Li Jilin

Curriculum and Practice for Children's Contextualized Learning

Translated by Kan Wei

ESPH 教育科学出版社 Educational Science Publishing House

Springer

Curriculum and Practice for Children's Contextualized Learning

Li Jilin

Curriculum and Practice for Children's Contextualized Learning

Translated by Kan Wei

教育科学出版社
ESPH Educational Science Publishing House

Springer

Li Jilin
The Jiangsu Institute of Situation Education
Nantong, Jiangsu Province
China

Translated by Kan Wei, Associate Professor, Institute for Curriculum and Pedagogy, Faculty of Education, Beijing Normal University, Beijing, China, Email: kanwei@bnu.edu.cn

ISBN 978-3-662-55767-9 ISBN 978-3-662-55769-3 (eBook)
https://doi.org/10.1007/978-3-662-55769-3

Jointly published with Educational Sciences Publishing House

The print edition is not for sale in China Mainland. Customers from China Mainland please order the print book from: Educational Sciences Publishing House.

Library of Congress Control Number: 2017951169

Printed on acid-free paper

This Springer imprint is published by Springer Nature
The registered company is Springer-Verlag GmbH Germany
The registered company address is: Heidelberger Platz 3, 14197 Berlin, Germany

Foreword

As Confucius says, benevolent people love mountains while wise people delight in the water. By my understanding, while there were value and aesthetic orientation differences among literati in ancient China, this saying expresses Confucius's unique opinions on nature and the mind.

Even though I am not a wise man, I love running water, regardless of whether I am standing by the side of a river or a creek, or on the banks of the Yangtze River or the East Sea. I always watch the beautiful scenery as long as I can, guessing at the wonderful world under the water. Moreover, I gaze into the distance and feel excited while longing for the other shore.

As early as the 1970s, I was among the first batch of explorers of educational changes who were ahead of the times. Just like those who cross the river by feeling for the stones, reformers tend to be passionate, but are hardly aware of the difficulties and ways of educational reformation. I was one of these reformers, touching the stones and bravely crossing the river. Even though I could not stride out, I felt the joy of exploration when I was moving forward.

I looked up from time to time and watched out over the shore; sometimes it was clear and sometimes it was obscure. It is crystal clear that the ultimate goal of educational change is the development of students. Therefore, I said that the other side of the shore was still clear even though we were crossing the river by feeling for the stones. The exploration of contextualized education always had a clear goal and this motivated me to keep moving forward without stopping and returning.

At the same time, I was delighted that the development of contextualized education had been receiving extensive attention and a high evaluation. I considered that more students should benefit from it. Hence, since the contextualized curriculum was the most specific and most convenient way for teachers to operate in the classroom, its popularization was part of my consideration. Then I thought that the beautiful shore was approaching.

It seems that I can smell the fragrance of flowers in the beautiful and vast space of education. Context merges with imagery and interests, along with nourishment from the national culture, including genuineness, beauty, affection and thinking, as more and more children's tiny minds develop and grow up healthily. Their thinking

opens wide, being free and going beyond their world of experience, and their creativity is fully developed. No matter whether a child lives in the city or a rural area, every single student can be developed very well and grow up to be talented and enjoy a true education. That is the other side of the beautiful shore in my mind.

Nantong, China Li Jilin

Preface by Guest Author

I have heard so much about Li Jilin's educational research based on experiments and long-term exploration, which is exceptional in present-day China. Also, after reading her work, *Children's Learning Experiments and Studies on the Contextualized Curriculum* (Li, 2001), I feel even more that she is a really excellent educator.

It is easy for me to link Li Jilin's training in spiral sequences (in Chap. VI, Li, 2001) with American psychologist and educational researcher Jerome Seymour Bruner's educational thinking. Meanwhile, I cannot help but think about Dewey's philosophy of education when I read Li's "Child's Cognitive Activities Centred and Value-Centred" (Chap. X, Li, 2001). Also, I thought about *what education is*, a reply by Germany educator Karl Theodor Jaspers, when I read the significance of the experiences stressed by Li in Chaps. I and VII.

I am impressed her metaphorical teaching linking context and affection, which is tied up with the post-modern educational perspective. In his concept of the "3Ss" (Science, Story, and Spirit), representative of American post-modernism, Dore stressed *story* and *spirit* with speculative perspectives. However, in Li Jilin's study, both story (context) and spirit (affection) are reflected in teaching practices.

It was Kaiipob who proposed the principle of visualizability, while visualizability, intuition and personal feeling have been merged by Li Jilin; obviously, her exploration has broader connotations. Moreover, the mission of education does not only remain at visualizability, it needs to review intuition and go beyond intuition. There are complete expressions of this educational theory in her contextualized curriculum studies.

Much educational thinking and conceptions are interlinked and some of them are paradoxical. The above comparison and the association between educational figures and Li's study also prove this point. The core question relies on thinking and conceptions, which are the tree of life growing on the soil of teaching.

It is very popular for educators to have common experiences of teaching in primary or high schools. It seems that education is in place which is close to humanity and ways to touch the human heart. Where there are flashes of the light of education, that is where educational thinking is located. As Dewey asserted:

"Philosophy even can be understood as a general theory of education." Any profound knowledge will remain devotion in facing up education.

I respect Li Jilin with dignity from my heart, as she is a contemporary educator who grew up on school practices and links with a child's heart. And I will learn for her.

No words will suffice to express my esteem based on these comments.

Changsha, China Zhang Chuting[1]

[1] Zhang Chuting (1937—), former President of Hunan Normal University, Professor of Mathematic, Ph.D. Supervisor of Higher Education, Curriculum and Instruction in Hunan Normal University.

Preface: A Heart Song Played for a Child

I have conducted more than 30 years of exploration and research on contextualized teaching, contextualized education and the contextualized curriculum, which also encompassed three stages. These are honored as the *Trilogy of Contextualized Education* by many experts and teachers, who suggested that I might write a book series around this topic. I feel much and have deep insights when I recall the long course of my research. Therefore, it is worth publishing a series of books. Moreover, *Trilogy of Contextualized Education* is a good title with poetic resonance. Hence, I could not help but accept this suggestion.

I have always approached children and listened to their voices from their heart in the process of compiling the trilogy. I joyfully stare at each of these vivid lives, pictures, beautiful songs and melodies, cheering and laughing… I touch the strings like a musician along with children's voices in their pure mind and the waves of their mood. Furthermore, I find ways to grasp the rhythm and make a fair guess at children's dreams and imaginings… I am captivated by them while meditating on the melody in solitude, and I enjoy and experience their truth and splendor. I have taken inspiration from them thousands of times, therefore I see the blooms of "flowers in the field" (the title of Vol. I of this series), hear the "song of the lark" (the title of Vol. II) and look forward to the "beautiful shore" (the title of Vol. III).

Day after day and year after year, I cannot get tired or inactive. As I immerse myself in the *Trilogy of Contextualized Education* and record the interaction between the intelligence and the affection of the child, I have reflections and gains along with my sensations. I was even in the state of literature creation and too often recognized that child in my mind when I started to write.

As tenured professor Gao Wen of East China Normal University warmly eulogized in his preface to my work *Poetry of Contextualized Education*:

It is grounded on the context of Chinese culture.

It is focused on the child writ large.

It takes more than 20 years to complete the trilogy.

It goes global with the imprint of "made in China."

Yes, contextualized education focuses on the child writ large. What I pursue as the goal of education is that children can sing and fly higher and further. Thus, contextualized education is the "song of the lark" in my mind.

I cannot forget the support from the leaders and experts at the National Institute of Education Science (NIES). They were on site during my "Ninth-Five-Year Educational Project: Research Experiment on Promoting Child's Development through Contextualized Education" in December 2000. They conducted classroom observations, attended children's activities and listened to my closing report. "It is really that seeing is being" was what they praised. I was extremely excited when my research was fully affirmed and highly appraised by experts.

As Dean of Institute of National Education Science (INES), Prof. Zhuo Qingjun, commented:

"The project presided over by Li Jilin is consistent with the global trend of development of basic education. She has been making unremitting effort regarding the mode of quality education, which has Chinese characteristics and the spirit of the times. This exploration has been forward looking and has great theoretical and realistic significance".

"Distinguished by its theoretical framework and operative system, contextualized education has completed many initiatives and unique research studies. It enriches and develops contemporary education and teaching theories and practices. Also, it explores a universally significant channel and has a tremendous impact on promoting children's development with liveliness and harmony, not only for Jiangsu province, but for implementation in quality education around the country. These fruitful achievements have been made by Li, particularly her ground-breaking research, which has become a treasure trove for contemporary education with Chinese characteristics."

I burst into tears as the hardship of my exploration in the contextualized curriculum intertwined with the success of its pursuit. The comments by Prof. Zhuo were the highest rewards for my 20-year study.

Their evaluation shows that contextualized education could search for ways of achieving health and happiness and efficient learning. Thus, I expect that more teachers could employ contextualized education in their own practices, so that children can benefit through accessing better education, which is the heightened state I have pursued for over the past half-century. It is a "beautiful shore."

Now I am writing down those events in the process of exploring contextualized teaching, contextualized education and the contextualized curriculum, in order to meet the expectations of teachers and experts, and to seek more like-minded teachers working with contextualized education. I intend to draw the outline that is steadily taking shape of the progress of schools in the field of contextualized education with the feeling of spring.

After all, this series of books, *Trilogy of Contextualized Education*, aims to listen to children's voices and play. There is no "trilogy" without the children. They are the wisdom and motivation for writing. I deeply feel that contextualized education belongs to the child and is for the child. Only in this way can we fill up with energy and sing the sweet *adagio molto*.

I would like continually and persistently to collaborate with more teachers and to make unremitting endeavors for children's development.

Nantong, China Li Jilin

Looking to the shore of beauty of contextualized education

An emotional bond between teacher and students in contextualized education

Disciplinary contexts are linked to children's activities

Experts from various countries participated in the International Forum on Li Jilin's Contextualized Education

Li Jilin (1st on the left), Sukhomlinsky's daughter (2nd on the right) and other Ukrainian education experts

Education experts spoke highly of Li Jilin's Collected Works (2006 International Children's Day)

Li Jilin in an interview with reporter from South China Morning Post

Li Jilin participated in fundraising activities with children

A teacher led children to try old milling tools in the countryside

Demonstrating mathematical knowledge in a vivid fairy tale

Children use mathematics in real life contexts

Contents

About the Author

Li Jilin born in 1938, is a famous Chinese educator, the founder of Chinese contextualized education, professor emeritus and a special class teacher from Jiangsu Province. From 1956 to 1983, she taught in No. 2 Affiliated Elementary School of Nantong Normal University. She is currently the director of the Jiangsu Institute of Contextualized Education, and a consultant for the National Medium and Long-term Education Reform and Development Plan. She is also a member of China's National Committee of Experts on Teaching Materials, a part-time researcher at China National Institute of Education Sciences, a part-time researcher at East China Normal University and an adjunct professor at Nanjing Normal University. She served as vice-president of the Chinese Society of Education for 16 years, before turning 70.

Li started studying and researching children's contextualized learning in 1978. Over more than 3 years, the theory and application evolved from children's first language learning, to constructing a contextualized learning paradigm and to a contextualized curriculum and practical system. Elements of ancient Chinese literary theory are integrated into her current educational work and combined with advanced modern educational theories. She has a unique educational proposition which unites the cognition and emotion in fine-tuned ways. With Chinese cultural traits and the spirit of the times, it mobilizes children to learn.

Li has published more than a dozen books, including *Experiment and Research with Contextualized Teaching*, *Language Learning and Cognitive Development*, *Contextualized Teaching of Elementary Chinese Language*, *The Poetry of Contextualized Education*, *Learning for the Children* and *Trilogy of Contextualized Education*. In 2006, China People's Education Publishing issued her Collected Works in eight volumes. She also has published more than 200 papers. Five research projects led by her have won first prizes for National Outstanding Achievements in Education from the Chinese Ministry of Education. In 2011, she was named a national model for educators. In 2014, she won the first special class award for individual outstanding achievements in basic education. This event is influential in Chinese education.

Li has been invited to Hong Kong four times to give lectures about Contextualized Learning as an Effective Way to Learn Chinese, Using Contextualized Teaching to Facilitate Children's Linguistic Development, Reform of Elementary Chinese Class and to introduce her thinking. These lectures have aroused great interest and attention from experts and researchers in the area of Chinese language education in Hong Kong. Hongkong newspapers, such as *Wen Wei Po* and *Ta Kung Pao*, have written reports and published photos. Phoenix Satellite TV, *South China Morning Post* and other news agencies also conducted interviews.

Li has participated in various academic conferences, such as the International Symposium on Constructivism and Curriculum Reform, the International Forum of Principals and the 2004 International Symposium on the Heritage and Reform of Sukhomlinski's Educational Thoughts. In 2008, China National Institute of Education Sciences, China Association for Educational Exchanges, UNESCO Asia Pacific Network for International Education and Values Education, East China Normal University and other institutes jointly organized the International Forum on Li Jilin Contextualized Education, which introduced Chinese educators to the world. At the beginning of 2014, American National Science Foundation, Organisation for Economic Co-operation and Development, United Nations Educational, Scientific and Cultural Organization and East China Normal University jointly organized the International Conference on Learning Science. Li was invited to make the keynote speech and communicated with learning experts from all around the world.

Translator's Biography

Kan Wei is an associate professor of the Institute of Curriculum and Teaching, Faculty of Education, Beijing Normal University. He has published more than 20 papers in Chinese educational research journals, *American Educational Research Journal* and other international journals. His English book, *Constructivist Teaching in China: Transformation in the Chinese High School System*, which analyzes dilemmas and practices in the context of globalization, is in preparation. His main research interests lie in the comparative curriculum and teaching theories and practices, classroom sociology and studies on teachers' and pupils' voices.

Chapter 1
Theoretical Framework of the Contextualized Curriculum: Unique Features of Cultural Classics

I have been circling around the project of contextualization for 38 years. I cannot help being concerned about children's learning in their daily lives. Children were getting bored in enclosed classrooms, with a tedious and repetitive learning process. So I determinedly took children to move in nature and society, to link their Chinese literature learning with their lives. Moreover, I brought art into the classroom, so that their affections were provoked by aesthetics and their cognitive activities. As a result, this exploration greatly improved their learning space and status. The contextualized curriculum had been conceived in the process of rethinking. It so happened that further education reform relied on the new round of curriculum reform since the beginning of the 1990s. Like a gentle spring wind blowing in the garden, various experiments in education had been conducted. Accompanied by the guidebook of curriculum reform, all the curriculum standards were also launched. They showed explicit directions for teachers who were interested in reform and also broadened the space of curriculum development. The environment of educational change provided an ideal context for my personal exploration and I was involved in the waves of educational reform. I was full of confidence and enthusiasm, on a roll along with nationwide and worldwide curriculum reform. I had a strong but simple wish: that more and more children could benefit from the contextualized curriculum and that eventually it could be popularized in the classroom.

At the end of the 1970s, when I was attempting to understand this from the aspect of Chinese literature teaching, what I could obtain was to borrow the discourse of "artistic conception," in which I linked the objective with affection (*qing*), thinking (*si*) and rhetoric (*ci*). After more than 30 years' further consideration, I was deeply touched by the profound artistic conception, as there are most simple and ancient principles, such as aesthetics, psychology and traditional scientific invention. Artistic conception, no doubt, is worthy of being a national cultural treasure, and it is also a blank space of study in the international research field of "contextualized cognition." No wonder that post-modern curriculum researchers pointed out that the paradigms of the curriculum should shift to seeking *contextualized educational significance*. Meanwhile, it is a well-grounded view for them to

L. Jilin, *Curriculum and Practice for Children's Contextualized Learning*,
https://doi.org/10.1007/978-3-662-55769-3_1

propose "searching for the wisdom of the curriculum and teaching from oriental culture" and to construct theories of cultural style.

Combined with modern educational theories, Chinese classical literary theories had been employed in my explorations in primary school. I had gained inspiration and nourishment from the Chinese national culture, which directs us toward localized educational innovation. In fact, in the final analysis literature is about the study of humans, which is focused on by educational research. Thus, there are interlinkages between literature and educational study in a philosophical view. So artistic conception is the theoretical support not only for primary Chinese literature contextualized teaching, but also for the whole construction of contextualized education and the curriculum. It is precisely because rich national cultural elements contain among them the spirit of the times that they show vigorous vitality and display a much brighter future in my studies on contextualized education.

1.1 Three Dimensions Constructed for the Child

With the requirements of children's development, reform of the curriculum has had a great significance since I started explorations on contextualized teaching in 1978. I was always concerned with the growth of children's health and their optimized environment. My team-mates and I had been attempting to integrate the various curriculum resources to establish and optimize context. The aim of the contextualized curriculum is to solve the separations between curriculum knowledge, children themselves and society, which were long-standing problems perplexing schools and resulted in impacts on children's all-round development. The school curriculum should stand at the center of the values of children's development, so that it can promote integration between their life and social practices. Gradually, the subject curriculum of the core field developed into a mega-themed unit comprehensive curriculum, from a transitional curriculum in the areas of convergence to the field curriculum in resources; these had been continually generated and improved after 18 years' exploration. Gradually, the unique curriculum system with Chinese characteristics was formed. Then, in 1996, I sorted out the fundamental content and points of the contextualized curriculum so that it could be more popular among teachers. The preliminary theoretical framework of research for the contextualized curriculum has been established since then.

Tremendous changes had occurred in curriculum theories and practices in the international field of basic education. The tendencies include the integration of subjects, comprehensiveness of the curriculum and more diversity and personality, which are embodied in the new trends of student-centered constructive curriculum theories. The contextualized curriculum, therefore, was an active response to international basic education reform and blended into the tide of the new round of basic educational reform since 2001 in China. The emergence of the contextualized curriculum provided a unique cultural connotation of a paradigm of a curriculum for basic educational change and development in the new century. The

contextualized curriculum had won affirmation and high praise from the society and the educational community for the significance of its practices.

Any development or construction of the curriculum is shaped by the recognition of three dimensions and their interactions: the child, knowledge and society. The contextualized curriculum is no exception. However, I have my own perspectives on the relations among these.

1.1.1 The Child

Traditionally, curriculum development usually focused on the area of knowledge for children required by teachers, society and the needs of the discipline. Children were regarded as naïve and ignorant, waiting to accept knowledge, and as a result they were the passive objects of what teachers instilled. Children were excluded from such a curriculum and even their curiosity for knowledge, which guided them to learn, was killed. This is definitely the most valuable driving force for development. However, the merits of the child were too often ignored by adults. Obviously, the beautiful nature and talents of the child were neglected. Nevertheless, the child is paramount and the real subject of learning in the theory of the contextualized curriculum. Meanwhile, learning is constructed by subject and knowledge acquisition will not happen without this construction by subject. Everything for the child's development is the starting point and the end point. Therefore, we need to reconsider our target of research and find its secrets.

The nature of the child can be summarized as loving beauty, loving being engaged in activities and having wisdom hidden among them. Then how can we educate children based on their nature, as Confucius said, according to these three characteristics? The fundamental principle is that we have to clarify that the ultimate goal of education is to promote all students to all-round development. Therefore, the contextualized curriculum makes full use of more than students' individual experiences and various valuable resources for promoting their growth, through interactively constructing old and new experiences with constant superimposing, restructuring, integrating and developing. That is not only the expectation for the child, but the wishes of the children themselves.

And there are various differences in children's natures under the influence of the curriculum. Some children's natures are explicit while others are implicit. Meanwhile, the potential wisdom of children has obvious uncertainty: it might develop very well, while it also could vanish. Their development occurs in certain situations, thus the situation becomes an indispensable source and an irreplaceable real-world scenario when students construct and employ knowledge. Children conduct observations, feelings and experiences in such scenarios; that is, their potential and their experiences should be built through their own activities and realized through interactions with society and culture. In particular, the contextualized curriculum rouses the child's affections through optimizing scenarios, so that they can be actively involved in learning and development. As a free individual,

there are collisions of active thinking and blends of intertwined emotions among students and teachers; even discussions and interactions are like a boiling pot. There are aesthetic activities, moral conversations and artistic explorations, and reasoning and scientific activities as well. Sparks of wisdom burst out from the children and some of these ideas are unexpected for the teachers. Once children's potential and experiences have been activated, their natural endowments, self-consciousness, independent qualities and personality will be displayed and promoted, and then the contextualized curriculum will be a true curriculum system which can enter into the child's world.

As teachers working in the classroom, my colleagues and I have experienced many times such a scenario when we deeply admired children's wisdom. So I often remind teachers that they should be more open and believe in children, as children are the subjects of learning and knowledge should be constructed by them. Teachers are awakeners and inspirers, or partners when children are learning; at best, they are the child's kind coach. There should be typical ways in which the child becomes the subject of learning in the classroom.

1.1.2 Knowledge

It has been a while since people have always thought that school is a special training place for transforming knowledge. Preaching, teaching and dispelling doubts are right and proper elements of schooling. However, what are taught in school are abstract symbols, so the child passively accepts knowledge inch by inch. They know little about the relations or background of knowledge and it is hard for them to understand. As a result, original, interesting knowledge becomes a purely abstract symbol, which is far away from the child's life. Their rich learning world becomes quiet and strange to them. Meanwhile, Chinese students are confronted with the historical burden and shadow of the ancient imperial examination system. Students are faced with numerous homework exercises, so big a mountain that the child can get out of breath. They cannot help but marvel at how learning is so boring. It seems that we could summarize this phenomenon of Chinese students' learning by the formula "closed knowledge + boring exercises = reasons for child's fear of learning." So the traditional means of transmitting knowledge have lost positive meaning and value. Thus, it has been doubted and challenged that the effects of instilling knowledge will be harmful to the child's mind and personality. I believe that knowledge and context are independent, thus all knowledge is produced in a certain context and eventually the knowledge will return to the context. Knowledge for a child's learning should be in context. Such intuitional methods as drawing, music, drama and multiple media should be connected with teachers' language, and knowledge should be inscribed in context. In such a contextualized curriculum, we cannot only create a scenario of real life, but also absorb ideas from the artistic conception, so that the context gains depth and breadth as the imaginative and aesthetic scenario is employed. As an autonomous agent, the child

obtains comprehensive, vivid and aesthetic knowledge. Meanwhile, we have realized that the child's learning is not merely grasping an isolated point of knowledge and symbols, which is called linear knowledge. Knowledge itself is diverse, vivid and interconnected.

Clearly, the ultimate goal of learning knowledge for the contextualized curriculum is practice and innovation. Hence, it emphasizes the principles of *focusing development and fundamentals*, *starting from the future* and *acting from the present*, which could be applied and operated in schools in an orderly way. Therefore, the contextualized curriculum is open to the construction of the child's knowledge structure, which is flexible and could be expanded and supplemented. As we know, the contextualized curriculum system pays more attention to the child's innovations and practices. So practice is the starting point of the child's understanding and only through practice can we truly grasp knowledge. In a word, the highest level of employing knowledge is innovation. The reason that human beings have made great progress is that they can employ knowledge and create innovation in practices. Innovation cannot be separated from practices, whilst without any innovation practices can only be repeated again and again. I am deeply touched that children's creativity is the most vivid and inspired wisdom that bursts out from their young lives. They are so brilliant and valuable even though they are only born a moment ago or are relatively shallow—how teachers should cherish these inspirations. Accordingly, innovation promotes practices and lively practices activate innovation. Therefore, children are engaged in innovative practices when they are in a specific scenario and motivated by affection. Also, they develop and obtain the joy of experience through simulated or symbolic operations and practices in the field.

1.1.3 Society

We started to develop the field of the contextualized curriculum in the 1980s, aiming to bring children into nature, having them enter into societal life and let them touch and feel the bright side of life. The fundamental effect was for children to learn about the world around them and understand life so that they know that knowledge is a societal process. Children have to connect their social practices and learn in an interactive situation through interacting with each other and the environment. The contextualized curriculum, as we have discussed, is committed to expanding a child's living and development space, extending it to family and community, as it is an open system. Letting our curriculum return to social practices as a community is an inexhaustible resource, which has an impact on us, guides students and supports children's lives there. Life scenarios seem to narrate their past lives and bring lots of deep thinking, meanwhile calling people to look into the future. Indeed, life itself is a textbook as well and the best experimental area for children's learning, the most vivid classroom of comprehensive practices. It makes no sense if the child's knowledge is far away from society or separate from life, when as a result they cannot comprehend the essentials of knowledge.

Besides, the ultimate goal of children's learning is just to survive in the future society, simultaneously promoting personal development and the societal process, which can be summarized as developing themselves for society. Thus, society is an indispensable resource for constructing a child's knowledge, which is the irreplaceable real situation. Making full use of the environment and controlling the context, linking the contents of the classroom and society, the contextualized curriculum creates a joyful atmosphere on campus through diverse extra-curricular activities. Meanwhile, relatively fixed educational weeks help the school further establish horizontal integration among the campus, family and society according to the theme of mega-unit educational activities. Children can be engaged in knowledge and learning through understanding, observing and experiencing rather than just sitting in the classroom. For instance, there is a Reading Week in February, a Week of Learning by Example, a Love Child Day on 1 June, Patriot Month in October, as well as a Harvest Festival and a Fairy Tale Festival. This kind of broad classroom is strengthened with the most vivid text and forms new traditions. It achieves good educational results, as the contextualized curriculum pushes down the walls between school and society and broadens the educational space. Ultimately, it successfully merges the child, knowledge and society in meaningful ways.

Connecting real-life scenarios with imaginative simulated situations, the contextualized curriculum provides a broad and very suitable educational environment for children's growth. The "roll effect" is therefore an effective way of promoting children to real subjects of learning and reducing psychological distance. There is affection between teachers, students and the content of learning, so students' potential wisdom can be stimulated in communications and interactions when knowledge exists among the emerging feelings within the context. Making full use of the functions of contextualized education, teachers link current learning and future applications, thus the child could be actively involved in thinking, imagining and operating. In this way the implementation of the child's overall development goals could be realized. As a result, the child, knowledge and society are linked by the "affection bond" (*qinggan niudai*), filled with the colors of affection and the glory of humanity.

1.2 Five Essential Factors of Happy and Effective Learning

Looking back over the course of my research, I summarized the five essential factors of promoting children's development through contextualized teaching based on long years of experience, including (1) developing an interest as the premise of inspiring the child's initiatives; (2) strengthening aesthetic feeling based on understanding real life; (3) developing thinking as the core and focusing on creativity; (4) stimulating emotion as the motivation with humanity; and (5) training their language learning based on their practices. Meanwhile, these essences also

could be employed in other subject classrooms, as they are indicated as universal characteristics. Thus, these explorations helped to build a theoretical framework for expanding on contextualized education. In the subsequent 10 years of thinking, I had a new insight: the five essences have been promoted as five principles in the implementation of the contextualized curriculum.

1.2.1 Inspiring Children's Initiative

To be precise, the process of teaching should be a course of promoting the learner to be a self-developer. Internalization and absorption of knowledge can be realized only through the active participation of the learners themselves. This essential of teaching determines that students should be the subject of teaching and the key to learning, and as a result is highly dependent on the engagement of students' initiative. The contextualized curriculum is devoted to studying "how to learn" and how to grasp the principles of learning so that the child's development can be promoted. The rational sense of school-aged children is rather poor, especially for those at the beginning of school. In contrast, their learning motivation is more likely to be influenced by their emotions. The aim of the contextualized curriculum, furthermore, is to promote the teaching process as an inquiry activity that intrigues the child's enormous interest and keeps them moving forward to the field of knowledge. As the initial motivation of the child's development, the same as changing other things, it is their internal cause of development. Thus, the first principle of employing the contextualized curriculum is subjectivity, which may fully motivate students' initiative in learning.

1.2.1.1 Arousing the Child's Curiosity and Thirst for Knowledge

Seeking knowledge and curiosity could motivate the child to engage in learning and love to doubt things. It is a valued psychological factor for children who are encouraged to use their initiative at their present stage or for their future development. Even though seeking and curiosity are a child's inherent characteristics, it is not easy to keep such positive psychology on a stable basis. Routine teaching activities, whether they are quite simple or very hard, or too much homework, teachers' unintentional reprimands or parents' punishments, can depress their valuable psychological qualities, and then these qualities will deteriorate. As a result, the child will regard learning as a burden and in more serious cases may even try to escape from learning. These situations are not uncommon in school.

Therefore, children are encouraged to leap learning hurdles in the operations of the contextualized curriculum, by means of new teaching methods in a vivid and interesting learning context. Since their learning emotions and motivations have been aroused, their curiosity has been satisfied and maintained. Once children have an interest in learning, they are dominated by their emotions rather than their

concentration. Psychologists maintain that there are three types of attention: *intentional attention*, *unintentional attention* and *follow-up intentional attention*. If the latter is supported by interest, eventually students are prompted to be engaged in learning.

The first important step in learning new content is to arouse motivation for learning in the introduction, which is emphasized by the contextualized curriculum. It uses different ways of doing this, including creating various scenarios and causing suspense so that the child is engaged due to curiosity. By teachers describing pictures, the child is engaged in learning as they are attracted by aesthetics or by revealing material objects, and the child's thoughts are triggered. By linking to the child's existing experiences, they are likely to learn as these experiences are close to their own life. By touching the realms of the child's emotion, their heart strings are pulled and motivated by emotions. No matter whether the child is curious or concerned due to emotion, the contextualized curriculum prompts them to form the explorative psychology necessary to inquire into knowledge. To those children who have strong curiosity and a thirst for knowledge, their psychological characteristics are meted out with satisfaction and humor, which ensures that they have an enthusiastic mood and engage with the teaching when they encounter a new lecture. Children's strong interest in learning is effectively aroused by their relaxed heart, joyfulness and self-performance, and interest also brings about their initiative to participate in learning activities. Based on numerous contacts, understanding and observation studies on the phenomena of children, I simply summarize this process as "inquiry → satisfaction → humor → formation of motivation → love of learning → engaging in learning → actively learning." After introducing the new lectures, the contextualized curriculum creates scenarios or simulated scenarios in life or a real context, scenarios in fairy tales or scenarios in science fiction, or other kinds of continuous and dynamic scenarios. Consciously, the teacher brings the children into the related context step by step. Then, the children's real sense and role awareness are strengthened in the interaction between emotion (*qing*) and context (*jing*). Learning, therefore, is always being likely to be engaged in an interesting and significant activity.

My long-term study provides sound evidence that if students' curiosity could be satisfied and continually strengthened while their positive psychology remains stable, then the child could keep the position of subjectivity in learning if they have a new learning motivation when they are engaging in a pleasant mood.

1.2.1.2 Building Up Self-confidence and Raising Self-esteem

Initiative is reflected in each pupil. Similarly, a child's self-confidence and self-esteem have a direct impact on their interest and initiative. Whether each student's initiative can be aroused depends on teachers' concepts and attitudes. Teachers, accordingly, must step out from the traditional stereotypes of moral dignity and deeply understand that the student is the real agent of learning. That means that the only aim of teaching is students' learning. Students can truly take the

initiative and construct knowledge only when they are the subject of learning. In particular, to students of low attainment, teachers' endorsement, criticism, encouragement or sarcasm is a greater influence on their self-confidence and self-esteem, as they very keenly feel strength or depression, great expectations or indifferent cynicism from teachers' tones and looks.

Accompanied by the child's enthusiastic mood, their imagination and activities are displayed, sparking their wisdom with the building of context. Imagine the kind of picture where they read text affectionately, propose a question in which they exactly use a metaphor or face up to inquiry scenarios: teachers should give them enthusiastic encouragement and prompt timely affirmation. Then those low-attainment students could feel the joy of learning and their own talents. Their self-confidence and esteem will be enhanced as they obtain emotional and spiritual power from the teacher, and then they can be actively engaged in learning. The effects of trigging their initiative cannot be ignored. Meanwhile, the expectations and encouragement of teachers could gradually change students' assessment of their learning or study, and this happens in the process of learning.

It is worth noting that once an underachiever gains recognition from their teachers, there are more general positive significant effects of stimulating all students' initiative, helping them to re-establish self-confidence and self-esteem. It is conducive to developing the positive learning chain of "teachers' affirmation → students' satisfaction → establishment of self-confidence/self-esteem → children's learning needs → re-affirmation/satisfaction → update on learning." Therefore, children's initiative has been developed.

Moreover, from a long-term perspective, the factors of interest will be reduced as the student grows up. Hence, it is a benefit to keep the continuity of initiative and construct good learning habits. At the same time as cultivating students' learning interest and arousing their initiative, students can develop the habits of carefully listening to their lectures, concentrating on reading and actively thinking. Then their sense of reason can take shape. Gradually, students consciously give their single-hearted devotion to learning. They can actively learn according to their sense of reason, even if the content is relatively boring. Children's learning, as a result, is really changed from passive learning to their own needs when cultivating their interest as the premise. Their motivations for learning are stable, sustained and strengthened. Since developing an interest is the precondition of contextualized education, children's passive learning is changed for their own needs. Their learning motivations are stable, continuous and reinforced in the classroom or outside of school, since their learning has been changed from passive ways to their own needs, based on the precondition of cultivating interest. This is because the priority of inducing initiative in the contextualized curriculum has significant meaning for helping children to overcome laziness, inspiring their spirit based on their initiative in the process of formative education. Only when they actively learn can children proactively develop for their future. As Vygotsky stressed, there can be no development for a person if there is no self-movement in place.

1.2.2 Strengthening Aesthetic Feeling

Teaching should be fully reflected in aesthetics and make use of aesthetics. The practices of teaching indicate that numerous successful teaching had been inspired by the aesthetics feeling of teachers.

Aesthetics should be fully embodied and utilized in the pedagogical process. Numerous teaching practices have shown that all popular classes reflect aesthetic meaning. Students' emotions, wisdom and their physical and mental development are pervasively influenced by aesthetics. There is no doubt that students' hearts need to be nourished by aesthetics, their wisdom needs to be activated and effective learning also needs to be promoted by aesthetics as well.

1.2.2.1 Displaying the Content of Aesthetics

Aesthetics are inscribed in literacy education, mathematics and other subjects in school. The inscription means that aesthetics are hidden in the subject. Too often children cannot feel aesthetics if these aesthetics are neglected by teachers. The aim of teaching is for students' development, thus it includes intellectual, aesthetic and moral content, except for learning knowledge and cognitive tasks in the classroom. This content has to be completed in synergy and comprehensively in the process of development of students' cognitive skills; that is, "literacy is not only Chinese language learning and mathematics is not only the development of the ability to calculate." (Li, 2001:92) In this way, children's competences can be fully developed in an all-round and harmonious way. Therefore, it requires a fusion inhibitor, and as a result the nature of beauty in teaching is not only a benefit for promoting aesthetic education in subjects, but also for integrating all elements of children's development.

Chinese literacy textbooks display various brilliant images of figures for children, from Isaac Newton to Albert Einstein, from Chinese ancient astronomer Zhang Heng to Nicolaus Copernicus, from Ludwig van Beethoven to Chinese modern artist Xu Beihong, from Mao Zedong to Deng Xiaoping, from domestic war hero Huang Jiguang to Liu Hulan and so on. Only children can feel the beauty of these figures, including their image, behaviors and language, and only they can comprehend the power of personality and great spirit, which will be deeply inscribed in their mind.

Rational mathematics is also beautiful. The formation of maths displays the concise, logical and creative beauty of the order of the universe through calculation and figures. As ancient Greek philosopher Aristotle pointed out: "the formation of the aesthetic is order, symmetry and certainty, which are the principles of mathematics research. Thus it is not impossible to have links between mathematics and the aesthetic" (*Metaphysics*). So I think that mathematics teaching could enter into a newly pure realm if aesthetics could be revealed in the maths classroom. Mathematics teaching could repeat the context for initiative created and applied by

mathematicians or workforces throughout history. Children could feel the beauty of maths as if they were present at the scene. As maths teachers emphasize, we constantly try to transform abstract formulas and theorems into specific, touchable and vivid formations. They unconsciously enter the "beautiful" realm when those formulas are changed into harmonic, symmetric and rhythmic images; they obtain the aesthetic pleasures and psychological reactions of the pleasant. In this manner, teachers do not deduce formulas. Rather, those formulas are discovered by students themselves through role-playing or discussion. Thus, what students gain is not only the understanding and application of formulas or theorems, but also the cultivation of a spirit of inquiry, the preliminary experiences of human beings' civilization process. Or we can say that the aesthetics in the teaching content are the first element that determines whether teaching has some features of aesthetics. Too often the beauty embodied in teaching could either be displayed by or neglected by teachers.

1.2.2.2 Selecting Graceful Teaching Methods

The employment of teaching methods mainly depends on teachers' pursuit of the realm of education. As a matter of fact, teaching methods are a medium. Aesthetics can be realized when teachers pursue them and the aesthetics are strengthened and transformed, so the goals of teaching could become true. Students should see, hear and touch feelings, so that they can have a sense of pleasure. Obviously, there are no aesthetics without exciting children's feelings. Therefore, I totally agree with the concept of "capable watching," the important factor in realm theory, in which the famous scholar Wang Guowei (1877–1927) proposed that real knowledge only exists within subjective feeling: "All truth only exists in specific items" (Wang 1928). Children can feel aesthetics when they can see them. Certainly, this kind of "seeing" happens in real and imagined contexts. So to those children who recognize the world according to images, it is vital and appropriate to directly feel aesthetics in the process of learning. We tried to launch the activities of "art enters the classroom" and help children feel the aesthetics. Aesthetics do not only belong to art, but also to Chinese literacy, mathematics, science and moral education, as art is "subjective to see" and "capable of being seen." I often think that drawings themselves reflect quiet beauty in space, music reflects emotional beauty in time and drama reflects the beauty linking quietude and motion. Therefore, in the process of teaching, teachers could integrate such subjective art with their own language and reproduce the beauty that the textbook describes, displays and inscribes, so that children could experience the context created or fabricated by writers. The colors, lines, rhythm, cadence and language in drama, actions, background and events are all consistent with related context displays, demonstrated in the textbooks. Children can not only sense these, they also enrich children's imagination and thinking, associative, imaginative and emotional activities.

1.2.2.3 Employing the Language of Aesthetics

All beautiful teaching content and teaching methods rely on aesthetic teaching language to embody them. To children's senses, thinking activities and emotional activities, the teaching language plays the dominant role. The strings of children's minds are often strummed by teachers' language in the classroom. The effects are various, obviously dependent on whether the teaching language is beautiful. Sometimes students are unmoved and sometimes they are touched; sometimes teachers' words are flavorless but others' language is like drinking at an oasis. How could a teacher touch a student if their language lacks a sense of aesthetics? As Vasyl Sukhomlynsky stressed, "language is the most delicate tool of human education, it touches the most sensitive corner of the mind … teachers' words become the strongest means of education" (Sukhomlynsky 1935/1987).

There are several types of verbal aesthetic teaching: (1) reworking the context described in a textbook; (2) stimulating students' aesthetic feelings by linking to their life experiences; (3) bringing students into expected scenes based on imagination and association; and (4) introducing understanding of the essences of aesthetics and its expression in textbooks. In short, verbal aesthetic teaching could prompt students to feel beauty, or help them to associate with beauty, or introduce them to the pursuit of beauty and inspire them to comprehend beauty. This kind of teaching with aesthetic words should be stressed in a vivid and infectious style. As German educator F.A.W. Diesterweg argued, "The essence of teaching art is not to teach skills, but rather motivation, to wake up and encourage" (Diesterweg 1865/1982).

1.2.2.4 Showing Teachers' Beautiful Manners

In the classroom, what is taught by the teacher is only the content of the textbook. The teacher is the sage and demonstrator, even the authority. Therefore, as a whole image, the teacher should shine with humanity, being a brilliant image in children's eyes, connecting with content, methods and words. Therefore, similarly, the image of teachers should be infiltrated with beauty. Their appearance and grooming should be beautiful and full of appeal. However, their presentation should not be deliberately playacted, but be a comprehensive reflection of the teacher's love for and pursuit of the realm of lofty beauty, which is called "style is human." Therefore, the appearance that students watch, the words of teachers and the affection for teachers are all intertwined so that children obtain a vivid and refined aesthetic feeling. The subject contextualized curriculum constructs an aesthetic psychological field (*shenmei xinli chang*) with multiple refractions. So children's affection and wisdom could be aroused when they are immersed inside of the field. As the subject of aesthetics, the child's competences could be comprehensively and harmoniously developed when they are enjoying the pleasures of aesthetic activities. This will help the child to grasp knowledge, promote their abilities and develop

healthy aesthetics and morality. Hence, the beautiful magnet full of charm should always be stressed for the subject contextualized curriculum.

1.2.3 Focusing on Creativity

In terms of cultivating interest in learning, arousing initiative, conducting observations, formation of subjective feelings and even children's emotional activities and language expression, all these educational issues cannot be separated from thinking activities. The concept of "development" refers to the overall harmonious development of psychological quality, including knowledge, capacity, wisdom and emotion. The core is the development of thinking, particularly creative thinking. The development of creativity could be achieved randomly in the process of teaching, or it could be consciously and purposely created.

By my understanding, the primary schooling stage is the best period for the development of potential wisdom. It is hard for this to be developed if children's potential ability cannot be aroused during this period. Eventually, without oxygen it is likely that brilliant sparks will be extinguished. Therefore, developing the child's potential wisdom was seen as a special task when the contextualized curriculum was introduced into the learning process. It emphasizes that developing thinking is core, paying more attention to creativity and promoting the development of children's concrete thinking, abstract logical thinking and creative thinking.

Due to the optimized context in the classroom, children's warm mood may even reach a boiling state and their thinking level is at its best. They are involved in active thinking and sparks of wisdom burst one after the other, then develop into the power to overcome obstacles, gaining the joy of success. Because children's emotional activities are part of their cognitive activities, these kinds of psychological activities are vital channels that turn potential capacities into reality.

In some specific related contexts in textbooks, there needs to be conscious training of children's intuition and development of their creativity. The ultimate aim of education is to improve their comprehension. In the case of cultivating the highest level of initiative, contextualized teaching has shown its unique value in the development of the child's whole brain.

