the overall teaching of large unit is the core in revising new curriculum standards. The New Curriculum emphasizes large-unit teaching as the basic unit to enhance students' language literacy and comprehensive abilities through integrating subject content and knowledge. In elementary school language teaching, large-unit teaching aims to cultivate students' abilities in reading, writing and oral expression through interdisciplinary and comprehensive learning, and at the same time to improve students' thinking ability, cultural literacy and aesthetic sensibility.

2) Actual condition: In Shanghai Lu Ming Primary School, in the practice of language teaching, teachers have been actively exploring the effective mode of large-unit teaching. For example, "Traditional Culture" is a large unit, integrating festival customs, idiomatic stories, ancient poems and other contents. In practice, students' understanding of and interest in traditional Chinese culture have increased, but there are still challenges in integrating knowledge from different disciplines and promoting in-depth learning.

3) Problems: In practice, how to deal with the relationship between large and small units, how to realize effective integration between disciplines, how to increase students' participation and interest, and how to assess students' learning outcomes in a scientific and reasonable way have become urgent issues. It has become an urgent problem to be solved.

4) Research gap: this study will focus on how to optimize the design and imple mentation of large-unit teaching in elementary school language under the guidance of the New Curriculum Standards in order to improve students' core literacy. Specifically, it includes how to enhance students' thinking ability, cultural literacy and aesthetic appeal through large-unit teaching, as well as how to scientifically and rationally assess students' learning outcomes.

5) Rationale: Through in-depth investigation and analysis of the language teaching practice in Shanghai Lu Ming Primary School, this study aims to provide useful references and lessons for the reform and development of large-unit teaching of elementary school language in China, as well as for the enhancement of students' core literacy.

2. Literature Review

Within the context of elementary Chinese language teaching , particularly when employing an integrated thematic unit approach, a conceptual framework considering the following variables can be explored (Figure 1). This framework posits teaching method as the independent variable, while student learning outcomes and motivation in Chinese language learning are dependent variable.
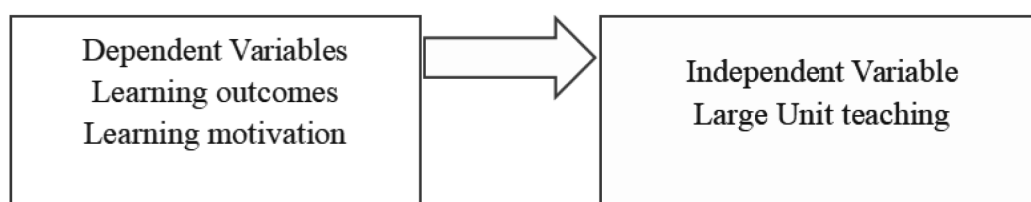
Figure 1 Conceptual Framework

Large unit teaching is not a new vocabulary in China, and its research has a long history. As early as the 1920s, Mr. Liang Qichao proposed that teaching should be comprehensively planned for articles, and that teaching should be done in groups rather than alone. Although this argument is more directed at teaching materials, it also reflects that unit teaching in our country had already begun to sprout at that

time. Since then, domestic research on the overall teaching connotation of the unit has been continuously enriched.

In some sense, instructional design is a crucial part of the practice and exploration of unit overall teaching. As pointed out by Professor Zhong Qi Quan, "units connect courses and class hours, and unit-based teaching design is not only the basic unit of curriculum development, but also the background condition of class time planning." As exhibited by combing and probing into the relevant results of the unit's overall teaching design, the relevant design research of the unit as a whole has given birth to some representative research findings. Scholar Ma Lan put forward five operational steps for the overall teaching design of the unit, namely to delve into the curriculum standards, to analyze the teaching materials, to integrate the unit content, to compile the objectives and preset evaluation requirements, formulate rubrics, to select teaching strategies and form a plan accordingly. What's more, the seven-step framework for unit overall design and development was proposed by scholar Li Gang; three key steps for unit overall design was put forth by Liu Hui: goal design, evaluation design, process design. Scholars Li Lei and An Gui Qing investigated the unit teaching design process from five aspects, namely the formation of the unit theme, the determination of the unit goal, the selection of the unit content, the implementation of the unit teaching, and the evaluation of the unit teaching.

Structuralism offers a vital theoretical foundation supporting large integrated curriculum units in primary Chinese language education. Structuralism emphasizes analyzing the intricate interrelationships between the component parts and the overall cohesive structure or system (Ornstein & Hunkins, 2009). This aligns with large cross-disciplinary units that teach language skills within the meaningful context of an integrated theme, contrasting isolated instruction of disjointed skills and texts.

Structuralism focuses on constructing integrated knowledge structures, which predominantly centers on comprehending core concepts and the connections between them (Ornstein & Hunkins, 2009). Large thematic units facilitate this conceptual learning by strategically organizing diverse content and activities around key anchoring concepts that unify the unit into an interconnected and meaningful

whole. Students learn to structure their evolving understanding of vocabulary, texts, grammar, writing conventions, cultural knowledge and communication skills on the basis of how they interrelate with the core concepts.

3. Methodology

The study investigates the implementation of Large Unit Integrated Teaching (LUNIT) in the Chinese Classroom of Lu Ming Primary School,Shanghai, China, within the framework of new curriculum standards. The population for this study comprised all students enrolled at Lu Ming primary school during the 2023 academic year (N =650). A sample size of 160 students was determined using Krejcie and Morgan's sample size table (Krejcie & Morgan, 1970), using simple random sampling. Data were analyzed using the software SPSS. Developing Data Collection Instruments Creation of instruments used in the study of the Large Unit Integrated Teaching in the Chinese Classroom of Lu Ming Primary School from the Perspective of the New Curriculum Standards. The researcher proceeded with the following steps.

1) Study the concepts, theories, and related research papers. The Large Unit Integrated Teaching in the Chinese Classroom is used as a guideline for questionnaire construction.

2) Create a questionnaire on the Large Unit Integrated Teaching in the Chinese Classroom, and develop the questionnaire by the advisors with suggestions of 3 persons. After that, the content validity was examined in line with the principles of conformity and comprehensiveness of the content by using the Index of Item Objective Congruence (IOC). And IOC of all questions in this paper is greater than 0.5.

3) The instrument was a try out by 30 students while not a sample to find reliability using Cronbach's alpha coefficient formula, (Cronbach, 1990).

Table 1 Reliability testing

Dimension	Item count	Cronbach's alpha coefficient
Motivation	8	0.897
Learning outcomes	10	0.907
Overall Scale	18	0.898

As shown in Table 1, the reliability alpha values of learning motivation and learning outcome dimensions were 0.897 and 0.907 respectively. Moreover, the reliability alpha values conforms to the standard of this study, and the alpha coefficient of the overall scale is 0.898, which is greater than the standard value of 0.8. This results reveal that the data results of this questionnaire have a desirable consistency.

4) The data were analyzed by statistical software packages: 1) According to the overall data of respondents classified by students on the current situation of large unit teaching methods in Chinese language classrooms at Lu Ming Primary School, it is analyzed through frequency and percentage statistics. 2) Level of the learning outcome of the students from Lu Ming Primary School, Shanghai is analyzed by mean, and standard deviations. And used to interpret the analysis results. To complete the instrument by data collecting questionnaires from the sample group

4. Findings

4.1 Frequency analysis of demographic variables

Demographic variable profiling provides basic descriptive information about the study sample, which is advantageous for the researcher to understand the overall characteristics of the study sample and provides an overview of the study context. By analyzing demographic variables, researchers can assess the representativeness of the study sample, which not only ensures that the sample mirrors multifarious characteristics of the research population, thereby helpinggeneralize the research results, but also makes them more generalizable and extrapolable. And demographic variable characterization is both the starting point of the study and the basis for subsequent in-depth exploration. By understanding the demographic characteristics of the study sample, the researcher is able to grasp the research question more comprehensively, which can effectively ensure the scientific validity and reliability of the study.

Table 2 Frequency analysis of demographic variables

n=160

Title	Options	Frequency	Percentage
Distinguishing between the gender	Male	68	42.5
	Female	92	57.5
Only child or not	True	82	51.2
	Fault	78	48.8
Father's education	University (Bachelor's degree)	44	27.5
	Congrats(on passing an exam)	42	26.3
	College (Associate Degree)	28	17.5
	Primary or below	22	13.8
	Junior high school	15	9.4
	Postgraduate and above	9	5.6
Mother's education	Congrats (on passing an exam)	46	28.7
	University (Bachelor's degree)	34	21.3
	College (Associate Degree)	31	19.4
	Junior high school	21	13.1
	Postgraduate and above	16	10.0
	Primary or below	12	7.5

This study was conducted by analyzing the frequency of demographic variables through the results of the survey of 160 students. In terms of gender, 42.5% were male and 57.5% were female. On the variable of being an only child, 51.2% of the participants were only children and 48.8% were not. Parents' educational attainment was also a focus of the study, with the father's educational attainment showing 13.8% at or below elementary school, 9.4% at junior high school, 26.3% at high school, 17.5% at college, 27.5% at university, and 5.6% at graduate school and above. The educational performance of mothers was 7.5% in elementary or below, 13.1% in middle school, 28.7% in high school, 19.4% in college, 21.3% in university, and 10.0% in graduate and above.