1.2.3.1 Training Children's Feelings

To human beings, feelings form the first channel of reorganization of the world. As Jean-Jacques Rousseau stressed, everything that is rational for humans is realized through feelings (Rousseau 1804/1988). So children's sense organs could be trained and become sensitive. However, slow sense organs could become obstacles to improving their intuition and appreciation. Hence, teachers need to take a key flexible period to cultivate children's intuition. This is not only for music, physical education (PE) and art, but Chinese literature, mathematics and science also should

take on this task. All vivid methods of contextualized teaching could have an effect on the child's sense organs, which are trained constantly in feeling. In this context, the aim of teachers' verbal descriptions is to introduce the child to feelings and experiences. Children's visual sense, auditory sense and motor sense can be sensitized and improved. This is a fact. Children who were in an experimental class had bright eyes and listened sensitively. They found that the shapes of tress were unusual when they conducted observations of an annular solar eclipse. Sometimes they walked out of the door and wondered what on earth had happened when they found that the sound of the rain was strange. Numerous facts have proved that children will pay attention to the world around them after experiencing training in their feelings, which helps them broaden the channels of further understanding of the world and establishes the vital elements of thinking, imagining and creating.

1.2.3.2 Cultivating Children's Instincts

To children, instincts are naturally born, but sometimes can be improved under acquired conditions. As a teacher, I particularly cherish the opportunity to develop them as contextualization puts more emphasis on training in sensory areas. Based on manmade situations, the perception of images, associations and aesthetics is very helpful for cultivating intuition. Most creativity in history is the result of a "leap of intuitive thinking."

We need to enhance human perception and that is a must to cultivate a child's instincts. Instincts cannot be separated from feelings; only acute feelings can produce instincts. When children can access the context of learning, their non-verbal thinking is being activated due to vivid images. Too often there is a sense of nature in the moment or the feedback of instinct. For instance, they may randomly say in the science classroom "The big lobster must climb faster than the tutor" or "I like red coral as it is more precious than the white one, so I like red coral much better" or "The dandelion must suck the milk of the land" or "If the tadpole's tail is broken, then they cannot find their mummy, we can conduct an experiment." Also, children have their own estimations of number, quantity and length. Similarly, these judgments, denial of short-term instincts and ambiguous surmises with predictions display children's instincts. Certainly, they are the obvious preliminary-level instincts. Based on the germination of instincts, the consciousness of teachers of the experimental class is strengthened, so that they cherish their potential wisdom as they respect and cultivate children's instincts: "You are good," "It is not easy to find it!" or "You are great." Not only that, students' learning motivation is aroused and strengthened based on feedback when they are guided to logical derivations according to simple deductions. Then they can further understand the ideas inscribed in textbooks and testify to corrections or the falseness of their own instincts. Based on long-term contextualized observations, training of children's senses and the accumulation of numerous experiments, which have been emphasized, teachers inspire children's associations, link with metaphors (including similes and concealed analogies, plus implement personification and the

employment of estimations, predictions and judgment in science and mathematics learning. All these methods could be boldly carried out in the classroom, and the results will burst out from children's potential instincts colliding with advantageous external factors. Although it is still at the primary stage, this is significant for activating and developing children's potential wisdom and improving their perception.

1.2.3.3 Developing Children's Creativity

Contextualized teaching focuses on training feelings and cultivating intuition, which are in fact both for the development of children's creativity. The vivid images and enthusiastic mood linking with images in front of them and those in their visual memory create some kind of jump connection. Unconsciously, association and imagination are developed and non-language thinking becomes more active.

Guided by the light of this general trend, teachers create an atmosphere with emotional communication based on democratic teaching and encouragement. Children's potential creativity is easily boosted in this context. Still, it needs to be inspired and guided: the new images in children's minds could have multiple combinations connecting with features of the discipline and transform the reproductive type of memory to creative training in language. According to the form of language, there are monologues, dialogues and multiple role performances. Children's creativity can be displayed if they can flexibly use words, knowledge of texts and rhetorical devices. Meanwhile, teachers need to promptly guide children's joyfulness when displaying creativity. The happiness of creativity is the biggest and highest level of happiness in one's whole life. After timely guidance on training in creative language, children gradually have the consciousness of creativity and celebrate the joy of success, and then their enthusiasm can be aroused.

Creation is only the modification of surface conditions. Therefore, divergent thinking plays an important role in the process of creating new images. Different to general thinking, divergent thinking often sparks children's wisdom. Based on observation and children's development, contextualized education broadens the space of thinking for them. It further promotes the development of children's divergent thinking with the employment of heuristic teaching methods and cultivates the flexibility and breadth of the quality of their thinking.

For instance, after completing a lesson on "seed power" in the fifth grade, students were asked to creatively retell the topic of "A contest of strong men," which was attractive to primary school students. They were excited when they read the topic and tried to finish the essay. According to individual life experiences, knowledge and various perspectives, they rethought who would be the strongest man and how they would contest it. Some of them argued that the elephant would win, others insisted that the little ant was the strong man, while some students said that grass and seed would be the winners. Finally, they realized the value of philosophy from this creative retelling.

There is no single affirmative answer in disciplinary training to what are the vital measures of fostering divergent thinking in children and developing their creativity. Teachers always tell children: "You should wait for a while if you got the same answers as other classmates. Try to think about it again, what you said should not be the same as other guys!" Then students' thinking flexibility and breadth are cultivated and their ability in divergent thinking develops well. Certainly, equal attention should be paid to seeking common ground while looking for differences. Teachers should reveal some common laws based on searching for the differences. This is a problem that cannot be ignored.

1.2.4 Penetrating Humanity

There is a saying that "writing is for conveying truth" (*wen yi zai dao*), and later there is an "integration of writing and truth" (*wen dao jie he*). Writing (*wen*) is a formation of truth (*dao*) and truth is a content of writing. There are dialectical and unified relationships between writing and truth. Affecting moral and aesthetic influences are important aspects of education, as educating people is the ultimate goal of education. Thus, it is impossible that the enlightenment of humans could completely and only rely on one subject or one class; rather, it has to fully cover all the curriculum in school and rely on permeation every day. Motivating emotion and permeating with humanity are basic laws and characteristics for children's emotional education. The contextualized curriculum, which can be called "permeation," penetrates children's minds like constantly dripping water. Naturally, it will affect children's spirit world after a considerable period of time. What roles does infiltration play in the process of education? Mainly it depends on emotional influences. Children's naïve mind will be opened up and infected by an image of flesh and blood, scenes with voices and expressions and a heartshaking climate.

1.2.4.1 Being Rooted in Loving the Home Country

Loving the motherland is a lofty and pure emotion, which may be a need for any country or any period. This lofty emotion should be cultivated when children are young. Many generals and soldiers have ridden on the battlefield and been scarred for their native land. Many writers and artists have performed miracles with their wisdom, displaying their contribution in the field of science and culture. It goes without saying that all elites of ethnic groups were patriots. Therefore, it is vital to develop education in patriotism for youths at the stage of developing toward prosperity.

Education in loving the motherland has been implemented through all disciplines, but especially in Chinese literature and moral education. As the crystallization of national wisdom, the mother language reflects the entire history of the national ethical and spiritual life. Like a trickle, the mother language is beautiful,

great and expressive, and has meaningful and profound influences. Children's emotional and thinking realm will be virtuous.

In primary education, with liberal arts and moral education as a guide, the mega-unit contextualized curriculum, comprehensive practices and activities of field education reflect the great and lovely motherland, linking with important festivals, events and backgrounds based on different perspectives. For instance, the magnificent mountains and rivers, a long history and splendid culture of the motherland also reflect the spirit of not being bullied, the glorious achievements of courageously fighting back against foreign invasions, constantly displaying the current brilliant homeland and its future development. Take the example of a primary school Chinese literature textbook, which emphasizes the beautiful nature, humanistic history, magnificent rivers and mountains from different angles. The idea of "the motherland is great and lovely" runs through the contextualized curriculum. Under this conception, the child seems to see that there are many pearls are twinkling on the mountains, grasslands, islands and lakes of the vast, 9.6 million square kilometers of land. Meanwhile, textbooks also display the narratives from the Mogao Grottoes, the treasures that were left by ancestors in ancient time, the Great Wall standing on top of the mountain, manned spacecraft travel into space today. Teachers can also share their reflections on figures from Confucius to Zheng Chenggong (1624–1662), the hero who recaptured Taiwan island in 1662, or figures described by Luxun, one of the greatest Chinese writers of his generation, to great contributors and current representatives. There are thousands of kilometers of space and a long history in each discipline or school-based curriculum. Then the word "motherland" should be deeply inscribed and enter in the child's mind through vivid pictures and images.

1.2.4.2 Stimulating Love Through Aesthetics

There are more obvious impacts on children's ideas when more vivid images are used. Inspired by what Russian literary critic Vissarion Grigoryevich Belinsky (1811–1848) argued, syllogisms are often used by philosophers, and images and drawings are always used by poets. Primary school teachers also learn the expressive ways of poets and try to use images or drawings. In other words, teachers should display their perspectives infiltrating humanism thought, rather than illustrating with their own opinions. Therefore, based on the relative content provided by textbooks, the contextualized curriculum selects vivid pictures, musical rhythms, role-playing and descriptions in language with the aim of helping children to understand the background images. Hence, children can be touched and shocked in their mind as if they were at the scene. The feeling for images should be stressed through permeating the humanistic through the liberal arts. Children's emotions can be aroused when they see, hear and touch. In a word, starting from images, aesthetics can be aroused by affection with emotional experiences, and then the humanistic could be implemented.

Traditional teaching, however, pays much attention to rational but ignores emotional development, which makes it hard to complete the divine mission of

setting high moral values and cultivating people. Affection is a strong initiator and inspirer of ideology and moral behaviors. As Vasyl Sukhomlynsky argued, "A child's heart should not be a cold store of truth. I am trying to prevent this from lack of enthusiasm and indifference. They will be ordinary people if their heart was as cold as ice when they were young" (Sukhomlynsky 1962/1987). Children's moral behaviors are driven by affection, which is one of the basic characteristics of human nature. Any beautiful affection is not inherent, but is nurtured and cultivated after birth. It gradually shows the significant importance of emotional education when we face up to the world and our families. It is the affection aroused in children as one of their main features and is gradually formed in the process of permeating humanity. It is certain that the accumulated passionate mood, abundant aesthetic feelings, excited pleasures and nobility in moral sense education will prompt the cultivation of learning motivation. To students, textbooks and the content of learning become objects of curiosity and requirements in context. Children enjoy the pleasure of creativity due to intellectual activities, including thinking and imagining. In a word, mood and emotion could produce an inner motivation and learning becomes one of children's needs. And then, children's cognition, emotion and behaviors will form a virtuous circle. In the process of employing contextualized teaching, cultivating emotion becomes the motivation for promoting children's development. Along with emotion, moral education and aesthetic education could be realized silently, influenced by the environment. Promoted by emotion, it is the most feasible and effective channel for shaping their beautiful mind.

To a large extent, the aim of achieving penetration of the humanities is to help children learn to be full of sympathy and love to help others, also nurturing the child's pure heart and making their emotional world rich and beautiful.

1.2.4.3 Guiding Children's Emotion According to Teachers' Love

Teachers' attitudes toward the figures, scenes and events described in textbooks also reveal their characteristics. Teachers display their respective and excited feelings from their heart toward great figures and heroes. Sometimes they are overwhelmed with joy and indicate their pleasure and pride in the mountains and beautiful scenes described in textbooks. Sometimes also teachers will indicate their inner feelings with judgments on right and wrong, good and evil. As a matter of fact, teachers open their heart in each class, convey their true affection and express their moral conception in the process of teaching based on the guidance of their demonstration of emotion.

In fact, teachers should open their hearts in each class and convey their true feelings, expressing their moral concepts. Such an introduction to affection is implemented in the process of teaching. Their characteristics will have a significant impact on students' emotions and behaviors. Teachers' affections toward the motherland, careers, students and others are their most specific and vivid display of emotional motivation. Examples of teachers' affections and words could arouse students' passion and love. Then, teachers and students would simultaneously enter

into the realm of teachers being good at teaching while students are engaging in learning. In the process, students could get to know teachers deeply and understand their life philosophy. Therefore, "loving students and good at teaching" is the motto of teachers, which requires an inclusive classroom. Especially primary school students wish to get their teachers' love.

Meanwhile, contextualized education is also very vigilant about the deviation of teachers' professional emotion and pays more attention to each child's self-esteem. It makes no exception in experimental classes and schools. Most teachers are keen on every single student. There is no difference between rich and poor, no high or low social status, no excessive favor or discrimination, as they do not look for utility, despise vulgarity and are magnanimous of mind. Students will be cultivated by their teachers' pure and noble qualities. It is children's emotion that is guided by teachers' love.

1.2.5 Running Through Practices

Starting by exploring contextualized teaching and education, then focusing on the contextualized curriculum, we have been committed to cultivating and improving children's practical abilities and stressing them in the process of teaching. The aim of learning knowledge is to employ these abilities. However, it is hard for knowledge itself to be transformed into competences without practice. The position of having high scores but low capacity has been criticized in Chinese society, which is correctly cutting into the problems with exam-driven education. "Truth comes from practices" (*shijian chu zhenzhi*) and "unity of knowing and doing" (*zhixing heyi*) form the consensus. Practicality has been emphasized through the contextualized curriculum and it is also based on fundamental concepts. There are three aspects to practicality, including societal practicality, stimulated practicality and applied practicality, which aims to improve subject learning, including symbolic operations. In sum, the contextualized curriculum tries to promote children's learning in action with their interest; when they are doing then they are likely engaging in learning.

1.2.5.1 Reflecting on the Integration of Comprehensive Activity

Within the contextualized curriculum, the core subjects contextualized curriculum, the theme mega-unit contextualized curriculum of the comprehensive field, the transition programs from kindergarten to primary school and the field contextualized curriculum of the resource area, all are consciously designed to get children out of school and into the community and nature, reflecting the integrity of practical activities from the requirements of multiple subjects and diversity. For instance, children are actively engaged in various practices including working in the field, volunteer labor, making handicrafts, comprehensively conducting surveys,

interviews and observations and collecting samples, measurements and statistics. The comprehensive curriculum system surely promotes children to integrate and improve knowledge and ability with popular extra-curricular activities.

If we take the example of the Fairy Tale Festival, it is regarded as the most pleasant day and described as a new year holiday by the children. There are different levels of activities for low grades (first and second grades), middle grades (third and fourth grades) and high grades. Each class has their own features, including reading fairy tales, telling fairy tales, painting fairy tales, writing fairy tales and fairy tale drama. A series of symbolic operations is implemented in a relaxed and pleasant atmosphere. For example, high-grade students had science fiction fairy tales: first they read the science books, tried to understand the scientific knowledge, and then integrated that knowledge into a fairy tale. This not only aroused students' fantasies in the fairy tale, it also intrigued their love for science fiction and promoted their enthusiasm for writing.

This kind of comprehensive practice promotes students to further understanding and effectively improves their ability to employ knowledge. "I've got it," "It's fantastic!"—that is the real learning to meet students' practical needs after they have had the early training and experiences through the contextualized curriculum.

1.2.5.2 Displaying the Diversity of Symbolic Operations

Children's practical activities are mainly carried out in the classroom. The essential feature of the subject is embodied in the contextualized curriculum, where it combines disciplinary courses with children's activities in the context of optimization. The great educator Johann Amos Comenius (1592–1670), in his curriculum philosophy of pansophism, stressed the need "to combine the training of activities with their cognitive activities" and "carry out practical activities in the process of recognizing the knowledge (Dewey 1932)". In John Dewey's (1859–1952) Activity Curriculum Theory, the activities of children's experience were more prominent in gaining an important position.

The exploration of contextualized teaching and contextualized education in the past 20 years has demonstrated the feasibility and validity of combining the course of activity with the subject course. This effectively overcomes the previous ways of stressing examination, ignoring practices in learning, concerning on learning knowledge and ignoring students' development on ability. The subject contextualized curriculum integrates the systematization of knowledge, the operability of activities and the pleasure of aesthetics, emphasizing the specific atmosphere and arousing children's enthusiasm. Active exercises in the optimized situation generate motivation, full experience, proactive inquiry, emotional experience, comparison of identification, judgment and correctness, analogous operations and language expression, such as observation, thinking, language, touch and other activities, in children's practice throughout the teaching process. Coupled with the creation of scenes by drawing, music and drama, there are activities of art, including singing and dancing performances. These activities and operations are the symbols of the

manipulation inlay contains, knowledge to transform into the ability, which cannot be abandoned.

Combining the activity curriculum and subject courses effectively overcomes disadvantages such as an overemphasis on lectures and despising practices or stressing knowledge and overlooking ability, as well as a lack of application in operation. However, the subject contextualized curriculum integrates the systematization of knowledge, the operability of activities and the pleasure of aesthetics; it emphasizes the specific atmosphere and arouses children's enthusiasm.

The subject contextualized curriculum emphasizes the features of practices. The training is connected with children's lives, integrating the development of their thinking and media with their perceptions and aims for application. Take the example of reading training in Chinese teaching. Reading is a lifelong issue for some people. Based on the various formations of language applied in life, conscious and systematic planned training, including intensive reading, skimming reading, reading silently, reading with rhythm, fast reading, skipping reading and guess reading, also includes browsing and annotation, so that students can rapidly and accurately obtain information in context or via role training in the classroom. After reading, there are requirements for summarizing, describing details or creative retelling, holistic demands that require application and the practice of language expression. The contextualized curriculum also pays great attention to training in practical writing, combining this with text or the life of children. Students consciously plan to write notes, letters, reflections, broadcast essays and experimental reports. It seems dull when children are training, but they may suddenly understand and be engaged in operating when this training is inscribed in the context of events and figures.

In contemporary society, most communication among people is based on verbal language. Therefore, combined with teaching content, when students are involved in various kinds of teaching in language communication, when they play the roles of journalists, astronauts, instructors, broadcasters, writers, athletes, referees and so on, they are excited. Thus, children are very keen to pursue the roles of their expectations, in a fairy tale or in reality. Students are engaged in language training, including descriptive, judgment and debating training, in ways of expressing or writing in whole paragraphs. In the golden period of language development, students boldly speak out in public. This training method could affect the student's whole life.

In the classroom, children's practice activities, simulated operations or symbolic operations are not at a certain stage, but throughout the whole teaching process. The following is an example, "Understanding the triangle," a series of symbols of children's diversity in the fourth grade:

1. *Recognize them*: Show students the acute angle, right angle and obtuse angles respectively and require students to identify them.

2. *Draw them*: Add straight lines to three angles and change them into another three triangles, then talk about the features of triangles.
3. *Put them together*: Use bars prepared before the class and then construct them into a triangle (practicing keywords related to triangles, such as "line segment," "surround," "connection between head and end").
4. *Listen to them*: Listen to an introduction to the triangle and further understand the definition of a triangle.
5. *Touch them*: Take out a set square prepared by the students themselves, touch it and feel how many lines there are, understand the lines and the summit.
6. *Play with them*: Using the method of personification, show three different images of triangles, play a role, introduce them separately and distinguish the same and different characteristics of sharp angles, right angles and obtuse angles in three triangles.
7. *Fix them*: Show them a chair with a loose leg. Let students play the role of a small carpenter with a wooden bar. Ask students to find a way in which loose chairs could be fixed, which aims to help students understand that the triangle has stable characteristics.
8. *Talk about them*: Illustrate the wide applications of the triangle in life based on the prior observations.

It is not difficult to see the significance of the practical. Abstract maths learning has become very specific and interesting. Teachers are aware of the idea of mathematics in life, and this has been vividly demonstrated in class. In these simulated situations, students' ability to apply knowledge is cultivated effectively, mathematics education is greatly enriched and the children's interest in mathematics arises spontaneously. It can be said that mathematics is produced in the situation, and this guides the students to use the situation. Combining mathematics with life embodies the diversity of classroom symbols and guides children to learn maths and use maths in real or simulated life situations.

Therefore, the diversity of classroom symbolic manipulation is an effective way to overcome the inefficiency of single exercise-type training.

In summary, it is not hard to understand that the five principles of the curriculum philosophy of contextualized education highly emphasize the child as the subject in education, with children's present and future development as the goal, building a generous foundation very early from the children's feelings and practices, and meanwhile, students would be influenced by the aesthetic feeling in the process of learning. In order to promote students to talents the contextualized curriculum achieves both depth of education and breadth of children's space. Practice shows that the contextualized curriculum conforms to the trend of international curriculum development, as well as embodying the wisdom of oriental culture.

1.3 Principles of Facilitating Children's Active Learning

Firstly, contextualized education embodies philosophical principles that are compatible with the environment. It is constructed based on Karl Marx's philosophical principle of all-round development inscribed in the harmonious unification of human activities and the environment. Moreover, the basic principle of contextualized education starts from children's psychological learning on the basis of emotional psychology.

Due to the optimization of the growth environment, schooling is an open system that expands its education space and it could be extended from the subject area. With the aim of linking the classroom, school, family and society, the contextualized curriculum constitutes a continuous, harmonious entity. In such a broad and open environment, children's physical and mental abilities will be released and they will not be able to help being involved in pedagogical activities, so that their hearts will be nourished and activated.

Contextualized education is a metaphor for the contextualized environment and the context of children's activities. It is an interesting network-style interaction between teachers and students in a broad space. It sets education and teaching content against a colorful background. This environment, which is optimized according to educational goals, is also in harmony with children's needs for knowledge, aesthetics and emotion.

The environment of the contextualized curriculum is not merely the physical environment, but the psychological environment. There are cognitive or affective distances between educators and educatees, between learners and educational content and among learners. How can students get a sincere feeling if there is a sense of distance? How can students' strong learning emotion be aroused? If there is lack of strong emotion, children lack the motive force to engage in learning. Obviously, in terms of children's psychology, it is difficult for them to be actively involved in pedagogical activities, which affects their initiative to be invested in education and teaching activities. Contextualized education can shorten the psychological distance among children, teachers and the teaching content through affinity with interpersonal situations and a vivid learning context, to prompt children to actively participate and engage in learning with the best mood state and to develop themselves initially.

The establishment of an intimate, helpful and joyful interpersonal context could shorten the distance among teachers and students, and communicate emotions between teachers and students. Children are keenly aware of a kind of expectation and power from teachers, which could be transformed into the driving force of learning. Gradually, this kind of interaction between teachers and students and a good emotional cycle then form the teaching spirit and learning spirit, respectively. The formation of an excellent teaching style and study style becomes the emotional background to children's learning. When entering this harmonious environment of communion, children's emotions and psychology will resonate and prompt the all-round development of their interaction in the real environment and activities.

This does not only find a basis in philosophy, I also borrowed contemporary scientific research findings from psychology to construct the basic principles of the contextualized curriculum, termed the "emotion-driven principle" (*qinggan qudong*), the "inclination of implication principle" (*anshi qingxiang*), the "role-conversion principle" (*juese zhuanhuan*) and the "integration of psychological field principle" (*xinlichang zhenghe*).

1.3.1 Actively Engage in Cognitive Processing Driven by Affection

Based on the effects of empathy, contextualized education promotes immersive perception and cultivates children's minds in deepening their emotional experience. Children's emotions are aroused by the implication. Children are emotional. True emotion is always stirring in their innocent hearts. In an optimized context, children are prone to moving their emotions into perceived objects. The contextualized curriculum is the most precious feature of the child's mind, which maximizes the influence of emotion and the driving affect.

Contextualized education creates the situation. The priority focuses on building a certain intensity in the atmosphere, so that children have access to specific feelings, which could arouse the corresponding emotion. I recognized that children could concentrate on their learning when they were exposed to the context. When teachers created rich and abundant aesthetic factors, these sensitive children who are in the early stage of life were satisfied and joyful. Accordingly, they accepted the context without any hesitation. It was proved that when children acquire specific feelings about an objective situation, they will show a positive attitude and maintain their attention to arouse the corresponding emotion. Meanwhile, children cannot help but move their emotions into the object of the teaching material with hints and the teacher's description, and they then achieve a state of identity about the subject and themselves. In this process, children's emotional experience of the content of textbooks is gradually deepened.

In this way, children are actively engaged in cognitive activities driven by emotion. Generally speaking, children change their attitudes because of pedagogical content and then attain a positive mood toward teaching activities. Accordingly, their emotions involuntarily move into the teaching or educational context and, with the continuation of the situation, their emotion gradually deepens, eventually infiltrating into the children's inner world and the value orientation of the gradual integration of their personality.

In a word, children's emotion experiences a continuing development process: "focusing → arousing → moving → deepening → dispersion." Their attitudes toward the content of learning are clearer. This generally happens in the integrated process of emotional and cognitive activities in the context of optimization.

In summary, the mood of the child undergoes a continuous emotional development process of "focusing → arousing → moving → deepening → dispersion" in the optimized context. Children's attitude toward teaching content is more explicit. They frequently have more explicit attitudes and are able to integrate emotional and cognitive activities in the optimized context, which continually and repeatedly happens in different grades and in different disciplines. Children's aesthetic emotion, moral emotion and rational emotion are well nurtured. The development of children's advanced emotion is an important basis for improving the quality of their talents, and the superiority of the contextualized curriculum is based on emotion and could be employed in aesthetic, moral and rational education. Being emotion driven is not only an effective means to promote the development of children, but also can achieve the ultimate goal of cultivating children's advanced emotions.

1.3.2 Implicitly Form an Unconscious Psychological Tendency

Generally, pedagogical activities have distinct purposes. School teachers are used to directly pour educational information and intentions into students. So teachers and students are in a purely rational and conscious state. It is hard for learning, accordingly, to be a subjective requirement of the child, who has passively to accept it. Therefore, potential wisdom is hard to develop when children are in a passive state.

In response to the disadvantages of direct delivery of expository teaching, contextualized education tries to improve ways of teaching based on optimizing the context. Based on long-term and short-term educational goals, it employs visual or typical live scenes including pictures, music and drama, which directly influence the child's perception system.

The strength of art means that the aesthetic sense of the optimum realistic life scene is in line with children's interests and needs, which are adapted to children's thinking and imagination. Though the contexts created by teachers are not the center or focus of children, the children can directly absorb the images, colors, sounds, rhythms, language and symbols at the edges. Also, they react to all the feelings of the context: the optimized context actually inscribes the information and teaching content in a specific context, and such indirect ways, which constitute a harmonious operation of the integrated linkages, display the deep influences on children's psychological trends in specific contextualized education. According to a theory proposed by Georgi Lozanov (1926–2012, known as "the father of accelerated learning"), all issues affecting psychology are intimation. Naturally, every child has the capacity to accept intimation, as it is a general characteristic of individuals.

Therefore, when children enter a situation, intense emotion is soon aroused, accompanied by the formation of unconscious psychological tendencies, and then it

cannot help but be put into education and teaching activities, revealing the heart of true feelings and quickly learning the change in focus response. It is the hint that induces children to produce the best psychological tendency unconsciously, advancing educational teaching activities quickly, so that they learn much more than they realize and understand. This kind of non-revealing purpose, creating a situation and optimizing its indirect aspects, inevitably affects children's psychology and behavior and thus achieves the established educational goal step by step, which is the implied effect. The shape of situation education, the emotion, meaning and characteristics of reason, all show the situation of the education-specific environment in relation to children's psychological tendencies. The role of the created context is implication. Ultimately, it is the function of the whole brain. Because of this, an unconscious relationship between people and the environment is in effect, so that children form unconscious psychological tendencies. This subjective and objective consistency indicates that contextualized education employs the principle of implied induction, which has the feasibility and universality of education and pedagogical activities.

If we connect with scenarios created by various areas in school, starting from the perspective that the child is a holistic individual, we can see that there are three contexts, including the teaching context with aesthetics, wisdom and interest in the classroom; interpersonal scenarios including close and helpful connections between teachers and students; and the extended educational space. Mega-unit teaching has a distinct theme and a wider vision of extra-curricular activities. While the styles are different, the educational objectives are consistent within different forms and channels to create an intimate, pleasant and wisdom-filled atmosphere in school. It should be said that the implied effect is the role of the atmosphere.

Therefore, I conceive that broad educational activities and the teaching space can be linked by various implied means. The aim is to create high motivation, so as to stimulate the personal potential of psychological tendencies, when the child can perceive the context through the edges of their perception of the situation. In a certain atmosphere, the child's unconscious inclination is in the realm of ecstasy, tending to develop on the orientation of educators. In other words, contextualized education is the process of using hints based on the environment and the psychological resonance of children, rapidly pushing forward to teaching activities. The essence is "consciously guided by the unconscious," "the reasons accompanied with emotion," (Li, 2001: 149–152) which are interwoven harmoniously. It can be said that the best psychological trend is an important channel for the development of potential ability, as what children learn has gone beyond that which they could realize and understand. Contextualized education helps students to maximize their benefits from unconscious processing. Use of this kind of implied tendencies, the ultimate aim of contextualized education, is to promote children's potential competence.

1.3.3 Convert from a Passive Role to an Active Role for Children

Students are used to being regarded as acceptable targets. Their main task is "concentrating on listening." In virtual terms, it forms a dependency or stereotype, and students simply absorb the passive role. School education is far from social life, where students' accumulated experience is abandoned. The teacher's dominant role has been exaggerated and intensified, which results in the educational reality of a class that is totally dominated by a teacher, where students' experiences have been excluded or ignored. In such a collective environment, students cannot become the main body. In contrast, the aim of contextualized education is for children's development. The child is the subject and their subjective position should be guaranteed in the process of pedagogy. The contextualized curriculum, accordingly, is connected with their lives and displays spirited life scenes as children are engaging the activities. In the specific situation of optimizing education and teaching, it contains the intention of educators and the role of the characteristics of teaching material, which embodies unification of the subject and object. Because of the new specificity and intimacy of the role, it causes children to reproduce the role of teaching materials or related activities, and then triggers the psychological process of role experience and evaluation by children themselves.

Contextualized education created by the situation is a background that children are familiar with. This kind of "realm with myself" (*you wo zhi jing*) might produce a huge invisible guiding effect. Children immediately have the consciousness of playing a role based on such a perception of the scene. They will soon understand the role of the position in the context of the relationship with other roles, as the pedagogical content is more realistic and visualized. Whether it is the role of the textbook, the expectation of the role or role-playing a fairy tale, all these roles conform to children's emotional activities. There are aesthetic, ethical and artistic activities, and also some literary and scientific activities among these roles.

The enthusiastic emotion aroused by the role transformation promotes the child as a living person. Driven by consciousness of the role, children are fully engaged in classroom activities. Within this context, the children's bodies and minds naturally move into their roles. Thus, it seems that they transform into those roles. They become the role and the identity of the children themselves, whose own real feelings are released. Due to the transformation of the role, children cannot help playing their role, thinking in context, rationally showing a series of behaviors according to the expectations of textbooks and peers, and expressing a series of behaviors and appropriate language expression.

The enthusiastic mood of role-playing might render the whole learning situation for students. Not only the actors but all students are unconsciously embodying roles, which are deep and vivid experiences of the psychological activity of the role. Even when the negative role is in conflict with this role, a negative evaluation is naturally produced due to role-playing in real experiences. Meanwhile, it also produces aesthetic meaning, named the "clear and noble disgust," which leads to a profound

criticism of the role. In short, education and teaching activities enter into the state with the activities of the role. The children's emotions enthusiastically devote themselves to education and teaching activities, and they become the real protagonists. The contents of the logical and abstract symbols of the textbook have become vivid images. This is the positive result of role conversion in contextualization.

The process of role conversion can be summed up as "entering the context → role-playing → role understanding → role experience → role performance → role identity → insight production." Based on role transformation, the passive role of waiting for acceptance in the process of teaching then transforms into active roles. Since taking on the active role, children as the subject of educational teaching activities form and gradually intensify in the process.

Experiencing such challenges, the child's subjective consciousness could obtain full self-development with growth. Once they become the subject of learning, they could take the initiative to accept knowledge, then form a series of good learning characters including initiative, imagination, inquiry and active drilling. As a result, their habits of learning could be cultivated and improved.

1.3.4 Satisfy Psychological Needs and Produce Active Behaviors

Contextualized education always integrates the pedagogy and development of the child. Taking into consideration development and the basics is the leading idea of contextualized education. The development of the child is often established based on particular knowledge. They key step is that students learn by themselves and are independent if they have a sound knowledge foundation and are free of burdens. Just like all pedagogical activities, the formation of all abilities needs children's internal motivation. Thus, it needs the power to push forward on the exploration.

According to the theory of field, an optimized context for people is actually a psychological field (*Xinli Chang*, 心理场). The space of child's lives has an impact on their psychology. No one can transcend this space. Even if a traveler drifted to an island, the earth would be the living space they depended on. The boundless sea and the isolated island seem to influence their psychological mind. In other words, one's living space affects one's personal psychological world without any exception. A person (including a child) and their mental environment appear in their living space simultaneously. When children perceive and feel their surroundings, they cannot be indifferent and careless, and they will mobilize and activate their thinking, imagination and emotional experience. The artificial educational situation, interpersonal situations and activity situations are embodied in the intentions of educators, and children's living space is no longer limited to a natural state; rather, it is a living space with connotations of rich education, full of aesthetic wisdom.

These are the special scenarios created or optimized by situations in contextualized education. These situations are obviously not mutually irrelevant or isolated to children who are involved in activities; rather, they are in a state of interdependence or in a network-based linkage. This artificial optimization context with intensity, real senses and aesthetic feelings could affect the psychological world of children. So it could prompt insights from children's full feelings and in their mood. Therefore, in the life space that is formed by optimizing the situation, all specific or imagined contexts, including experienced, present or future scenarios, will be blended with children's present situation. In short, the role of "field" (*Chang* 场) is an insight into the life space. Children get satisfaction as there are rich images of impacted, real emotional experiences and the potential enlightenment of wisdom. Naturally, this forms a "force" toward the goal of education and teaching when this kind of psychological demand has been satisfied. This is the "positive inducing force" (正诱发力, *zheng you fa li*). Under the impetus of this positive inducement, children's initiative, attitude, emotion, language and behaviors in education and teaching become more abundant; as a result, they are engaged in learning. Teachers who are involved in scenarios simultaneously feel the joy of successful teaching, and then they engage in pedagogy with enthusiasm. In this way, there is a good cycle with multiple directions of the psychological field among context, teachers and students. it prompts children to concentrate their learning with their mind, and accordingly teaching can step into a good state. Employed with the psychological field, contextualized education promotes the formation of positive inducement. In the meantime, children's epiphany is accelerated, thus constantly changing their cognitive structure and psychological structure, which help to realize independence and self-education in the classroom without a heavy burden.

1.4 Core Elements of the Contextualized Curriculum

The artistic conception (*yijing shuo*), as an important theoretical resource, supports the construction on knowledge in the exploration of the contextualized curriculum. *The Literary Mind and the Carving of Dragons* (*Wenxin Diaolong*), by Liu Xie (465–520 CE), a literary theorist in Dong Jin Dynasty in ancient China, and *Poetic Remarks in the Human World* (*Renjian Cihua*), by Wang Guowei, are two classic representative works of artistic conception, which are part of the treasure of Chinese traditional culture. The essence of the work could be summarized as "merging feeling with scenery" (*qingjing jiaorong*) and "the realm is priority" (*jingjie weishang*). Originally, artistic conception was the theory of literature creation or, more accurately, the theory of poetics. In the process of exploring contextualized education, the ancient realm could be borrowed as our learning context. As Wang Guowei said, "all the realms are set for poets" and, by my understanding, the entire context could be set for teachers and children. I summarized the four characteristics as trueness (*zhen*), affection (*qing*), thinking (*si*) and aesthetics (*mei*) and was inspired by them, which had an impact on my construction of contextualized curriculum models.

1.4.1 Trueness: Showing the Child the Real World

In Chapter XLVI of *The Literary Mind and the Carving of Dragons*, "Influence on the Literary by Natural Phenomena" (*Wuse*, 物色), Liu Xie emphasized the functions of external objects in literary writing. He summarized this as all reflections in the mind being caused by changes in natural phenomena (*ganwuyinzhi, mofeiziran* 感物吟志，莫非自然). Thus, things are the objects of creation and the resources of sentiment, thinking and phraseology (*ci*), which are linked with feeling and the expression of emotion. This kind of exposition stressed that true writing could express feelings. In Chapter XXXI, "Content and Form" (*qing cai*), Liu Xie explicitly remarked that it needs authentic depiction (*xiezhen*) and it was clearly opposed to artificiality or deliberate embellishment. Wang Guowei clearly pointed out that "the person who sees truly, knows deeply" and "If an author writes scenery with true sentiment, he has the realm."

Contextualized teaching was influenced by this discourse from its initial stages. I optimized typical scenes and provided children with a theme for composition with the aim of pursuing the real world. We walked into nature, experienced various social lives and showed a vivid, visible and touchable, colorful world. In further experiments and research studies, the contextualized curriculum integrates the content of subject teaching and the reality of life, so that children will grow up feeling what is "true" and comprehending what is "true," speaking the truth. It is very beneficial and necessary for the development of their cognition, emotion and thinking and the future of children who have stepped into social life. Therefore, one of the characteristics of the contextualized curriculum is "real imagining" (*xing zhen*) or "similarity in spirit" (*shen si*), rather than "resemblance in shape," because I realized that it is impossible for the contextualized curriculum in the classroom to be able to reproduce all images for every subject. It would also lose its typical significance if each image represented the real scenery. Neither could it provide children with a far-reaching realm. It is the essence that the contextualized curriculum requires for the connections between teaching content and real life. Even the created context also contains the simulated situation, but it is necessary to give children a real sense, rather than only provide the absolute true scenery; in short, to show *real imagining* based on their *similarity in spirit*. Teachers start from what is "true" and students' intelligence is inspired by the truth, the pursuit of "beauty" and advocating for their "good."

1.4.2 Affection: Creating Inner Impulses for the Child

In the chapter "Inflence on Literary by Natural Phenomena" (Wuse, 物色), Liu Xie made a vivid description of the impact of human emotion influenced by external objects; that is, "the author's sentiment is changed by the external scenario" (*qing yi wu qian* 正诱发力). He further pointed out: "Changes of objective things can cause

agitation in people's minds" (物色之动，心亦摇焉) and "A piece of yellow leaf falls, and the poet's mind might be affected by a few voices of autumn insects" (一叶且或迎意，虫声有足引心).

This shows that human emotions are influenced by objects. Wang Guowei clearly pointed out that "the boundary is not only about the scenery, but expressions of joys and sorrows of the human mind" (境非独谓景物也，喜怒哀乐亦人心中之境界) and that "all the language of scenery is emotional" (一切景语皆情语). Not only that, Liu Xie also proposed that "sentiment is the center of a thing" (情者文之'经'), meaning that sentiment is the soul of an object. He advocated writing essays for sentiment (为情造文), but he was opposed to "writing for producing sentiment" (为文造情). In particular, he put an emphasis on the expression of true feelings in an essay. Also, Liu discussed the affection of the language skill, and brilliantly expounded the important functions of sentiment in literary creation.

I transplanted contextualized teaching from the English class to foreign literacy education in primary school. Previously, I had just employed it in language training in the classroom. However, after I was inspired by the artistic conception, I was suddenly enlightened and my horizons were broadened. I thought that since external objects might affect a poet and the emotion of a writer, inevitably they would also affect children's psychological world. For instance, children could be given access to an autumn night or witness winter snow in the morning. I have personally experienced children's education in a scene of true embodiment. It is a scene for life and the sentiment is merged into the scene. Objective external objects arouse children's emotions and naturally produce a non-self-suppressed expression of motivation. This is called "emotion and resignation." So, when I read articles containing substantive and sentient exercises for children, I attempted to employ the artistic conception and abandon the disadvantages of traditional composition teaching. "Observing contextualized composition" played a pioneering role in the development and construction of the whole contextualized curriculum.

I have also found that the optimized context in the classroom can arouse children's enthusiasm, according to our teaching, in which students are driven in the teaching process. I combine the incisive exposition of the artistic conception and the experiences of my teaching practices. I perceive that the context linking intuitive art and verbal description is not a simple image; rather, it is permeated with emotion. Emotion then becomes the kernel of the context. So in addition to the vivid image (*xing zhen*), I also summarized other contextualized teaching characteristics, including true affection (*qing qie*), a profound scene (*yi yuan*) and deep implications (*yiyu qizhong*), and their rationale.

After years of exploration, I have a deep feeling that affection is the lifeblood of the contextualized curriculum. When children are guided by teachers, they step into the context and affective links are formed between teachers, students and textbooks, which interact with each other. I summarize my practices as "taking affection as the link" (*yi qing wei niu dai*), one of the important operational essentials of the contextualized curriculum, and I combine learning in the field of psychology, aesthetics and field theory. This clarifies that the optimized situation will inevitably

arouse children's enthusiasm and then produce a kind of input learning activity from the needs of subjectivity. Students, accordingly, can feel happiness and contentment with learning activities, and then they will be edified within the context. Due to the function of affection, real mood, high expectations and motivations from the teacher then promote students' self-confidence. Children's thinking, imagination, memory and other activities of intelligence are in the best state. Meanwhile, their learning activities may achieve unexpected results. Undoubtedly, it is impossible for children to be engaged actively in simple symbolic learning, much less to feel joy. Children's latent wisdom cannot be ignited as there is no spark of emotion, which continues to be extinguished when teachers and students are in the unconscious state. Under the influence of the artistic conception and after years of exploration, I constructed a unique curriculum paradigm that combines children's emotional activities with cognitive activities, embodying cognition and emotion, learning and aesthetics, education and culture in the contextualized curriculum. Certainly, this does not imply the exclusion of contemporary advanced education theory, but the combination of eastern and western culture provides more pluralistic theoretical support for our research.

1.4.3 Thinking: Widening Mental Space and Developing Potential Wisdom

In *The Literary Mind and the Carving of Dragons*, Liu Xie put forward the idea of "spiritual thought" (神思, *shen si*); that is, when the poet is thinking, his thoughts are not restricted by distance or time. This feature was elaborated in a chapter that clarifies that human thinking is not constrained by space-time. The poet's imaginative creation can be extremely far-reaching, which is called "thinking meets the thousand years" (思接千载, *si jie qian zai*). When a writer is conceiving a work, his thinking and imagination often fly far away. He is quietly absorbed in thinking and may ponder on the ancients and events thousands of years ago, as if he could see things a thousand miles away, which vividly describes the poet's creative thinking activity. The spirit of a person can travel with objects, stepped into the magical and wonderful realm like the "mind wanders with things" (神与物游, *shen yu wu you*). The poet is trying to figure something out and is shaping the illusion. It seems that emotions diffuse through the mountain when a poet stands on the hill, as if they were standing on the shore and the trends of thought were deeper than the sea. This is called as when climbing a mountain, they were full of affection; when observing the sea, his feelings were in the sea. The poet's talent and truth are blended with their mind, which is magical and subtle.