4.2 Characterization of large-unit teaching

In an effort to understand the familiarity of the 160 students in this survey with the large-unit language teaching, as well as the degree of liking of the large-unit language teaching and the acceptance degree of the large-unit language teaching, the following table was obtained accordingly through the descriptive analysis of the SPSS 22.0, in which the mean values of the familiarity and the attitude towards teaching were greater than the theoretical median 3, which suggests that the familiarity with large-unit language teaching of the present survey was on the upper side of the average. To put it another way, most of the samples are familiar with it, and the mean value of teaching attitude is 3.33, that is to say, the students in this survey like the teaching of large-unit language teaching to be on the upper side. The mean value of the difficulty level is less than the theoretical median of 3, which indicates that the difficulty level of the large-unit language teaching is on the neutral side.

Table 3 Descriptive analysis of the characteristics of large-unit language teaching

Characteristics	Min	Max	M	SD
familiarity	1	5	3.23	1.19
attitude	1	5	3.33	1.29
degree of difficulty	1	5	2.99	1.20

4.3 Reliability analysis

The method adopte in this paper is the Cronbach's alpha coefficient method, which is the most extensively applied method to measure reliability, the calculated Cronbach's alpha coefficient may be the mean value of the folded half of the reliability, which takes the value between 0-1, and the maximum is 1. It's particularly noteworthy that the closer the analyzed value is to 1, the better it indicates the reliability of the survey data. In academic research, the reliability of the survey data is far beyond our expectation. The more the analyzed value tends to be 1, the more it can show that the survey data has desirable reliability. In academic research, the general requirement for Cronbach's alpha coefficient is that the overall value is greater than

or equal to 0.8. Apart from that, subscales greater than or equal to 0.7 can be considered to pass the reliability analysis.

The data in this paper were analyzed for reliability using SPSS 22.0 to investigate the data obtained for the variables in the questionnaire. The final result of the analysis is depicted in Table 4.

Table 4 Reliability testing

Dimension	Item count	Cronbach's alpha coefficient
Motivation	8	0.897
Learning outcomes	10	0.907
Overall Scale	18	0.898

As can be seen from the above table, the reliability alpha values of learning motivation and learning outcome dimensions are 0.897 and 0.907 respectively, and the reliability alpha values are up to the standard of this study, and the alpha coefficient of the overall scale is 0.898, which is greater than the standard value of 0.8, which indicates that the data results of this questionnaire have a good consistency.

4.4 Validity analysis

As revealed by the validity analysis, the data can also be true and reliable enough to mirror the correspondence between the variables, which can effectively explain the process of variable changes.

Table 5 Validity check

Dimension	KMO	Bartlett's test of sphericity		
		chi-square	Degrees of freedom	Significance
Motivation	0.913	600.499	28	0.000
Learning outcomes	0.937	727.515	45	0.000
Overall Scale	0.919	1388.09	153	0.000

The table 5 exhibits the results of KMO (Kaiser-Meyer-Olkin) measure and Bartlett's test of sphericity of the scale for assessing the correlation and applicability among the variables. KMO measure is used for assessing the applicability of the sample data and the value ranges between 0 and 1. A higher KMO value indicates that the variable has better validity. As clearly suggested in the above table, the KMO values of all variables are between 0.913 and 0.937, which indicates better sample data. And Bartlett's test of sphericity is employed to validate whether the observed correlation matrix of the variables is a multiple of the unit matrix. The chi-square values, degrees of freedom and significance levels are exhibited in the table. In all cases, the significance level is less than 0.05, indicating that the correlation between the variablesdoesn't arise itself from random factors. This demonstrates that the Bartlett's test of sphericity can achieve the desirable results. And the validity of all variables in this survey is beyond our expectation.