I put forward thinking as the core in the essentials of the contextualized curriculum. Obviously, it is based on psychological theories. In the early stage of contextualized teaching, I found that imagination has a special role in developing children's thinking and cultivating their perception. Then I began to pay attention to

the development of children's imagination. This kind of recognition was deeply influenced by the artistic conception, which is inseparable in order to absorb theoretical nourishment from Liu.

From the late 1970s to the beginning of the twenty-first century, relying on textbooks and compositions, I started to work with my colleagues, enlightening the imagination of children and bringing them into the far-reaching mood. Students were reading within the contexts described in textbooks and were involved in imaginative repetition and imaginative composition. They were unfolding their wonderful imagination, systematically linking observation with thought and imagination. When children are engaged in reading by virtue of imagination, they can deepen their emotional experience and enrich their reading materials. When they are doing composition exercises, their essays may be full of funny things. I gradually realized that inspiring children's imagination is an indispensably effective way to develop their creativity. Therefore, I particularly advocate encouraging children to read and write essays with imagination within an optimized context. Practice shows that children's imaginations are extremely amazing and wonderful in scenarios. I feel deeply that children's thinking has wings like a bird and can fly far away. Although their essays cannot reach the level of the poet's thinking, their imagination may go beyond rivers and oceans, climbing the mountain with white clouds, and at the same time can think of the past or long for the future.

1.4.4 Aesthetics: Improving the Efficiency of the Curriculum with Aesthetic Pleasure

Liu Xie stressed "literary talents" (文采, *wen cai*) in Chapter XXXI, "Affections Coloration" (情采, *qing cai*). Not only did he get insights from the turbulent water and the flowers on the tree, but also from the pattern and vivid color of an animal's fur. This ancient literary theorist attempted to indicate that things always need beautiful colors and that poetry also should pay attention to literary talents. Furthermore, he pointed out that there are three basic regularities in writing essays. The first is that there are five colors in the formation of texts; the second that there are five tunes in the pronouncements of essays; and the final regularity is that there are five characteristics. It looks like a sparkling dress with five colors, five tunes that can be coordinated to compose music, and the five characteristics (i.e., Confucian benevolence, righteousness, ritual, wisdom and beliefs, which were regarded as the core concept of beauty). Touching expressions are not as simple as an essay, also it is impacted by the law of nature. It is not difficult to see the pursuit of the beauty of harmony in poetry. In the modern era, Wang Guowei further pointed out that "the word is lyrical, so especially focused on the aesthetic" (Li, 2001:147). Therefore, the poet links true scenery and the beauty of outer things, together with the poet's own inner beauty, which blends with the external beauty. When children and teachers can be immersed in the realm of the aesthetic, they are immersing themselves in emotion.

There is repeated praise for beauty in the theory of artistic conception, which also borrows references from modern aesthetic theory, and which had an impact on my pursuit of beauty in the early stages of exploring contextualized teaching. I creatively introduced art into Chinese literacy teaching, presenting aesthetics through creating, reproducing or optimizing the context. I strongly expect that beauty will dominate in the mind of children through the formation, content and language of beauty. To children, beauty has great charm, so I chose beauty as a breakthrough and as the first piece of the essence of operating the contextualized curriculum, since beauty is regarded as a realm and a means of aesthetic education.

Beauty is employed as the soil for cultivating the innovative spirits of children in the contextualized curriculum. Since the pleasure of aesthetics promotes children's imagination, developing infinite associations of ideas in their psychological world, the seeds of innovation have the potential to sprout easily in this pleasant aesthetic field. Beauty shows its positive drive, producing inspiration for children everywhere. Beauty not only moistens children's hearts, but also takes them to a lofty and holy realm, and ultimately makes their minds become much better.

In the contextualized curriculum, there are irreplaceable functions for children brought about by teachers' aesthetic feelings and the high effectiveness of teaching. So I clearly propose a teaching principle named the "sensibility of beauty" (*mei gan xing*). It can be said that relevant understanding of aesthetics, in addition to the enlightenment of the principle of aesthetics, particularly the aesthetic conception, has long been a subtle influence on me and is supported by theories.

1.4.5 The Four Core Elements

The four core elements of trueness, affection, thinking and aesthetics have infiltrated the theory and operation of child contextualized learning, becoming a strong support for the theoretical frameworks of the contextualized curriculum. For instance, the five operational essentials of the contextualized curriculum are aesthetics as the realm of the future, thinking as the core of the curriculum, affection as the link to learning, children's activities as the channel of development and the surrounding world as the source of education. Also, there are five principles of making children happy and efficient learners: inducing initiative, strengthening aesthetic feeling, focusing on creativity, infiltration of the humanities (emotion) and implementing practice. Putting children first means intelligence activated by affection, aesthetic education guided by beauty and learning combined with practices, linking to students' experiences. The contextualized curriculum, therefore, fully embodies the functions of education, including trueness, affection, thinking and aesthetics.

The four core elements not only permeate the concepts, suggestions and strategy of the contextualized curriculum, but also have an impact on the channels, means and methods of curriculum implementation. The earliest explorations of the contextualized curriculum can be tracked back to the arguments of Liu Xie in *The Literary Mind and the Carving of Dragons*, such as "sentiment changing in

different contexts" (*qing yi wu qian*) and "speech inspired by the emotions" (辞以情发 *ci yi qing fa*). The contextualized curriculum has been enlightened by these insights from traditional works and has formed its own discourses step by step. Also, I was guided by these insights to lead students to go out of school, touch their own life world, conduct observations and appreciate beauty and the real situation, so that the contextualized curriculum has stepped into a new era. In order to pursue truth, my classroom learning had to connect tightly with children's life and open up their learning system. In the process of enjoying the beauty of nature, children get to know the world around them and start to compare, analogize and explore the causal relationships of nature. In different grades, especially with growth, the contextualized curriculum also pays great attention to deliberately selecting healthy and vibrant scenes from social life and the typical characters and pictures that embody the beauty of society. This includes designing visits or field observations in various environments and architectures. Children are required to play the roles of reporters, painters and photographers and write down their social investigations and reports. According to the selected design, children's tender minds can understand vivid figures, scenes and objects. They can love beauty as much as they hate ugliness. Furthermore, they can participate in social public welfare activities, becoming the "small masters" of social life, cultivating them to be able to say "I am a good citizen" and to have a sense of pride.

Trueness, affection, thinking and aesthetics are highlights in contextualized education that are children's needs. Children are real individuals with affections. Teachers should be full of innocence. This calls for an interlinkage between education and life, which is the performance of truth. Even in a simulated context, students should have a sense of reality, as only a real scene can arouse real emotions, stimulate far-reaching thinking, promote the realm of aesthetics and create a vision of beauty. This forms a curriculum system with "blending emotion and wisdom" as its main characteristic. It is fully embodied in the contextualized curriculum in its ways of integration, edification and stimulating the role of educating people, which also shows the unique advantages of the Chinese national culture and steps along the road of Chinese education.

1.5 The Latest Findings of Brain Science Research Provide Evidence for the Contextualized Curriculum

While experiments and studies have found success step by step, all the time I have been trying to figure out why the optimized context can be so highly efficient. I found preliminary answers from the perspectives of psychology, but I was not satisfied. More and more I wished that I could find theoretical support from brain science, because children's learning is closely related to the brain. What is the mystery of the brain? For this reason, I have focused on the findings of studies in the field of brain science research. In past papers there has been more than one

reference which mentioned the division of the brain into two hemispheres and expounded on whole-brain synergy. Over the past more than 10 years, with innovations in brain research, brain and neuro-cognitive sciences have developed rapidly and have achieved new results. In recent years, very relevant translations have been published. After studying these works again and again, I found some preliminary explanations for why the contextualized curriculum is so efficient.

1.5.1 Children's Brains Need an Enriched and Active Learning Environment

The uniqueness of the contextualized curriculums is that it creates the best learning environment for children by creating or optimizing situations. Because aesthetics are embodied in these scenarios, children experience a sense of pleasure, and then they are more likely to engage in learning activities. At the beginning, I only recognized that aesthetics could produce pleasure based on my understanding of aesthetics and psychology. Now studies in the field of brain science also prove that enriching the environment can make the brain run very well, so that it produces chemical substances which transmit internal information more smoothly.

The books of Sprenger (1999) and Jensen (2004) argue that rich environments can promote dendritic growth in the brain and that "a rich environment will increase the nerve connections." These are the findings of long-term studies in the field of neuro-physiology, which has found that the brain structures of rats and humans are similar based on experiments.

Researchers also conducted an experiment in which a tiny rat and an adult rat were kept in the same cage. The aim of the experiment was to observe whether there were more dendrites in the rats' brains. The findings reveal that because the adult rat occupied most of the cage, the tiny one did not have enough opportunities to play. The conclusion of the experiment provides suggestions for the development of the contextualized curriculum: "It is not enough merely to provide students with a rich environment. … What we need to do is not only help students to build a rich environment, but also attract students to engage in the learning."

Coincidently, these two books also stress that "music is another way to trigger a positive release of chemical substances." People who attend concerts have a large amount of morphine-like endorphins, a kind of chemical that produces pleasure. The important function of music is "to stimulate the nerve pathways of the brain, so that the nerves are always awake." It is also pointed out that "the use of art is not merely a reflection, it can even teach people how to think, and can establish emotional expression." So brain scientists suggest that "in order to improve the richness of the environment, we need to prove once again that art and activities are integrated into the classroom" ("The Teaching of the Brain"). The conclusion could be summarized that the era of instilling education had been passed, and it strongly proved that the rich educational environment could obviously promote the development of brain. This is strong proof that a rich environment can indeed promote

brain development. So brain scientists suggest that we should go crazy in enriching the environment.

This is why the contextualized curriculum employs scenarios including art, music and drama, which in lively situations, linking with the optimal environments of beautiful nature and bright and beautiful situations in social life, create a rich learning environment from different perspectives.

The contextualized curriculum not only creates a rich environment, but also attracts children to be actively involved in learning. Students do not only engage in the thematic mega-unit contextualized curriculum, the field contextualized curriculum and the transitional contextualized curriculum, but also in the subject contextualized curriculum. The essential characteristic of the subject contextualized curriculum is to combine subject content with children's activities in the optimized situation, and it proposes clearly that children's activities are one way of achieving the essential operations of the contextualized curriculum, because children need to interact with the environment. In the contextualized curriculum, there are not only observations and perceptions, but negotiations over roles and the appraisal of the contextualized curriculum, which is the best environment for children to learn. As brain scientist Dionmand argues, when our educational environment has been enriched, the number of dendrites in the brain increases, the number of mature nerves in the spine increase and the number of cells increases as well.

1.5.2 Children's Brains Need to Constantly Improve the Frequency of Links Between Neurons

It is completely clear that the scenarios or selected contexts designed by the contextualized curriculum are not merely methods of teaching, but create an atmosphere which inscribes knowledge. And the more substantive significance is that it makes full use of the context and that students' potential thinking can be aroused and developed, so that they can engage in a series of activities of thinking, association and imagination. For many years I have been longing for and pursuing the idea that both clever students and less lever students could become cleverer. Studies of brain science show that the masterpiece of the brain is learning, and that learning can change the brain. The ultimate achievement of human learning is intelligence. These arguments prove that the goals that I am pursuing are right.

Therefore, at the early stage of exploration of the contextualized curriculum, the five elements for the child's development were initially proposed as "focusing on development thinking and concentrating on creativity." At a later stage "thinking as the core" was put forward in *Essences of Operation of the Contextualized Curriculum*. This shows that the development of children's thinking was emphasized as the core position in the process of constructing the contextualized curriculum. My first paper, "Development of Junior Students' Intelligence in Chinese Literature Teaching," was published in 1978. I integrated the development of thinking with children's interest, observation and language learning. In the first round of experiments from 1980 to 1986, I also carried out studies on

contextualized teaching and developing children's imaginal thinking, logical thinking and creative thinking. In the process of the development of the contextualized curriculum, the experience of developing children's thinking in reading and writing was summarized. Furthermore, the cultivation of children's creativity was emphasized and regarded as "the soul of education." Then I put forward other points, such as "cultivating creativity in aesthetic pleasure, and promoting students' thinking in the best mental state"; "in the harmonious relationship between teachers and students, activating the potential of innovation, let emotions ignite the spark of wisdom"; "in observing and imagining, broaden the space of innovation."

Children's brains are growing, which means that there is obvious flexibility. Learning occurs when information is transmitted from one neuron to another, where it can easily form connections. There is a vivid metaphor which says that the connections of the brain in the early years of childhood are a "rugged path"; there are more connections and then information is transmitted on the "highways." As the center of the contextualized curriculum, thinking links cognitive activities, observation, imagination, language expression and practical applications in specific educational teaching. When children are constantly inspired and encouraged to think, the frequency of their thinking activities can be improved. Then children are more likely to enter a state of thinking. The contextualized curriculum also always grasps training in disciplinary competence and the unification of development thinking. Combining training on vocabulary, cultivating the accuracy of thinking, guiding the use of rhetoric and enriching the image of thinking, the contextualized curriculum develops children's order of thinking through training with texts, cultivates flexibility and breadth of thinking through its orderly development and develops the creativity of thinking through imaginative compositions.

The results of our experiments have been confirmed satisfactorily by brain science: "when one neuron transmits information to another neuron, learning occurs when the nerve generates a coupling". "As neurons continue to learn and apply information, they connect more and more frequently"; "neural network frequencies will become more and more high, so that it is more and more smooth." (Li, 2001; 181–183); In the course of the experiments on and research into the whole contextualized curriculum, the development of thinking was highlighted, and the emotion aroused after children entered the situation was used to guide their positive thinking. As a result, the children have positive emotions and the best state of mind can lead to them taking the initiative and being willing to think. This was a realistic scene of classroom teaching: copies of the children's manuscripts indicate that clever children could become smarter and less clever children could also get smarter. The strongest illustration lies in the performance of students of low academic attainment in the classroom.

In this way, the signal can change the potential to accept neurons, so that it has the potential to accelerate the speed of learning: The more connections among the neurons, "the heavier the brain is" (Jensen, 2004:59). Because the information enters through the dendrites of one neuron and is transmitted to another, it constantly produces contacts and then the dendrites grow, so that the information is more concise and runs faster. The important purpose of the contextualized curriculum is to make children's brains develop well (Jensen 2004).

1.5.3 Children's Brains Receive Emotional Signals as a Priority and Memories Are Unforgettable

Students are becoming the real subjects because they are in thriving scenarios created by the contextualized curriculum; also they get more inspiration, encouragement and support from teachers. Such a harmonious relationship between teachers and students makes for a more vivid context, which is full of teachers' love and enchantment at human nature. Accordingly, the contextualized curriculum proposes to "bring smiles to children" and "take emotion into the classroom." So there is no abuse or reprimands, nor ridicule or mockery. Therefore, the scenarios designed by the contextualized curriculum are not only abundant, but there is more inspiration, encouragement and support from teachers in these rich scenarios, which form the most appropriate, safe and no-pressure place for learning.

Studies indicate that the classroom should be a place where children feel safe and happy. In such a classroom, "the brain can produce a lot of important chemicals." Teachers' positive feedback, cordial smiles and good relationships with students can cause the production of 5-hydroxy tryptamine, dopamine, endorphins and other neurotransmitters, so that students feel very well (Sprenger 1999, "Brain Learning and Memory"). This is because the contextualized curriculum brings children into beautiful and rich situations and thus produces the chemicals that help the brain to promote effective learning.

The brain relies on the production of chemicals (ibid: p. 79) called neurotransmitters, which pass information from one neuron to another. A child's inner pleasure and intense emotion are prompted when a large number of neurotransmitters is released in the brain. Among these, dopamine is a chemical that contributes to information accessing higher levels of brain processing. Another, 5-hydroxy tryptamine, called the "feel good" neurotransmitter, can make the brain and body's internal information transform more smoothly. Meanwhile, a large number of endorphins can make people feel pleasure, which is considered part of the reward system in the brain (Jensen 2004).

So teachers in our experimental class pay great attention to the emotions that are linked with the teaching materials. From the beginning of the class, a high degree of attention is focused on children's emotions. Teachers use contextualized language descriptions and demonstrations, showing pictures, playing music or making contacts with students' life experiences. Because of the beauty of the context and the teachers' affection, a positive and enthusiastic mood is aroused in the children and they actively participate in learning through teachers' language and their positive feedback.

This positive mood is quickly accepted by the brain—"The emotional information always takes precedence over other information processing" (ibid: 97)—so that children's thinking activities occur in the best mood state: "Positive emotional participation is the key to learning"; "Emotional memory is the most efficient memory" (ibid: 132–134). In fact, these points constitute my three major findings in the field of emotion research: "physiological pathways and priorities of emotion,"

"emotion and chemistry" and "understanding and recognition of emotion and memory." It can be said that nothing is closer to the relationship between emotion and learning.

Meanwhile, this is associated with the implications, empathy, role effect and forces of the field of psychology, which are also supported by studies in brain science. When situations unfold in front of children, the information stimulates their brain. Due to the release and transmission of neurotransmitters, children cannot help but accept this positive emotion, even if unconsciously, so that the situations, events and roles in the scenarios leave an indelible impression on their minds.

The latest findings of research led to me generating some insights into why the contextualized curriculum is so effective. Why are our students' attainments excellent but they have no heavy burden? This relates to the rich content and safe situation within the contextualized curriculum, which arouses positive emotions, releases a number of neurotransmitters in children's brains, improves the frequency of neuronal coupling, promotes their intelligence, opens the channels of memory and results in emotional memory; these effects are inseparable. Emotional intelligence affects children's accomplishments for their whole life: "Genius is an example of emotion-driven creativity" (Li, 2001:127).

Chapter 2
Four Areas of Constructing the Contextualized Curriculum

The generation of the contextualized curriculum is a process of construction based on a theoretical system in its basic mode, and then has been developed into a practical system. With the development of experiments, curriculum reform was gradually brought into schools. Therefore, the contextualized curriculum was the inexorable outcome of educational experiments and the continued need for development. It stresses the inducement of initiative, strengthening the sense of aesthetic feeling, focusing on development, permeating the humanistic and breakthrough practices in schooling. With the aim of penetrating to educators, a context full of aesthetics and wisdom, the principles of implication and empathy, the transformation of the role and strengthening the child's subjective consciousness in the field of psychology mean that children actively engage in learning so that they can be fully developed via activities. Therefore, the contextualized curriculum, as one mode of education, naturally integrates the activity curriculum into the subject curriculum. With the widening of the educational space, extra-curricular activities, class activities, field activities and the establishment of the thematic mega-unit curriculum and other courses, the teaching of knowledge, the development of intelligence and quality training have been involved in the clear goals of the contextualized curriculum, and then the contextualized curriculum has been brought into the classroom.

Aiming at children's development, the construction of the content of the contextualized curriculum is based on core courses, comprehensive courses, the transitional curriculum and source courses, which are called the four fields of the source curriculum. The contextualized curriculum, accordingly, integrates the systematization of knowledge, the operability of activities and the pleasure of aesthetics. It also emphasizes the specific atmosphere, arousing an enthusiastic mood and active engagement in learning. Therefore, the contextualized curriculum strives to combine the influence of the explicit curriculum with the implicit curriculum and constructs an open, pluralistic and network-structured curriculum system.

L. Jilin, *Curriculum and Practice for Children's Contextualized Learning*,
https://doi.org/10.1007/978-3-662-55769-3_2

2.1 Core Domains: Subject Contextualized Curriculum Linking Teaching Content and Children's Activities

In the teacher's mind in different disciplines, the priorities are rich emotion, latent potential and children. Teachers must not learn for students, directly replacing subject learning activities by transforming knowledge. Simply imparting knowledge neglects many important factors, such as emotion, aesthetics feelings. The goal of the contextualized curriculum is to cultivate children as people with good qualities and all-round development. Of course, this incorporates affective goals.
The subject of the contextualized curriculum brings children into optimized situations, in which curriculum content is combined with children's activities, effecting implication, empathy, role and the force of the psychological field, along with the active participation of emotion in education, the teaching process, mobile activities, awareness activities, language activities, thinking activities, touch, imitation and other physical activities, coupled with the creation of pictures, music, drama and art around these activities. It can be said that if there are no activities for children, it is impossible to discuss the participation of their initiative, not to mention the development of their abilities, intelligence and affection. The pansophist curriculum theory proposed by Comenius emphasized that "to combine the training of activities with cognitive activities" there was a need to "carry out practical activities in the process of recognizing things." Dewey's Activity Curriculum Theory also highlighted the important position of activities in children's experience.

Thus the subject of the contextualized curriculum creates an atmosphere according to the characteristics of textbooks, in which students feel a graceful climate in classroom , which combines disciplinary courses with children's activities and knowledge that has been inscribed in the context, so that knowledge and context are interdependent. Children interact with the situation and carry out relevant practical activities. They are active in this optimized situation, and their attitudes, emotions, language and behaviors enrich the situation, which overcomes the traditional Chinese subjects overemphasis on imparting knowledge but neglecting practices, or lack of specific information on operation and application. Meanwhile, to some extent the contextualized curriculum compensates for the defects which make it easy for the simple activity curriculum often to fall into a non-systematic state. As children's activities always promote the teaching process, thus it helps to deeply understand the degree of comprehension and application of the subject content.
In fact, from a broad perspective, the knowledge of all disciplines could be traced back to the origin of human activities, and in human activities is constantly promoted, developed and perfected. As Professor Zhong Qiquan of East China Normal University pointed out in his book *Modern Curriculum Theory*, "People are thinking, experiencing emotion and making judgments when they are involved in activities."

Children are engaged in experiencing, exploring, discovering, expressing and operating in a warm mood. According to this series of activities, children can take

the initiative in learning and become the main roles in the process of learning. The activities in these situations are not completely separate and irrelevant to their experiences; conversely, they interact with and reinforce each other, because all these scenarios are fused in the context and generated by teachers and students. In view of the important position of the subject curriculum in children's development, I put it forward as a "core area" in the subject contextualized curriculum.

2.1.1 Linking Subjects and the Child's Life

Around the world, social life is an important resource for learning knowledge: it is a vast and rich classroom. Therefore, the contextualized curriculum constructs the three dimensions of the child, knowledge and society, and classroom teaching and life in the subject situation can be linked through the real situation and the creation of simulated situations.

Although children's experiences are relatively shallow, in life they have contact with characters, scenery, things and events and they accumulate a lot of experience. Remember that Dewey once pointed out: "From the viewpoint of children, the school's obvious waste is children cannot completely and freely employ the experiences obtained outside the school within schools" (Dewey 1922/1985). Children's experience should be the starting point and foundation of the curriculum. However, children's experiences are often ignored, which is a tremendous lost opportunity.

The priority is to employ children's experiences fully when the subject contextualized curriculum links with life. The connections between Chinese teaching and the life world have been elaborated and introduced in the previous chapter. Here, an example from mathematics will elaborate further. Many children have a basic knowledge of and experience with numbers, and parents often help their children to add up with toys, which can be a very vivid mathematical enlightenment. After elementary school, with a richer experience of life, children's understanding of various geometric forms, scores, percentages and some of the basic laws of mathematics should be highly related to mathematics that cannot be ignored, and should be a fully utilized resource.

For example, in the fourth grade there is a lesson on "triangle understanding." When I was preparing the lesson, the teachers and I wanted to use the children's experience to relate to common triangles. An electricity pylon, a red warning flag, a high crane tower with a long arm are all triangles; the triangle is universal in life and is also known to children. So before the class teacher lets the children go out to find triangles, they should be encouraged through intentional attention to let the mosaic of the life of the triangle appear sharply before their eyes. Starting in class, letting students report examples from their own life before beginning the study of the triangle of income, means that children learn more efficiently and in a way that is closer to them. This shortens the psychological distance between students and

textbooks. The students are likely to find a variety of triangles—obtuse, acute, right-angled—and the personification of a "big triangle family" can be used so that they play the roles of different triangles, to introduce themselves to them. Let students observe, think about and sum up the different characteristics of each triangle and how common they are. Then guide the students in how to apply the characteristics of the triangle to life. Let the child pretend to be a carpenter and use the triangle's "stability" characteristics to repair a loose stool (as outlined in Chap. 1). In our class the children interestingly watched one of the students who play the role of little carpenter. He picked up a wooden strip on both sides of the stool, then collect a small hammer and some iron nails, then made a small bench which has triangles, so that the originally loose pyramid of the stool was in front of the child and they could truly feel the triangle's characteristics in a real-life application. In the active learning state, the children also enumerated their familiar small red flags and triangular cakes, and found that the triangle is not only stable but also aesthetic, and can save the raw materials. Such discoveries surpass the textbook and show that life will enrich the classroom. By guiding the children to discover and recognize triangles, and finally to apply the knowledge they have gained to their lives, they learn to be relaxed and interested, and an interest in mathematics is also cultivated.

Of course, experiencing maths in life is not confined to the things that children go through and the scenes the see. From the campus to the family and society as a whole, all of life around the world can be reflected in a maths class.

In addition to using experience as maths teaching, it is very meaningful and interesting to let children gather data themselves. If mathematical knowledge seems distant from children's real life and as a result maths learning is relatively boring, children will not understand their role and will be unable to produce an interest in learning, which leads to resistance to achieving the goal of learning. In fact, as long as the teacher is a conscientious person, they can find something of interest in children's real lives. Linking this part of the content with students' lives in a full way may bring unexpected results.

One maths teacher was teaching the fifth grade about the circumference of a circle and she asked students to collect data on the Shenzhou V spacecraft. In class, the teacher showed the video of the successful launch of this manned spaceship, and showed a schematic diagram of its flight trajectory. She naturally connected the study of mathematical knowledge with the latest high technology. As a result, this triggered the children's curiosity about space exploration, so that the atmosphere of inquiry was suddenly strong and their thinking was activated. Subsequently, the teacher designed problem scenarios so that students could finally realize how to calculate the perimeter. In her teaching, this maths teacher did not tell the students the method of measuring the circumference directly, but created an actual situation that let them measure the circumference of a spacecraft's orbit. In this situation, the students' previous experiences, such as winding, rolling and pulling, conflicted with the new problems arising from the scenarios. The previous cognitive balance had been broken, and "think how to calculate the perimeter" had become the inevitable

need for these students when their desire for inquiry had been activated. As Jean Piaget (1896–1980) pointed out, fifth-grade students are still in the concrete operational stage. The creation of a situation gives their thinking the support of specific things, and then effectively promotes their active thinking.

In our school, teachers are more concerned about the many current events in society, but also pay attention to the combination of these events and teaching, which brings unexpected results. For instance, the teachers took the example of Yuan Longping, who is called the "Father of Hybrid Rice" in China, with the aim of helping students to understand the differences between the past yield per acre of rice and the current Chinese food requirements, so that they calculated that 1,000 acres of hybrid rice can produce more than in the past to support more people's food consumption. This helped the students to understand the contribution of scientific and technological achievements to society. Moreover, children are particularly fond of sports and especially idolize sports celebrities, so the teacher made a comparison of a few sets of data, and the children conducted a comparative study on the nationwide record for the 110-m hurdle race, held by Liu Xiang. Children could feel the spirit and strength of the Chinese nation based on these data. In thematic educational activities called "I Love my Hometown, I Love the Hao River" (see later in this chapter), the teacher asked the children to collect some special information about the development of Nantong's various undertakings, such as its annual industrial output and the throughput of the port. Combining these data with maths teaching does not only give mathematics concrete connotations, it lets the numbers produce the power; also, it prompts students to feel the gratifying results of social development in the course of studying maths.

In the Patriotic Month, combined with the thematic mega-unit educational activities, the maths teacher delivers the "multi-digit reading method" in the fifth grade. It is not easy for children to understand terminology like million and billion —they do not have such a concept and these terms are not easy to read and write— so simply learning these numbers become very boring to them. I think that numbers are meaningful and valuable only if they connect with children's real lives. At that time on the National Day, the newspapers reported tremendous economic development in the production of grain, steel, coal, automobiles, electricity and other outputs. I discussed with the maths teacher whether children could be asked to collect relevant data and conduct comparisons, so that they could concretely understand economic development.

In fact, this was also a kind of social investigation, a vivid ideological education, which connected mathematics with the economic development of the motherland. The children collected data and were involved in group discussions, which created the context of a "motherland economic development exhibition." As the exhibition was about specific issues taking place in the children's real lives, they were engaged in making charts and carefully writing down numbers with multiple digits with the requirements of being accurate, clear and correct. Some of them drew tables and some wrote out the numbers, and then the "exhibition" was ready. There was a need for some instructors, so children raised their hands and asked to serve as instructors.

It demanded a loud and articulate voice and reporting the numbers accurately. In such a simulated application scenario, the children learned to read multiple digits through applying to be instructors and actively practicing the ability to report multiple digits. At the same time, they were proud at the astonishing speed of the motherland's economic development. In this way, mathematics learning, children's lives and the development of society were linked together.

Since then, the teachers have learned that maths can be linked with the context in various applications. The maths class at school has become interesting. Learning statistics about reading activities is another example. Students were required to collect statistics on reading and make them into a chart. In a similar way, when students learned about percentages, scores and proportions, they grasped methods of collecting data in class, school and society through a particular project to compile maths calculations in real life. Meanwhile, when they started to learn about the Chinese currency, students were asked to play the roles of salespeople and cashiers, so that they understood the currency system and exchange rates.

When sixth-grade students learned about their area, the teacher took them to a rural field. The students did not only feel fresh and interesting, but also were impressed by the concept of Chinese acres and hectares, which were not familiar to them and had little contact with their lives. When the students learned about percentages, they used a program called "Little Financial Expert," which helped them really practice their knowledge and had a good effect in the classroom. The discipline of language, whether it is reading or writing, has the same emphasis on how to read and write for the life needs of the ability to design an appropriate form or carry out applied training. This could be described as "seeing is believing." When children's thirst for gratification has been reached, they are more willing to engage in a new learning situation. They sincerely say things like "Nature is our classroom" or "There are countless examples of mathematical knowledge in life." Practice shows that the subject contextualized curriculum and life are interlinked, which adds vitality to disciplinary teaching, transforms difficult learning content into something easier to grasp and changes monotonous knowledge into abundant content. It is like a spring around the world and a social life for children's classroom learning.

In subject teaching, children's activities maintain the characteristics of the various disciplines and also embody the organic relations between disciplines and society. I feel deeply that all knowledge of Chinese literacy, mathematics and other disciplines is produced in a social context, and ultimately subject knowledge should come back to scenarios in the classroom. Therefore, activities designed in the subject contextualized curriculum often display knowledge in real or simulated social practices in the context of the application of the main content. What students learn is the subject of knowledge which links with production, life and other practices. Based on the needs of textbooks and the theme of the activities, children learn content in specific situations when they engage in the operational process, conducting observations, writing reports, playing the role of judge, creating

descriptions or retelling speeches. This ensures that every child can improve their capacities as they mature. Their learning process is full of a sense of accomplishment of "learning to use."

Naturally, subject knowledge that connects with children and their lives is perfectly constructed in line with the ways of the child, knowledge and society. This construction of children's cognitive laws is conducive to the inherent connection of knowledge and its transfer. The elements of the humanities and experiential courses are also well embodied in the curriculum. In such a process, because of the sense of aesthetics and interest in the context, it promotes the participation of teachers and students and forms emotional links among children, knowledge and society. This best mood state can drive and activate children's potential ability. Childish innovation will occasionally be displayed in the learning process. As Chinese female scientist Wei Yu said, "Innovation is a kind of intuitive thinking with passion." Therefore, there are typical characteristics of culture, emotion and innovation in the construction of children's knowledge in the subject contextualized curriculum.

2.1.2 Promoting the Teaching Process in a Series of Subject Activities

The teaching process has always been dominated by teachers and by teachers' explanations and step-by-step demonstrations. In such a teaching process, students can only be passive and can only have a "supporting role." Their principal position in learning cannot be guaranteed.

In order to embody the active position of students, the subject contextualized curriculum emphasizes a change in teachers' philosophy; meanwhile, it also requires full preparation with less design and arrangement of students' activities. It should be stressed that this is a major step in reforming classroom teaching. If teachers have the teaching concept that it is possible to start everything from students' thinking, then it is also possible to generate (生成, *sheng cheng*) the new form of teaching on the basis of *presupposition* (预设, *yu she*) with students' feedback. Those brilliant sparks and trails are often collisions of wisdom among students and teachers.

For instance, when I was designing a lesson called "Underwater World," I realized that the underwater world was a secret storehouse for humankind. When land-based resources are increasingly scarce and overexploited, human beings have to develop undersea resources. In fact, the development of the oceans has begun, so I changed the way of teaching this text with common sense to help students to understand this mysterious world, arousing their curiosity and interest. According to the texts, I designed a series of contexts to promote the teaching process with children's activities (Box 2.1).

Box 2.1 Teaching Design: Secret Storehouse
Student activity 1: Read Sections 1, 2 and 3 of "Secret Storehouse" by themselves to know that the ocean is big and deep

Teacher: In Section 1, what is big? (The land is big.) In Section 2, what is big? (The ocean is big.) What about in Section 3? (The ocean is very deep.).

Teacher: (showing the globe) Look, all the blue is the ocean.

Teacher inspires students' imagination: Can you imagine how big the sea is? (Students close their eyes, teacher describes the ocean in a soft voice.) The ocean is bigger than our country, China. The ocean is bigger than the sum total of the land. Then imagine the depth of the ocean. Put Mount Qomolangma in the deepest part of the ocean and a more than 8,000 m high mountain top will drown in the ocean. (Let the students appreciate the size and depth of the ocean.)

Student activity 2: Enlighten students by asking questions

The ocean is so big and deep. What kind of questions do you have? What kind of world is there under the sea?**Student activity 3: Understand the basic structure of the article**

Guide the students to grasp the beginning and end of the article, and to use their reading skills to get the main characteristics.

Students read the article.

They should notice the structure of the article, which can be summarized as a question being raised at the beginning, the answers to which are in the following seven sections. Then let the students grasp the main points of every section.

Ask questions:

light from the bottom of the sea
voices
animals
valley, plants
minerals
summary
} answer the questions

Student activity 4: Learn the whole article

Create context 1: Field trips (show a picture of the blue sea)

Description: Ms. Li is the president of the College of Marine Science and you are researchers. Now we are on the beach. We are going to dive to explore the seabed. Field trips are common in research to study particular things. Please put on your diving suit and go to the bottom of the sea. (Add a paper cut-out of a diver and move it slowly to the depths of the sea.)

(Continue slowly and softly): We dive 100 m into the sea and it is still light. At 200 m, it is not so bright. At 300 m, it starts to go dark. At 400 m, it is darker. Below 500 m, it is all black. What do you find?

Student activity 5: Create a presentation to introduce the scene 500 m below the sea

Students give their presentations.

Create context 2: Access to literature

This time we found strange sights at the bottom of the sea. In order to study one thing, it is often necessary to look up literature in addition to going on a field trip. Now I offer you a copy of "The Cold Lamp on the Bottom of the Sea." It will give you an idea of what starlight is like 500 m below the sea.

Student activity 6: Reading the materials

Guide to skimming: There is intensive reading and overview reading. In order to study a problem, we have to look up a lot of literature and it is impossible to read every word. However, scanning the literature enables us to have a choice. Intensive reading is for the important literature and skimming for the rest.

Student activity 7: Find the answer by reading

The starlight on the sea floor is the light from abyssal fish. Why do abyssal fish shine?

To sum up, the functions of shining are (1) to attract prey; (2) to locate companions; and (3) to defend against enemies.Rethinking the questions and firstly answer the questions by yourself, then describe what happened then explain how happen in the context. It is more attractive to describe the phenomenon first and then follow up with the reasons when you answer the question.

Create context 3: The virtues of modern machines

1. Inspiration: It is quiet at the bottom of the sea, but that does not mean that there is no sound. We can hear the sound by virtue of the detectoscope.
2. (Play a video or draw stick figures to show a detectoscope.) There is an oceanographer listening with a detectoscope on the television screen.
3. Description: In order to study something, we need make use of modern instruments and equipment in addition to field trips and access to literature. (Enter the context.) Now please continue to act as an oceanographer, put on a headset (put your hands over your ears to simulate the situation) and listen with the detectoscope.

Student activity 8: Act like a modern machine

Teacher simulates the sound of abyssal fish (gently) buzzing, chirping, woofing, purring.

Question: Did you hear that?

Why doesn't the teacher speak loudly? Explain the meaning of a whisper, as speaking in a low voice in private.

Student activity 9: Compare two sentences and enjoy the language

A. Animals at the bottom of the sea make different kinds of sound that you can hear with the detectoscope, such as buzzing, chirping, woofing and purring.

B. Animals at the bottom of the sea usually whisper. Some buzz like bees. Some chirp like birds. Some woof like dogs. And some purr like they are having a deep sleep.

Read the two sentences and say which you think is the better one. Enjoy the language.

Give some directions according to the students' answers.

The writer of B uses a rhetorical device, a metaphor, to describe the animals at the bottom of the sea. They treat the animals as humans who have many secrets to share with each other. It is mysterious. They expand the sentence pattern of A to create B. This makes the reader feel the context more easily and enjoy the splendor of the sea world more deeply.

Student activity 10: Read the sections of the article in turn

Create context 4: Compare the sections of the article

1. What is the theme of the fourth section of "Sea World"? What about the fifth and sixth sections? (Answer: four animals; five plants; six minerals.)
2. What about each section of "Humanity's Secret Storehouse"? Is there only one theme in one section? If there are several themes, how many? (Answer: animals, plants, minerals, summary.)
3. Direction: There is one theme in one section of "Sea World" and all the themes are in one section of "Humanity's Secret Storehouse." What they have in common is that they are the main part of the article. When we read an article full of information, we should give it subheadings. "Paracel Islands (one of the islands located in South China Sea)" is the same as "Sea World," in that there is one theme in each section (sea surface, seafloor, beach, island).

   We should give subheadings to a section that contains more than one theme in order to figure out the structure of the article. Students should

know that there are animals, plants and minerals at the bottom of the sea, which is a human storehouse.

Student activity 11: Find the contradictions in the two articles and think about them

Inspiration: Did you find any contradictions in the two articles? (Students should find out that there are 30,000 kinds of animals at the bottom of the sea from "Sea World" and 150,000 from "Humanity's Secret Storehouse." Lead the students to explore the context.)

We sometimes have contradictions when different data exist about one thing. We have to find out which one is right.

Inspiration: "Sea World" is an article from a textbook that I used 30 years ago.

Students may notice a sentence in "Humanity's Secret Storehouse: "due to the limited knowledge of the sea world, there are more treasures…" They may realize that 30,000 is a number from the past, which has been updated to 150,000. It is not a contradiction. It means that people know more and more about the sea world. We are pushing the door of the secret storehouse.

Student activity 12: Do a detailed reading and grasp the key words

There are 150,000 kinds of animals and many kinds of plants and minerals. How can we express the abundance of the sea?

Direction: Begin with the sentence about different animals having different activities to inspire students to describe then animals and their activities. Then choose four typical ones to give four examples. What would you choose to write about plants? What about minerals?

Animals: the slowest; the fastest.

Plants: the biggest; the smallest.

Minerals: write briefly about these.

What are the typical examples in "Humanity's Secret Storehouse"?

The heaviest; the smallest; those that move backwards; those that rely on extra force?

Direction: It is impossible to list all the examples to describe one thing. So showing the most typical examples is the simplest and smartest way to describe it.

Student activity 13: Watch the video about the sea world

Play a video about the fantastic scenes at the bottom of the sea or show students some pictures.

Teacher and students summarize the means of expression together.

Notice the heading and the end. Consider the full article.

Figure out the structure. Seize the key points.

Clarify the numbers. Grasp the full view.

Choose typical examples. Know the general ones.

Student activity 14: Read the fourth, fifth and sixth sections of the article

Student activity 15: Retell the content of the article creatively with a clear structure

Now we know the basics of the sea world. You, as oceanologists, should introduce the sea world to the other pupils. You can choose one form from the following (reflecting individualized teaching):

A. You come back from a field trip and give your report.

B. Two students in a group report one scene.

C. Describe the sea world briefly.

It is not difficult to find that students enjoy an interesting study in a series of contexts and when they are in a dominant position in the study. The teaching procedures follow the students' learning procedures step by step. Students have grasped the full view, summarized the article, seized the key phases, acquainted themselves with the sea world and had interest in exploring the sea aroused through this class.

Similarly, maths activities generally reflect the characteristics of exploration. Teaching procedures are pushed by guiding students to analyze, compare and suppose, and then to choose and judge.

2.1.3 Role Effect Helping Children to Devote Themselves to Learning

In the course of teaching, the inherent role of each individual student to "students" tends to get rid of the shackles of being taught and passive acceptance. The negative state of this role will also affect students' overall activity in the teaching process.

The subject contextualized curriculum attempts to promote children's learning through their activities in the context of learning knowledge; meanwhile, students learn to employ their knowledge in scenarios, which are the epitome of society, but are authentic and typical examples and are highly related to textbooks. For instance, in a Chinese literacy class, the scenarios reproduced are what the authors created, while in a maths or science class or in social practices, the scenarios are related to the theorems and formulas being discussed.

In the particular context designed by teahcers, children could be involved in thinking, emotion and language activities when they are required to play roles. In accordance with the needs of thinking, the emergence of roles makes the teaching content of education closer to students' real life. Let them learn the contents of the textbook by taking on a specific role, or reading aloud, or reporting the information,

or showing the action, or portraying the performance. The vividness and novelty of the role make children naturally engaged in the scenarios. Driven by emotion, the initiative of this kind of "force" is almost impossible to control. Suddenly, the logical, abstract and symbolic content in the textbook becomes very vivid and imaginal. This is precisely the positive result of role conversion in a given context.

2.1.3.1 Taking the Expected Role

When children play the role they expected , say as a scientist, astronomer, painter, poet, referee, PLA (People's Liberation Army), journalist or presenter, their emotions are particularly enthusiastic. Because the expectations of such a role conform to the child's thirst for emotional movement, prompting them with strong emotion, a good vision and participation in activities, they are engaged in the learning process. For example, when first-grade children learn the poem "Dawn of Spring," because the ancient poet employed the technique of flashback, it is still hard for them to understand even though it is a short four-sentence poem. If we neglect students' activities and only explain the meaning of a poem through the language of adults, it is hard for students to understand this representative of ancient Chinese poetry.

In my class, children were asked to play the role of a poet and they were excited.

The teacher described the scenario: "It is late at night and you (the poet) are reading by the light of a candle. You read, read and read some more, and then you are sleepy. It is midnight, it is windy outside, and the wind and the rain awaken you."

The children raised their heads and it seemed that they had also woken up.

The teacher continued: "You listen and listen, and then you go to sleep again in a moment. Early in the morning, you are disturbed by birdsong and you wake up."

The children stretched and some of them stood up.

At this moment, the teacher asked: "On this spring morning, you are awakened by the chirping of the birds. You wake up, walk to the window and write a poem. What two sentences would you be likely to write?"

The children were happy to imitate the ancient poet and said: "It's a wakeless spring morning, everywhere birds are chattering" (chunmian bu jue xiao, chuchu wenti niao, 春眠不觉晓, 处处闻啼鸟).

The teacher continued: "You the poet suddenly remember that yesterday at midnight you heard the wind and the rain, and you also think that after the rain the flowers will be knocked down. What are the rest of the sentences in the poem?"

The children said:"Last night's rain has ceased, the flowers are still falling" (夜来风雨声, 花落知多少).

In this way, students have a sense of role and experience unknowingly the poet's description of the situation. Because the role has changed, language behavior inevitably changes too. The enthusiastic mood of the role-play is suitable for the whole learning situation, all the students unconsciously enter into the role of the unconscious, the activities of their imagination almost synchronized with the

experience of the role. Children's whole body and mind are put into the role and they become the real protagonist.

Students could play the role of the author of text, as they could understand the contents and language in texts when students observe and listen the scenario with their own perspectives.

2.1.3.2 Playing a Fairy Tale Role

It often happens that teachers set up a fairy tale role corresponding to children's activities. Because fairy tales are magical and full of fantasy color, a fairy tale role is particularly attractive to children. In children's imagination, the classroom is shrouded with the charming color of fairy tales, such as the long-nosed elephant in the animal kingdom, the naughty little monkey, the cunning fox, the radish doll of the plant kingdom, the cauliflower girl, the willow sister, the younger grass brother, the little rain sister and the snowflake girl. Children are particularly fond of these roles. For instance, when I taught a lesson called "Boat in the Desert," students played the role of a camel. There were camel self-narrative activities and so on. The emergence of role-playing as a fairy tale character adds infinite vigor and interest to the classroom and the children's initiative increases greatly.

2.1.3.3 Taking a Real-Life Role

Real-life roles are part of children's life experience and the scenarios they create are the familiar background that they have experienced, so they feel very cordial. The child is really overjoyed when they play the role of Daddy, Mama, Grandpa or Grandma. Other kinds of roles are also familiar to students, including salespersons, traffic police, postal workers, farmers or drivers. Children feel novelty and interest when these very ordinary roles are reproduced in the classroom. Elements of language training and the use of language can be combined with real-life roles played by children.

Children are engaging in the learning process when they are involved in learning with an enthusiastic mood in a simulated real-life scenario. This cultivates students' ability to apply maths and greatly enriches maths learning. When the logical, abstract and symbolic content of the textbook becomes a vivid scenario, children's interest in maths is more intense.

The "realm of ego" (*you wo zhi jing*) can produce a huge invisible guiding effect. In accordance with the role played, the experience of thinking, dialogue, presentations, operations and other activities comes immediately to children's consciousness. By virtue of this feeling, they will quickly understand the role of the position in the situation, and of words and deeds. Children's experience is fully exploited in this context. The emotions of the role and the verbal behavior become as if they were the child's own thinking. When roles change, thoughts, feelings and language also change. So students cannot help playing the role of the identity, being

in the situation to think, to vindicate, to operate, according to the content of the textbook and teachers' and peers' expectations, rationally showing a series of behaviors and identifiable language expressions. The enthusiastic mood of the role-play suffuses the whole learning situation; not only the student in the role-play but also all the other students cannot help entering into the unconscious psychological effect, the deepest and most vivid experience of the psychological process of role conversion.

2.2 Comprehensive Domains: Children Benefit from Multiple Channels in the Thematic Mega-Unit Contextualized Curriculum

When contextualized teaching was expanded to contextualized education, I concerned myself with and absorbed the diverse, humanistic and comprehensive ideas in theories of the curriculum. Meanwhile, I was largely inspired by the incisive explosions in the comprehensive curriculum, proposed by the prominent educator Ye Shengtao (1894–1988) in China. Naturally, my "Combination of Four Aspects and Intensification of a Thematic Mega-Unit" (四结合大单元强化, Si jiehe dadanyuan qianghua) had been broadened and implemented in multi-disciplinary teaching.

As Ye argued, traditional education has some disadvantages, for instance "Due to the separation, each curriculum place extra emphasis on one realm" and the "Final goal of education lies in the comprehension of all realms, which means when the influences of the separated curriculums are assembled together, they constitute the systematic realm, in which students are immersed" (Ye 1980: 78). This really struck a chord with me, as the dispersion of traditional education obviously weakens its overall effect, and all information from the various spaces in school has an effect on students' mental world. Based on my common life with children, I realized that the content of pedagogy could be mutually integrated and strengthened.

Certainly, it is easy to integrate the separate disciplines. There are inner knowledge systems within each discipline. The priority issue for solving this is how to organize the orders of knowledge systems when they are integrated. So when i realized that I could not completely reorganize all situations in textbook, then I tried to start from the parts. In order to overcome the shortcomings of the boundaries between disciplines, I began to explore the mega-unit at the end of the 1980s. I was attracted by the concepts of "theme," "mega-unit" and "comprehensive," and I put forward the idea of thematic mega-unit activities. In "Experimental Study on Employing Contextualization to Promote the All-Round Development of Children's Qualities," I proposed that school subjects should "lead by moral education, headed up by Chinese literacy and creating synergy with the various branches," so that education could form joint efforts to increase its intensity.

At that time, because of the limitations of the available information, I had not yet encountered the dynamics of international curriculum reform. I did not realize until 1996 that Professor Zhong Qiquan had initiated a comprehensive education day, which had been proposed by the UK, France and Sweden. The contextualized curriculum was in conjunction with teaching as well as aesthetics to implement a "learning unit beyond the discipline" teaching plan, trying to create a mega-unit as a way to integrate the course via a topic involving the collaboration of several disciplines. I was very happy to see that my exploration and the integration of the world curriculum echoed the trend from the late 1980s to the end of the twentieth century.

In fact, the ideas of the mega-unit and of the contextualized curriculum had sprouted in my early exploration of contextualized teaching. At that time, I integrated national and supplementary textbooks, as similar content was in component units, classifying it with themes and combining it with classroom teaching, field education and observational activities. For instance, I took children to the Tianning temple and to visit Guangxiao tower. They were required to observe the shape of the tower and listen to the small bell under its eaves in the wind, but also were asked to recite sentences from an ancient poem, "Dare not speak loudly and fear to disturb people in heaven," by Li Bai (701–762) of the Dang dynasty. They also counted the levels of towers and small bells on the ancient pagodas and tried to understand the scenarios of maths education, then calculated the number of small bells. Then they drew pictures of the tower, finally organizing a dance at the end of the activities. Under the same theme, the relevant disciplines were organically combined to constitute a harmonious realm.

A thematic mega-unit contextualized curriculum integrates various educational and children's activities, each of the major units setting up a distinct theme, in which teachers and students are encouraged to be involved. Examples such as "Actions of Bees," "Let's Look for the Beautiful Place," "Concerns about the Disaster Area," "We Get the Wings of Imagination through Fairies," "Step through the Door of Science" and "Race with Old Father Time" are attractive themes for children. Each subject teacher and chief class teacher coordinate with each other, offering mutual support and making full use of similar blocks (相似块, *xiangsi kuai*) from teaching and pedagogical content, within and outside the curriculum, from campus to school to the family and society, under the guidance of the theme, employing the educational and teaching content to gather together various aspects of the focus on education. With the consistency of interaction of the components, the mega-unit contextualized curriculum puts in more educational effort and strengthens the depth and density of educational results. It can expand and find a way of integrating a comprehensive curriculum and embodies the superiority of curriculum synthesis.

A thematic mega-unit contextualized curriculum involves various subjects, so it needs more teachers to participate in the planning. For instance, there is a garden of winter sweet in our school and it was full of blossoms in winter. In order to prompt children to feel the tenacity of winter sweet, they were guided to feel the spirit of the blossom. As the team leader of the Young Teacher Training Center, I asked

teachers to participate in the planning. Each teacher was required to independently design a plan. It was a cold winter and the young teachers were assembled on the third floor of the school hall, with the north wind coming through the windows, but they were enthusiastic to participate in the training without any complaints about the weather.

I walked to the window and, looking out at the blooming winter sweet, considered that children not only need the spirit of winter sweet, the same as the teachers they should understand and appreciate that spirit. Education is poetic, but it needs more effort over a long time. The teachers handed in their proposals, which were brilliant. Subsequently the proposals were implemented for their respective programs. Students in the first and second grades were asked to conduct observations on winter sweet, particularly on their shape, color, blossom petals and flower heart. Students in the third and fourth grades conducted observations of winter sweet and then recited poems that praised the plants. In short, going up through the grades, gradually the understanding of winter sweet and the character of the sentiment deepened, through the experience of beauty.

Many teachers were involved in the thematic mega-unit contextualized curriculum, which developed quickly. Over the years of practice, experience accumulated on a variety of thematic integrated activities. The thematic mega-module curriculum has the characteristics of a distinctive theme, being accompanied by motion, the autonomy of children and various roles. Children actively participate in the mega-unit with enthusiasm, which greatly enhances the effectiveness of the education. Their vision has been widened and their comprehensive abilities are fully practiced in the thematic mega-unit contextualized curriculum. Over its long-term implementation, teachers all feel the superiority of mega-unit education, the key points of which are summarized in the following sections.

2.2.1 Confirming the Themes of the Mega-Unit Based on Social Background

Since the curriculum is integrated in some subjects, there must be a theme, otherwise it will not be able to lead the branches. How are the themes determined? From the effect of education, we try to improve the overall efficiency of education through thematic mega-unit education. We want to strengthen the intensity of education, which must have a broad background of a particular type, or a social background, so that our theme for education can embrace nature within the social life of the wider environment.

I think that such ideas could be considered as part of the nature of education, so it is easy to conform to the law. For example, when spring comes, teachers from the first and second grades confirm that the theme is “We Have a Party in the Spring.” Children are involved in the texts of “Spring Girl Comes,” “Color Pen of the Spring Rain,” “Kite” and “Small Tadpoles Looking for their Mama,” which are poetic

descriptions of the spring. In October, it is the National Day of our home country and we carry out the thematic mega-unit of "We Love the Mother of the Motherland." Children can feel the atmosphere of national celebration, and in particular they can feel the footsteps of progress. Whether in Chinese literacy or in a maths class, the themes all focus around loving the motherland. In Chinese literacy the lessons reflect the motherland's new appearance, describing the magnificent mountains and rivers. Mathematics integrates the data of reform into computations. The campus windows and class newspapers also are meticulously decorated with the themes of reform and nationwide change. The effects of the thematic mega-unit in a continuous situation are gradual progress and deepening. There is a warm and healthy atmosphere which is filled with love for the motherland, from an individual class to the whole school.

The thematic mega-unit contextualized curriculum displays its desired formation and creates themes linking the seasons and the social background based on the characteristics of the children. It pays more attention to cultivating children's love for the motherland and their hometown, as well as a consciousness of collectiveness, responsibility, autonomy, environmental awareness and development of children's ability to be hands-on, communication and self-care.

For instance, the Shenzhou VI spaceship successfully flew in October 2005. The whole country was cheerful. The children were also very concerned about this big issue in which they had a strong interest. We seized the opportunity and changed the Fairy Tale Festival to a thematic mega-unit on a scientific fairy tale, which was called "I Am a Little Doctor with Wings." All the students were interested in an infinite number of funny themes, in which they were full of imagination, passion and creativity, learned fairy tales, read fairy tales, drew fairy tales, wrote fairy tales and played fairy tales. The Chinese literacy class each year arranges a unit of a scientific fairy tale. This is supplemented by some classic scientific fairy tales, such as "Small Gecko Finds a Tail," "Round and Fang," "Traveler of Dust" and so on, not only enlarging the amount of reading and knowledge, but also stimulating students who are interested in science to understand the characteristics of a scientific fairy tale and have the desire to create one themselves.

Middle- and high-grade students also created books of scientific fairy tales. They designed the covers and illustrations themselves. The fifth-grade students also made a few fairy tale books. In maths class, the teachers displayed mathematical knowledge in the form of fairy tales, so that students could learn and apply the knowledge with vivid images. In the music class, the teacher taught students to sing "Forever Live in Fairy Tales" and "Blue Cats," which connect fairy tales with reality, and with life today and tomorrow. Other disciplines also combined scientific fairy tales with subject knowledge and skills, not only playing the core role of classroom teaching, which ensures the implementation of teaching tasks, but also enriching the content of teaching and promoting the development of activities.

In such a happy mega-unit activity, there were balloons everywhere on campus. The wise oldman came to the venue, surrounded by the recent Beijing Olympics mascots the Fuwa. Students in first and second grades played the role of "small tadpoles searching for Mama" with singing and dancing, expressing the joy of

learning fairy tales. Students in the third grade showed their interesting scientific fairy tale book on the stage and read the fairy tale. Students in the fourth grade publicized the fun of painting fairy tales with a scientific fairy tale gallery that was more than 100 m long. Meanwhile, students in the fifth grade created a maths drama and demonstrated their passion for writing fairy tales. Students in the sixth grade produced hundreds of unique science fiction models, expressing fairy tale miracles and their desire to achieve a better future. As they were cheering the countdown, when it reached "ignition, takeoff" the model of the Shenzhou VI spaceship made by the children themselves flew into the sky accompanied by cheers from the hall. Obviously, these activities were not only designed for the students, the teachers too were immersed in the scientific fairy tales. The children's patriotism was also stimulated by the idea of making the motherland better with their own innovations.

There are many other activities linked to seasonal events in mega-unit education. For instance, "Today I Am in charge" on Women's Day and activities during the Olympic Games in 2008. This way of following the pace of the times captures educational opportunities, helps students who are engaging in the activities touch the objective world, develop their social life and cultivate their sensitivity to current affairs, for their future personality development and socialization.

2.2.2 Breaking Disciplinary Bounds with Subject Integration

The thematic mega-unit contextualized curriculum takes into account the knowledge system of disciplines, but it cannot restrain children's activities that have impacts on the effect of mega-unit education. In order to accommodate children's activities, the subject content needs to be adjusted, especially in Chinese literacy and moral education, as well as artistic disciplines. Sometimes these subjects need to break the order of material, adjust the content, insert and supplement with more content which is more suitable for children's participation and improve the overall effect of the education.

On the theme of "Concerning a Disaster Area, Show the Love of Your Small Hands," into the mega-unit educational activities teachers integrated the related themes of love, such as themes in fairy tales and poetry as one unit. The maths teacher quickly collected data on donated money in the whole school. In the maths class, students discussed the theme in groups, combining maths teaching content, arithmetic, statistics, percentages, decimals and fractions. Students were guided to compile their own maths questions and calculate the results by themselves. On the one hand, the children could feel the love from the donations in this process; on the other, they understood the value of applying mathematics in real life. Besides the activities in the maths class, the music and art classes were also involved in the activities of showing the love of small hands.

In the Creative Month, in order to cultivate the spirit of inquiry and arouse curiosity about a new field, the third-grade classes combined the "seabed world" into a thematic mega-unit which covered the theme of an ocean tour. In the children's beautiful imagination, the sea was mysterious, beautiful and profound. In addition, it attracted their curious hearts. They aspired to have a glimpse of the boundless blue world and explore the mysterious spaces that are deep beneath the seabed. Aiming at satisfying the children's desire, the teacher integrated the teaching of various subjects so that students could understand the ocean, cultivate their love of the ocean and form the initial perception that the protection of the ocean is the responsibility of everyone.

At the same time, exploring various forms of the ocean world cultivated students' imaginative abilities and spirit of innovation to meet the new era of oceanic development in the twenty-first century. Because the oceans are the secret storehouse of humankind, developing their treasure is an urgent need. Guided by the subject, children's interests and the inspiration of their curiosity, they read a series of books about the oceans and actively gathered information, produced a picture exhibition on the theme of "Ocean Exploration," made a "Blue Homeland" ocean knowledge newspaper and launched an "Ocean Roaming" encyclopedia and knowledge contest. All the subjects began teaching around this topic. A series of Chinese classes were held on a set of texts, including "Undersea World," "Cold Lamp" and "The Secret Storehouse of Mankind." In the maths class, by the teacher applying the lesson to the carefully created ocean situation, students learned in a vivid and interesting way. In lessons on nature, teachers and students explored the underwater world of colorful biological and abundant mineral resources. The music class taught about the small conch shell. The art class was also full of life in a few consecutive lessons, from a "Hello, Huanhuan" mascot design to an "Ocean Imagination" painting contest, and then to a "Seabed World" marine environment simulation, letting the children fully exert their own artistic talent and creativity. The integration of sports was more innovative: the PE teacher became a "Marine Olympic Games" sponsor, proposing a "Happy Ocean" of fun marine animal games. Accompanied by cheerful music, the children wore their own homemade animal headdresses and became multi-colored starfish, bouncing swimming crabs, a smoky octopus, a colorful parrot snail, a penguin with a gentlemanly demeanor, a tall sea lion and so on. These family members of the marine life team participated in medal contests for each project. Interesting marine animal games brought the theme of a trip to the ocean to a climax in the major unit educational activities, the school playground becoming a veritable "happy sea."

In thematic mega-unit educational activities, the children are truly immersed with their whole body and mind. These are contextualized activities and they are also teaching activities. Therefore, they prompt the children to be engaged in the emotion initiatives, receive a lasting and stable educational effect through the dispersion of emotions.

2.2.3 Implementing Comprehensive Practices Based on Children's Autonomy

The thematic mega-unit contextualized curriculum provides a broad space for children's activities and children are fully active in the thematic context, which fully embodies their subjectivity. From the start of the activities, including planning, exhibition board layout and decoration of the classroom, everywhere the children are active and show the potential of their wisdom.

This was true of the ocean journey, as described above, and the entire activity was carried out by the students themselves. They showed great enthusiasm, gathered a lot of marine knowledge and pictures, designed a lovely mascot of a dolphin called Huanhuan, depicted the imaginary future underwater world with clever pens, and also with their own small hands meticulously crafted various marine animal headdresses.

Another example, "We Have a Party in Spring," was a thematic mega-unit integrated activity for first-grade students, which was a way of cultivating students' practical abilities. The children were involved in activities called "I Am a Small Flower Gardener," "Spring Is Growing Up," "Where the Spring Is" and "Spring Doll Footprints." They came to understand nature and society and scientific knowledge on health, while they watched kite-flying performances and enjoyed sports games with their parents.

A thematic mega-unit activity can also be based on social background and involve a series of activities according to the measurements and selected themes of the National Moral Education Initiatives. In 2005, there were solemn commemorations of the Sino-Japanese War (1937–1945) and the sixtieth anniversary of victory in the Second World War (1939–1945). The school pursued the theme of "Remembering History, Loving Peace and Rejuvenation" in the context of the whole society. Under the guidance of teachers, they were invited to participate in narrative activities concerning veterans of the Sino-Japanese War. They watched television programs and movies, decorated an exhibition and edited a pamphlet called "Bearing in Mind the War of Resistance against Japan." All the disciplines were collectively prepared to organize the corresponding teaching units and each grade class carried out individual activities. For instance, teachers in the Chinese literacy class compiled a series of anti-Japanese poems and essays, and guided students to complete reflections after reading and editing a newspaper, which prompted students to understand the suffering and the glorious history. In the maths class, children used charts and proportions, and compiled problem-solving questions concerning statistics about the Sino-Japanese War. In the music class, teachers taught anti-Japanese songs, so that children could connect the melody with love of the motherland. Finally, the school held a chorus festival as a climax to the whole activity, in which all the students sang anti-war songs. Because the theme of the activities was distinct, it had a rich form and all students are engaging in the dynamic activities? It had the desired effects. Each class held competitions and students' initiative and creativity were greatly stimulated.

Based on different scenarios, the thematic mega-unit contextualized curriculum prompts children to be inspired by enthusiasm for the mood and guides them to carry out a series of symbolic activities. In the thematic mega-unit called "The Fairy Tale Is Your Friend and also Your Teacher," the children participated in such symbolic operations. All the classrooms were decorated with colors and it seemed like we were walking into a beautiful fairy tale world. The teachers looked like they were going back to childhood; the students were more excited than can be described. We cherished the emotion between teachers and students and guided the feeling of a beautiful fantasy realm. After that, the children were asked to speak about and write fairy tales, rewrite their own stories for the drama, make headdresses and play out a fairy tale. In this festival of fairy tales, we received more than 1,000 fairy tales and more than 2,000 pictures of fairy tales, which concentrated on symbolic operations in a relaxed and enthusiastic way. Students even launched a newspaper, for which they interviewed teachers and completed reports whilst doing the typesetting and designing the layout, in which their ability to comprehensively use the language was improved. Meanwhile, some of their classmates produced excellent articles, for instance "Little Swallow," "Observer," "Bamboo Shoots in Spring," "Stars" and "Venus." Based on the plots and roles of the context, students were involved in compiling problems on the chosen sites or carrying out a calculation contest, which were typical symbolic operations of the context.

There are generally only two or three thematic mega-unit contextualized courses in each semester. However, with their distinct themes of horizontal communication of various disciplines, these skillfully combine the explicit curriculum with the implicit curriculum. The dynamic continuity and synthesis of the activity make the educational situation vivid and profound. In this way, the thematic mega-unit curriculum brings children's cognition and emotion into a new development area in school education.

The thematic mega-unit contextualized curriculum makes the whole campus like the contextualized curriculum of the big classroom. In such a happy, warm, beautiful situation, the boundaries between classes and disciplines are blurred and ultimately broken. Meanwhile, the gaps formed between teachers and students in traditional "dignity" education have gone. All these activities embody the common efforts of teachers and students in the whole school. They make a plan, are involved in discussions, form a program and work together on integrating the thematic educational scenarios happily.

Children who grow up in optimized situations are nourished in their minds. Such an education will affect the formation of their personality and of all-round qualities, which will influence their lives. In fact, to the teacher, it is because of the thematic mega-unit contextualized curriculum scenarios that teachers and students can grow in a happy situation.

Students have no burden when they are involved in thematic mega-unit contextualized curriculum activities. They devote their dedication and fully play to their ingenuity in the activities of their classmates and in cooperation.

Box 2.2 Instructional Design Typical Case 1: "I Love the Yangtze River, I Love the Hao River" Themed Activity

Background

To the east of it is the eastern sea of China. To the south of it is the Yangtze River. It is an important city which has many harbors in the north of the Yangtze River estuary. It is our hometown, Nantong. There is a mother river, the Hao River, going through the city. It has witnessed generations of Nantong people living here. Nantong is a great city whose people are excellent. The Number One Scholar in the late Qing Dynasty, Zhang Qian, ran his business and managed education in Nantong. Here he created several firsts in China. Therefore, Wu Yongliang, an academician of the Chinese Academy of Science, came up with an idea that Nantong is the first city in the modern period of China. All the Nantong people are proud of it. A Nantong Port Negotiation Meeting will be held in September, which is a chance to encourage city development and for pupils to enhance their understanding of the history of our hometown. Through it, pupils will come to love their hometown more. Therefore, we organized an "I Love the Yangtze River, I Love the Hao River" themed activity.

Objectives

1. To lead students to a realistic context in several ways. To provide students with a chance to know more about the history, places of interest, geographical advantages, celebrity stories, folk customs, folk crafts, local specialties, economic characteristics, new look and city development planning of their motherland. To begin with the love for the motherland and then to stimulate the love for country, and love for country always starts with love for its mountains and fields.
2. To form an overall understanding of society, nature and self, and develop a love for nature and the hometown from involvement in the activities.
3. To cultivate students' abilities to ask questions and solve problems with others, and to make good use of knowledge. To foster students' traits, such as cooperation, willingness to share and a positive attitude to life.

Design and Implement Teaching Procedure

1. *All the grades participate, clarify the theme and create the context*

There are more than 4,000 students from six grades. They are of different ages and levels, therefore each grade has different activities. They differ in the context, the objectives and the grade themes according to students' hometown and characteristics.

An initial speech was given by the School Moral Education Department at a morning conference. An introduction to Nantong was given to students through Red Scarf Television and the Small Magpie radio station. The documentaries *The Song of the Yangtze River*, *Look Down on Nantong*, *Zhengda Variety Show of Nantong* and *Make the World Understand You—Nantong* were played at the school, which was imbued with a Nantong atmosphere. The slogan "I Love the Yangtze River, I Love the Hao River" and pictures of the Yangtze River and Nantong were displayed on the bulletin board.

Many students paid attention to the following poem in the photo exhibition. It aroused their love for their hometown so that they wanted to know more about Nantong:

> There is a piece of land, born from the sea, listening to the roar of the Yangtze River.
>
> There is a piece of land, harboring the strong backbones of five mountains, pouring out the beautiful Hao River.
>
> There is a piece of land, playing the harbor nocturne with diligence, promoting the blue and white rhythm with wisdom.
>
> This is our lovely home—beautiful Nantong.

An initiative, "Welcome to Nantong Port Negotiation Meeting, Be a Good Teenager," was sent to all the teenagers in Nantong. They enjoyed the activities on the Hao River and in the ecological green area and Olympic Park. They surfed the Internet and read books. They finished an observation report. They published a newspaper. They visited specialists and took photos. They wrote a poem and drew pictures. They created a student union. The views of their hometown impressed them a great deal and they grew in the activities.

2. *Combine subjects, develop a contextualized curriculum*

In order to achieve the overall educational effect, the activity was organized as a combination with moral education, Chinese, mathematics, English, music, sports, art, nature, society and other subjects. Every subject was free to play its disciplinary advantage to different grades. All the subjects joined together to form a contextualized curriculum.

In the Chinese class, students read beautiful poems and articles, and introduced celebrities and places of interest to each other. Students in the first and second grades read poems about the Yangtze River, such as Li Bai's "Say Goodbye to Meng Haoran in Guangling" and Du Fu's "Climb to the Height." Students in fifth and sixth grades read "Small Bridge" and Yu Qiuyu's article "At the Foot of Woof Mountain" in his book *Hard Trip of Culture*. The teachers compiled reading books such as *Nantong—The First City in the Modern Period of China*, *Stand by the Bridge of My Hometown* and *Culture of River and Sea*.

In the maths class, students felt the great changes in their hometown through measuring, calculating, drawing and other digital tools. They solved application problems. They undertook field trips and interviews and read literature to gain a lot of data. They used the data to create some application examination questions.

In the English class, students introduced their lovely hometown to foreign guests. They tried to describe the Hao River, the Yangtze River, Woof Mountain, the new culture plaza, the sports and exhibition center and the museums in English.

In the music class, the students learned songs about Nantong, such as "Nantong Is a Great Home," "Nantong Is Beautiful" and "Embroidery in Nantong." They got to know more about their hometown from the lyrics and the melody.

In the art class, students of different grades felt the nature of their hometown through sketches, watercolors, gouache, oil paintings and other forms.

In the PE class, students listened to stories about the Olympic champions in Nantong. The teachers recommended that students read the book *Peak*. They had a PE class in the sports plaza.

In the science class, students investigated how to protect the environment. They took a sample of water from the Hao River and then analyzed the water quality. They went to the communities, streets and parks to interview citizens about the current situation of environmental protection of the homeland, and they proposed that people should protect Nantong together.

In the society class, students watched the documentary *About the Yangtze River*. They designed a questionnaire to understand what they know about Nantong and their views on city development.

In the computer class, students surfed the Internet to gather information about Nantong.

3. *Students of different grades participate in different activities*

3.1. Students of the first and second grades enhanced their sense of pride as Nantong teenagers through acquainting themselves with the beautiful scenery and customs in happy and interesting situations.

Students of the first grade had spent less than one month in primary school. Their objective was to get to know their hometown. They went to the ecological green area in the east of the Hao River and enjoyed the beautiful views. The teachers told them the history of the Hao River and they listened. They sang the song "Hometown Is a Good Place." They walked along the Hao River and counted the old towers.

Students in second grade participated in a series of activities such as "Paint Your Hometown," "Talk about the People in Your Hometown," "Taste the Food in Your Hometown," "Sing the Song of Your Hometown" and "Praise the Beauty of Your Hometown." In the activity of "Taste the Food in Your

Hometown," students were introduced to Nantong specialty food: West Pavilion crispy shrimp sauce, Haimen goat, Rudong clam, Ma round, cloud cake and so on. They were shown the crafts and understood and appreciated the blue cloth, dyeing crafts and whistling kites.

3.2. Students in third grade visited the Nantong Spinning Museum, which was the first spinning museum in China. They furthered their understanding of their hometown's economic development through the old looms and spinning wheels.

The students visited people undertaking Nantong's famous folk craft, small silk tie dye. After several processes, a small piece of silk becomes a colorful craft. Students tried to make themselves a small piece of silk. There were many wonderful combinations of yellow, red, blue, green and other colors. In this way students approached the culture in Nantong.

Students in the fourth grade organized several activities, such as "I Learn the Craft in My Hometown," "I Make Food in My Hometown," "I Create a Newspaper for My Hometown," "I Take a Photo of My Hometown" and "I Design the Application Examination Questions."

3.3. Students in the fifth grade made good use of resources outside the school. They visited experts and listened to them relate the history of Nantong. They visited the museums. They visited the five mountains in Nantong. Before the autumn trip, they looked up literature to find out more about the culture of the five mountains. They had the theme of five mountains in pictures, "Talk about Jun Mountain" and "Tale of Jun Mountain." The teachers developed specific themes for the curriculum, such as "Poem and Paint about Nantong," "Enjoy Nantong," "Reflect on the History of Woof Mountain" and "Tale of Nantong." Students undertook several cultural studies and compiled research papers, such as "Tale of Nantong," "Folk Art and Food Culture in Nantong," "Basic Necessities of Life in Nantong," "Drama of Nantong," "Cultural Landscape in Nantong" and "Language in Nantong."

Students in the sixth grade did research with the theme "Give Us a Visiting Card to Nantong." They divided the research into five parts: spinning, education, architecture, health and life, and sports. They took a trip on the Hao River and visited museums. The guide words "Welcome to Our Hometown" were sincere and attractive. They went on cruises to take photos of Nantong and enjoy the landscape. They visited the harbors and interviewed the chief engineer of Yao Harbor Company. They heard a lot of exciting information and understood the government's plan in more depth. They did research with the theme "Stand by the Bridge of My Hometown." They got to know more about the Hao River and their hometown. They came up with some advice. They published a proposal on protecting water. They wrote a letter to the mayor.

Box 2.3 Instructional Design Typical Case 2: Mathematics Culture Festival Themed Activity

To mathematicians, mathematics is theory. To other disciplines, mathematics is a tool. To everyone, mathematics is a way of thinking, as well as a kind of cultural spirit. It is a bright pearl in the history of the development of human civilization. As M. Klein said, "Mathematics is always the main force in the formation of modern culture. At the same time, it is an important element of this culture."

Therefore, the objectives of the mathematics contextualized curriculum in our school are to enhance students' cognitive knowledge, but also to cultivate aesthetic, cultural and emotional edification. We combine the feelings of maths culture with children's spiritual world to promote their all-round development.

In order to further students' understanding of the interaction between mathematics and the development of human society, and give them a chance to experience the value of mathematical science—application value and cultural value—the first Mathematics Culture Festival was held. We hoped students would improve their cultural quality and creative consciousness.

Program of the First Mathematics Culture Festival of the Second Affiliated Primary School of Nantong Normal University

1. *Purpose*

   Mathematics is a science, a kind of culture, as well as the foundation of civilization. The cultural and aesthetic context of mathematics is the key to the mathematics contextualized curriculum. In order to create a rich cultural atmosphere in the school, the first Mathematics Culture Festival was held. We hoped that students would realize mathematics' rich cultural heritage and feel the infinite charm of mathematics through different kinds of activities; that they would find that mathematics is fun and useful; that they would then be able to use mathematics in life; that the activity would stimulate students' love for mathematics; and that it would promote the formation of their mathematical literacy.

2. *Theme*

   Promote mathematical culture and feel the charm of mathematics.

3. *Content and Schedule*

First Grade

Activity Content

3.1. Go shopping and pay to consolidate knowledge of the currency (from May 8 to May 13).

Accompanied by their parents, the students go to the store and buy something. The parents take photos of the items they buy and their behavior. Students describe the process of paying in their own language and write about the photos.

3.2. Tell mathematics stories (from May 1 to May 31).

Week 1: Students collect mathematical stories in various ways.

Week 2: A storytelling contest is held in every class.

Week 3: The storytelling contest is held in each grade. There is one student from every class participating in the contest.

3.3. Assemble graphs to consolidate knowledge of rectangles, triangles and parallelogram (from May 14 to May 20).

Students cut out different sizes and shapes of rectangles, squares, triangles and parallelograms to assemble different graphs. New graphs are encouraged.

3.4. Counting game (May 18).

All students participate in a counting game. There will be first, second and third prizes.

Activity Achievement

Collection of mathematics stories, excellent photographs in each class, good graphs, great homework.

Second Grade

Activity Content

1. Quotes from famous mathematicians.
2. Stories about mathematics.
3. Mathematics common sense
4. Solve mathematics riddles.
5. Play mathematics games.

Week 1: Collect relevant information.

Week 2: Read stories about mathematics and tell stories on Wednesday and Friday mornings.

Week 3: An interesting quiz of mathematics riddles is held in the playground. Four classes are in one group.

Week 4: There is a competition for a total of 24 points.

Activity Achievement
Collection of literature, printing plates of wonderful pictures.

Third Grade

Activity Content

1. According to the textbook contents, teachers instruct students to make paper cut-outs showing axisymmetric, translation and rotation principles. Design and make an annual calendar (from April 30 to May 11).
2. Collect mathematics stories and tell them in class. Three or four students tell stories in the morning meeting time to each class. The overall story-telling team consists of one or two students from each class (from May 14 to May 18).
3. Combined with the Ten Years Old Celebration, a show will be held of self-made mathematics comedy or fairy tale programs (June 1).
4. Games: "24 points," "30 Snatch" and so on (one game per week, from February 21 to May 31).

Activity Achievement
Paper cutting, exhibition of calendars, photos, performance programs, mathematical culture reader.

Fourth Grade

Activity Content
Design an emblem for the Mathematics Culture Festival (from May 8 to May 13). Students demonstrate familiarity with numbers, symbols and graphs. Encourage them to use symmetry, translation, rotation and other methods to create an emblem for the Mathematics Culture Festival which can reflect its connotations.

1. Put on a show in each class (from May 13 to May 21). Students collect stories about mathematicians and learn to tell a story. There is a Story King Contest in each class. Students can perform a fairy tale drama in the contest and there is a show for the whole grade (May 25).
2. Special events in every class (before May 18):

   - Newspaper of stories about mathematicians
   - Mathematics jokes and songs
   - Mathematics fairy tales and poems

- Mathematics couplets and mathematics in life
- Mathematics games and quotes
- Mathematics stories and future of mathematics
- Ancient questions and mathematics games

Activities differ from class to class. The activity is shown on the doors and windows to attract teachers and students to participate.

Activity Achievement
Emblem panels, photos, layout of class environment

Fifth Grade

Activity Content

1. Design a mascot for the Mathematics Culture Festival (from May 8 to May 11).
2. Collect mathematics quotes, anecdotes, puzzles, masterpieces by Chinese mathematicians, mathematics riddles, couplets, magic and other literature to compile mathematics reading materials (from May 14 to May 18).
3. Organize a "I + Maths = Smart" mathematical knowledge contest (from May 21 to May 25).
4. Students write "Mathematics through My Eyes" compositions (from May 28 to May 31).

Activity Achievement
Compilation of mathematics extra-curricular reading material, mathematics kaleidoscope, panels of mascots for the Mathematics Culture Festival, best poster of mathematic diary.

Sixth Grade

Activity Content

1. Students give lectures about mathematicians' stories (one or two students per class) to every class at morning meeting time.
2. Introduce a mathematics quote every day.
3. Sudoku contest:

- Introduce the rules of Sudoku on the school television program.
- Select one player from each class.
- Hold a contest in the grade.

4. Compile mathematics extra-curricular reading material and a mathematics kaleidoscope.
5. Play mathematics games (e.g. Magic).

Activity Achievement
Mathematicians' stories, compilation of famous mathematics quotes, compilation of mathematics extra-curricular reading material and a mathematics kaleidoscope, carved disc of the Sudoku contest.

Summary

During the Mathematics Culture Festival, we carried out abundant mathematical activities. Knowledge of mathematics was integrated into students' daily lives. Mathematics became a kind and easy-going person to students, who got acquainted with it in many ways which aroused their interest. They learned to think, learned to cooperate and learned to use mathematics in daily life. There was an atmosphere of loving mathematics, learning mathematics and using mathematics in the school. Watching the kids counting 24 points with a furrowed brow in a serious face, I could not help but cheer for them secretly. I was moved imperceptibly when they were telling the stories of mathematicians. I was happy when they thought over and over about mathematics riddles. I was proud when looking at their mascots, newspapers, dramas and poems. I knew that they had enjoyed the aesthetics and culture of mathematics.

During the Mathematics Culture Festival, you could hear the children say things like:

"I can do it, these 24 points!"
"I have a different way to do it!"
"I can't figure out this riddle."
"I can! I can!"
"Uncle Yang Le is amazing!"
"I will be better than him when I grow up!"
They picked up their pens to record their feelings.

We're crazy about mathematics

Mathematics is the key to wisdom. Mathematics is the golden sun. Mathematics is the wings of a dream. Recently, a Mathematics Culture Festival was held in our school.

"Wow! How beautiful!" Every classroom had a new look. The classrooms became a sea of mathematics. They became the world of wisdom. There were mathematics riddles in the windows. During the recess, students stood next to the windows and thought about the riddles. I could see the light of wisdom in the eyes. Look! The windows were full of mathematics jokes. Students were so interested in them that they did not want to miss a word. Look! The

windows were full of couplets. Students read them. With a happy laugh, I knew that mathematics was not boring symbols and numbers, but a wonderful life.

"Hahaha!" We put on a text-based drama. The group of Cai Zhihui performed "A Bad Fox and Triangle." They made the role vivid. Cai Zhihui, the bad fox, was smiling and staring at the little chickens. The chickens were frightened, hiding behind their mother's wings. After laughing, the students realized the stability of a triangle. The group of He Tianyu were playing allegro and integrated mathematics into the allegro. There was also the group of Huang Handan and the group of Xu Shulou. Students showed their talent on the tiny stage and found interest and fun in mathematics.

Mathematics is the key to wisdom. Mathematics is the golden sun. Mathematics is the wings of the ideal. We are crazy about mathematics.

2.3 Connective Domains: Going Beyond the Interim Contextualized Curriculum

2.3.1 Principles: Combine a Short Time in the Classroom and Outdoor Activities

Preschool children often yearn for primary school life. They have a great enthusiasm and are waiting for the day when they can pick up their bag and go to school! In their eyes, primary school must be very interesting. As a student at primary school, they must be very happy.

However, when they have stepped through the gates of the primary school, they seem to be frustrated. They are even fearful of life. From kindergarten to primary school, the learning environment has changed, they are learning much more and it becomes a huge burden. There is only a summer vacation after children leave kindergarten, but there are such huge changes that many children cannot quickly adapt to the challenges. In the first half of kindergarten, there is only half an hour of indoor homework classes. The rest of the indoor and outdoor activities include observation, gymnastics, singing, dancing, games and other activities, and children do not get up until 15:00 as they have an afternoon nap. After the summer vacation, they begin primary school, where they have a completely different environment. They have to be involved in the morning class, through the whole morning, and they do not rest in the afternoon. Other than for PE and a short recess of 10 min, the children stay in the small world of the classroom almost the whole morning and afternoon. Their life is filled with literacy, writing, arithmetic, a series of symbolic activities. They seem to have lost the fun of childhood. This change is unsustainable for children of preschool age. It forms the "steep slope" of the kindergarten–

primary school transition, which inevitably affects the love of primary school life of those in the first grade.

In order to improve the connection between preschool education and primary school, we have to reduce the slope, to overcome the lack of cohesion in early childhood and primary education; we have to set up a transitional contextualized course. Aimed at preschool children just leaving kindergarten, and according to the actual requirements of primary education, the reasoning proposed during the transition period is that the principle of arranging the new learning life is "linking indoor short courses and outdoor observation." The specific approach can summed up in roughly the following areas.

We suggest reducing the duration of each session from 40 to 30 min, and increasing the break time from 10 to 20 min. The main subjects are divided into various classes and the teaching format changed. For instance, the Chinese class is divided into Hanyu Pinyin literacy, phonetic reading of Chinese characters, observation of speech and an interesting mathematics class. There are also some activities including "Story King" and singing games. The outdoor activity time is increased and field activities are carried out regularly. The indoor short course uses various means to enhance the teaching content.

Box 2.4 Instructional Design Typical Case 3: Transition Class

Type of Chinese curriculum: phonetic notation, reading, conversation, outdoor activity

Transition class: review phonetic notation, single characters in the following titles of text in textbook

We Are Kids
Small Schoolbag
Campus Is Beautiful
The Crooked River
Are q and g Alike?
Small Goldfish
Orchard in Autumn
My Little Schoolbag
Fairy Tales beside the Flower Bed
The National Flag Is Rising
Outside the River

Rest time: 30 min for each class, 20 min for recess, nap to 14:30

The transition class is an attempt. Seven first-grade teachers are full of creativity and eager to carry out the exploration. During the first round of the experiment, I added several articles to the compilation of reading supplements in order to guide the children to love the campus and understand the world around them.