4.5 Descriptive analysis of motivation/learning outcomes

In general, descriptive analysis is a basic statistical method for summarizing and generalizing the characteristics of a data set. It describes the variables in a dataset by calculating certain statistical indicators such as central tendency (e.g., mean) and degree of dispersion (e.g., standard deviation, range) to understand their characteristics and properties. Descriptive analysis is usually the first step in the initial analysis of a data set. More importantly, this analysis is beneficial for us to more clearly glimpse the overall pattern of the data before a more in-depth and extensive analysis.

Table 6 Descriptive analysis of motivation/learning outcomes

Characteristics	Min	Max	M	SD
motivation	1.25	4.50	3.18	0.94
Learning outcomes	1.60	4.80	3.30	0.88

The above table 6 illustrates that the mean values of both motivation and learning success are above the theoretical median of 3. It shows that in this survey, the students' motivation and learning outcomes are above the average level.

4.6 Related Analysis

Generally speaking, correlation analysis is a basic method of relationship research, the purpose of which is to explore the relevance between two variables, including whether there is a connection between these two variables, as well as the closeness of the correlation. In line with the size of the Pearson coefficient, the value of the coefficient ranges between -1 and 1. If the Pearson coefficient is greater than 0, it indicates that there is a positive correlation between the variables. If it is less than 0, it illustrates that there is a negative association between the variables. The absolute value of the numerical value indicates the strength of the correlation. The closer the absolute value of this indicator is to 1, the stronger the correlation between the two variables.

Table 7 Correlations

		Familiarity	Attitude	Degree of difficulty	Motivation	Learning outcomes
Familiarity	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	160				
Attitude	Pearson Correlation	.323**	1			
	Sig. (2-tailed)	0				
	N	160	160			
Degree of difficulty	Pearson Correlation	0.121	.352**	1		
	Sig. (2-tailed)	0.126	0			
	N	160	160	160		
Motivation	Pearson Correlation	.342**	.257**	.233**	1	
	Sig. (2-tailed)	0	0.001	0.003		
	N	160	160	160	160	
Learning outcomes	Pearson Correlation	.398**	.492**	.428**	.301**	1
	Sig. (2-tailed)	0	0	0	0	
	N	160	160	160	160	160

** Correlation is significant at the 0.01 level (2-tailed).

The above 7 table reveals that there are significant correlations between familiarity with large-unit language teaching, attitude toward teaching, degree of difficulty and learning motivation and learning outcomes. Pearson correlation coefficient is greater than 0, which not only suggests that there are significantly positive correlations between familiarity with large-unit language teaching, attitude toward teaching, degree of difficulty and learning motivation and learning outcomes, but also indicates that the higher the familiarity with large-unit language teaching, the higher the learning motivation and the better learning outcomes. The more favorable the teaching attitude towards large-unit language teaching, the higher the motivation and learning outcomes. The easier the level of difficulty of the large-unit language teaching, the higher the motivation and learning outcomes.

5. Conclusions Discussions and Recommendations

5.1 Conclusion

5.1.1 The application of large unit teaching in Lu Ming Primary School lacks depth.

Teachers' distribution of specific lesson objectives within the unit in Lu Ming Primary School was still characterized by a simple list of objectives, poor articulation of objectives between lessons, deficiency of gradient progression of objectives, and the teachers often followed the idea of single-article teaching, whereby the objectives of each lesson were fragmented and did not reflect the overall spiral of the unit, and the objectives of each lesson, more often than not, got progressively vague. The findings seems to contradict the suggestions of the structuralism of large-unit integrated teaching. (Ornstein & Hunkins, 2009). It is a teaching method on the basis of structuralism, which aims to reinforce students' understanding and application of knowledge by integrating large units.

5.1.2 The learning motivation and learning outcomes are remarkably influenced by the teachers' professional literacy and the design of the curriculum.

The higher the familiarity with the large-unit language teaching, the higher the learning motivation and learning outcomes. The more favorable the teaching

attitude towards large-unit language teaching, the higher the motivation and learning outcomes. The easier the level of difficulty of the large-unit language teaching, the higher the motivation and learning outcomes. Scholar Ma Lan put forward five operational steps for the overall teaching design of the unit, which are as follows: delve into the curriculum standards, analyze the teaching materials; integrate the unit content, compile the objectives; Preset evaluation requirements, formulate rubrics; select teaching strategies, form a plan. The finding supports the suggestions of Ma Lan's operational steps (Ma Lan, 2014).