In the first lesson, we shared the article "Campus Is Beautiful" and started to get to know the campus. We, the teachers, observed the campus with the

children. We went to the school gates first and took a good look at them. We read the name of our school. Then we walked through the campus and carefully appreciated its beauty. The students looked here and there with great curiosity. They looked at the trees. They looked at the flowers. They looked at the grass. They found the beauty in the campus. After that, we started to learn the article.

In the vivid real-life context, it was easy for the children to learn this essay when they imagined that they were standing by green trees, red flowers and green grass. Meanwhile, they had a sense of intimacy with a new learning environment; they felt that their campus was beautiful. If students had not been in the specific situation but had been isolated from the environment when they were taught such rigid sentence patterns, "there is…," "have a … and …" or harder descriptions like "Our campus is so beautiful!" it would have been harder to find ways to handle their learning.

The transitional course, therefore, is closer to the courses in kindergarten but is also at a higher level than kindergarten. Early reading begins at the same time. In the transition course, we also created the theme of "Observation, Speech and Comprehensive Reading," which links understanding of the world and language. As a matter of fact, these two aspects cannot easily be separated.

Box 2.5 Instructional Design: Orchard in Autumn

There are many fruits in autumn and children all love fruits, because they are colorful and of all different shapes. Fruits are beautiful. Wouldn't it be wonderful if students could go to the orchard? We looked up the information and found that the orchard was too far away from our school. I thought that the situation could be real and could be simulated as well. The real orchard was too far, so we simulated an orchard in the courtyard of our campus. We painted three thick tree trunks for apples, pears and jujubes, and winding grape vines. Students brought apples, pears, persimmons, grapes and pomegranates from home. We put the fruits in blankets and imagined that this was an orchard in autumn. The students were happy when they walked into the orchard. Above the gate, there was the title "Orchard in Autumn". The students came to the orchard and started to spell out the title.

They walked into the courtyard and sat on the floor. I said to the students: "Kids, this is autumn. Look, Aunt Autumn is coming." A team of young girls acted as Aunt Autumn carrying baskets and walked into the orchard accompanied by beautiful music. I said: "Aunt Autumn is coming. What are she going to bring us? Let us guess, kids!" The students could not wait to answer. I continued: "Be quiet. Close your eyes." They were so lovely and put their hands over their eyes, although several boys were impatient and opened their eyes. The teachers put the fruits in the trees when the children closed their eyes. The students opened their eyes as soon as the music

stopped. “Wow!” they cheered. The trees were full of all kinds of fruit. I was excited to report: “Ah! This is the present Autumn Aunt brought to us!” The students were surprised, excited and could not help but clap. We observed, talked, read and did some simple mathematical calculations.

The following is a record of the dialogue between the students and me.

Teacher: Kids, Aunt Autumn brings us so much delicious fruit. We should send our appreciation to her.

Students: Thank you, Aunt Autumn!

Teacher: What is your favorite fruit?

(Students said apple, pear, dates, grapes.)

Teacher: What does it mean to bring us so much fruit in autumn? Let’s give an example of two kinds of fruits.

Students: Aunt Autumn brought us apples and pears.

Teacher: Yes, Aunt Autumn brought us three kinds of fruits, what would you say?

Students: Aunt Autumn brought us pears, apples and persimmons.

Students: Aunt Autumn brought us apples, pears …

Student: and pomegranates.

Student: Aunt Autumn brought us apples and grapes …

Student: and dates as well.

Teacher: Aunt Autumn brought us so many delicious fruits. And their sizes and shapes are not the same. How can you express their number?

Teacher: (picking up an apple) How many apples are there?

Student: This is an apple. (个)
Teacher: What else can you say?
Student: This is an apple. (只)
Teacher: A jujube is small and round.Teacher: What about grapes?

Student: This is a bunch of grapes.

Teacher: Fruits are not only delicious, but also very pretty. Let’s observe their appearance and color.

Student: Red apples.

Student: The apple’s face is red.

Teacher: Excellent!

Student: Yellow pears.

Teacher: Good! What about dates?

Student: Round dates.

Student: Grapes are purple and transparent.

Student: I would say that grapes are watery.

Student: Grapes are sour and sweet.

Teacher: There are so many fruits hanging on the tree. How can you express this meaning?

Student: There is an apple on the tree and another one.

Student: The tree is full of apples.

Student: The branches are full of apples.

Student: There are bunches of grapes on the grape trellis.

Student: The round dates are innumerable.

Teacher: Very good. The fruits are delicious and smell good. We will eat them after class.

After the discussion, I said: "In this little orchard, we seem to have come to a big orchard, where there are countless fruit trees. Now we will learn an article. The title is 'Orchard in Autumn.'" I showed the children the article:

q i ū t i ān d e g uǒ y uán

Orchard in Autumn

q i ū t i ān gè zh ǒ ng g uǒ z i s hú l e p íng g uǒ

In autumn, so many kinds of fruits are ripe. Apples,

l í z i hé zǎ o z i g uà mǎ n zh ī t óu y í zh è n

pears and jujubes are hang in the brunches. When the wind

l i á ng f ē ng c h uī l á i g uǒ y uá n l ǐ p i ā o c h ū

is flowing, the sweet smell flows out from the orchard.

t i án t i án d e x i ā ng wè i

甜 甜 的 香 味。

The students read the article happily. They imagined a picture of the orchard based on the simulated orchard. They could recite the article after a while.

Then, the mathematics teacher arrived. She led the students to count the number of fruits and do a counting game. Therefore, the students knew that the numbers were real.

During the transition class, we took the students outdoors. Because of their young age, we chose a nearby place to which we could walk. Observation, reading and conversation were combined and the students' imagination was cultivated.

When the transition class goes into a simulated situation, it is easy for the students to accept. It can help them transfer from kindergarten to primary school. It made me realize that students can adapt to new circumstance as long as they feel interested and comfortable. Based on this investigation, parents think that the transition class makes students love school life more and it is a great link between kindergarten and primary school.

2.4 On-site Domains: Bringing Children into the Outdoor Contextualized Curriculum

The field contextualized curriculum follows a long-term process of practice and research. Because I am a Chinese teacher, I naturally took into account the children's language materials at first. At that time I felt that children were far away from the vast world as they were isolated from real life and just lived between books and homework, the family door and the school gate. Therefore, they had narrow horizons. As a result, their childhood life was not only boring, but also caused a lack of imagination in thinking, and their language was wizened and tasteless. As traditional Chinese literacy teaching is far away from life and nature, I knew that words and symbols needed to be strengthened by images and symbols. In this way there is communication between the world around them and their own lives. On the other hand, I think of humankind from infancy to preschool, from word to phrase, from multiple words arranged combined into sentences, gradually achieving the complex process of language automation.

As famous writer and thinker Lu Xun (1881–1936) argued, infants learning language are "without teachers, no textbooks" and they independently overcome their original language learning difficulties. Infants in the bosom of nature are sucking on rich nutrition in the specific situation of their lives, the rapid development of perception, on the basis of a gradual learning of language, mastering symbols and maintaining a balance between the two signaling systems. However, classroom teaching often discards the successful experience of children's independent language learning and imperceptibly the link that the child naturally

maintains between the two signaling systems is severed, leading to a loss of balance. I think we should accord with nature and use children's experience of language learning to let them return to nature, and let the world put a broad and generous embrace around them. Moreover, many masterpieces and texts in Chinese textbooks, which are based on nature, are drawn from life.

The knowledge that children accumulate about the world, including their perspectives, experiences and apparent or hazy appearances, directly correlates with the development of the knowledge, ability and potential to learn. It is very different if a child grows up in a closed environment and another child grows up in an open world. In addition, the latter must be better than the former because the world around them is a source of children's cognition, which should flow into the classroom. I think that this is the most precious, most beautiful and irreplaceable nourishment given to children by heaven.

As a matter of fact, the background to field education has a long history, going back more than 2,000 years. The generation of the Chinese sage Confucius put forward that teaching should be implemented under the "pear tree," which is a thought about natural teaching. Zhuangzi, the founder of Taoism, also proposed to educational thinking that there is naturally a "mass division" between heaven and earth. In other countries, French Enlightenment thinker Jean-Jacques Rousseau (1712–1778), who proposed the "naturalistic curriculum theory," advocated that courses should be mostly in nature. He paid great attention to children's "direct experience" and said: "If there is no breathing to the flower incense, see the beauty of the branches, stride on the wetting and soft lawn, how can make him feel the joy?" (quoted from Zhong, 2015: 79). The Soviet educator B.A. Cyxomjnhcknn (1918–1970) provided examples of field education, such as "school under the blue sky" or "300 pages of nature's book." Therefore, I use field education as a source for the contextualized curriculum and take students to the source. After many years of practice, I summarize here three points about the implementation of the field contextualized curriculum.

2.4.1 Prefer to Access Aesthetic and Broad Fields of Vision

The interaction between children's development and the context around them is a form of movement. Therefore, we strongly expanded children's horizons and broadened the educational space. We opened a field activity course for the lower-grade students at least once every two weeks, and for middle- and high-grade students once a month, because when children are young, especially those students coming from the first, second or third grades, field activities should be carried out in local places. In the light of the forward wind, their whole bodies are bathed in the sun and the air, and it is more comfortable than staying in the enclosed and crowded space of the classroom.

First, I chose a large field behind the school. The children just needed to spend ten minutes walking or running across a bridge. A small river, some farmland, a grove of trees, an old pagoda—all of these construct a child's early acquaintance with the world around them. The experimental class starts from here and opens a window to the wider world.

We preferred typical scenes around the world, from a single natural scene to a corner of social life in the context of nature. We tried to select appropriate fields so that teachers could visit them again and again. First of all, we set up a network of field activities. Starting from the school, we walked across the river to the west side of the school and the ancient Guangxiao tower, then along the river at the edge of the city and to the outskirts of the foothills and riverside of the Yangtze River. Each point paints a wealth of pictures.

The first-grade students came to the riverside. The ducks, small fish and shrimps were all good topics for them. The peach trees on this side of the river and the willows over the river became vivid data for the teaching mathematics. The children were standing by the river, imagining the river running down toward the distant sea.

I recorded the time I spent outdoors with the students in an essay, "Cole Flowers Are Yellow Again":

> Each year, whenever the cole flowers are yellow, I take the students to the field. We embrace the spring. I teach them to recognize the flowers in the field. They have no need to dig for wild herbs any more. They don't know the story of a garland of cole flowers. They search for different wild flowers. They think the wild flowers are of exuberant vitality. No one waters them. No one fertilizes them. However, they are alive. The field in spring is the lover of painters. It is also the children's teacher and friend. In the field, the children run and fly kites. They play with butterflies, birds and insects. They enjoy the wonderful views of the spring. They play with tadpoles and crabs in the river. They explore how a tadpole becomes a frog. How attractive the field in spring is to the children! How much nature can give to children! The students don't want to go home.

2.4.2 Comprehensively Observe, Think and Practice

The abundant educational resources in the field naturally become the ideal classroom for comprehensive education. In the field contextualized curriculum, we make full use of it so that children can undertake observations, thinking and practice.

The spring fields are vibrant and show boundless vitality. I took the students to the riverside. They learned to observe the new tender buds on the bank and watch the flocks of ducklings jumping into the water and swimming merrily in the stream. Based on their observations, the children understood the realm of the ancient poem: "Bamboo, mahogany for two or three of the branches, when the river flows warm" (Su Shi, 1037–1101). Then the students went along the river to find tadpoles, carefully observing a group of small tadpoles swimming around in the water. Spring is also the season of cauliflower blooming in the fields. Countless bees were pollinating the cauliflower, merrily humming and singing, and flocks of white

butterflies also came, flying into the spring cauliflower, adding unlimited fun to the colorful picture. We seemed to have entered a world of cauliflower. The vivid images and rich aesthetic feeling led the children to unfold their wonderful imaginations and abundant positive thinking. They said, "Let the cauliflower play a game. Who will be the referee?"

2.4.3 *Coordinated Development of Cognition, Affection and Will*

Nature is not isolated, it is connected with people, and it is also interlinked with society. Therefore, field education not only can allow children to acquire the most vivid knowledge of cognition, but also can develop morality and aesthetics via the undertaking of some thematic activities.

In guiding children to know the world around them, the experimental class also infiltrates moral and aesthetic education through the field contextualized curriculum. When the children were standing in the beautiful fields, they interviewed the people who worked so hard on their lands; they witnessed the dramatic changes in socialism's new constructions in rural areas and deeply understood the reform policies. The teachers always took them to the outskirts and to the new houses, and asked them to draw portraits of the new houses, calculate how many there were and describe them, so that they could feel the change in their hometown.

There is a large reed marshland on the Yangtze River, but it is very charming for children. The first-grade children do drills here: under the foot is the wetland, the head is gently blowing white like the reed, and the red flag is in the ranks at the front, fluttering upwind, in order to overcome difficulties and twists and turns. The children are finally drilled with a glance at the side of the reed marshland. In this field contextualized course the children gain a great deal, and they themselves speak most clearly. Here are some excerpts from what the Hu Tingting, Wang Wei and Wang Jing classmates wrote after the activity:

> Yingying autumn wind, treading on a leaf, bathed in a drizzle, our fifth-grade classmates and teachers came to the riverside, ready to carry out reed marshland activities.
>
> Standing on the embankment, looking to go, the reed marshland is gray and boundless, appears unfathomable. I can't help worrying: Is there a road? The mud is so rotten, will our feet sink in? The autumn winds blow and the reed marshland is like a platoon waving to us. We immediately set out, the teacher and several strong "Hercules" leaders. We follow through the reed marshland. The beginning is a stone dike, but not for long, then comes the "Attention, there is no road ahead" command.
>
> The teacher put the reed aside, pressed it to the knee and then quickly lifted the foot to press it down; the action is neat. We also learn how to copy the teacher, struggling to poke the reed down. But the reed seemed deliberately to oppose us, bouncing on our faces, tripping

up our feet. Suddenly, I got two feet stuck in the mud. I hurriedly grasped the reed to pedal: the result was that my foot was up, but my shoe was still trapped in the mud!

The road became more muddy. We just walked, my shoes were soaked, white sneakers turned into black sneakers. One of my feet had just pulled out of the mud and the other foot sank. I pulled hard and my feet came out, and we went to move on. A classmate of gas drum said: "How could we go out of such a muddy path?" I forthrightly said: "That year, when the Red Army soldiers were on the Long March, their conditions were much harder than ours, but they could cross the meadow, go over the snow-capped mountains. What are we at this point?" "Yes, you are right, we must go down!"

"Guys, don't be discouraged!" the teacher's inspiring words came to our ears. We multiplied our confidence to move forward; whether it be landslides or mud, it would not stop our pace.

We are on the embankment, all like clay figurines, you look at me, I see you, we all laugh, and the laughter echoes over the reed marshland.

Ah, we won! The students stood on the river bank, in the autumn breeze, suddenly relaxed and happy. Looking back, over the boundless reed marshland, a winding path greeted us. I suddenly realized that the road was at the foot of it. At the cost of sweat, you can step out onto a road.

Other children said: "As long as we are as brave as a rush, we can overcome difficulties, insist on victory!"

It is not difficult to see that this field education cultivates willing children and helps them understand more about their life. It is not possible to produce this kind of sentiment in class. The green barracks are the places for which children yearn. During the training day, the soldiers were in charge of the drill and the children were full of enthusiasm; they looked like young soldiers and were engaged in the training. At night, they listened to the soldiers' narratives about army traditions and their experiences of military service. More inspiring essays were written.

So far our field situation curriculum has been running for almost 40 years, since the autumn and winter of 1978. Each field contextualized curriculum has different backgrounds and aims, but there were three connections among them, which are summarized below.

2.4.3.1 Providing Learning Resources that Integrate All-Subject Teaching

The field situation curriculum started from language teaching and the needs of children's assignments, and then recognized that such a curriculum also could provide vivid scenes for children's mathematics learning and, naturally, that music, PE and art classes also could be included in field observations. Many times in the field contextualized education I saw children in the embrace of nature. These were appearances of life's emotions in gorgeous color and sound, which left a deep impression on the children's memories. When learning Chinese, these vivid images in the real-world situation could be drawn on as the best complement for their learning.

Also, when children are involved in learning mathematics, such as measurement and other practical operations, they could carry out a specialized program of field activities, so that teachers could combine field activity with recent subject teaching content.

Children are in the wide embrace of nature and look at the world with their eyes wide open. In the field contextualized curriculum they are in the optimum place to observe speech, practice maths assignments, understand scientific knowledge and ecological change, conduct social investigations and so on. In the beautiful situation of observing, imagining, thinking, learning and exchanging, in this unique, broad, rich field situation, they naturally come to understand the surrounding world and gain research-based learning organically. For example, children can observe the flying swallows of spring and also study the characteristics of migratory birds. They can observe both foggy fields and the formation of fog. They can both feel the flow of the river and investigate the river's changes, study and comprehend the importance of protecting water resources and scientific methods for doing so. In these real situations, children's thinking is authentic, enthusiastic and active, and they have a wealth of sources for learning various branches of knowledge.

2.4.3.2 Enriching Students' Perceptions Based on Thematic Mega-Unit Education

In thematic mega-unit education, under the guidance of subjects, there are not only various integrations between subjects, but also connections within and outside the classroom. Therefore, in carrying out thematic mega-unit educational activities, teachers basically take the children out of school, touching down in nature, conducting observations on social life, carrying out investigations, visiting places and collecting data, so that children can obtain sharp perceptual materials and related materials.

When the "I Love the Yangtze River and I Love Hao River" thematic mega-unit activities were carried out, teachers in different grades planned how to implement them. Some teachers led the child on a tour of the Yangtze River, others took students to visit the Hao River. It was said that the Hao River, like the Seine in Paris, France, flowed around the city. We tried to let children recognize the unique beauty of their Nantong hometown and understand its modern businesspeople and educators like Zhang Jian. Also, the students visited the first museum on the Hao River bank and went to the Blue Calico Museum, which is located on the east shore of the Hao River, and observed the process of weaving.

Middle-grade children had a tour of Nantong City. They went on a boat, enjoying the scenery of the Hao River, and then visited places associated with historical figures and the cultural heritage of the river. They not only felt the beauty of their hometown, they also began to understand the history of the city in which they were living. Here are some of the children's essays after they returned:

The Hao River, the Mother River of Nantong, is also the ancient moat of Nantong. It is located in the urban area, flows around the city and encompasses 700,000 square meters, many landscapes, lush trees, and a bridge pavilion on the waterside, hidden in the course of boats and yachts on the rippling water.

The boat started slowly, my mood could not be calmed down. Neither could I help being attracted by the river: The Hao River is 10 kilometers long, 15 meters at the widest point, the water comes in vast waves, shaped like lakes, the narrowest part is only 10 meters, like a drifting ribbon. Nantong City now expands outside the periphery of the Hao River. That is the reason that somebody compared it to the Seine in Paris and described it as an "Oriental Venice."

The Hao River southeast of the shore, here is the Nantong Museum, which was the first museum established by Chinese. It was said to be founded in 1905 by the Nantong industrialist Zhang Jian, so it has a hundred years of history.

The most striking sight on the river is the giant sculpture, which reflects the history in the fields of industry, agriculture, business, culture, education and other aspects from 1895 to 1926. The sculpture reproduces the large Nantong cotton mill and 27 other majestic buildings and famous figures from Nantong, including Zhang Jian, Wang Guowei and Shen Shou. Let us appreciate the history of our hometown.

The field contextualized curriculum is not merely a case of walking out of school. As a curriculum, it must have clear objectives, specific content and implementation processes. For example, in the autumn children have a Harvest Festival, when the higher-grade students take the lead and use their own hands and the fruits of their labor to decorate the school like a fairy tale building. The big pumpkin is on top of the dwarf's cabin in the big tree, there is a head of corn and countless grains of rice, in a hill-like heap in front of the cabin. Several female teachers are also deeply involved and show their ingenuity with a needle in a thread of peanuts, hanging in the doorway of the fairy tale building, just like a special bead curtain, which is really original. The children in first and second grades are also eager to do what they can in the Harvest Festival. They go to the countryside to get carrots. The teachers all try to let the children participate in agricultural labor.

Box 2.6 Instructional Design Typical Case 4: Admiring the Moon on an Autumn Night

The poem "The Moon Is So Much Brighter Than Usual in the Mid-Autumn Festival" inspired me. We should take the students to watch the moon during the Mid-Autumn Festival. It will stimulate their imagination.

I am talking about the students in third grade. There should be some guidance for them to admire the moon.

It is the location that is the key element in this activity of admiring the moon. It should be big enough. I thought about the playground first, but the playground was empty, there was no atmosphere there. I considered the park next, but there were too many trees to block students' view.

Finally, I chose the right position: on the bridge outside the park. It is a bridge over the Hao River. The surface of the water is wide. Nothing can

block students' horizon. What is more, they can admire the moon in the water.

I told the students to gather at the gates of the park 15 min before the moon rise. We went to the bridge in a line, hand in hand. Wu Zhou, the student at the head of the line, said to me: "Let us walk quickly. Grandpa Moon is waiting for us."

Students can write a great poem in such a situation. My heart was warm. And I quickened my pace.

The students played in front of the gates of the park for a while. Then we sat on the ground. They looked to the east side of the sky and expected the moon to rise.

The reason I asked the students to arrive 15 min early is that I wanted them to wait for the moon. And during the waiting time, they could appreciate the beauty around them and be thirsty for it.

After a while, a child yelled: "Look. The moon is rising."

"Yes, opposite. The moon is rising."

A round, big, red moon was rising from the east. It was the first time I had watched the moon so sincerely. I inspired the students to describe the situation.

"The moon rises in the east, so big, so round, so red, so beautiful!"

"The moon resembles a red lantern!"

"The moon is as red as the rising sun, but not so dazzling, so radiant!"

They were right. The moon was as red and beautiful as the sun in the morning.

The children continued to describe it: "The moon rises from the far grove quietly."

"Who can draw an analogy?" I asked.

The children stared at the rising moon and one of them said: "The moon seems to be hanging on the branch."

"Ms. Li, I have a different description from his. The trees in the sky stretched out their long arms to hold the moon."

Long arms. Hold. What a vivid and correct description that was! I thought it would be impossible to write such a beautiful sentence in this situation.

The moon was rising. When the moon was in the middle of the sky, we could see its shadow. I guided the students to combine observation and imagination, science and mythology.

"Do you see the shadow of the moon? Do you know what it is?"

The students said: "It is an osmanthus tree. It is a rabbit. My grandma told me." The students seemed to follow the myth of the moon.

"Ms. Li, they are wrong. The shadow is round like a ring of the moon."

Ah! Science and myth. Reality and fantasy. The students were trying to explore the truth of the moon with a wonderful fantasy.

A gust of wind blowing, a row of willows swaying beside the river. The shadow of moon in the river was broken. I said thoughtfully: "There is a

moon in the sky. What about in the water?
"Then the children sang songs affectionately :

Bright round moon,

The round moon is like silver,

Would you like to play hide and seek with me?

You. Ah! With a smile on your face, which side of the cloud you are hiding in?

The children were all immersed in the poetic. On the way home, I asked them: "Could you write a composition to describe the moon you see tonight?"

"Of course!"

"Could you give the composition a title?"

"The moon is rising."

"The moon night."

"Admiring the moon on an autumn night."

The children gave their suggestions one after the other, showing their interest in writing.

The day after the Mid-Autumn Festival, we discussed the outline of the composition. We came up with the general order: waiting for the moon, the moon is rising, the moon is rising higher and higher, and we are in the situation of admiring the moon.

Some of the children came up with an imaginative outline: we see the moon's smiling face, the moon plays hide and seek with us, and we really want to fly to the moon.

The children wrote excellent compositions.

I would suggest that literacy, reading and writing start at the same time. There is a process of exploration and improvement, which proves the feasibility of optimizing the structure. In order to enrich the teaching content, I tried to consolidate the syllable to teach ancient poetry, showing four lines of syllables.

As a way of curriculum setting, field activities help children to walk out of enclosed small classrooms and freely breathe the fresh air, and to realize the vast, boundless universe under the sky. In the process of understanding the world, children gradually learn lots from the contextualized curriculum. Nature directly or indirectly activates the children's senses. Such a way of openly storing information provides inexhaustible, abundant resources for children's cognitive, language, thinking and affective activities. Therefore, children's hearts and knowledge of these storehouses can continue to be nourished and enriched, in which the human mind is shaped. Outdoor contextualized education promotes children to embrace nature and acquire a wealth of perceptual materials. They are exposed to a living source of thinking and speech. They develop the analytic reasoning of both imagination and logic. These living resources greatly enrich the cognitive activities in the classroom.

From the combination of disciplines and activities in the classroom to breaking the boundaries of subjects, the contextualized curriculum walks out of the classroom and carries out the linkages in a mega-unit. Also, it goes out of the school and provides access to the wider world, coupled with the transition between early education and primary schooling, and is a supplement to the micro-curriculum, such as the network in general and the educational space. Again, children as the main role of the series of activities had been engaged in the contextualized curriculum.

The application of the contextualized curriculum brings joy into the classroom. It changes the "indoctrination teaching style" and the single means of "listening analysis by teachers," using learning by rote which causes a heavy burden and the low efficiency of a passive learning situation. It aims at children's thinking characteristics, according to the means of shaping them, the breakthrough of aesthetics, "sentiment" as the link, the resources of real life. Therefore, children can use their brains rationally and there is a harmonious teacher–student relationship. Eventually, children realize the fun of exploring, aesthetics, recognition and creating, and even the interest in pursuing the rich spiritual world. Also in the course of training, such primary education for the healthy growth of children's knowledge, ability, intelligence and emotions will have laid a solid foundation for all-round development.

Chapter 3
Subject Plans for a Contextualized Curriculum

First, I consider that contextualized education should expand the space for children's development. I deeply understand that children have lives full of wisdom and emotion. The strengths and weaknesses of children's development are determined by the different breadth and narrowness of their growth. This is linked with the growth of ginkgo, which can grow to 17–18 m tall, living for hundreds of years on the vast expanse of the earth. However, if ginkgoes are confined to small pots, they can only bend in the middle and grow to just dozens of centimeters. The trees are same, but the growth and height are different. I was curious about the reason. The answer is simple, though: it is the difference in growing space. This is especially true of children's growth. Contextualized education must be bred according to its nature. I deeply understand that school and society are in similar types of situations, and that children need to be in the optimized situation to obtain aesthetic enjoyment and moral emotional edification. Therefore, "broadening the educational space and improving the overall effect of education" is the first principle of contextualized education.

Then I think of the people in this activity space: how are students and teachers so affinitive and happy? Because they construct a broad and relaxed living space within the school. According to the characteristics of contextualized education, I attempt to shorten the psychological distance between students and teachers based on the "cordial, helpful and harmonious interpersonal model" and "aesthetics, wisdom and an interesting learning context". Also, I proposed the initiatives of "shortening psychological distance and entering into the best state of mood". Furthermore, I think there is no doubt that students are in the leading role when I propose affinitive relationships between teachers and students. Ultimately, the aim of teaching relies on learning. So I try to break through to the fundamental concept of "all for the development of children" according to "employing the effects of the role and strengthening the subjective consciousness". My philosophy on children leads to a blend of affection and wisdom in my mind, which can be a guide to constructing the basic mode of contextualized education from space, psychological distance, subject and goal.

L. Jilin, *Curriculum and Practice for Children's Contextualized Learning*,
https://doi.org/10.1007/978-3-662-55769-3_3

The success of contextualized teaching in experiments in the moral education class promoted its progress in other disciplines. Due to their own subject features, we had relatively smooth progress in the exploration of the contextualized curriculum in the disciplinary fields of music, art and PE.

I cherish the potential wisdom of teachers. As a Chinese saying goes, each lock has a key. I leave the key of contextualized education to young people, so they have a chance to open the door to it. The key is the five elements of contextualized education: *inducing initiative, strengthening aesthetic sense, focusing on creativity, permeating humanity, implementing in practice*. At the same time, I require teachers to grasp the two essentials of unlocking, namely two characteristics and one goal. The two characteristics are *disciplinary characteristics* + *children's characteristics* and the one goal is *children's development*. When teachers are handed the key, they also hold the room in their hand, and then they are very confident about exploring further.

3.1 Contextualized Learning of Chinese Literature

3.1.1 Simultaneous Development of Literacy, Reading and Writing

For many years, traditional Chinese literacy teaching has always emphasized that literacy is the basis of reading, and reading is the basis of composition. Thus a linear order of teaching was constructed, which can be summarized as the sole structure of "Hanyu Pinyin → literacy → reading → composition." It seems very orderly, but also caused the low efficiency of Chinese language teaching, which can be summarized as "less (amount), slow (speed), poor (quality)" (*shao, man, cha*). The significant flaw in this way of teaching is that it obviously abandons the relationships among Pinyin, literacy and reading. In addition, it largely ignores students' interest in language learning.

How could we make students obtain more learning in each hour, gaining much but using less time? "Systematic theory" proposes that "structure determines effectiveness." While I was exploring contextualized teaching, I started to reform the content of Chinese teaching and improve its efficiency by way of an "optimized structure" (*Youhua Jiegou*). I used a simultaneous, three-tier approach (literacy, reading and exercise, *sanxian tongbu*) in the lower grades. The first step was to learn Hanyu Pinyin, which is called the "stick of literacy," in kindergarten, so that children knew the initials, finals and ways of spelling (they recognized Pinyin, but there was no need to learn how to write it). I emphasized gradually consolidating the teaching of Hanyu Pinyin in kindergarten so that children would be proficient in Pinyin, and then they could speed up their spelling.

3.1.2 Learning the Chinese Phonetic Alphabet Through Games

Preschool is the peak of children's language development. There are incalculable advantages in learning language during this period. At this time, children's language learning is not only fast, they are also good at imitating. So currently, many countries' schools and teachers utilize this golden period to promote children's second-language learning. However, during the late 1970s and early 1980s, there were limited resources for implementing second-language teaching in China. It is possible to teach Hanyu Pinyin, but in kindergarten in China there is only a 1-h of Pinyin teaching every day (30 min, two classes a day). Such limited teaching is not enough for further learning when children step into primary school, which causes the "steep slope" between kindergarten and primary school. Moreover, children's potential ability has not been fully developed in its critical period when they are exposed to such limited learning, so that their intelligence is in a state of starvation. In essence, it is a waste of intelligence. In kindergarten, Hanyu Pinyin is beneficial not only to the development of children's language, but also to the possibility of early literacy and earlier reading, which can reduce the slope. Therefore, Hanyu Pinyin in kindergarten is not only a possible way of learning, but also necessary content for children's development.

Therefore, I tried to go to kindergarten to teach Hanyu Pinyin by myself. I taught children twice a week, for 30 min in each class. Practice shows that the teaching of Hanyu Pinyin does not increase the burden of young children; on the contrary, they love the content of Pinyin and are interested and enthusiastic. The facts tell us that children in big classes can not only learn Hanyu Pinyin, but also feel fresh and interesting and have the initiative of learning.

Being careful not to increase the burden of children and avoid the tendency of preschooling becoming "primary schooling," we strictly control the amount of content of Pinyin and try to provide vivid ways of teaching which could be accepted by children without difficulty. Teaching Pinyin means fitting it to the characteristics of a children's game, and making preparations for young children in accordance with their psychological and behavioral habits.

If children are taught the Chinese phonetic alphabet by way of games and dialogues, they are relaxed and happy in the process. This gives them appropriate training in the language and they welcome such classes.

There are totally 33 h, equal to 990 min or 25 classes for learning on Pinyin in primary schools. It has been proved that these arrangements are in line with children's understanding and psychological characteristics according to the eager expectations of teachers, their excitement in the classroom and the effects of teaching. Therefore, there is an explorative and improved process of simultaneous "reading and writing," the feasibility of which has been demonstrated.

The following lesson plan is one case when I tried to emphasize the content of syllables:

cǎo

lí lí yuán shàng cǎo

yí suì yì kū róng

yě huǒ shāo bú jìn

chūn fēng chuī yòu shēng

When children spelled out the syllables one by one, I told them that what they had just spelled is a poem which was called "The Grass" and I was going to recite the poem to them. The children were so overjoyed that they also followed the recitation. This unexpected harvest told the children that learning the Chinese phonetic alphabet is useful, and the more useful it is, the more children want to learn.

The most obvious benefit is that early school-age children can read after literacy. Children may find that literacy is so useful that they can read for themselves without their mother's help. It is a great leap and a great event for them. In fact, then children are keen to learn.

Besides, there is a cyclical and spiraling process in children's Chinese learning. In fact, their language ability must be formed in application and in life practice. Children use the Chinese phonetic alphabet as the "stick" for literacy. Not only can they read, but the Chinese phonetic alphabet is also consolidated in constant use. In the same way, children can read after literacy, so that literacy will be consolidated when they read. Writing is the comprehensive use of knowledge of characters, words and sentences learned from reading, and the ability will be gradually improved with use. At the same time, the words are also being applied.

Therefore, the four elements of the Chinese phonetic alphabet, literacy, reading and writing which constitute Chinese teaching interact and are closely related to each other, not existing in isolation. So I started from the optimization of the Chinese teaching structure to reform the content of the course. I took literacy, reading and writing as three lines starting at the same time and made full use of the interaction of elements that constitutes the teaching of Chinese. The virtuous cycle of "A promotes B, B promotes C and C promotes A" forms a multi-way structure and spiral sequence, leading to collaborative development. Its efficiency must be greatly improved for the structure to turns from uni- to multi-directional (as shown below). This greatly enriches children's learning in the stage of enlightenment through education, and fulfills and inspires their desire for knowledge.

Single structure

Linear order

Chinese phonetic alphabet → literacy → reading → writing

The amount of information is increased while the length of the class is not increased, but the overall effect is greater than the sum of the parts. At that time, there were ten classes a week in an elementary Chinese course with three types: literacy, reading and writing.

3.1.2.1 Literacy

There are seven classes using Ministry of Education textbooks to teach, from single characters to the study of words, sentences and texts. In fact literacy is a big event and a difficult thing for newly enrolled children. A block of characters needs to be learned one by one. If the beginning is not solid, children are not clear about the Chinese character component and do not grasp the rules of Chinese characters, the learning will be slow and the effect will be poor. For me, I usually grasp the starting point and teach single characters, since learning single characters is the foundation. When I teach single characters, I often cite the original pictographs and the process of their evolution, combined with stroke order, character structure and radicals, to help children take a solid first step in literacy, allowing them gradually to comprehend the ideographic feature of Chinese characters and inspiring their interest.

Being able to recognize, write, understand and use characters shows that the three lines of literacy, reading and writing start at the same time. It does not mean that the pursuit is just of speed, but of speed on the premise of quality.

3.1.2.2 Reading

There are two classes to begin a phonetic character reading course. When children develop literacy, they can read known words in advance and they can initially spell in the Chinese phonetic alphabet.

As soon as children were able to read in the first-grade semester, I managed to introduce new words and let them see the characters they already knew in songs and rhymes. The children were happy. It was their great progress and great pleasure that they were able to read.

For example, I made up a song about the sun and the moon:

The Sun

The sun is powerful,

Gives me light and warms me.

The sun listens to my heart,

Its heat I come to tube.

To sing with the moon,

The moon is round and bright,

How many stars are around,

I'll sit on the spaceship when I grow up,

To sing with the moon.

When they come to the next semester of first grade, the children are more familiar with the Chinese phonetic alphabet and know more words, so I tried to select some good songs, wonderful essays and classic fables. For example, Tolstoy's "The Farmer and the Water God," "The Farmer and the Bear" and "Two Friends" made the quality of the children's reading more advanced. I think this is

just like a baby eating less to try to get the most high-quality breast milk. Children read these Chinese character phonetic texts with relish. For example:

The flying flowers
Butterflies, butterflies,
You fly over the fields and hills,
In the spring of our land,
Flowers bloom everywhere.
Red, yellow and purple flowers,
A sea of flowers,
The butterfly flies over here,
Spreads out colorful wings.
Butterflies, butterflies, you are like flying flowers,
You fly and fly, fly to the distance,
Far away is also the sea of flowers.
The little white sheep in the sky
A group of small white sheep in the sky,
Some are standing and some are lying.
Come down, little white sheep,
Don't be cold in the sky.
The water is clear on the ground,
The grass is lush on the ground.
The ground is your hometown.

There are three standards for writing a supplementary textbook: first to be interesting; second to make children feel the beauty; third to be able to inspire children to imagine. For example, fairy tales are full of fancy. Of course, I also considered the early popular science education for children and compiled some commonsense texts, such as "The Beautiful Leaves," "The Smart Dolphins," "Standard Time" and "See More and Be More Careful." In addition, considering that the ancient poem is the pearl of our literary heritage, we should cultivate children's interest in learning ancient poetry. In the strongest period of their memory, leading children to read classic masterpieces is very beneficial to them in language development, intellectual development and understanding of classical culture. I chose a collection of 10 poems each semester. After five years of accumulation, the children had recited 100 ancient poems imperceptibly. With the addition of modern poetry, there were 50 poems in each book and 500 poems in five years. The experiment proved that expectation became reality five years later.

In order to promote the combination of reading and children's life, I arranged themed supplementary materials from the beginning of the next semester of the first grade. My self-edited *Chinese Supplementary Reading in Primary School* has become an important basis for the reading of phonetic characters. From writing poems myself at the beginning to selecting poems and essays, all make children be able to read, want to read and like to read. Going up the grades, I tried to select

famous works to help students experience language models and ingenious ideas, and to let them read classic articles of quality and beauty, be close to classics and even get into classics during early reading. In *Chinese Supplementary Reading in Primary School* for the lower grades, which only matches with up to four volumes of the textbooks, I chose more than 20 pieces from Chinese and famous foreign writers, including Guo Moruo, Ba Jin, Ai Qing, Chen Bochui, Yuan Ying, Qin Zhaoyang, Ke Yan, Ke Lan, Guo Feng, Leo Tolstoy, A.N. Tolstoy, Hans Christian Andersen, Leonardo Da Vinci, Aesop and so on. With the addition of 40 well-known classical masterpieces by ancient writers, there are nearly 60 articles, which account for 30% of the total of four textbooks.

As a result of the rich beauty of the supplementary reading material, the wide penetration of the imagination space and the early infiltration of science, children's reading interest, aesthetic emotion and exploring spirit are effectively cultivated as well as their early development.

For phonetic teaching, the principle is to read more, explain less and practice better. The purpose is to enrich children's initial learning at school and speed up their initiation into education.

3.1.2.3 Writing

This is one class. Writing is children's use of written language to express what they have seen and heard. Why is the work in advance? I think that the written language is much more complex in structure and more formal in form than the spoken language. It has strict requirements in the selection, collocation and combination of words, word order, the relationship between sentences and the relationship between two paragraphs. So mastering the written language is difficult, especially for children. However, as the lowest grade of primary school is the critical period for children's transition from spoken language to written language, earlier language training in a lively and interesting form will produce a very good effect. Early school age is a sensitive time for children to learn language. During this period, they can easily understand the simple form of written language, which may effectively promote the early development of written language and create a good foundation for forming good written-language habits. Therefore, the experiment is a gradual transition from oral composition to a contextualized composition.

Due to much one-sentence training from oral to written, observation and talk, as well as paragraphs of description in the first grade, children know that coherent oral composition is text by writing down the words they say. Therefore, we should gradually help them to develop the habit of writing in complete sentences and writing well, with smooth statements and clear meaning. Practice shows that starting these lessons early is feasible and necessary.

The structure of the three lines of literacy, reading and writing starts at the same time, as it not only makes children read more and use language to express the world they have seen more often, but also stores the representation of the world around

them, laying an important foundation for the subsequent learning of language and other subjects, along with the development of thinking.

The harvest of taking these three lines at the same time was great after children had been in school for two years. After testing, they met the standard of 1,660 words that the general textbook stipulates and the accuracy of dictation was above 96%. My Chinese phonetic reader *Chinese Supplementary Reading in Primary School* is aimed at the characteristics of early childhood and of teaching materials. The use of contextualized teaching makes children's learning fun, effective and a little difficult. This greatly accelerates the process of teaching and initiation into education. In the four semesters of the first and second grades, the children not only read four sets of the five-year general elementary school language teaching material, which totals 108 articles and about 30,000 words, but also four parts of *Chinese Supplementary Reading in Primary School*, which totals 200 articles and about 150,000 words. They were able to recite 34 ancient poems and carried out nearly 60–70 observed expression and writing practices, which was six times as many as other students in normal classes. We used the time to do overall training in using language instead of using exercise-books. Though phonetic reading classes are not required for a child to read, seeing more and reading more enriches literacy. There are about 1,300 new words in 200 phonetic reading classes (the "sihui" words in the department textbooks are not included). We did the extended literacy test for each student in the experimental class at the end of three terms: first grade (first semester) and second grade (first and second semesters). The test result was 1,028 words per capita. Adding the 1,660 words in the department textbooks, the number of words that students who enrolled in the experimental class had mastered over two years not only exceeded 2,500, it reached 2,688 words per capita. Even the students who had the least literacy in the class mastered more than 2,000 words and developed a preliminary reading ability. The results obtained on the course were bound to reflect extra-curricular activities. For example, students in the experimental class could read the general press and children's books independently. Since they could read books, their interest in reading interest was generally strong, which helped them to enlarge their knowledge. Such literacy and reading abilities provided children with the ability to use language tools for reading mathematics, science and other teaching materials, comprehending and compiling questions by themselves. In terms of composition, the first semester of the first grade included regular oral composition and observation, while in the second semester there was daily sentence practice, together with an observation diary in second grade. All of this effectively trained students' written language and promoted their overall harmonious development in the optimal structure of "three lines starting at the same time," showing good prospects for the sustainable development of their mother-tongue learning.

I always straighten out the dialectical relations between "development" and "foundation," focusing on development and spending time on the basics. The effect of the reform of optimizing the structure was obvious and welcome.

3.1.3 Intensification of the Mega-Unit Through "Four Combinations"

In the lower grades, we implement the model of "simultaneous development of literacy, reading and writing." Students start to learn Hanyu Pinyin in preschool in advance, which fundamentally changes the solo structure of lower-grade students' learning in Chinese literacy and fully utilizes the interactive effects among Hanyu Pinyin, literacy and reading. It greatly improved the efficiency of junior Chinese teaching. How could the structure be optimized when students step into the higher grades?

For more than half a century, the traditional teaching method has been for teachers to explain texts (model essays) one by one, producing limited connections among texts. Obviously, this structure of teaching and compiling is based on parts of texts and attempts to achieve the overall effect through the addition of parts.