5.2 Discussion

Structuralism is an important educational ideology, which also has great inspiration for large-unit teaching in primary language education. In this paper, we will discuss the practical application of structuralism in elementary school language education from the perspectives of language large-unit curriculum design and teachers.

1. Large-unit curriculum design

Structuralism believes that knowledge is structured and students need to build their own cognitive structure through continuous exploration, discovery and construction. Therefore, in the design of elementary school language large-unit curriculum, we should pay attention to the inner connection and structure of knowledge to help students build their own cognitive structure.

Specifically, the design of the large-unit curriculum should focus on the following aspects: 1) Determine the theme of the large-unit. The theme of the large unit should have a clear language knowledge and skills requirements, can be throughout the unit's teaching content. 2) Design of the large unit of teaching objectives. Large-unit teaching objectives should have a clear structure, including knowledge, skills and affective goals to help students build their own cognitive structure. 3) the development of large-unit teaching content. The content of large-unit teaching should emphasize the inner connection and structure of knowledge to help students build their own cognitive structure. At the same time, it should emphasize the diversity and comprehensiveness of the content to help students

broaden their horizons and enhance their language literacy. 4) Designing large-unit teaching activities. Large-unit teaching activities should emphasize students' participation and interaction to help students build their cognitive structures. At the same time, they should emphasize the diversity and comprehensiveness of teaching activities to help students broaden their horizons and enhance their language literacy.

2. Teachers

In elementary school language education, teachers are important guides and instructors of students' learning. Therefore, in elementary school language teaching, teachers should focus on the following aspects.

1) Teachers should pay attention to their own professionalism and teaching ability in order to improve the teaching effect and students' interest in learning. 2) Teachers should pay attention to the interaction and communication with students in order to understand the learning situation and needs of the students, and adjust the teaching strategies and methods in time. 3) Teachers should pay attention to the cultivation of students' independent learning and cooperative learning ability in order to improve the learning effect and interest of the students. 4) Teachers should pay attention to the development of students' learning ability and cooperative learning ability in order to improve the learning effect and interest of the students.

5.3 Recommendation

This paper takes a large unit teaching design case as an example to provide reference for the implementation of unit teaching design. In practical work, based on his own practical work experience, the author have provided specific design examples for the problems encountered in the current teaching design of primary school Chinese language units. The unit teaching design concentrates on each unit, including the organic connection between each text, which is beneficial for students to study systematically. In such case, students learn more knowledge in specific scenarios designed by teachers, which can strikingly strengthen their learning motivation and autonomy by combining with existing life experiences; In the course

of unit teaching design, students' vocabulary, reading and writing should not be neglected, and laying a satisfactory foundation is the premise of deep learning. When designing the teaching course, we should not neglect the mastery of basic knowledge on account of the emphasis on form. As a result, the author puts forth the following suggestions:

1. At present, the research on unit teaching design is still in the stage of theoretical construction. On that account, it needs a long period to be optimized and updated with regard to the unit teaching design in practice. On the basis of the existing research level, the author comes up with the unit teaching design model at the theoretical level, which is also implemented and evaluated in a small scope.

2. The case of unit teaching design chosen by the author is within a certain scope, which cannot sufficiently represent the overall thinking of the current elementary school Chinese unit teaching design, in other words, it lacks certain universality. It's imperative to systematically integrate teaching content and make full use of after-school teaching resources to make the teaching process more reasonable. In addition, it's preferable to adequately take into account the actual situation of students, as well as the functions and characteristics of each module of the course, so as to continuously adapt to different teaching styles and situations. In this situation, we can adapt to local conditions and continuously explore innovation, so that we can design teaching modules without breaking away from fixed processes. In the future, more teachers are needed to participate and jointly explore and optimize the teaching design of primary school Chinese language units.

3. The birth of large unit teaching, to some extent, has reversed the phenomenon of scattered knowledge points in single teaching. Nevertheless, it unnecessarily indicates that the single teaching is totally denied, because the unit teaching and the single teaching have an inseparable connection. In the whole unit teaching, we should not only grasp the humanistic experience and perception of a single text, but also grasp the comparative reading between the texts. Additionally, it's advisable to fix attention on both generality and individuality. In the intensive reading text teaching, we should not only refer to the form of single teaching, but also concentrate

on the whole teaching activities. Moreover, we should first take students as the center, and subsequently create an independent and cooperative learning atmosphere. Last but not least, it's sensible to guide students to actively explore and use language learning methods to achieve instrumental goals.

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