American psychologist Bruner and other researchers did an experiment in which a sample of students was divided into two groups. Group A used strategies of a holistic approach to solve problems. In contrast, Group B paid attention to the relationship between the various parts to solve the problem. The results showed that the "whole-solution group" was better than the "partial-method group," regardless of the difficulty of the problem or the number of characteristics. Similarly, in a study of skills, the experiment also showed that the whole method is better than the partial method. In the structure of textbooks and their arrangement we are very accustomed to the partial method, therefore there is one text plus another text, and an accumulation of 30 or 40 is a textbook. And as a result, the teaching process has a lack of integration of knowledge, separated from the text. The descriptions of the situation are full of abstract analysis and these text analyses are fragmentary. Therefore, students cannot realize the vivid and romantic language, perfect image of the text and the emotions lying between the lines. The emphasis on fragmented "knowledge points" and ways of explaining the answers to unrelated exercises was the result of the traditional concept of narrow, test-driven education.

I totally agree with the idea of reading being deep and writing being a little shallow. I think that this is in line with the rules of children's understanding and application of language. The ancients said, "When one learns 300 poems of the Tang Dynasty by heart, one is sure to be able to write." Some famous scholars also advocate that reading has an important impact on children's ability to improve their compositions, following the concept of "read more, obtain more." However, I think it is not reasonable merely to pursue "quantity," there needs to be a high emphasis on a certain "quality." High-quality reading means recognizing the rules and fundamentally improving language literacy. In the 1980s, Chinese primary schooling was a five-year system and students had ten Chinese literacy textbooks, which meant a total of about 200,000 words. Each student spent the whole of the six months in each semester reading texts of more than 20,000 words. Furthermore, they could only complete eight or nine pieces of composition in half a year. It is impossible to learn the mother tongue very well with such a quantity of reading and

writing. Certainly, we now put forward "read more" not as a narrow view of Chinese-language learning, but as part of the framework of a large language-optimization structure. In fact, it is the result of optimized the structure of mega-Chinese literature, which broke the narrow view of teaching Chinese literature. By means of unit combination, I combine the elements of Chinese teaching in the middle and senior grades, calling this "four combined ways with large-unit teaching, which linking instrumental and humane, language training and cognitive development, reading and writing and classroom learning and extra-curricular activities." In particular, this unifies the "instrumental" and the "humane," then called "the combination of *wen* and *tao*." The combination of language training and development thinking, of reading and writing, of lessons and extra-curricular activities, leads to the integration of eight aspects of Chinese teaching to promote the all-round development of children and the overall improvement of language quality.

3.1.3.1 Combination of the Instrumental and the Humane

Primary school texts are full of emotion, including the love of others, the love of the motherland, the love of nature and the love of science and art, and this emotion may be moral or aesthetic. To those students who just step into the world , this kind of emotion could be described as a high level and noble emotion: "When students learn a language, they seem to learn to master a tool that is far from that." The process of learning a language is the process of making oneself a human being, the process of determining one's true existence, the process of letting the world present itself and getting into the world: "As a Chinese teacher should be through Chinese language learning, teaching materials contain the emotional infiltration of humanity." There is an inevitable connection between the teaching material and the students' learning, and it can be said that the feeling produced by teaching materials is the necessary emotional foreshadowing to guide students to learn to be human. However, feelings are not taught by explanation, they lie in the edification, in the soul of the communion between teachers and students. Therefore, Chinese teachers should try to bring children into the beautiful emotional world of teaching materials, so that they are nurtured and inspired, and via a combination of the instrumental and the humane guide children to feel good. Beautiful things have a huge appeal; when opening a primary school Chinese textbook, it is not difficult to find text showing beauty or saturated with love. We make full use of beauty to stimulate love, to show truth, to demonstrate what is good, in order to guide students to beauty, truth and worship, and enrich their spiritual world.

3.1.3.2 Linking Language Training and Cognitive Development

Language plays a special role in the development of children. First of all, through the form of language, that is, with the help of the symbolic system of words, the

child is able to understand the content of textbooks and what teachers say. Language is a child's tool for sensing, memory, thinking, imagination and other intellectual activities; without language, intellectual activities cannot be carried out. Thinking is difficult to divide from language, so language is called "the shell of thinking." Therefore, it is logical to promote the development of children's thinking by training their language.

In more than 30 years of teaching and exploration of contextualized education, I have always combined disciplinary training with the development of thinking. In the training, I have not only guided students to use images in thinking, to expand their associations and imagination, but also to carry out reasoning, judgment and logical thinking, and to meditate alone, cultivating depth of thinking and independence.

Specific operations to achieve the combination of word training, to cultivate the accuracy of thinking, to guide the use of rhetorical techniques, enrich the image of thinking through the training of the text, the development of the order of thinking, and, in comprehensive language training, the flexibility and breadth of thinking through imaginative composition and the development of creative thinking.

3.1.3.3 Connecting Reading and Writing

Ye Shengtao has said that each text is a typical example. In a certain sense, a textbook is a sample of children's learning and writing. Making full use of models in carrying out a combination of reading and writing is an important principle of primary Chinese teaching. "Four combined with large-unit teaching" in the composition of teaching materials is a more typical concentration on the principle of "model text as guide" and the "integration of reading and writing."

In the teaching of reading, we can effectively help children to form images and emotions based on vocabulary and the rich perception and vivid impression of the emotional color of words. This is of great significance for cultivating a sense of language in the combination of writing and reading. It not only deepens students' comprehension of the language of the text and feeling of the text's emotion, but also gradually raises their sensitivity to words. This sensitivity makes reading more profound, and also makes it possible to use words accurately in exercises. This is an important manifestation of accomplishment in Chinese. The enrichment of words must promote the development of thinking and students' expressive ability.

We tried to allow children to do "writing in reading." The language curriculum standards require students to clarify the order of the narrative, explain the main points of the text and expound on the writing methods. Actually, they ask students to understand the layout of texts. Not only does this let children know what the aims of the writing in the text are, it also mainly enables them to understand how the author wrote the essay. In addition to mastering vocabulary, children must also be taught certain sentence patterns and commonly used rhetorical techniques (not terminology). Also, they must combine comprehension with application. These form the overall training in the context. Reading and writing are two important

aspects of language proficiency which should be combined. The essence of traditional Chinese education lies in connecting reading and writing.

3.1.3.4 Connecting Classroom Learning and Extra-curricular Activities

The combination of Chinese teaching and children's lives makes Chinese literacy teaching move toward real life. Meanwhile, it supplements and enriches the learning in the classroom through the nourishment and subject matter acquired in life outside class. The text is the main body of the unit combination. Because of the combination of texts on similar subjects and focused teaching, a strong intensity of education is formed. The writing unit allows students to focus on the noble spirit of the character, the beauty of the soul, the harmony of the scenery and the richness of beauty, which fundamentally promotes the combination of "humanities" and "tools" and enhances education in the Chinese language. At the center of each big unit, we combine teaching with extra-curricular activities, not only to improve the effect of the education but also to enrich the content of children's writing, and guide them to express their feelings about life over time. In the middle school mega-unit, because of similar themes which make it easy to reveal the rules, children find it easy to learn and grasp words and phrases.

First of all, we start from the whole structure according to the unit requirements at the beginning of the class, and then focus on each part—the unit-dominated reading, the combination of article skimming and then coming back to the whole structure—to summarize the rules of the essay. This way is called "four combination" (*si jie he*) big unit teaching and combines the related elements of Chinese teaching organically. As a result, students can grasp both the commonness of the whole unit and each text's individuality. In short, according to the organic connection, students can understand the rest by analogy. This application of the overall principle communicates that the whole, the interaction between the various elements, is formed by the use of a set of methods, so that knowledge is strung into "chains" that together form a "block." The newly stored information is linked to the information that the brain has stored and becomes more complex and orderly, thus obtaining a multiplier effect. In large-unit teaching, according to the theme of the unit, extra-curricular educational activities related to the subject are carried out and form a system of open education. For example, the scenery unit can be combined with classroom teaching about observing the nature of a typical scene, or a corner of the home, so that students can observe the beauty of nature and visualize in a concrete way the description of the scene that the textbook writers depict. The words in the textbook are used in the specific scene to obtain the corresponding vivid image, so that the words and the image are integrated. Words learned in a unit are often easy to classify, but there is also a need to understand the scenery that the words portray, the subtle differences between words and their different emotional colors.

It can be said that in the combination of unit teaching and extra-curricular observation, group of words could be activated. The use of rhetorical devices in a

particular scene also becomes a natural expression of emotion, or an expression of the natural. There is no longer just a rigid recitation of the definitions of "metaphor," "personification" and "parallelism" in Chinese textbooks. The students do not only have the words to write down, they know how to express themselves and even become good at writing. This is a way to get rid of the restrictions of finishing reading one text, then just imitating it and rewriting another. The whole-unit training process focuses on the development of children's thinking ability and imaginative ability. Practice shows that this is a very effective way for students to develop language.

In the content, we adopt the method of optimizing the structure; in the way of Chinese literacy teaching, we employ contextualization and emphasizing the strong scientific and artistic connections from content to form. This has the result that students no longer hate studying, but love it and engage in it so that they learn more.

Table 3.1 illustrates the horizontal arrangement of the volume's unit combination along with class and extra-curricular activities.

Table 3.1 .

Unit	Texts	Activities	Composition
Genius Comes from Diligence—describing people	The Story of Making a Windmill ○ "Smart Little Gauss" ○ "Edison" ○ "The Girl Playing the Piano"	Class activity: story session about scientists' childhoods	"A Story of a Beloved Scientist"
Models—describing people	Liangliang ○ "The Child Building the Bridge" ○ "The Story of Father's Childhood" ○ "Peach Tree"	Extra-curricular activity: observe a child you're familiar with and attracted by	"Lovely Friends"
Stories in Life—writing things	The Story of Playing Ghost ○ "Battle in Snow" ○ "The New Shirt" ○ "Feifei and Lulu"	Activity: school cooperates with family	"Being Dad and Mom's Good Assistants"

(continued)

Table 3.1 (continued)

Unit	Texts	Activities	Composition
Rich Extra-Curricular Activities—writing things	Ten Minutes' Break between Classes A Table Tennis Match ○ "Three Grasshoppers" ○ "Hunting"	Activity: recess games	"Class Is Over"
Describing objects or views	Lvy's Feet ○ "Camellia" ○ "Winter Jasmine"	Extra-curricular activity: observe the flowers on campus	"A Kind of Plant on Campus"
Beautiful Flowers and Plants—describing objects or views	○ "Grass That Grows out of a Rock Seam" ○ "Chrysanthemum Indicum"	Activity: plant flowers and learn to look after them	"The Flowers I Planted"
Plants, Animals and Buildings—describing objects or views	Towel Gourd and Ladle Melon Alcedo ○ "Gecko" ○ "Sanwei Study" Nanjing Yangtze River Bridge	Outdoor activity: visit a bridge	"The Bridge in Our Hometown"
The Seas in the Motherland Are Picturesque—describing scenery	The Fertile Paracel Islands ○ "The Beautiful Riyuetan Pool" ○ "White Clouds" ○ "The Sea Is Yours" Song of the Sea	Outdoor activity: look at the moon by the river in the hometown	"Look at the Moon on an Autumn Night"
The Beauty in Memory—describing the scenery	Maternal Grandmother's House ○ "Auspicious Snow" ○ "The Winter" ○ "The Rain"	Recitation contest: observe the rain or snow	"I Am in the Rain" or "I Love Snow"
The Beauty of Winter—describing scenery	○ "The Auspicious Picture of Snow" ○ "The Star Mountain" ○ "A Snowy Morning"	Observation activity: the small garden in winter	"The Winter"

(continued)

Table 3.1 (continued)

Unit	Texts	Activities	Composition
Enter the Gate of Science—expository writing	The Inspiration Comes from Rowing ○ "How Old Is the Earth?" ○ "The Lights That Can Speak" ○ "Understand National Defense"	Activity: introduction to children's books and the small encyclopedia	"A Scientific Experiment"
Express Yourself Concisely and Clearly —expository writing	Orioles and Tits ○ "Anti-Mosquito Wicker Fish" ○ "The Story of the White Dwarf" ○ "A Game of Basking in the Sun"	Activity: Introduction to the process of making pencils	"The Story of a Pencil" or "I am a Pencil"

Notes "Composition" includes oral and written composition' "○" represents a reading text

3.1.4 Reading Combining Affection with Cognition

3.1.4.1 First Reading

First reading is for children to perceive the textbook. In the initial stage of contextualized teaching, according to the characteristics of the textbook, I bring children into the situation, into the fun of inquiry, stimulate their learning motivation and continuously strengthen their motivation. Generally speaking, stimulating learning motivation, in the introduction of new classes, is an important step toward learning new lessons. Contextualized teaching is very particular about the mastery of this link, according to different textbooks or the use of different forms; or by creating a problem situation, causing suspense, so that children to learn because of curiosity; or causing thought through observation, to learn by inquiry; or connecting with the child's experience, to develop intimacy, to learn by drawing attention to life; or touching a child's emotional field, to evoke a sympathetic chord in the mind, to learn by the driving of emotion. Whether it is curiosity to seek knowledge or the need for emotional attention, all promote the formation of an effort to explore the psychological. The formation of this kind of psychological inquiry is satisfying and fun for children who have curiosity and a thirst for knowledge. This is to ensure that children come into contact with the new class with a warm mood and enter actively into the teaching activities. Introduction of the new lesson encourages children to read with their full interest, so that they take the initiative to read the whole article. Writing the text of the matter, through the creation of the situation, arouses children's attention to the protagonist in the story. Scenery and lyrical text through the

creation of the situation give children a rich sense of beauty, so that they are willing to read the whole article and actively understand and appreciate the text described in the scene, so as to experience the feelings of the author expressly. The text of the object, in the first reading, leads through the creation of the situation to the description of things, to obtain a concrete appearance.

How can children's learning motivation in the initial reading stage be stimulated with different types of texts? For fairy tales, fables or stories, I often choose a text that describes a beautiful scene, one or several characters with a vivid image, a fascinating outcome to consider and that is designed to lead. By introducing characters or describing their circumstances, or contacting children's personal experiences, a description of the characters' close feelings produces the emotion of concern to read the whole article. In other types of material students are led invisibly to the study of science, searching for and reading information in context. They seem to be really a small astronomer, reading the text to be particularly attentive. In other words, the text is mainly related to the phenomenon of children's life experience, or to introducing relevant scientific knowledge, or to asking questions, to guide children in the context of exploration to stimulate learning motivation.

I and the experimental class teacher come to the classroom early and always prepare everything before class, including how to stimulate emotion. From the beginning of the class we pay attention to rendering a consistent atmosphere with the textbook, carefully toggling the children's heart strings, consciously letting the teaching materials produce emotions and for the children's emotional activities to be connected to communication. It can be said that if there is an emotional bond at the beginning of the class, the pull has started. In primary school language textbooks have a variety of themes, a variety of texts, so that on the first reading of the text students are pulled into the situation. In fact, this indicates the formation of learning motivation. The motivation itself is a kind of anticipation, when the students are eager to know how the characters, things and phenomena occur in the text, and how to develop them step by step. Students enter a positive state of learning because they are in love.

While inspiring children to learn the motivation of the new lesson, we follow the general reading procedure, from the whole to the local, from the outline to the details, and then back to the general. So the first step of reading is from the whole, from the understanding of the outline, to clarify the author's ideas. Finding the clue to the author's thinking can also be called tracking the author's thought activity. Only by clarifying the author's thinking, being clear on the ins and outs of the article, can the article truly be read, and only by reading the article can the children go further into the author's description of the situation, so as to grasp the key words and sentence, experience the sense of language, experience the feelings between the lines.

After the children's learning motivation is aroused, if the teaching process is rigid and unitary, that motivation will weaken and disappear because of disappointment. Therefore, after bringing the children into the situation, we should keep continuity according to the development of the plot and the need of the content. The

teacher consciously takes the child to the relevant situation described in the text, so that the child feels that "the situation is in sight" or "I am in the situation." The enthusiastic mood of children after entering the situation enriches the teaching situation in its turn. They smile from the heart, cannot help crying or experience righteous indignation, scrambling to express their feelings and opinions. All of this strengthens children's learning motivation in this kind of emotion and environment of interaction. Teaching has finally become an interesting and meaningful activity in which I am happy to participate.

3.1.4.2 Reading Carefully

Children's emotions are always dynamic. After the first reading, when they understand the main idea of the text, often their enthusiasm for learning will weaken. However, the goal of Chinese teaching is far from complete and students must be guided into the stage of deep reading.

In the first reading of the text, teachers should cherish and grasp the pulse of students' emotional activities, so as to promote the teaching process from "into the feeling" to being "emotional." The generation of children's emotions is closely related to their understanding. Specifically, in the process of learning Chinese, children's feelings are connected with their understanding of the text, and the author's feelings are embodied in the image depicted. Therefore, the important link is to let students to know and feel the emotional image of the text. Without feeling the image, there is no emotion. So I advocate "strengthen feelings, dilute analysis" or "language training alternative analysis." The truth is also here. The literary master Balzac said, "the writer must see the object to be described." The same is true of children, and the key is to allow children to see the images depicted in the text. The characters depicted in the text vividly reappear in children's eyes. If the text describes a specific space, the children can be involved in it as if seeing it in front of them, hearing its sounds, appreciating its scenery, with the objective of being rewarded by the situation. However, this is based on their understanding of the language of the text.

On the basis of reading the whole article and clarifying the author's thinking, I focused on guiding the students to read the key paragraphs carefully. The key section of the textbook is the main part and the core of the whole text. The key words, sentences and paragraphs in the text are the most essential and concentrated expression of the full text's content. Therefore, the words of the focus paragraph often affect the whole. Teachers should be good at guiding students to grasp the key words, sentences and paragraphs, as well as the key chapters. In this respect, from the efficiency of the classroom, take less time to achieve as much effect as possible; on the other hand, it is also true that to cultivate students in future study, they must actually have the ability to read.

In my teaching, I have focused on guiding students to understand the key words through further entering the situation, feeling the image of the textbook and using the methods of inspiration, suspicion and contrast.

When reading the key paragraph, requiring children to have a deep understanding of the text, this deep reading process incorporates a variety of psychological factors comprising complex intellectual activities. This includes children's perception, awareness, thinking and language activities, while their motives and emotions are directly involved in the series of intellectual activities.

In the course of reading, we must pay attention to the intensity of the situation and how it appears in order to give children positive effects. Only when things reach a certain intensity can they be perceived by children, who will only then be moved. To this end, teachers need to use a variety of means, such as musical interpretation, picture reproduction, role-play and language description. In the process of application, these artistic means are often combined. Children are excited by various senses, producing warm emotions and deepening their inner experience.

From the fairy tale character, the image from a fable, the protagonist in a story and even commonsense text, or from a strange and bizarre scene in the undersea world, the operation of cosmic heavenly bodies, the formation of a lunar eclipse, the fiery sun—combined with the language of the text, students seem to see and also hear these vivid images. Their attention and passion are greatly aroused. In the first reading stage the emotion is generated, then deepened. This kind of inner emotional development drives students to devote themselves to the teaching process. Around the textbook, teachers and students are immersed in an invisible psychological field filled with emotional exchanges. In this way, students will be able to grasp the key words and read the key paragraphs, deepening and accelerating their understanding of the full text and insights into it.

The creation of the situation takes students to the text described in a scene of rich nature or social life. The intensification of the situation, the author contained in specific things, the living space of the emotions, are rendered through the scene. In the shape and emotion of the interaction, the student's mood is aroused, forming an internal driving force. Under the impetus of this kind of force, the student easily think how the scene of the present may resemble another scene, and has already obtained related imagery to unite and reorganize these, thus entering the imaginary situation. In fact, without imagination, students and even teachers cannot get into the typical situation of a textual description; the expansion of imagination not only makes students feel immersed, it also enriches the author's situation.

When students feel the image of the text, it arouses associations and imagination, emotions and an emotional trend. From their facial expressions, from the tone of the reading, from the words spoken, the teacher is able to be keenly aware of the emotional waves that are surging in students' hearts.

From the students' reaction in the classroom, it is not difficult to see that situation teaching has produced an effect, which embodies its superiority. For some of the texts, understanding the key words can also lead to a prominent situation that provides students with the opportunity to imagine, and when their imagination unfolds their hearts are moved. Students are often excited about this upsurge of learning emotions, which greatly enriches the text and deepens the understanding of its content. Enjoy it when you achieve it.

This situation of perceived reinforcement directly stimulates the cerebral cortex, so that students seem to hear, see and touch. In such a situation, it is helpful for them to be active in image thinking, and on this basis analysis and synthesis have promoted the development of abstract thinking. When students are thinking, their internal language also improves quickly. With this foundation, they should be guided to external language in a timely manner. Therefore, after the situation is strengthened, language training should be consciously combined with the development of thinking, and through the design of language training students' understanding will be clearer, feel more profound and provide the opportunity to use the words and sentences they have just learned.

As the students are engaging in expression, coupled with the role of emotion, they will often be in the "emotion and resignation" state of eagerness. At the same time, language training has deepened their feelings, prompting them to develop their thinking and imagination. This is different from an abstract word with a conceptualized annotation, which is searched for to build a sentence with a prescribed word. That way, the student's expression is completely insincere and is purely isolated, passive, coping with exercise-type training.

The reading process includes initial reading, further reading and intensive reading. In fact, from reading to intensive reading there is no obvious boundary, and it often occurs in real time. The so-called intensive reading is reading the text of the wonderful fragments and words, reading out their charm. Chinese teaching in China has always been about comprehending the verve of language, which is decided by the rich appearance of the language itself. Fine reading often take into account the development of the plot, not the deep meaning of the language. In the intensive reading stage, their attention begins to turn to the language of the text itself, and under the guidance of the teacher and their emotional drive, they will pay attention to the words that are deeply immersed in the author's emotion. Therefore, in order to guide students to read the sense of the language and attain a deeper understanding of it, so as to arouse their emotional deepening, they should be encouraged then to turn to the text of a vivid paragraph, verse or word. The most important part of reading is realizing the thoughts and feelings of the author, to improve the ability to write expressively and also to improve students' reading skill and level of appreciation.

The ability to appreciate a person's reading involves their understanding of the sentences and expressive methods of the good words of the article, which includes obtaining aesthetic ideas about "beauty" and "ugliness," "being" and "not being," and cultivating students' language quality. Reading will directly affect their ability and skill at using language. Therefore, in the reading process, read the whole article to understand the author's ideas, grasp the focus of the paragraph and understand the key words on the basis of further guidance in reading the essence of the text, which is very important to cultivate students' preliminary ability to appreciate writing.

The main practice is to guide students to experience the sense of language. I remember that Ye Shengtao once said: "The word is not appropriate suddenly, the

language to realize its God. To read a painting, to realize the charm of it, to understand the picture of the feeling, paint the meaning of the outside; as a reader of the article the charm of the keen feelings is the sense of language.

That sense of language is the sensitivity to speech, and is the most abundant understanding of language and text. Grasp the sense of language to seize the most essential things. It should be said that the cultivation of students' reading and writing ability, the development of their thinking, their rich imagination and the edification of emotion, mainly occur through language teaching. When organizing students' intensive reading, we should attach great importance to the image, rhythm, momentum and emotional color of the textbook language. In order to let students learn the sense of language gradually, I told them the "Monk Knock (push) The next door" of the allusion, said Wang Anshi "Green" in the "green" in the word changed the story that revised a word in poem for five times. These very small, interesting words are well known, but for children to know what "scrutiny" is, and how it is 'not a good word," guides them to experience that a sense of language is very helpful, and they can be inspired.

The application of contextualized teaching makes abstract and generalized words become concrete images, thus arousing students' emotion and positive learning. All these have created favorable conditions for students to realize their sense of language accurately and richly.

The intensive reading stage, with the creation of the situation, grasps the textbook with a vivid pen, so that students feel the sense of language. The specific operationa are including comparison and recitation. The comparison is to differentiate, and the "ratio" method is the most effective. Specifically, there are several types of comparison with the original text:

- Insertion
- Deletion
- Replacement

Guide students to compare, read and think, and to speak so as to realize what is complicate or concise, neat or disorderly, delicate or rough, imaginative or dry, concrete or empty, accurate or forced in the differences. Moreover, in the comparison to strengthen the differences in the sense of language, the comparison of the images of emotional color deepens understanding.

Teaching practice shows that the child's reading aloud, the child's answer, clearly demonstrates that the emotion has moved into the text description of the object body, called "I and he the same," to reach the realm of immersion, so that the emotion disperses and tends to stabilize.

To promote the feeling of students, which in their entire inner world is only an accumulation, so repeated, superimposed, students' noble aesthetic taste, moral feelings are not difficult to cultivate. Via appreciation of the comparison, with the opportunity to exercise imagination, using teacher-led language to deepen the experience, which is almost synchronized with the understanding of the text language, students' emotion and language ability are therefore cultivated.

With such scrutiny and comparison, students' sensitivity to language will gradually improve. In reading they will be more sensitive to grasping some of the rich charm of the words, and in their own written expression they will also gradually know how to temper words.

The language sense of the article is more than the charm, but also can show its momentum and rhythm by voice and intonation. Therefore, in the experimental class's teaching of a sense of language, comparison words and comparison reading are often combined.

The essence of the article, the recitation of *yin*, is always indispensable. This often needs to depend on the situation. When children's emotions are aroused, using association and imagination, guide them to read softly and emotionally, form a "vision" of the text, describing the situation as if through their eyes. The practice of reading aloud, tasting and feeling the sense of language, is commonly used in the teaching of reading and is almost universally applicable. Practice has proved that this approach also works easily.

As mentioned above, in the exploration of contextualized teaching I generalize "take into context and read whole," "strengthen the contextualized focus," "with contextualization produce a sense of language" and other reading procedures to achieve first reading, to clarify the author's ideas; reading and understanding, to grasp the key phrases; and intensive or deep reading. This is a reading procedure that adapts to the learning life and the future work practice.

Of course, the procedure of initial reading, further reading and intensive reading is not completely separated in the course of concrete teaching. In particular, reading and intensive reading are often closely linked, with the students not finishing reading before moving on to intensive reading. However, in the focus of the paragraph, through the reading, understanding the key words, followed by a sense of turns, the expression of reading aloud offers guidance. According to the different needs of reading, different purposes can also break this procedure. Practice shows that this kind of practical reading procedure can effectively improve students' reading ability and the ability to use language, affect their thinking quality and cultivation of emotion, and promote their development.

The feelings of the students will have been deepened and their emotions aroused. They will not want to be suppressed, and will want to read through emotional and express their feelings. To guide children to express their inner feelings in time does not only meet the needs of their psychology, but also the needs of teaching. The expression of emotion can make the inner feelings of children communicate, inspire and infect each other, therefore children can deepen their emotional experience and make own understanding clearer, thus receiving aesthetic and moral emotion.

Reading with expression means that although the reading itself just focuses on the language of the text, it also permeates the expression and represents the child's subjective feelings. These are often expressed in appropriate tones and at a suitable speed, expressing their love or hatred for the characters, roles and things in the work, or their joy or sadness, compassion or disgust, nostalgia or longing. So

children are particularly fond of reading aloud, because of the sound of doing so, and while they read they can hear their own and their peers' expressions of affection, which are mutually infectious, so that the children's feelings reach a climax in their expression. Thus we should pay attention to reading aloud, as letting "I" read the text with emotion, in a sense, is also a kind of words. Proper language training is also a very good way for children to express their emotions.

In general, the teaching of contextualized reading includes first reading, for motivation; then close reading, so that children can feel the image of the text described in emotional terms; and finally intensive reading, so that children can understand empathy in the appreciation of the essence of the text and lyricism in the expression of language.

In the process of first reading, close reading and intensive reading, the reappearance of the situation makes students seem to see the images and scenes depicted in the text as if they had heard the characters' dialogue, or even heard the birds calling in the text and the rustling of the leaves. Just seeing, hearing or talking about feelings also can arouse emotion. This is the language of the symbol and the image of the combination. With the transfer of teachers' emotion, the teaching language is adjusted, controlled and awakened, and it inspires students' empathy. In the flow of emotion, students' emotion is aroused and their subjectivity is fully established, so that it cannot help but be put into teaching activities, and also vigorously promotes the teaching process. Contextualized teaching uses "emotion as a link," as it is throughout the teaching process, promoting and continuing the feelings of teachers and students with the emotional ups and downs of the text. Because of the emotional link in classroom teaching, maintenance becomes more attractive, more active in learning activities, and learning motivation has been further strengthened.

3.1.5 Contextualized Writing Driven by Affectional Expression

Writing is an important way of training children to learn how to express and communicate by using language. The expression of children's speech is based on their understanding of the world and is closely related to the activities of thinking, observation and emotion. It is almost impossible for children to express and reflect when they lack knowledge of the world around them. So the contextualized exercise first selects a typical scene from life and guides the child to know the world around them, which is the birthplace of knowledge and thought. After years of practice and research, the unique advantages of contextualized exercises become more and more prominent, and the work is a child's delight. Because observation of the situation in their inner world leads to a surge in true feelings, the process fully shows how the (external) *objects* stimulate feeling, which starts *thinking*, which is the expression in *speech* of the internal law.

How we can help students improve their writing ability is outlined in the following steps.

3.1.5.1 Guiding Observation in the Process of Obtaining Rich Data

The world is a novel and charming place for children. Through observation, the vivid images of the world around them will enter into their consciousness. Wisdom can be enlightened from here, and the subject of writing can also be obtained from this inexhaustible source. Therefore, observation in contextualized learning is an effective way to improve children's writing level.

Contextualized writing emphasizes children's observation of nature. Especially in the lower grades, which are the hotbed of artistic language, nature is the primary object of observation for children. I often take children into nature and to the beautiful world. It is an open classroom for children to witness and personally experience the beauty of the colorful pictures in nature, the vibrant flowers and trees, bright and shining stars, the brilliant and changeable scenery of the spring and autumn. This is an unparalleled, huge picture in the eyes of children when spread in front of them. In the bosom of nature, children's physical and mental pleasure and the love of beauty cannot help but increase, and children's language is also accompanied by emotion. In the experimental class, children observe that nature is ongoing. This can be summed up roughly in six aspects, namely spring and autumn; stars; rain and snow; mountains and fields; flowers and trees; birds, animals and fish. Of these six aspects, the scenery from the sky to the ground is almost all-inclusive. Some of the dramatic changes in the nature of the scene, together with the vitality of animals and plants, can bring fresh colors and various forms into the child's consciousness.

In addition to observing nature, I also guide children to observe social situations. Every child grows up to be a social person and we all live in society. To understand the world around us, it is necessary to include the living patterns of people in the surrounding social scene, and to allow children to participate in social activities within their means. When it is cold, everyone sews gloves for the border soldiers, and the teacher's sewing cushion is the heart of others. When children are active and careful, they have something to say, and because they are happy, this produces a desire for expression.

Observation widens children's vision and thinking space. By looking at the typical scenes of social life, children acquire real themes. Then guide them to express their observation in words. This natural expression of their true feelings in language activities for children is quite a sense of achievement, fresh and interesting, thus they gradually learn how to use the appropriate words to depict people, things and the scenery. The image of the situation and the rich sense of beauty not only make the words stored in the memory reappear, but also prompt children to combine the image with the words. "Observing contextualized speech" and "observing situational composition," which blends the color of beauty and intelligence under the driving of emotion, will arouse emotion in children' form the motive for

language, emotion; and make the language of children have a kernel of thought. The activity of thinking has the virtue of using language.

In short, the context of observation enriches the language of children, providing more vivid descriptions of life than abstract language.

3.1.5.2 Guiding Aesthetic Feeling to Strengthen the Desire for Expression

Whether it is a picture of nature or a scene of social life, they are full of a sense of beauty. Observation not only lets children get to know the world, it also gives them themes for compositions and lets the aesthetic occupy their hearts. Therefore, I advocate first taking children to observe the good things in social life, to stimulate their love of life so that teachers should select appropriate opportunities to take aesthetic education.

The rich fragrance of nature, the huge forms, the vibrant colors and the beauty of the heart—all these beautiful things make me and the children more intoxicated with lingering. In taking the children to get to know the four seasons, I also often select some of the characteristics of small creatures, to let children further appreciate the nature of the beauty of life and to cultivate their good taste. In the spring, I always consciously let children see the messenger of the spring swallow in the willow branches and in the field, as well as small bees and butterflies in the flowers. In the fullness of the picture, life always presents an eternal dynamic beauty. In fact, we love life because life itself is beautiful. For example, observe the whole process of silkworm growth, or small tadpoles growing into frogs and their developmental changes. In summer, guide the children to listen to cicadas, and move from the whole to the part in the analysis of the insect's life habits and physical structure, to cultivate interest in inquiry. In autumn, let the children see the southern flying geese and guide them to imagine the birds' hard journey south and also understand the characteristics of migratory birds. In winter, although all things are bleak, the hibernating turtle or the small sparrows in the snow can induce children to look at the colorful world with new eyes. The aesthetic feeling would be arouse in the process of observation. It impacts on students' learning process as well. After observation, let them write compositions such as "Starry Sky," "The Moon Rose Up" or "Hometown of the Green Mountains." They will write very emotionally and their writing will also be fresh. As Chinese language educator Ye Shengtao pointed out: "A beautiful raw material can be made into beautiful utensils."

In view of children's psychology, contextualized teaching chooses the good things around the world as the object of perception, since to feel the beauty of a real-life scene is in line with children's interests and needs. The rising sun, the gorgeous sunset, the rainbow after the rain, the shadow of a tower in the fog, the small river, wildflowers silently opening by the roadside, as well as the social life, the static street lights in the night, the cleaners in the dawn, the tireless teacher under the lamp. The beautiful scenery and characters in these lives can enrich children's aesthetic experience effectively under the guidance of teachers and the

prompting and awakening of emotion. So, after bringing children into the situation, I often guide them to see and listen, to feel the most beautiful static or dynamic beauty in the situation, and to allow their perception of the object of observation become more sensitive and rich. Because children's emotions are in the process of recognizing things, observing the novelty and feeling of the situation can arouse their enthusiasm and directly affect the expression of their thinking and language, thus arousing their desire to express themselves.

To sum up, in order to response children's nature of loving beauty, contextualized learning of mother-tongue selects the perceived goals of observation of pre-writing, then sets the context, which is vivid and beautiful. As the subject of aesthetic observation, children feel beauty through their senses and their mind and acquire aesthetic experience. With the promotion of aesthetic pleasure, children will be happy to speak out and write down their feeling. Because love is aroused by the beauty, then students could express their expections wonderful people, beautiful scenery and good life.

3.1.5.3 Linking Observation and Imagination with Expressions Based on Touching

Imagination is an important intellectual factor in developing children's creativity and cultivating their noble sentiments. Through the expansion of imagination, the object of observation will appear vivid and colorful in their eyes. Imagination is accompanied by observation, which strengthens the subjective sensibility. Early in the experimental class with children still in the lower grades, I led them to expand their imagination about wings: "The scene of the present, the color, that posture, what are they like?" When we looked at kites, I let the children imagine the way they wanted to: "Do you suppose that the butterfly kite flies so high, the bee kite follows behind it, where are they going? The small goldfish kite's tail is fluttering, as if it is looking for what?" I intentionally use personification to arouse the children's expression of interest. As a result, they want to open up: "Butterflies and bees gather nectar, because there is a big garden in the sky, there are many strange flowers on the ground." "That little goldfish is probably looking for a pond, looking for a river, but how can the sky hide water? Will the little goldfish swim to the ground?" The use of the personification technique has effectively moved the child's emotion to the observed object, the kite in the blue sky, as if it also has life, has emotion. The child's imagination, like the kite, cannot help but unfold and their language is suddenly enriched along with the emotional activity, the thought activity, expressing the desire spontaneously.

There was a burst of applause and cheers in the field. It was in 1983, the Chinese spaceship hasn't been launched yet, it seems that children imagined this scene, which i was suprised by their amazing imaginations. The small photographer gave the sound of an enthusiastic call, there was a click, click from the shutter, and a child's smiling face, together with their fairy tale of desire and aesthetic feeling, stays in the memories of the album. It is this upsurge of emotion and strong expression of desire that prompts the children's rich interest in composition. Observation lets the child get to know the world step by step, observing the feeling which obtains the beauty that affects the young heart. Their spiritual world, wisdom and emotional world are also enriched and developed. Children become immersed in the beauty of the situation, nature enters them into their mind.

When children are in the embrace of nature, this opens up a picture of social life and they can truly feel the beauty of nature, the beauty of society; in a small classroom they cannot see or learn. In the context of sound, image and color there is an emotional appearance: in a flash and the worlds collide. A word or sentence, together with rhetoric in a real situation, seems to have life, be all alive. The children in this situation cannot restrain their inner excitement, and often describe what they saw and heard in an impromptu way.

One of the children's essays shows that they are particularly comfortable with the situation, which allows them to acquire authentic materials, to tell the truth and to say what they want most. Observation becomes an important channel for children to know the world, and also an important way for them to get the subject matter for composition. Observation directly enhances children's ability to express themselves in language expression and develops their thinking ability, emotions and the formation of thoughts and viewpoints.

3.1.5.4 Grasping Fundamental Skills in Multilingual Training Through Describing Context

Based on the characteristics of children, there should be various forms of training in response to their tastes, their practical language ability and the need for application. Contextualized teaching makes full use of the beauty of the situation and the wide space of thinking, so that students enjoy it. In order to accelerate children's development, their language training needs to start early, improving the starting point from the first grade in literacy, reading at the same time, then word training, a large amount of language training, and at the same time beginning oral composition classes, inclusive of comprehensive training in simple words and sentences. From writing observation diaries in the second grade to situational composition in the third grade, it is not only training in words and phrases that is important but also training in layout, which overcomes the shortcoming of the "word–word–sentence–article" single training in the past. Overall, each grade has a focus and the formation of a spiral rising sequence effectively promotes the development of children's language.

3.1.5.5 Starting Training from Writing One Sentence

I guide the children from the context of life to learn to write about one of their happiest days to express a sentence. So the children take what they have seen, listened to, thought and found most interesting, and use a sentence to train their initial written language. They write freely, from writing, to scenery, and back to writing. Gradually, they children learn from the many words in their language practice that a sentence can answer what and how: "What man?" "What's the matter?" "What about the place?" The concept of a sentence is formed in this process. One month later, many children have naturally evolved from writing a sentence to writing seven or eight sentences. In one semester, this kind of training for each child occurred at least 90 times, which played a good role in the basic skill of using small words.

3.1.5.6 Establishing the Basis of Understanding and Expression Through Observational Diaries

On the basis of "writing a sentence every day," from the second year onward, the children have to observe every day and write a short observation diary. This can foster a good habit of paying attention to the world around them. Over the long term, children's brains store a lot of imagery. This is the material for their future thinking and imagination. At the same time, the child's comprehensive use of words and phrases gets a good workout in this diary and can be extended according to their ability.

In the experimental class, students kept the habit of writing diaries when they were in second or third grade, during the important period of transition from oral language to written language. Each child in four semesters wrote 360 observations in their diary. With such a foundation, their compositions could be written with greater pleasure in expression and initiative, and this aroused their creativity. As their teacher, I also learned to look at the world through their eyes, holding the wind or the snow or the rain in my heart the same way. I could not help thinking of my students: at this moment there would be children standing in the yard watching and thinking. Would they look at the whirling pictures of trees under the dim moonlight? I remember one time, there was a gust of wind, and a sudden "ding ding ding" of hail falling from the sky. The sound was a magical symphony. I bent down, picked up a hailstone, put it in my palm and watched it shrink in my warm hand. I stayed in the yard and wished my students were as curious as I was at that moment to observe the transparent ice hockey. The next day, as soon as I got to school, I asked my children who had observed the hail the previous night. Those who did were so joyous and eager to report their observations to me. Since then, when there is rapid change in nature, although the teacher is not with them they have become accustomed to observing with psychological inquiry to try to understand the mysteries of nature. This long guidance, nurturing children to observe the world around them as a habit, is very valuable.

I always feel like a glittering dewdrop when I am reading a child's observational diary, which looks like the morning sun, is so transparent, so bright, reflecting the shadow of the red flowers and green grass. I rejoice to read their work, often with the children themselves, and I experience a lot of fun.

3.1.5.7 Observing Dialogue and Contextualized Writing as the Best Way of Improving Ability

Whether it is observing the situation or observing the contextualized composition, it is based on students' observation. They obtain the subject matter by observation, to the classroom teacher through the language depiction, the intuitive method unifies, the reappearance observation the typical situation, arouses the student to observe the object recollection and the anxious expression motive, then according to the grade different request carries on the different level language training.

This kind of situation enables the student to use the sentence pattern which the teacher provides to express the observation situation more concretely. It helps the student to have the words to be able to speak, and simultaneously causes them to learn the written language.

As children get a real sense of beauty from the world around them, their language gradually becomes more vivid. Senior children can even write very emotionally and their writing is very fresh. Around the world novelty arouses the children's "inner sense of interesting." Teachers inspire and expand their imagination, and guide them to see, feel and then form the desire to express themselves.

A series of practices show that emotionally driven, contextualized exercises can obtain satisfactory results, coupled with solid training, because of the foundation of the world around us, through the beauty of the scenery and people, which inspires children's desire and emotional drive for self-expression.

3.2 Contextualized Learning of Mathematics

3.2.1 Bringing Mathematics into a Child's Life

Mathematics is found and exists in life, but currently mathematics teaching is far away from children's lives. It is natural for children to find maths difficult and boring. Therefore, the contextualized teaching of mathematics should start from the drawbacks of abandoning it: that is how to let mathematics into children's lives, to let children get close to mathematics. In this way, I think the idea of creating a situation in mathematics opens up greatly.

In teaching the "percentage application" unit in sixth grade, the math teachers found that the books mentioned "tax and interest issues" and "discounts," which

were unfamiliar to children. In the example, there was the creation of a bookstore to calculate business tax, a student had savings in the bank and a bookstore discounted the price of books. Because of a lack of life experience, students had some difficulties in understanding these three real situations. Nevertheless, they were very interested in the questions and the class generated many valuable practical questions: "How do you fill out the deposit certificate?" "What do you mean, 'buy four for one' on sale at the mall?" "When Mom buys a pair of shoes, some shopping malls discount by 50%, some shopping malls say to buy 300 yuan spend 150, which is more cost-effective?"

As a result, the sixth-grade teachers thought about how to use students' curiosity to help them understand percentages and learn to solve these problems that are closely related to life. Combined with the contents of the textbook, the sixth-grade class carried out the integrated practice of "child-headed" mathematics. In the event, the children listened to the bank staff when they told them the secret of money and other financial knowledge: China has various big banks, types of deposits and deposit interest calculation methods, so how to fill in a bank deposit and what happens when you lose your deposit or forget a password is part of the basic knowledge needed in life.

What made children more excited was the Laking flea market. They became salespersons, putting their spare toys, books, stationery and other items up for sale in the school playground. They tried to learn the discount of bussiness and launch attractive promotion ways. "All the audience 85% off," "Buy four for the price of one," "Get 5 yuan back for every 30 yuan spent," "Buy one at 90% discount, buy two at 80% discount," "Everyone who spends 50 yuan can participate in a lucky draw." The playground contained a flow of people like the tide, yelling and shouting. Some of the small salespeople danced to praise their products, others were happy to count their hard-earned money and the bright coins, and the playground is permeated with the smell of the market. After the operation, the various stores developed different distribution options. For some, 5% of turnover was a tax payment for class construction, 95% was banked in the name of the group, as a holiday fund for team activities; for others, 60% of turnover was for shelves for a poor primary school in Rudong, and 40% went to a class fund to reward students' learning progress; for yet others, 70% of turnover was used to buy trees on campus for Arbor Day, and 30% was for everyone to add a few new books.

In the context of life, through hands-on practice students develop insights and ability, but they also harvest happiness. Discounts, taxes and interest—this mathematical knowledge becomes so close to life that it is easy to understand. The wide applications of mathematics are also fully embodied.

When mathematics comes from life, it leads students to discover mathematics in life and lets mathematics and life combine. Whether mathematics is being learned in a real or simulated life situation, mathematics is still being used.

3.2.2 Inquiring into a Context with Imagination

In the face of the development of contextualized education in mathematics, I also think that an important trait of mathematics is "the gymnastics of thinking." The study of mathematics must constantly lead children to think and to explore. The situations we create should have distinctive characteristics of exploration, conducive to the development of children's thinking.

However, exploration does not imply abstraction or mere logic. Children's mathematics should be accompanied by a vivid image to explore the context of the study, in an environment of love and intelligence, so that the inquiry can be accompanied by fun and make it easy to produce insights. Therefore, the maths teacher of the experimental class tried to put abstract formulas and laws into a specific image or vivid form, so that the knowledge of mathematics would be embedded in the situation.

For example, in the teaching of irregular body volume calculations, by allowing children to participate in the "Hua group," (Hua Luogeng (1910–1985)) the teacher enhanced the personality of students and clearly put forward the learning requirements of the course. The teacher then took the students to a simulated "metal workshop." The worker was making a brass lock and the teacher readily produced a brass lock, creating a problem situation: "The material used by the worker is a square block 9 cm long. That amount of copper can be processed into how many locks?" "The volume of the copper lock is irregular. Does the lock have a body, a handle, a hole? How can we calculate this?" The children were puzzled, but the teacher encouraged them to speculate boldly.

Because the children were puzzled, the teacher used a scientist's story to let them into the depths of interesting thinking: "More than 2,000 years ago in ancient Greece, there was a greatest mathematician, his name is Archimedes. He also met the problems you are encountering today." This was a novelty to the children. The teacher went on, "The King wanted Archimedes to judge whether the crown was made of real gold. He was puzzled for several days. What was the final result? Let's listen to the situation of Archimedes."

"Only Archimedes knew how to judge whether the crown was true or false", the teacher told them the key was to know the size of the crown and then proportion of the crown. But the shape of the crown was irregular, so how could he calculate its size? Archimedes walked along the road to think, but back home when he ate the food was not fragrant, and he also could not sleep. What could he do? He took a shower first, to let his mind clear. The bathtub was full of water and Archimedes found that a lot of water overflowed when he stepped into the tub. Looking at the overflowing water, he immediately jumped out of the bathtub, put on his clothes and rushed out into the street, shouting: "I know! I've got it!"

The children followed the story with excitement. The teacher asked: "When Archimedes saw the bathtub overflow with water, he was inspired to find a way to measure the crown's volume. Do you have any inspiration from this?" Then the teacher encouraged the students to give it a try: "Now form a team and, using the

experimental equipment on the table, try out your own ideas, be bold. What kind of method is the same as the one used by Archimedes?" Children who listen to their own method are likely to be the same as the great mathematician Archimedes, happy to jump. Passion often inspires wisdom. The children finally realize that they can use the same method as Archimedes to calculate how many locks the copper block can produce.

After a period of experimentation, I and the mathematics teachers reached a consensus that the creation of the context for mathematics has a distinctive characteristic of exploration. Contextualized mathematics not only allows children to feel mathematics in the context and understand the rules of its operation, but also to explore mathematics in a very pleasant state of mind, prompting children's thinking to be active and cultivating their interest in the subject.

Since mathematics is the gymnastics of thinking, through creating a situation of inquiry let children be accompanied by the joyful mood, actively thinking, combining cognition and the emotion, combining image thinking with logical thinking, and enlightening themselves about the wisdom of mathematics. The facts have shown that the mathematics contextualized curriculum has brought limitless vitality and fun to children.

3.2.3 Penetrating the Aesthetic and Cultural in Mathematics

I feel deeply that mathematics and other disciplines, as well as the important part of human civilization, abound with aesthetics. The symmetry, harmony, simplicity and wonderful beauty of mathematics are so unique. As British philosopher Bertrand Russell said, mathematics has a kind of "beauty cold and austere." This makes me realize that elementary mathematics should embody the aesthetic and the cultural, and that in the process of learning mathematics children should be guided to acquire its aesthetic feelings and cultural influences, by combining the feeling of a mathematics culture with the spiritual world enriching children. The cultural and aesthetic of mathematics are a new subject, and the characteristics of the mathematical contextualized curriculum are easier to explore, so we have a new level of studies of the contextualized curriculum. Children should not only receive cognitive education, but also be permeated with aesthetic, cultural, emotional and moral edification, which can promote the all-round and harmonious development of their qualities.

We seize the "threads of thought" of the mathematical culture, reproduce the situation of the mathematical formulas of human inventions, and better embody the culture of mathematics. Humankind's research into mathematics is inherited by subsequent generations, and the later achievements are developed on the basis of the previous research findings. This has a different significance when we grasp the threads of thought of mathematical culture and reproduce the context of a formula's discovery.

"Calculating the area of a parallelogram" is part of the content of fifth-grade mathematics. Traditional teaching methods include reviewing the formula for

calculating the area of a rectangle, then showing the parallelogram to students, demonstrating the formula for the area of the parallelogram, and finally organizing students to practice it. This is the most common way of direct teaching, which only focuses on students' cognitive activities. When we were preparing a lesson plan, a teacher suggested that the computational formula for human studies of the area of a rectangle has been used for 10,000 years, but the area of a parallelogram has only been studied for 50 or 60 years. This advice trigged my thinking on the culture and history of mathematics, the beauty of which I think it is important for children to feel.

At the beginning of class, the teacher prompted students to think about the following: "Humans' interest in and study of the formula for the area of a rectangle have lasted for more than 10,000 years, but it was only 50 or 60 years ago that they started to explore the formula for the area of a parallelogram, based on that for the rectangle." These simple words explained the calculation process. Then students were required to play a role: "Now assume that you are little mathematicians in ancient China." The teacher showed a simple stroke, and painted a parallelogram in front of the hut. The teacher told the students: "An old grandpa's house has a parallelogram of land in front of it. This grandpa wanted to know how big this land was, but nobody in the village could tell him. You are little mathematicians, could you please find a way to calculate its area?" So these little mathematicians were engaged in calculations using graphics of rectangles and parallelograms and were concentrating on discussing the question.

After a while, someone raised their hand, followed by more children, all of whom wanted to express their findings:

"I cut down the parallelogram and it became a rectangle."

"We can calculate the parallelogram by using the formula for a rectangle."

Then there were debates and discussion in the classroom. The teacher did not tell the students the formula, their explorations were based on their own discoveries. This kind of reproduction through students' role-playing connects mathematical knowledge, culture and children's spirit of inquiry in the scenarios. The children have a vivid experience when they witness the process of development of human civilization. Thus, from the perspective of the beauty of design thinking, the teacher can make maths lessons more interesting.

From the view of mathematics in contextualized education, it means linking students' real lives, demonstrations and artistic methods, which aim to reproduce the process of invention and scenarios around mathematical formulas. In this way students feel the cultural and aesthetic sense of mathematics as well as acquire mathematical knowledge and skills, which enriches their spiritual world.

The process of exploration of mathematics contextualized education has taken seven or eight years. There is indeed a process when we try to understand how to introduce context in mathematic class. To help students discover maths we realized that it should be combined with their real life, and then understand that in the methods of employing contextualized education, the philosophy of education must serve for content, and mathematic contextualization must embody the characteristics of mathematics, followed by the discovery of the mathematical aesthetic implications, and

also put forward the links between mathematical contextualized teaching and mathematical culture. There are more and more young teachers who have been engaged in this kind of study.

Box 3.1 Instructional Design Typical Case 5: Using Situation to Actuate Understanding of Mathematics

Teaching and Thoughts about Understanding of Fractions

Teacher: The Second Affiliated Primary School of Nantong Normal University, Jiangsu Province GU Juan

Class Evaluator: Primary and Secondary School Teaching Laboratory, Jiangsu Province, Wang Lin

Overall Design Train of Thought

Moving from an integer to a fraction is a very important event in the history of mathematics, which marks the point at which people's understanding of things is more comprehensive. Since the concept of a fraction relates to students' understanding of the relationship between whole and part, it reflects a kind of thinking mode of "relational cognition." So a fraction is more abstract than an integer. Regarding the role of numbers and algebra in the Mathematics Curriculum Standard, there is a specific goal for the initial understanding of fractions: "Linking up with specific situations, students can understand fractions preliminarily, can recognize, read and write a simple fraction."

The teaching methods of deductive concepts are so boring that it is difficult to inspire and can even suppress students' enthusiasm for learning, which leads to inefficiencies in teaching. Fractions are from life, reproduction of life or simulated life situations. They can effectively activate students' life experience and learning drive, making them truly experience the formation process of the fraction concept, solidly experiencing the essential connotation of fractions and truly feeling their practical significance.

Grasping students' realistic starting point of learning is a necessary condition to create effective circumstances. In informal learning situations, where have students met fractions? In which case would they hear about or see fractions? Would they use fractions in daily life? If so, how would they use them?

Through the previous survey and data analysis, we learned that 98% of students know fractions; 90% of students have heard about fractions in their lives and could cite examples (for example, Grandma said that we ate only one-quarter of today's meal; the Chinese language teacher said that two-thirds of the students' composition scores in the class were rated as excellent); 20% of students can use fractions, but limited to one-half and one-third. It is obvious that fractions were present in the lives of students, but their impression of fractions was still vague and their understanding was simple. The students' realistic starting point for learning provided direction for our class teaching: pay attention to students' previous life experience; handle

teaching materials reasonably and flexibly; let students carry out a large number of intuitive and perceptual mathematics activities in the context of life related to fractions; and enhance life-based mathematics in the subject of mathematics. This is an effective way for students to easily transfer knowledge and obtain ability.

Based on the analysis of the logical and realistic starting point of students' study, we set up an "outing" situation throughout the class combined with the season (autumn). Firstly, through a mass of emotional material in situations, we helped students experience the formation and internalization process of "differentiate and analyze material → refine essence → summarize nomenclature." Then, further taking the knowledge of fractions as a teaching carrier, we trained students to discover the relationship and meaning of mathematics; helped them develop the mathematical vision of discovering relations and meanings; assisted them in establishing a mathematical way of thinking; and turned their previous life practice wisdom into life growth.

Teaching Process

Preliminary Understanding of the Essence of Fractions

Design concept 1: Numbers appear gradually in children's real life and productive labor, as does the fraction, which originated from the needs of life and production. So at the beginning of the class, we should ask students to divide bread and apples in a real-life situation to comprehend the generation of fractions. This popular material is approachable, interesting and easy to understand, which can arouse students' previous experiences. At the same time, many problem situations can continue to lead to students' cognitive conflicts, lead to oscillation in their thinking and promote the formation of active participation in exploration and the tendency to solve problems. This will be the accumulation of a good basis for students' follow-up study of knowledge, thinking, emotion and other aspects.

Class Record

1. Preliminary perception of 1/2

Teacher: Children, what kind of season is it now?

Students: Autumn.

Teacher: (Showing a picture of an outing of Xiaoming's family) Xiaoming's family, Grandma, Dad, sister and he, went to the countryside. His mother was not able to go because of work. Before leaving, Mum told Xiaoming that he was a big boy and should learn to take care of family members. She gave him eight pieces of bread and four apples, and asked him to divide those later. If you were Xiaoming, how would you divide them?

[Evaluation: The teacher used the activities of an outing with which students are familiar to arouse their emotions. The students rushed to the podium to divide the bread and apples and fully experienced the joy of the activity.]

Teacher: Xiaoming gave the biggest apple to Grandma. Grandma told Xiaoming that she couldn't eat an apple and wanted to share half with Xiaoming's sister. If you were Xiaoming, how would you divide it this time?

Students: Slice into the apple in the middle.

Teacher: Which numbers can express half of an apple? What about the other one?

Students: 1/2.

Teacher: 1/2 is different from the numbers we have learned before and it is called a fraction. Today, we're going to learn about fractions.

(Writes on blackboard: fractions)

2. Deep understanding of 1/2

(a) The origins of fractions

Teacher: Fractions, what do you think they have to do with?

Student 1: Dividing.

Student 2: Dividing things.

Teacher: Right. In ancient times, when people divided things such as fruit and prey, the result was often not an integer, so a fraction was generated. In Latin, the meaning of word "fraction" is broken and incomplete. It was called a "broken number."

Student: That's interesting.

(Laughter in the classroom)

(b) Reading fractions

Teacher: An apple is divided into two roughly equal parts, each one of these can be expressed by a fraction. (Writing on blackboard: 1/2) Who can read this fraction?

Student: 1/2.

Students (in chorus): 1/2.

Teacher: Why can we use 1/2 to express it? Please give me a reason.

Students: (reacting quickly) Because the apple is divided into two parts and each part is a one-half.

[Evaluation: Students were not aware of the expression problems. At that time, the teacher took out another apple and divided it into two parts of different sizes, which demonstrated good enlightenment for the students' thinking. Then many students were eager to try and raised their hands.]

Student 1: The apple was not divided into equal parts.

Student 2: I've got it. Only when it is divided into equal parts can each part of the apple be called 1/2.

Teacher: Who can evaluate the answers of these students?

Student 1: One said "divide into equal parts", while the other didn't.

Student 2: It can't be 1/2 without equal parts.

Student 3: "Divide into equal parts" cannot be omitted.

[Evaluation: The teacher let students fully communicate their ideas in a real-life context with rich material and in a harmonious interpersonal situation. When the expression of their language was not clear, not tight, or non-standard, the teacher was not eager to inform them, but transformed the situation into an available teaching resource. Through dialogues between students focused on "equal parts," the key issue to be studied in this lesson was put forward: a study on the relationship between the overall and the parts based on equality. In the collision, students sought new ideas and their thoughts turned from active to deep.]

Teacher: (According to the students' answers, writing on blackboard: Divide an apple into two equal parts, each part is 1/2 of it. Pointing at the word "it") What does this word refer to?

Student: The apple.

(c) Writing of fractions and the names of each part

Teacher: Please turn your books to page 100 and read by yourself. Let's have a look at who will learn fastest.

Teacher (later): Who wants to be the little teacher and share what you have learned with others?

Teacher (after the students have answered): Children, you have learned so fast. Do you have any clever methods?

Teacher (after the students have answered): What a coincidence, the ancient people thought almost the same as you when they gave names to the parts of fractions. At that time, the main research focused on fractions where the numerator is smaller than the denominator. People vividly imagined the smaller number as the "children" (the meaning of children) and the larger number as the "mother" (the meaning of mother). Later, people called them numerator and denominator. The pronunciation of numerator in Chinese is "son of fraction", while the pronunciation of denominator in Chinese is "mother of fraction".

Recognition of the Meaning of a Fraction

Design concept 2: The question is at the heart of mathematics. An effective question situation is the optimal mathematical situation. The questions in this section should be simple and clear, but point to the interior of mathematics. Through hands-on operations and observation analysis in problem situations, students learn to discover and create: a whole has the same relationship with its different parts, so that although there are different ways of dividing it, the relationships between a whole and its different parts are the same. Carefully designed questions and situations can make teaching always move forward in dynamic balance.

Class Design

1. Different cutting methods all lead to 1/2

Teacher: Think about how we can cut the apple into two parts in other ways.

Teacher: The shapes of parts are not the same in different cutting methods (pointing to the objects), why are all of them 1/2 of the apple?

2. 1/2 of different objects

Teacher: How can you get 1/2 of a watermelon?

Teacher: How can we find 1/2 of different things?

Teacher: Children, just now we divided an apple into two equal parts and each part was 1/2 of the apple; we also divided a watermelon into two equal parts and each part was 1/2 of the watermelon. But why are these two parts so different?

Comparison of the Size of Fractions

Design concept 3: A coherent situation will make students devote themselves to learning with enthusiasm. The situation of an outing will not appear only at the beginning of the class, but also run throughout it. To use a rope to tie firewood for a barbecue, for instance, we need to fold the rope into 1/2, 1/3 and 1/4. Each student will have a plastic rope in their hand and will be asked to fold the length of rope corresponding to the fraction. The students will become more specific about fractions and master the method of comparing fractions by operation.

Class Record

Teacher: Xiaoming and his father prepare to bundle firewood with rope. (Shows a picture) Xiaoming's father takes 1/3 of the length of the rope and Xiaoming takes 1/4 of a rope of the same length. Children, do you know how long was the rope they took?

Teacher (after the children have answered): You also have ropes on the table, let's work in pairs. Male students, please fold the ropes to check how long was the rope that Xiaoming's father took, and female students, please also fold to check how long was the rope that Xiaoming took.

[Evaluation: With the teacher's ingenious design, the students picked up ropes and worked in pairs, operating with their hands and communicating with each other. The class seemed to become a place for students to have fun.]

Teacher: Communicate with each other that Xiaoming took 1/4 of the length of the rope and his father took 1/3 of its length. Which is longer?

Student 1: (lifting up the rope he folded) Father's rope is longer.

Student 2: (also lifting up the rope he folded) Xiaoming's rope is shorter.

Teacher: What does this show?

Student: 1/3 is larger than 1/4.

Teacher: (writing on blackboard: 1/3>1/4)

Teacher: Xiaoming's sister took 1/2 of the length of the same rope, can you compare 1/2 with 1/3 and 1/4?

Practical Application of Knowledge of Fractions

Design concept 4: The class belongs to students. If not, the class and teachers will be worth nothing. How can we get students to realize the value of knowledge? We can think of fractions in the breakfast shop. We make the students play the role of the boss, the waiters and the customers. The waiters wear suits and a white hat. The customers are lining up. They are prepared to buy 1/4, 1/2, 1/3 and 1/8 of a pie. I assign the hot steamed buns to each group. Students divide the steamed buns and say what fraction each is. Students must take complete participation in the task. In this way they will learn the meaning of fractions.

Class Record

Teacher: Today we met a new friend: fractions. In addition to 1/2, 1/3 and 1/4, where can you fractions like these in life? Say it to your group members.

(Students exchange their ideas. Some can't help making a performance.)

Teacher: Fractions are really all around us. I came across them when I bought breakfast this morning.

Teacher: (showing the pie) A pie like this was sold in front of the door of the snack shop. It is so delicious that it attracted a lot of customers. They come to buy the pie and they used fractions.

(Students are excited about the pie.)

Teacher: Who wants to be the boss of the snack shop? Who wants to be a customer?

(Students are more excited and raise their hands.)

Student: So many customers. It seems that the boss has to hire a waiter.

(The boss wears a chef's hat and apron. The waiters yell: Delicious pie, buy one, buy one. Come on!)

Customer 1: Boss, I want 1/4 of a pie.

(A waiter cuts about 1/4 of a pie for the customer. The customer raises it toward other students to show it off.)

Waiter 1: Here you are. Welcome next time. Next customer.

Customer 2: Boss, give me 1/2.

Waiter 2: OK, I will cut it.

The waiter hesitates and doesn't know how to cut the pie. The teacher looks at him and whispers to his boss.

Boss: Hello! Thanks for waiting. Would you like 1/2 of the original pie, or 1/2 of the rest?

Customer 2: 1/2 of the entire pie.

The waiter gets it and cuts it immediately.

Waiter 2: Here's 1/2 of the whole pie. Welcom next time if the food is delicious/if you are satisfied the food.

Customer 2: Thank you! Excellent!

...

Teacher: You are all passionate about this activity. Does everyone want to have a try? I bought some steamed buns in the breakfast shop. Now I'll give them to you and you can have a try.

(Students are looking at the hot steamed buns. Their emotions and thinking are more active.)

Teacher: There are 10 steamed buns. Each group can have 1/5 of them. How should we divide them? How many steamed buns does each group get?

Student 1: (speaking and dividing) Divide them into 5 parts, each group have 1 part.

Student 2: Each group can get 2 steamed buns.

Teacher: Let us use our brains and our hands to put into practice the new knowledge we learned today, okay?

[Review: In the optimal situation, the students are dominant in the class. They are the discoverers of knowledge. They are the success of learning. They do their thinking happily. They are so happy that they will remember the fun from mathematics and not be able to forget what they have learned.]

3.3 Contextualized Learning of Science

In the process of exploration and research into a contextualized course for scientific knowledge, the teachers have boldly reformed science teaching and have achieved remarkable results. Here I sum up the main points of their operations.

3.3.1 Stimulating Curiosity and Cultivating a Love for the Scientific Spirit

Curiosity is in a child's nature, and is a very valuable psychological quality. Because of curiosity, children will be concerned, will have doubts, and then will explore. We should cultivate children's scientific spirit, mainly starting from the spirit of inquiry. It is very important for science knowledge class to find a problem, ask a question, and then try to solve the problem. Because science is often born out of doubt, the cultivation of children's scientific spirit must lead them to form the sense of a problem, fully stimulating their innate curiosity and leading them to explore, to find out. Through a science course, a wonderful world full of mysteries gradually unfolds in their eyes.

In the lesson "Composition of the Air," teachers connected children's experience to shortness of breath to create a problem situation.

The teacher said, "We are breathing all the time, and under normal circumstances we do not care. Now do an experiment: hold your nostrils with your hand, don't breathe through your nose, and see who can hold their breath the longest."

The children were suddenly excited and engaged in discussion. The teacher took to the platform and timed the children. After a moment, with no teacher stopping them, the children almost at the same time shouted: "Ah, I really can't hold it! Oh, I'm choking!"

When they were all breathing again, the teacher asked the question: "Why?"

Many children were able to answer: "Because we cannot have no air."

"We can't live without air."

"Because there is oxygen in the air, and people can't live without oxygen."

The teacher said with great admiration: "So some of you know that oxygen is in the air. In the lesson today, we will study the composition of air."

It is not difficult to see that such a problem situation would arouse children's curiosity and sense of inquiry.

The teacher continued, "People and animals need to breathe because there is oxygen in the air. If there is no air, there would be no oxygen, and it would only take a few minutes to suffocate. So we breathe air every day, but is there really oxygen in it?" Such questioning is the embodiment of a rigorous scientific attitude.

Then the teacher led the students to experiment by putting candles in water, lighting the candles in the glasses, let the flames and air cut off. The children watched with wide eyes as the flames continued to burn, then after a while the candles gradually went out and the water went up.

The teacher asked the students what questions they had about this phenomenon. The students thought, whispered to each other and soon began to ask questions: "The glass has been insulated from the air, why can the candle burn?"

Another student immediately replied: "Because there is still air in the glass, it burns."

A further student added: "It just proves that there is oxygen in the air."

And another: "After a while the candle is extinguished, because there is no oxygen, it cannot burn."

The experiment showed that the oxygen ran out. The experiment was successful, and because the children had experienced such an exploratory experiment they were very active. One of the students asked: "Since the burning needs oxygen, then there is the process of combustion, the oxygen content gradually decreased, so the water should also gradually rise. Why in the experiment did the water after the candle went out suddenly rise?"

What a good question! Even the teaching reference book did not address this. The teacher did not immediately answer, but asked gently: "Did you learn about the wind in this lesson?" The students suddenly found the answer. It was the candle burning in the air after the expansion of the glass. Although the oxygen was reduced, because the internal pressure was large, the water could not rise, but when the flame was extinguished, the temperature decreased, the pressure decreased and the water went up. The children were so excited that they had found a problem that the teacher did not find.

Many familiar things around children contain scientific elements, and it is important for teachers to use these experiences skillfully to create problem situations that point to science.

In the lesson on "Batteries," the teacher took out a small light bulb and asked the students: "How can we make this small bulb glow?" The students replied: "You need to connect the batteries." They had given an answer according to their experience, and the teacher had to do the opposite and arouse their desire to explore: "Today I can make it shine without a battery, do you believe that?" The teacher put copper and zinc tablets in the apple, the result of light bulb, students are very excited, some can't help to run to the podium to see a careful. You can imagine if the teacher said directly: "Today we will learn the principle of a battery." Then when they demonstrated the experiment, the students' interest would not be so high.

In the lesson on "Water vapor," the first part guided students to know that water vapor is a colorless, tasteless, invisible gas, and then showed them a cup of "white gas" and said that in the winter people exhale "white steam." What kind of gas is that? According to their day-to-day experience, the answer of most of the students was water vapor, but immediately one of their classmates reacted with dissent: "Since water vapor is an invisible gas, and now the "white gas" has a color and is visible, is this not contradictory?" The students stared in amazement. They were eager to know what kind of gas the white steam was. Some said "hot," others thought that "white steam is not necessarily hot, such as fog" and so on. The students raised one explanation after another, but one by one they were denied. Finally through an experiment with a cup of hot water covered with a glass, which led to the condensation of small beads, their research proved that the original consisted of water beads.

Through this kind of design, students gradually realize that daily life is full of science. Common phenomena contains so many interesting scientific truths. The problem situation makes students think clearly about the goal, and not only raise their own questions but solve those questions with courage. This satisfies their desire for inquiry and thus nurtures their scientific sentiment.

3.3.2 Learning to Be Hands on and Developing Scientific Practices

John Dewey advocated "learning by doing" in the early twentieth century. For scientific common sense, "learning by doing" appears to be more important. "You'd better try once even you heard more than 100 times," as Karl Marx said; human nature is precisely a conscious activity. The development of scientific undertakings involves a brilliant performance and the experiments are never ending, there are hundreds of thousands of experiments to consider. Only through experimentation can we discover a solution, and then through unceasing improvement and further

experiments prove its correctness and reliability. From a small product to human exploration of the vast universe, no one can pass over experiments.

Therefore, in contextualized science common sense, let the students do experiments personally or let them witness them, causing their curiosity about exploration. Letting students do their own experiments is not only letting them personally verify a phenomenon, but also inquiring into the world around science. Not only does it give them a real sense of perception and positive thinking, they devote themselves to the experimental process. In such a change from the results of the experimental process, the students are more interested in and fascinated by science. Therefore, scientific experiments not only cultivate students' ability to do things with their own hands, but also cultivate their scientific attitude.

Schools have limited equipment and can only configure a number of simple experiments. The key is that the teachers make full use of it. The children all know how to use a beaker, spirit lamp, measuring cup, cylinder, tripod, asbestos net and square bracket, and also have used a microscope and a magnifying glass. Through the use of simple equipment, the discovery of "small things" in front of them presents changes and the occurrence of unexpected phenomena. These simple experimental devices are much more interesting to children's hearts than their childhood toys, since they enter a new world.

Science teachers do discharge experiments, feel the electricity produced by magnets, light and heat, understand the nature of metals and experiments into expansion and contraction, and undertake experiments to understand the lever principle; experiments into atmospheric pressure and buoyancy have been done to discover the secrets of the ups and downs of objects, and to observe the capillarity and siphoning; they let students do experiments at the same time to feel the change in the amount of friction, to produce and propagate light or observe its color; they investigate the formation of earthquakes and of the four seasons. The phenomena that children experience in their lives can be demonstrated through experiments, giving them a real understanding of the links and causal relationships between things.

These experiments are an extremely common form of scientific common sense for adults. Yet for children in a world full of fancy, they are very important to their scientific attitude, scientific spirit and scientific sensibility. They are naturally curious and the world is full of questions, so let them do experiments. Science also needs to be bold to doubt and guess, and conduct more careful, rigorous verification.

In the lesson on "Conduction of Heat," the first edition of the design employed a group of experiments: on the podium with four cups, made of stainless steel, plastic, porcelain and glass, into which was poured hot water, then the students were allowed to touch them and say what different feelings they had or problems they found. This is actually a phenomenon often encountered in daily life. The teacher introduces the students to the role of the scientist, stimulates their consciousness of problems and guides them in the practice of the scientific method: "The scientist discovers the problem that needs to be solved, but first guesses at a solution. Can

you boldly guess like the scientist?" After a group of small "scientists" made assumptions, the teachers continued to guide the practice: "Are these guesses correct? What do we need to verify? What kind of experiment are you going to design to validate your guesses?" The children began to experiment with enthusiasm. One said, "I'm going to heat a long wire, touch the other end, if the other is hot, the wire can conduct heat." Another said, "I think I have to try to burn glass or plastic to illustrate the problem." In the course of the experiment, the teacher further guided the students to observe and think, draw conclusions and inspire themselves to summarize the experiment. Then everybody used the experimental method to carry on several experiments autonomously. The students themselves put forward hypotheses, designed their own experiments and independently filled out the experimental report. Finally, one by one, the "scientists" rushed to the podium to give their experimental report and accept questions, to which they replied, a change to the traditional "spoon-feeding" type of teaching. Students in the role of scientists could explore the nature of the psychological process, experience the joy of inquiry and discovery, and their ability to practice science was rapidly improved.

Similarly, in teaching a class on "Composition of the Soil," the teacher did not let students simply observe the soil, but encouraged them through watching, pinching, smelling and other methods to observe the soil and find the material contained within it. After the students pointed out that soil contains air, water, rotten leaves and so on, the teacher observed with the students, guiding them to speculate, to understand the nature of things. The teacher suggested, "How do you prove that there are these ingredients in the soil?" The students' thinking was active and many different methods were designed.

One child said, "I have to prove that the soil contains water. If there is water, just look at the line, you do not need to prove it."

Another child immediately objected, "There is little water in the soil, the eyes cannot see it, nor say that there is no moisture. My proof is to use paper to wrap the soil in and pinch it, to see if there are any wet spots."

The teacher continued to encourage the children to prove the ingredients in other ways. The teacher prepared the utensils in advance and provided the conditions for the students to do experiments. Then, the children did both demonstrations and peer observation: one child wrapped soil in paper and gave it a hard pinch, and after a while on the paper there were water traces to prove that there was water in the soil. Another child ran to the podium and put some soil in a glass of water. The other children stared intently, and after a moment found that the water had bubbled up, proving that there was air in the soil. Another classmate burned the soil and the children saw white smoke rising from the earth and smelled the stench, proving that there was not only water but also humus in the soil. By observing the experiment, the children knew that the soil contained sand, clay, humus, water and other ingredients. The harvest of observation excited them and aroused their enthusiasm for further exploration.

At the end of the class, there were still student who had done enough to provoke a challenging questions: "Teacher, soil is useful for plant growth if it contains humus, which provides nutrients for plants, but I found that humus is only a small

part of it. Experiment made the tree grow to 68 kg, but the soil only reduced by 0.5 kg. Obviously the main nutrients for tree growth are not from the soil, the soil contains almost no nutrients, so for that tree to grow, where do the nutrients come from?" The student's problem had gone far beyond the text.

The problem itself shows that observation has aroused students' speculative interest, and the student who asked the question and the whole class are active in thinking, with all kinds of hypotheses and speculations hovering in their minds. Although this was not the teaching content of this lesson, the teacher still fully agreed with it and left it as a topic for the students to solve. After class, they consulted the material, consciously discussed, debated and communicated, and finally understood that sunlight and water photosynthesis is the important nutrient source for growing trees. In his "teaching postscript" the teacher wrote, "Contextualized courses provide an effective model for children to understand nature, to nurture emotions that love nature and love science." Letting children into the observation situation allows them to feel that nature is colorful and that science is magical and interesting. The beauty and wisdom of the scene of fascinating nature and the science of the magnificent picture present to their eyes arouse children's curiosity and amazement. Let them observe, ponder, conjecture and think, let them gain the endless emotional and rational joy.

Witnessing the new scenes in class, I deeply felt that contextualized education makes the classroom teaching of various subjects bright, vivid and interesting. Contextualized education is generally welcomed by children. I summed up context education of the sound body in three words: emotion, interest and beauty. It prompts the heart, develops imagination and improves disciplinary skills training.

In later subject contextualization, beauty was more prominent, letting children feel the beauty of music, the beauty of painting, the beauty of sports. So that in the process of aesthetic education students' love of art and sports can be cultivated. Artistic literacy is an important part of human accomplishment, because it affects people's feelings and morals.

3.4 Contextualized Learning of Art

3.4.1 Inscribing Knowledge and Skill in Context and Promoting Competence in Art and Sport

By creating a relevant situation, teaching knowledge of the subject and training in skills are embedded in a vivid situation, which attracts children to take the initiative in the learning activities and receive good results.

For example, the fifth-grade music class was learning the "Nantong chant" from their local textbook. Working people for their own encouragement want to express their feelings in this form of folk song with its original ecological charm. This is

obviously unfamiliar to children. A teacher of children from the Nantong culture suggested the subject and did the first demonstration of the song. This was full of the rich flavor of the exotic, so that the children were suddenly excited.

The teacher put the Nantong chant against the background of the children's home culture, so that they could understand the meaning of a cultural rhyme. Taking the children into the specific situation of the chant in Nantong deepened their experience and inspired emotion. The teacher described it like this: "Now let us go back to the past. We have come to the Yangtze River, a group of trackers are carrying a rope and with human force they pull the windward ship forward. Now we are a group of trackers on the Yangtze River pulling the rope, shouting the chant. Who is the leader of the trackers?" The children invariably did a boat action while singing the Nantong chant. Then the teacher took the students to the ridge: "Now we pick up the baggage, shouting from afar. Who will be the leader of the porters?" The children did the actions of carrying a burden while singing the Nantong chant.

When the children's singing and playing was in full swing, the last teacher created rehearsals for the children's version of a "Together Nantong" party situation, an activity that became a paradise for the students to create! In groups they adapted the drums of the Nantong chant to create the famous national "Haian Flower Drum"; turned the symphonic version into the emotional chant of the beautiful "Diffuse River Chant"; and altered the dynamic rock version to the "cat step," a model showing a Nantong specialty, blue Calico. Reports of the performance were wonderful, and through the Nantong chant students delved further into their hometown to gain a deeper understanding. Local music fostered their love and appreciation of music from a variety of perspectives.

For art, children like graffiti from a young age. However, to be very clever it should leave almost no trace. We always let children into situations that enable them to feel through their artistic activities. I remember the art teacher in the third grade teaching the three primary colors, red, yellow and blue. With children's vision and early recognition of experience, the key is an "original" word; that is to say, "change." The teacher created a small forest studio. The situation let the students play the small tabby cat, the chicken, the duckling, the small goat, and play "The Small Animal Has This Color Face" game.

The teachers said: "Now we will go to the forest studio. You, the little white cats, small chicks, ducklings and little dogs are tiny painters. I am an old goat painter. Today we are going to draw the view of the shore that we observed yesterday and then paint it in watercolors. I am only going to give you three colors: red, yellow and blue. What do you see on the river? What color is it? What are you going to paint?"

"I want to draw a big willow, but I do not have green, what can I do?"

"I want to draw an orange tree, but I do not have orange, what can I do?"

"I want to draw the trumpet flower, but I do not have purple, what can I do?"

The "old goat painter" said: "I will now tell you a secret. Today you have red, yellow and blue and these are called the three primary colors. The twelve colors in our watercolor paint box are made from these three colors."

The children were very surprised to hear this. The teacher was not in a hurry to tell them which colors to mix to obtain which color, saying: "You are small painters, you try first. For example, mix blue and yellow and then paint it on some paper. What color do you get?"

The little painters couldn't wait to mix up their colors and they shouted: "It's green!"

The teacher let a few of the small painters compare the colors they had obtained to show them that all greens are not the same, there are darker and lighter greens. The teacher guided the students and then let them freely choose the color they wanted, and then put their own color works at the front of the classroom one by one, showing that they were really colorful. Through the children's own attempts and the introduction of their own experience, and then after the timely affirmation and guidance of the "old goat painter," the students finally understood the magic of the three primary colors. They were excited about learning new knowledge and skills.

In fact, walking, running, jumping, throwing a ball and gymnastics are basic projects that growing children should learn to master. Not only that, physical fitness training remains important when they reach adulthood and into their middle age. In order to make the teaching of physical education have a far-reaching impact on students, our sports teachers always try to embed PE teaching and its training essentials into a life situation or a fairy tale situation in which the children are interested. For example, in the first grade the standing long jump is no longer taught according to the "class of students → teacher explains methods → demonstration → students take turns" kind of program. When the teacher lets the children know the way to do a standing long jump by explanation and then demonstration, the effect is certainly not ideal; first the children need to be happy and interested. The teacher created a "Frog Learning Skills" teaching situation, vividly depicting a few small frogs in the river on the lotus leaf jumping on the screen, guiding the children to understand the action of the standing long jump. When the children had begun to master the essentials, but also to continue to open the situation, the teacher encouraged them to be enthusiastic little frogs, jumping up without waiting for the teacher's orders. At this time the teacher was a big frog and the small frogs tried to imitate each other, creating a "Frog over the River" situation, with a symbolic river and a small island painted on the field, wearing headdresses and playing music. The teacher's vivid language description made the children forget that they were in class learning, they were so excited. The teacher also prompted the students to go over the river, from one small island to another: what method could they use to jump in the most stable way and not fall into the river? The children in their imaginations were standing on the island and finally kicked out their feet to jump, realizing that landing on their feet was the best way. They tried to jump over the river and hop

onto the island. The playground burst out cheering, the children's physical fitness was fully exercised and developed, and their body and mind also experienced unlimited pleasure. The standing long jump method may not have been fully mastered, but they were happy to jump, jump and jump some more.

Contextualized sports are lively and vivid, often with the performance of a situation. The most common are fairy tales or fables, with the children playing a role in the story. The big horse, the wolf, the giraffe and the black bear, or the police officer and the sports teacher, are the children's favorite roles. Understanding and mastering athletic skills through the role effects of acting, in a situation in which children have little knowledge of the educational intentions, brings them joy and excitement while they are learning skills in art and sports.

3.4.2 Bringing Physical Pleasure with Aesthetics and Enriching Their Spiritual World

Art and sports are undoubtedly full of beauty and children should be fully experienced in their study. For primary school students, the purpose of art and physical education is not to cultivate future musicians, painters and athletes, but to cultivate people who know beauty, love the beauty and enrich the spiritual world. Therefore, the traditional teaching of sound and beauty emphasizes skills and neglects culture and aesthetics, as well as not cultivating children's aesthetic taste and ability, which is obviously deficient. The beauty of contextualized sound is that it cultivates children's aesthetic interest and sporting enthusiasm through singing, painting and sports, and encourages a love of art and sports from childhood. Because of the cultivation of these qualities, its significance is profound and remote.

The cultivation of children's aesthetic ability starts from the beauty of feeling, and the contextualized course advocates that the art class should make children's vision feel beautiful. The enthusiasm for beauty that art in context can bring to children is enormous. One student wrote "Spring in My Heart" after writing the message: "I have never seen such a beautiful spring, the sky is so blue, water is so clear, grass is so green, the rape like golden spray, yellow so bright, dizzying … Spring is so cute."

For many years, the content of traditional physical education has been the parade, gymnastics and the throwing, running and jumping skills of track and field training; even basketball, volleyball, football and other ball games are not part of primary school PE but the content of extracurricular activities, or school team training projects. Practice has become the essence of physical education, with almost every lesson requiring teaching content, and "play" seems to be a taboo word. In this kind of physical

education, the child almost entirely obeys command, and passively and mechanically repeats actions; only when there is a certain degree of difficulty in their training, a physical release, do they feel a kind of excitement, a satisfaction of their life needs. As to how fitness in practice produces a joyful mood, obtains aesthetic pleasure and a desire for accomplishment, that is very difficult to say. As someone who was once an athlete, I longed that children in a PE class should not only exercise their muscles and bones, but also should feel the joy of sports, the liberation of physical and mental pleasure. This is not only a requirement for life, but also is necessary for spiritual development. In other words, in modern primary school physical education, we should pay more attention to the synergetic development of children's physical and mental health.

In teaching a martial arts textbook, created a "small fine Wu Hall" situation, in all "small apprentice" and "master" learning martial arts, play "Chinese Kung Fu" background music, "small apprentice" in the sonorous sound of music. Feeling the beauty of the hardness of Chinese *wushu* culture, appreciating the small partners and their posture in martial arts, the shape of the beauty, brings endless fun to children. Or for teaching endurance running, create a "walking spring" situation against a background of "spring outing" music, so that children can walk, run and jump to the beautiful sound of music, and like the true spring season be happy and forget their fatigue. The beauty of the situation gives children endless pleasure.

The beauty of art and sport is a physical beauty that children can see through their eyes; that is, through vision. Music has beauty in the flesh, no less than fine arts and sports. Musical melody, rhythm, speed synthesis of the language is in the aesthetic performance, in the lyrical aspect can be said to be the most powerful, even the most shocking, is also the most delicate, is the most likely to arouse the listener's association and resonance, it is through the auditory as if you can see. Therefore, in the music contextualized course, we especially emphasize the cultivation of children's aesthetic taste and ability through music.

For example, in the first grade we taught a piano "Frog Chorus" appreciation lesson. This piece skillfully used a register change, and vividly depicted the old frog and the small frog happily singing together. The teacher used the fairy tale "The Singer in the Forest" to take the children into the Frog Kingdom, where an innovative concert was being held. The children listened to the bright and light melody of the alto, which was a lively and lovely little frog, and then to the bass playing a loud and vigorous melody, the skillful singing performance of the old frog. The teachers and students played frogs of the appropriate size and sang sentences in turn, immersed in the fairy tale world and laughing along with the fairy tale characters. The situation helped the child to feel the emotion and the scene in the melody, and the students seemed to see the visual image from the music, greatly enriching their aesthetic feeling and leading to their body and mind being infinitely joyful.

In the past music lessons were often used to teach a song to a child, or to teach some musical theory. The child only felt the beauty of the song itself; in fact, the author and their works, especially those of famous musicians or classical songs, were often ignored and did not form part of the excellent curriculum resources for

students' aesthetic education. This kind of expansion of related teaching content is very valuable and contextualized teaching frequently fully utilizing such materials to realize its aims.

Because of the beauty of the situation, the children practiced and sang beautifully. In their happy practice of music, sports and fine art skills, in the process their ears were tempered to appreciate music, their eyes aesthetics, will show the posture of aesthetic. With the edification of one lesson, the children's aesthetic vision and ability have developed. This is the important content which art and sports disciplines should train and the traditional art discipline neglects.

3.4.3 Linking Training of Imagination and Skills and Developing Creative Potential

It has been mentioned that in the beauty of contextualized sound, which aims at cultivating children's aesthetic sentiment and sports consciousness, the training of skills is not abstract, boring and mechanical repetition, but a fusion of enjoyment of art and sports. Children's happiness and aesthetic pleasure after entering such a situation will encourage them to learn the knowledge and master the skills more actively and with initiative. At the same time, because of the warm emotion in learning knowledge and skills, as long as the teacher is gentle, using images and beauty it is very easy to arouse children's imagination. Using situations to inspire children to imagine, to experience, to behave enables them to acquire pleasure while mastering skills, improving abilities and developing creativity.

Music, whether it is a song or instrumental, is extremely powerful. Its rhythm, melody and speed constitute a music-specific language. This is not like the language required for the medium of words, it speaks directly to children's senses whenever they like music. They understand music in different ways, and the joys and vibrations that music brings to them are unparalleled in any other form. Teachers make full use of this characteristic of music, combining it with fairy tales familiar to the children, encouraging them to imagine and compose the musical language of their own heart.

For example, the music teacher when teaching "Forever Live in a Fairy Tale" to a class allowed students to edit the guide and the play to suit their respective percussion instruments, highlighting the main melody and letting other accompanying instruments be a foil. The whole class sang and accompanied them with their home-made instruments, and their enthusiasm was unrestrained. The children said: "My cloth sandbag instrument is like a dwarf, Snow White is where I also go. When Snow White is happy, I am stronger, when Snow White is melancholy, I will be down." Others said: "My string of small bells sounds like my song, crisp and sweet, very attractive, and with it to accompany and enhance the rhythm, I feel so touching." As the music teacher said, "Cultivating students' creative consciousness

and creative ability is the highest state and best effect of instrumental music teaching."

The children's own production of "Earth Metronome" was very interesting. With cans and beverage bottles, some loaded with rice, some beans, some stones, some sand, they made their own production, whose operation was particularly cordial and excited. This kind of emotion makes children learn percussion, mastering the rhythm of these more monotonous basic musical skills, the training in which has become so colorful.

This tells us that the music discipline fosters the creative potential of children, mainly in the search for a way that best enables them to exert their potential. The process of music teaching allows students to participate in the shaping of a musical image, so they are not only familiar with the tone, they grasp the strength and experience the song's emotion, expand the content of the lyrics, but it also plays to their imagination and inspires their desire to express. The children made up more than ten verses, developed creative thinking and demonstrated their individuality and creativity in their active participation, which was imperceptibly influenced by the true, the good and the beautiful.

Guided by this concept, the classroom expands the space of children's imagination and develops their valuable potential. In this class, teachers will be impressed by the imagination of children, their creation of strange things. Of course, the key is that the teacher's own teaching design should be creative, its form should be novel, to leave room for children to work within it.

It is not just in music that creative potential can be fostered. Art is the use of certain lines, colors and other "meaningful forms" to express emotions. Children often use some special symbols to express their emotions in artistic activities. In their eyes, drawing lines, painting colors and pinching clay is more important than the final image. That is, they are trying to express themselves in the form of art. A research in Cornell University in the United States found in a long-term children's painting experiment, "If a child has an important thing to say in his heart, he will be very excited when he paints." Our art contextualized curriculum creates multilevel activities, so that in the process of painting and manipulating we can cultivate children's expressive and creative abilitoes, enlighten the artistic potential of their talents, cultivate their aesthetic eyes and lead them to be influenced by art.

I suggested to the art teacher, "Try to combine training in disciplinary skills with the development of children's imaginations." Therefore, the teachers in the art group abandoned the simple skills, the one-sided, mechanical form of training, and with their words created a specific situation to arouse corresponding emotions in the children, so that they were free to draw and there was no frame, no strips, no bonds. Therefore, the children's characters, images and handiworks were a form of self-expression. Children were accompanied by their own emotions, expressing their real feelings with a paintbrush or by hand.

In order to let the students touch a Chinese painting, feel the pen, ink and paper and the inkstone treasures, the teacher of fine arts designed an "Ink Painting Game" so that they could enjoy the painting and understand the different pen and ink

methods. First they got to know the brush, ink, inkstone and Xuan paper, and then through the use of the brush they played the game, which taught them the center of the brush, its side and front, and the opposite front of the pen, a method that students tried after the teacher's demonstration. The exchanged and appreciated the works, evaluated them, felt the Chinese calligraphy and the art of painting, its cultural taste and exquisite tools. The students felt fresh and interesting, and using ink painting generated their interest.

The contextualized curriculum encourages children's work to fly to the outer planets as they imagine, walk and work by remote control, and in their writings plants and animals can speak as human beings, living and feeling. They break the limits of real life to free their imagination, leading to unrestrained expression and arbitrary combinations, creating bizarre, novel images. The children's works show that the characteristics of human beings are conscious activities, combining hands and brain, unifying explicit and implicit activities, operational and thinking activities. Painting provides a wide space for children's free imagination and is very conducive to the cultivation of creativity.

The result of contextualized teaching is a strong love for art. Children like to paint with sticks, with chalk and sometimes with crayons and fingers. As soon as they have free time, they pinch clay, play with sand, build blocks, throw bricks and use base stones. In the contextualized course, they are active, showing their curiosity about life, their concern for nature, their pursuit of beauty and their strong creativity. Their shape, imagination and free expression in the activity are very emotional. This kind of emotional concentration and devotion, the process of harmonious and joyful attention, not only has aesthetic characteristics, but also embodies the main characteristic of creativity.

Therefore, the cultivation of children's creativity in primary school art education is the cultivation of child artists: "Children as artists are creative children." (Li, 2001:p.197) In practice, by attaching importance to students' aesthetic feeling, creating "a living space permeated with the intention of educators, rich in beauty, full of wisdom and children's taste," teachers are deeply educated in the situation, which is an effective way to cultivate creativity and "children of art."

The beauty of the sound body also leaves a great deal of space for children to exert latent creativity because of the image of aesthetic display and the function of expressing contextualized awareness. Through the creation of the situation, skills training in the situation can easily arouse the students' imagination. Imagination wraps skills training in poetry and fun. At this time, the teacher timely 1.1 dial, children's wisdom spark will be ignited.

In the context of optimization, the curriculum of a sound body combines the subject curriculum with children's activities. Because of the optimization of the situation, the children's emotion is aroused; therefore, the learning of subject curriculum knowledge and skills training become the subjective needs of children, so that their subjectivity is embodied. The creation of potential also occurs because of the active input, since the emotional drive obtains very good development, and the teacher's ability also leads to development in the subject contextualized curriculum.

3.5 Contextualized Learning of Moral Education

On the basis of a large amount of practice, I put forward the proposition of contextualized moral education; that is, optimizing children's space for growth, making moral education a kind of intangible influence, guiding children to be independent and letting moral education become their active participation in practical activity.

3.5.1 Developing an Impact on the Child

Every single child grows up in a very specific environment. The environment and the people around them, in the course of their activities, constitute a static and dynamic, materially and spiritually intertwined living environment. The impact of this environment on children, though imperceptible, is far-reaching.

The environment for children's growth is much wider than that of a 50 or 60 m^2 classroom, but because of the traditional notion that schools are a special place for imparting knowledge, many people cling to the distorted educational goal of "exam score education," which makes the educational space so narrow that the walls of the campus, the low windows and doors of the classrooms, block children, society and nature. In such a narrow world, how can we cultivate children to adapt to the future, adapt to the world and harness the modern talent? In this closed, narrow world, the old knowledge and imprisoned consciousness are unable to adapt to the future of the complex information society. Therefore, children's moral education must first optimize the growth space.

The environment and human behavior have consistency and in the long term a good environment leads to edification, and the child can form the correct moral ideas and behavior. Modern education is an open system, and moral education should expand its space. Given the contextualized curriculum's optimization of the moral situation, its impact on children is strong, but also extremely extensive. The latest brain research shows that the environment directly affects the growth of the brain. Therefore, contextualized education advocates building an optimized growth space for children to make full use of the environment and control it. Through the diversity of extracurricular educational activities, the atmosphere of the school will be happy; through the theme of large-unit educational activities, the effect of education will be strengthened; and through the field of contextualized activities, the source of classroom spiritual activities will be enriched. This space seeks to be sentient and full of beauty, from the teaching of various classes to the campus of various activities, and even the family, constituting a continuous, consistent goal of harmony. Optimize the education space, form a multidimensional structure and enrich the "educational source" to promote the development of children's physical and mental qualities, so that whether in school or in the family, the soul is nourished and comprehended, thus forming the influence of moral education. Children in this

harmonious space are permeated with rich educational elements and imperceptibly nurtured and enthused.

In particular, characteristics of typical events of the time should be seized on to carry out related activities, but also to enhance their impact. On May 12, 2008, in Wenchuan county in Sichuan, a catastrophic earthquake occurred that brought heavy damage to people's lives and property. We quickly mobilized the whole school and held activities around the theme of "emotional disaster area, outstretched friendly little hand." The children were all concerned about the disaster area, watching the news every day, reading about the earthquake and the relief activities in the newspaper, and the whole school formed an atmosphere of being the heart of the disaster area. The school radio station told the students the true story of the disaster and the touching deeds of relief heroes; the classes organized students to collect news reports and pictures to decorate the blackboard and classroom walls; the teachers in the classroom led the children to recite moving poems about the disaster area. Every day, they all watched the latest news: the weather had changed, the plane with relief supplies could take off, the road was cleared, the 100,000 people trapped were saved, the miracle of life happened, and someone who was trapped for more than 100 h was rescued.

Under such a concentrated and intense environmental impact, the teacher guided the children into thinking about what they could do for the disaster area. They had a lively discussion because of the enthusiastic mood. The children quickly began to act and in their respective classes they enthusiastically donated. On this basis, the group organized the whole school to hold a rally in the playground. Teachers and students were very emotional, formed a person to help others, willing to help the vivid situation, the whole school students neatly lined up in the playground, even the teacher lined up a good team. The first thing the children saw was the retired teachers who came to donate, some of them with temples already gray, some with silver hair, so sincere and solemn when they put their retirement pay in the donation box. This was a silent education. Then, out of pure love the children put their pocket money seriously into the donation box. The playground was seldom quiet, but everyone's heart was warm. Witnessing the scene, the children were amazed at the donations from the whole school (the whole school donated 289,000 yuan) and also at their enthusiasm to help the children in the disaster area. Especially in three days of mourning, watching the solemn flag lowered for the death of their compatriots, the dignity of life rising at the sound of the whistle, all the students standing to attention then bowing to mourn for the victims, it was the first time that the small minds had experienced such a scene.

In this time, contextualized moral education expands the educational space in breadth and depth, enhances the overall benefit of education and plays a great role in boosting children's moral qualities.

3.5.2 Moral Behaviors Driven by Affection

Traditional education is mainly indoctrination and the moral requirements of teachers are often conceptualized, so that students do not feel the relationship between moral education and their own needs. This sense of distance also makes moral education superficial, not really entering children's hearts. Therefore, contextualized education advocates shortening the psychological distance and integrating moral education into their lives through the real ways that children can perceive. By this means, children can be actively engaged in the process of moral education because of their emotional role.

3.5.2.1 Stimulate Aesthetics with Beauty

Children are born to beauty, because beauty can bring them joy. Contextualized education is the use of children's characteristic of beauty in moral education to show the image of the aesthetics and arouse good feelings, so as to awaken children to the surrounding world, stimulate love for others and sow the seeds of good. Love can act as power.

At the time of the Qingming Festival or Tomb-Sweeping Day, we never forget to go to Jisao Martyrs Cemetery. Each of the children holds their own little white flowers, led by a pennant celebrating the martyrs that came before, in the cypresses between the white flowers. Then, the procession was pay respects to a dead person at his tomb before the song, chorusing: "Your blood is not white, we will move on. Because the martyrs gave a solemn sacrifice, we are more aware of the solemnity of the pine and cypress, because the field of peace is good, we have more sense of the heroic deeds of the martyrs." The children's singing is full of truth. We believe that heroic martyrs are a shining treasure of moral education, and it is our duty to pass this wealth on to our children. Because the image of heroic martyrs is tall, they have a glorious performance, their hearts are beautiful.

Of course, more beauty to inspire love permeates the children's daily activities. Cultivating their love for the motherland begins with the love of home. The love of rivers, village and folk culture can also arouse their love for their hometown.

3.5.2.2 Guide Children's Love Based on Behavior

Once a child's inner moral emotion is aroused, it will drive the generation of moral behavior. We first contacted the blind school to learn how blind children use their hands to read. Then we let the children close their eyes and realize the pain of reading without eyes. For a personal experience, the teacher took the students to the blind school to visit, see how blind children learn. Children have a more vivid

experience of the hard work of the blind and heartfelt sympathy for their unfortunate little companions. Some students said: "We have a pair of bright eyes, how happy we are. Blind children cannot see everything so they love learning, we should be diligent and hard-working." The students also made their own calendars to make the blind children can touch the hand, such a wall calendar donated a few cars, was sent to the Special School.

Of course, it is impossible to build up good moral qualities in children by a single activity, especially to expect it to have a long-term effect. There are many classes in our school under the influence of this kind of "loving" atmosphere which has produced the positive consciousness of action. The class has a child who has suffered a long illness that means he has difficulty in walking, and from the first grade teachers and students began to care about him and help him. They took him to the toilet, downstairs, back to the teacher and to daily study, and students everywhere helped. He went to Beijing for surgery and the students wrote him dozens of letters of condolence and blessings. Reading these letters, he felt the warmth and strength of the class, and before and after the operation was very brave, not a tear fell. The classes of students also sent love to the remote one of the poorest areas in China, to which the children wrote letters, sending their clothes and learning supplies. The five (1) class teacher learned from the news that on a mountain in Yunnan, primary and secondary school transportation was inconvenient, so children had to walk to school over a very dangerous chain bridge, but that now there was funding for repair of the bridge. Therefore, the whole class mobilized donations for the construction of this "Love Bridge" to contribute a little bit of strength.

Love will drive children to act. Love as a guide can often lead to satisfactory results. Because it conforms to the law, love will produce power, and driven by love children will undertake conscious, positive action.

3.5.2.3 Cultivate Habits Based on Children's Behavior

Primary education is, to a great extent, a very important form of education. Therefore, the moral education of children is finally internalized into their conscious behavior and habits, which is its aim. Habit is the performance of stable behavior, and in the context of the exploration of moral education, I found that habits lead children to "doing" in the continuous practice of habit formation. We proposed a strategy of "doing" to develop good habits. To this end, we launched a "behavioral training course" in the first grade. The lower grades are an important age for cultivating education, when we lead students to experience moral behavior which is closely related to them by simulating their life situation, starting from the subject of moral education and coming close to the reality of junior children. We simulate families, shops, theaters, traffic crossings, and the activities of the children's palace, People's Park and so on, conducting training on children's moral deficiencies and the requirements of good habits.

Box 3.2 Case Study in Moral Education

Now that parents' work is busier, many grandparents live in the countryside and children have very few chances to visit the old people. We designed a "Go to the Countryside to See Grandma" behavior training class, which carried the venerable old love of education to the student. We designed a series of situations for which the teacher played the role of Grandma and the students played the grandson or granddaughter.

Situation 1: Buy a Gift

The child took his mother's money to the shop to buy a gift for Grandma. At the shop, the assistant aunt asked the children what they wanted to buy (the teacher played the salesperson) and deliberately recommended to him chocolate, transformers, food and toys, all rejected by the children, who said: "My money is to buy a hat for Grandma." Some students said: "I like to eat chocolate, but if I buy chocolate I have no money to buy a gift for Grandma. It is cold so I could buy her a scarf or a pair of gloves." Others said: "I will buy Grandma a hot water bottle."

Situation 2: On the Bus See Things Grandma's Way

An old man got on the bus. There were some free seats and some of the children were sitting as usual. When the seated children saw others students stand to give up their seats, they realized that they should also offer their seats. Then the situation reoccurred, embodying the behavior training. The children were still sitting on the bus, singing "little driver" children's songs, as if the bus is speeding along the road, giving children a sense of reality. This time there was an old woman getting on the bus, but this time all the children stood up, warmly greeting her with "Grandma, sit down," and some said, "Granny, I'll help you with your bags." The children were very excited about their progress.

Situation 3: Going to Grandma's House

When you get to Grandma's house, what do you do? Grandma's ears are not good, but you don't want to shout. How should you talk with Grandma, tell her what you bought her and ask her if she likes it? Practice talking to Grandma.

Each of these details allows the children to think for themselves and are repeated. They learn from their own behavior how to visit friends and relatives, how to knock and enter the house, how to say hello, and how to learn to care about Grandma and ask her questions. This is a series of behavioral essentials.

Situation 4: Be Grandma's Little Helper

In the country Grandma grows vegetables and cooks them for her small grandchildren. How can you help Grandma dig up or pick the vegetables, and after dinner help her to clear the table? After discussion, the students are trained to play this role.

The moral emotion of caring for the old is integrated into behavior training in a continuous situation. In this way, children not only learn to be tasteful, but also very easily transfer the behavior to their real life and use it. Their closeness to Grandma stimulates care for the elderly, and the truth is self-evident. For example, on International Women's Day, each grade according to the age characteristics of the class does "Mother's Apron," "Today I Am the Master," "Give Mom a Surprise" and other activities. Beforehand the children discuss how to celebrate the festival for mom, and senior female students are even specially invited to play the scarf aunt to teach their classmates how to knit a scarf for their mother. The children were put into action at once when they came home from school. After investigation and parental feedback, they know that when the mother comes home from work the younger children can take the initiative to pick up their mother's bag, pass her a pair of shoes, give her a cup of tea and a kiss; middle and senior students have to do greeting cards or write a poem or a letter, or help their mother mop the floor or fry food she likes to eat. Many mothers were moved and got in contact to write about their feelings: they felt the children were growing up, being sensible. The scarves that the children wove were particularly warm. There were mothers who write the children poems or sent letters to the unit colleagues, together with saying that they were very touched.

3.5.3 Creating Moral Education and Playing an Active Role

At school, children's favorite thing is activity. A few years later, most people remember the activities they took part in when they were at primary school. It can be said that activities are the most motivating of children's emotions, the most inspiring of their subjectivity, but also the most comprehensive form of education. Therefore, contextualized moral education attaches great importance to children's activities as a way to educate them morally. In fact, only in activity can the child produce the real experience and the sentiment, thus actuating moral behavior.

I still remember that before the new year, in order to let the children know how to cherish the time, we held large-unit activities with a "Time of the Elderly Race" theme. The children focused on the big playground and each class rushed out Chi poetry: "Tomorrow, how many days of tomorrow are there. Less effort today, worry about it in the future." The children recited the verses they had already memorized in their hearts. That sentence of the poem seems to be the voice of children, expressing their determination to cherish time. There was a string of balloons with tails in the sky, which said "Race against the Old." We put a beard on a teacher who was labelled "Race with Time Old Man," and put on a tall cotton cap and a long purple-red padded silk jacket. Activities in the new year's fireworks sound in the curtain, the teacher led the children and the "Time Old Man" race, along the "To

Tomorrow" runway, we are filled with pride of running … This activity is far more vivid than simply saying "cherish time" to children.

With a lot of practice, our contextualized moral activities were gradually systematized, with many fixed programs and characteristics.

3.5.3.1 Developing Weekly and Festival Activity to Build the Traditions of Moral Education

We created many campus-specific festivals for the children, such as "Fairy Tales," "Love Book Week," "Create the Month" and so on. For example, every February, students just entering the new semester in the winter vacation will each get a book which also is a good time to read, so we set the first week as "Love Book Week." In Love Book Week we not only guided children how to cherish textbooks, but also encouraged them to read extracurricular books. With the slogan "Good books to make friends," we let the children experience the beautiful happiness of reading in spring. There was a wonderful opening ceremony of many children's familiar heroes, and the schools collaborated with Xinhua Bookstore to hold the "Golden Apple" book fair, so that children could feel the pleasure of traveling through the sea, inviting famous children's literature writers to tell them the story of their books. In the meantime, the children took the initiative to save their pocket money to buy books for poor students, and donate their favorite books to enrich the class's book corner. On Love Book Week days, the whole school was permeated with the pride of reading and an atmosphere of reading for fun.

May is our "Creation Month," in which, combined with Labor Day, we focus on creative education, encouraging children to give full rein to their creative potential, bold imagination and positive innovation. There is extensive development of science and technology small productions, the selection of scientific papers and other activities, so that children experience the creation of happiness. The "Fairy Tales" festival before and after Christmas are the happiest days for children. They walk into a magical fairy tale world, realize the truth and goodness in fairy tales, and let their wisdom soar on the magical wings of fantasy.

Children are the real happy owners of these and other similar education weeks and festivals, and these have become an important part of school culture and a new educational tradition, so that moral education has been strengthened.

3.5.3.2 Emphasizing the Main Position of Students with Various Activities

Moral education should not be rigid or monotonous, or students can only participate passively. Contextualized moral education advocates the development of morality in a variety of activities, so that children cannot help themselves from participating in the initiative. We take "child autonomy" as the core, from the school to the class and the team, from the school to outside, with a variety of activities with the content

of moral education embedded in them. The whole school has the theme of large-unit activities, each class has themed classes, and the students are completely free to design autonomous teams. From the classroom to extracurricular activities, from campus to off-campus and even family, activities occur under the guidance of the theme of mutual migration, interaction and complementarity. These attract the active input of all students, who feel and experience the activities. Of course, such activities can also develop students' wisdom, deepen the sense of closeness with the teacher and promote friendly cooperation between students, resulting in a good educational effect, so that moral education permeates into children's lives.

We also attach great importance to the cultivation of children's civic awareness and basic moral qualities. For example, May 15 is world Water Saving Day. In view of the current widespread waste of water and pollution of water resources, the school decided to combine this day with "Cherish Resources" environmental education. The warm-up started with the students, and everybody, not only the children, collected their own knowledge of water, data related to the Earth's water resources and a variety of water-saving strategies. The teachers also contacted the Water Technology Museum and took students to visit the scene, to see at first hand how the muddy water of the Yangtze River goes through the complex purification process to turn it into clean water. The Municipal Water Resources department and the waterworks also united with our school to carry out this activity, and produced more than ten pieces of information with words and comic books to show the students how drought was threatening the world; water shortages in the capital, Beijing; China's focus on water resources; how to develop a good habit of water saving, and so on.

After the children had a certain understanding of water and the lack of attention to the problems of water, classes organized an autonomous team to let children express their feelings and ideas. The children also created 100-meter water-saving posters, using advertising language on a painting scroll, and wrote on them "$number Love Water," "Water-Saving Diary" and other compositions. In the brigade rally the teacher affectionately told them that water is the source of life. It created the whole world, feeding the whole of humanity and nature. It provides energy for all life and promotes the sustainable development of society. However, our water resources are limited. Although 70.8% of the Earth's area is covered by water, 97.55% of the water is seawater, neither directly drinkable nor irrigated, and in the remaining 2.45% of freshwater, the amount of water that human beings can actually use is less than 1% of the world's total freshwater. Through a series of water-saving activities, the students came to understand the basic national conditions of a shortage of water resources, cultivated the good behavior of consciously saving water, and further radiated the information to their family and outside, making a due contribution to building a water-saving society. The children realized that because of water, the flowers are beautiful; because there is water, the fish are happy; because there is water, the pasture is crisp and healthy; because there is water, life is wonderful. The brigade department also issued a proposal to call for more positive action. The children said that for our common homeland, for our common happiness, in order not to let our tears become the last drop of water on

Earth, we should strive to save water always, everywhere, everyone should save water and actively carry out water-saving activities, to protect good water resources.

It is in such multidirectional, continuous activities that children give full play to their talents, finding materials, creating many works of relevance to the theme, but also wring a diary of their deep feelings and gradually cultivating the "I Am the Small Master of Society" concept. This is using the lively classroom of nature to carry out moral education. Nature is full of novel mysteries for children and countless educational elements. In the beauty of nature, children tend to let go of their hands and feet and devote themselves wholeheartedly to its exploration.

During the Spring Festival in 2008, the amount of snow came to national attention. Snow is also a concern for children, and in the past every snowfall had brought them surprises and laughter. Although it was the winter holiday, the teachers still realized that this was a not-to-be-missed opportunity for moral education. So they through the "Home School Pass" they sent a text message to tell the children to pay attention to observing the snow, taking photos or recording what they observed in a diary. In the first five grades, there was a "Snow in Love" activity. The children wrote a touching story of the snow. There were stories, reports, pictures they took and a more than ten-piece exhibition board. Through the small Magpie radio station, they also spoke to the whole school about the heavy snow they had seen and how their parents had removed obstacles to pedestrians, as well as rescues they had heard about in the snowstorm. The snow brought a different meaning to the children, the whole school experienced the beauty of human feelings in the snow, but also it was a good opportunity for moral education in the new semester.

The autonomy of children in moral education activities is fully reflected in class management. Every Friday in our school there are children who design and rehearse their own autonomous teams. Some classes have a one-child system, taking turns to be monitor, arousing everyone's sense of responsibility, but also wiping the blackboard, collecting books and other class duties are assigned to every classmate. Everyone has a duty, everyone offers strength. Some classes arrange every day for a classmate to remember the class diary, do regular class reading, comment on what has happened in the class, as well as using the network platform to establish a class blog about the teacher's speeches, glimpses of activities, exercise shows, good deeds for everyone, parents' messages and other columns. This is a concentrated, fast reflection of the class's style. There are even many strangers who leave blog messages, commenting that these children are growing up very well. School, family and society all converge in the online home that the children have built together.

Contextualized moral education takes "beauty" and "love" to open up the child's heart, stimulate their independent consciousness in the form of activity and make moral education permeate every space of their life. By actually producing an influence, it gradually becomes their moral behavior.

Chapter 4
Strategies and Key Points of the Contextualized Curriculum

4.1 Four Features of the Contextualized Curriculum

As one of the theoretical frames of the contextualized curriculum, "artistic conception" (*yijing shuo*) absorbs the national culture and combines it with teaching practice. Gradually it forms the distinctive characters and unique superiorities of the contextualized curriculum, including the features of "vivid image" (*xing zhen*), "true affection" (*qing qie*), "profound scene" (*yi yuan*) and "deep implications" (*yiyu qizhong*).

Contextualized curriculums are popular among children. Due to the vivid environment, students can engage in it and they feel that subject learning becomes easy and interesting as it touches their mood. Meanwhile, it also obviously improves the efficiency of classroom teaching. In the implementation of the contextualized curriculum, the subject is not a thin textbook, neither is it the endless monotonous repetition of various exercises and dispensable and tedious questions. Students' vision and thinking are also no longer confined to the small classroom. The enriched and interesting teaching content, the vivid images, the real and touching affection and the intriguing philosophy of learning content make teaching into a more attractive, interesting and meaningful activity. The contextualized curriculum itself has the four features outlined above.

4.1.1 Vivid Image

Generally, children tend to know the world through images. The content of primary school teaching is rooted in life, which basically has a distinct image. Typically, in Chinese literacy, as the language itself is abstract, how can we help students understand the image and be influenced by the language that is a description of that

L. Jilin, *Curriculum and Practice for Children's Contextualized Learning*,
https://doi.org/10.1007/978-3-662-55769-3_4

image, meanwhile deepening their understanding of language? The creation of a context to inscribe the language of the text could help students understand the language in a specific context. As a result, the symbols of language are translated into a distinct image, so that students seem to enter into the scenarios where they can see the scenes and view the images. Only when students can feel real life can they step into the field. As the famous expert in Chinese literacy Ye Shengtao pointed out: "If there is a context in an author's mind, then it is easy to enter into the context." This context might be historical figures from former ages, or the roles of a foreign land, or mountains and rivers. It seems that there was a blind girl playing "Moonlight Tune" or little Vanka gently crying when he was writing a letter to Grandpa. The context shortens the distance between abstract things and reality, and also enhances the real sense of the image, triggering children's attention to the characters in the text, producing a meticulous emotional experience, and children's feeling toward the language of the text also becomes more sensitive.

In mathematics, as long as the content of the textbooks is linked with children's real life, it is easier to make students feel the value of mathematics in their application in life, so that abstract maths can become visible and touchable.

So the vivid image is the first feature of the contextualized curriculum. Nevertheless, this does not mean that the entire context must be a reproduction of the real image of life. Therefore, the main requirement is the image is full of real sense, which is similar to verve. It means that the image could be understand and could be imagined. Compare it to the use of line-drawing techniques in Peking opera. When the actor has a paddle, that means that the ship is running along the water. Although it is so simple, the image seems true to the audience. Similarly, contextualized teaching could employ an image of music or drawing to reproduce the context for the same reason. Therefore, "likeness in spirit" (*shen si*) show a vivid image. For instance, in the mathematics class "Understanding the Triangle," students were required to play the roles of members of the triangle family, right angle, acute angle and obtuse angle. The actors wore different triangle headdresses to introduce themselves to their classmates. The personification of the triangle prompted students to understand the similarities and differences of three kinds of triangles according to the simulated vivid image. This is not only for use in the classroom, the image is also a representation of learning.

Thus, a vivid image is not a reproduction of the entity, a faithful copy of the target or a photographic reproduction, it means simplifying the form and implying the entity in the structure of the corresponding image, which gives students a sense of reality.

4.1.2 True Affection

The striking goal of the contextualized curriculum is to promote the harmonious development of children's psychological qualities, intelligence and individuality, including their emotions. Children are the most innocent people in the world. Their

emotions are easily aroused. Once awareness can accompany their emotions, this will produce a "force" which directs them toward teaching. The subject contextualized curriculum could arouse children's learning emotion based on a vivid scene, together with the teacher's language and the classroom atmosphere, which becomes a multidimensional overall context. The role of children's psychology is then to motivate them to actively participate in all the learning activities. The contextualized curriculum precisely grasps emotion, which is the motivation of promoting children's development and launching a series of teaching activities. This is fundamentally different from expository teaching, which is a passive way for children to learn. Contextualized teaching makes children's learning be driven by emotion and an active development process. The value of the contextualized curriculum lies in inspiring children by the teachers' affection and then arousing the corresponding emotion in children, so "true affection" is another feature of the contextualized curriculum.

Students' emotion could be guided by teacher. The teacher's emotion for children is a conductor, a spark. Teachers should be adept at transmitting their feelings and emotional experience to students. I remember I taught a class on the "Guilin Landscape," and when I visited the Lijiang scenery again that peculiarly beautiful landscape give me a feeling of distant beauty and pride. So when the teaching began, I let the students see the mountains of our motherland. Because they were talking about beauty, the children were very keen. Then, I told them enthusiastically, I saw many foreign friends, they flocked to our motherland because of the great landscape in Guilin. The richness of its beauty and the pride of the nation filled my heart, and even I felt the emotional tone. The children were suddenly attracted to the beauty and yearned to enter the situation, and they actively read the text.

When producing his masterpiece "Earth, My Mother," Guo Moruo was excited to take off his shoes and walk with naked feet on the ground, anxious to bend down to kiss the earth. Our teachers may not be poets, but they also need to enter the situation of the text with their own feelings to arouse children's emotions. So I teach about the motherland's mountains and rivers, the scenery of the text, and it is as if the hills and rivers of the picture show in my eyes and I and the children are in the same painting. In class, I created the situation through imaginary travel or like a general, with the children "marching" through the motherland, enjoying its magnificent mountains and rivers.

Similarly in other disciplines, the aesthetic sense of the situation arouses the students' enthusiastic mood with emotion and passion. That is one of the common characteristics of the subject contextualized curriculum.

Because the contextualized curriculum has emotion as the tie, the truth is transmitted between teachers and students, so we will see children smile from the heart or not being able to stop affectionate tears running down their cheeks. Students always keep full of emotion for learning. They have a relative standard on the right/wrong and beauty/ugly, which could be attribute the positive influences by the factors of emotion in contextualized curriculum.

The contextualized curriculum allows the emotion of teachers to inspire and stimulate students, often through the teacher's words and what their eyes show. The expression of the teacher's emotion is vividly manifested as hope and expectation of students, so that it becomes a factor in the development of students' psychological qualities.

It can be said that emotion is the starting point of contextualized courses, but also the goal and destination of their pursuit. Moreover, as the educational purpose or destination is emotion, the performance of a more advanced level, a richer connotation of ideals, morals, beliefs and will, is a powerful affective force.

Liu Xie in the article "Wen Xin Diao Dragon, Sentiment Mining" pointed out "the sentiment of the literary classics" and advocated "for the sentiment." In the contextualized curriculum, we regard emotion as the lifeblood of educational teaching activities and the "soul" of children's education. In the essentials of the operation of contextualized courses, I put forward "emotion as the tie." In the basic mode of constructing contextualized education, I propose to "shorten the psychological distance," eliminating the distance between teachers and students, create the interactive context of close, helpful and harmonious relations between teachers and students. In class, we should create beauty, wisdom and interest in the teaching situation, so that children feel favor toward their teachers and the teaching materials feel near. Because of the closeness, love will be generated, so that the children's activities are done in the best mood state. Cognition and emotion, study and aesthetics, education and culture are comprehensively manifested.

The contextualized curriculum is true, prompting children's emotional participation in cognitive activities, fully mobilizing their initiative in learning. Children's thinking activity enters the best state and bursts out into sparks of surprising wisdom, the latent wisdom obtaining a good revelation of the optimized situation. "Let the emotion enter the classroom" and the teaching realm, and through contextualized teaching this pattern is achieved.

4.1.3 Profound Artistic Conception

The content of each textbook is derived from real life in the final analysis. Contextualized teaching and contextualized education take "situation" instead of "scene," because the situation should have a certain depth and breadth. The characteristics of "the artistic conception is distant" in the contextualized curriculum are influenced and enlightened by the artistic conception. Liu Xie pointed out: "The thought of the text also looks like the flying dragon and the imagination goes far away." The contextualized curriculum advocates a link with the beautiful life, so that it is the creation of the scene of profound artistic conception.

The "meaning far" of the contextualized course broadens students' imagination space. The situation is to a large extent similar, rough and simple, aimed to enable students to retain a wide range of imagination. This reminds me of what Ali Nihotz, the founder of a children's theater, said: "If children's theater background and

dressing up are too lifelike, children will have no room for imagination, and therefore cannot promote the development of their imagination." She added that the lack of education today is a matter of realism, and there is no room for developing children's imagination.

Contextualized courses pay attention to "taste" and "imagery," so it is impossible to use situations graphically and mechanically. The situation is always a whole, appearing in students' eyes but also designed for them to open up a wide imagination space. The poet Ai Qing once said: "Imagination is the starting point of experience of the unknown." Therefore, contextualized courses always link the content of textbooks with the context of life, in the present and the future.

In specific courses, children are often brought into the realm of far away, broadening their thinking space, so that children could combine their observation and thinking, link their practices and imagination with their active mood. For example, when teaching "Circumference of the Circle" in mathematics, under the guidance of "meaning far," the teacher asked the students to collect relevant data on the Shenzhou V spacecraft to design the application question. This let the students' associative activity, imaginative activity and logical thinking actively unfold. They were asked to imagine serving as the Shenzhou V design group's small assistant, to choose the best method to measure the spacecraft's flight orbit perimeter. In this situation, children eagerly search for answers. The teacher did not explicitly propose to study the "circumference length calculation method," but created a realistic and far away situation for students to measure the orbit circumference of the spacecraft, and effectively promoted active thinking.

Teaching practice shows that children's imagination appears extremely amazing and wonderful in a distant mood, and deepens the understanding of the essence of things. Again, an example would be letting third-grade students write an imaginative composition on "Undersea World Roaming." Because of the distant situation, students' creative motives were aroused and they did two exercises in the recess, not resting until after school and also relishing the opportunity to write with imagination. Later, the teacher asked them to continue to write in the observation diary. As a result, the children wrote six or seven consecutive articles, and some even wrote more. Imagination gives students the joy of creation, which teaches them that their thinking can have wings and fly. With the inspiration of imagery, there is a specific feeling. The form, the sentiment and the rationale are interwoven. "As it says in Wenxin Diao Long", people could see and prospect as far as thousands of miles if they have the imagination.

Thus contextualized courses pay attention to emotion and imagery. The situation always unfolds in the children's eyes as a whole, causing a direct impression and arousing their emotions. It also forms a "need to promote" and becomes the opportunity for students to imagine. According to students' imagination activities, teacher could link the contents of the textbook and the students imagined the situation, by this way, teacher could broaden the students's horizon and bring them into the situation describing in the textbook. The far mood in contextualized

teaching arouses children's imagination, and children's imagination enriches the context of the text. Students' powers of association and imagination are also developing well.

4.1.4 Deep Implications

The contextualized curriculum presents a vivid image, express sincere feelings and opens up the far mood. To bring these three into a whole, the lifeblood is the concept of connotation. The contextualized teaching cannot be accepted by teachers as it has shallow and limited theoritical framework. As mentioned above, the concept of the Guilin landscape is the motherland's splendid scenery, from the Lijiang River to the beautiful mountains and rivers of the pearl, when students are playing the imagination. "Zhan Tianyou" is the performance of a patriot defying hardships in the mountains to create a miracle, showing his fiery patriotism. It can be said that the concept embodied in the contextualized curriculum is the idea contained in the textbook.

The features of the contextualized curriculum, such as truth, emotion, meaning and distance, embody the implication and unique style are reflected Chinese classic culture. The four characteristics not only put forward a form of truth, but also pay attention to meaning far; not only highlight the real love, but also emphasize the rational, the correct embodiment of the relationship between rationality and sensibility, understanding and emotion, so that contextualized education contains a simple philosophical meaning. The contextualized curriculum fully utilizes imagenation and activates the cerebrum, enhance the child's understanding, because the artistic conception, the implication idea, they promotes children to immerse themselves in the study. Image thinking and abstract thinking complement each other, promote each other, then drive the child to the quality of all-round development.

4.2 Basic Strategies

4.2.1 The Child Is the Priority

For a long time, when children live with each other every day, I have felt that they are growing vigorously. I continue to find that children have good taste and a naïve fantasy, the kind of positive features, which cannot curb their active participation in the initiative; it is amazing. Children will continue to feel bursts of life as fresh as flowers and the fragrance of vitality. They are constantly craving new knowledge and getting new information, because children have a strong thirst for knowledge and curiosity. Their potentially infinite wisdom, the "sleeping power," is germinating,

always looking forward to a touch so that it can burst out. Children have the true beauty of intelligent elves, they are dynamic, bright, developing, forever longing for the future and creating a future of precious life. The adult world is almost eclipsed by comparison. Children's feelings are pure and hot, as they are lovely, they are beauutiful and they are full of wisdom, also because of they are curious on knowledge and unknown world in their mind. That is the most valuable driving force to guide children to learn and develop.

Therefore, in my mind, in contextualized education children are the subject of real learning. The teaching process is only the process of promoting "self-development." Without the constructive activity of the subject, it is impossible to acquire knowledge. The teaching process can be realized only through the active participation, assimilation and absorption of the learners themselves. Therefore, whether students can take the initiative is the key to the success of teaching. Contextualized education combines the emotional activities of children with their cognitive activities. It encourages students to engaged in learning. They learn from doing with their interesting, meanwhile, their capacity had been developed through their own perception, operation and experience, which ensure the development of students' subjectivities. At the same time, if the form and content of the teaching are enriched, children are more willing to learn. The realm we seek is not only for children to learn, but also for them to use their own initiative; not only for children to acquire knowledge, but also for them to enrich their spiritual world; not only for the future of children, but also for the well-being of the first life today. This is all for the development of children, in order for them to grow as people; this is the starting point and destination of contextualized education. Therefore, we need to constantly study the subjects of our education—children—to explore the secrets hidden within them.

4.2.2 Stimulating Wisdom Based on Their Affection

Children cannot think in a careless state of mind. Once their cognitive activities are accompanied by the development of their emotion, learning then becomes students' needs, which hence become their active process driven by emotion. After a great deal of practice and sentiment, I put forward the proposition of "emotional intelligence" to "shorten the psychological distance" and create a kind of favorable, helping and interpersonal situation between teachers and students in the classroom, to create a beautiful, intellectual and interesting teaching situation. I also developed the concepts of "to observe the accumulation of the situation, enrich the children's imagination with the necessary thinking materials," "with emotion as the cause, provide the opportunity for imagination, so that the children are prompted to create a new image" and other specific strategies.

The aesthetic feeling and interest of the situation draw children's attention quickly, which leads them to have a positive attitude and arouses their corresponding emotions. Driven by emotion, artistic conception could promote children to acitvely and happily be engaged in leanring as their thinking are the best. The child will take the initiative and enter actively and joyfully into the study activity, thus doing their thinking in the best condition. Because the optimization of the context is not only based on material, but what their said, expressed and communicated in the context then will produce the power of running cross the obstacles. Therefore, the context is the most appropriate space for children to think and speak, also it is effectively arousing their imagination. Students are thinking and shaping the figures in their imaginations, while their delightful sparks of wisdom are burst out. In this beautiful world, children's emotional experience makes them want to learn knowledge and develop their intelligence, and because of the emotional color children's intellectual activities are more efficient. Brain science claims that information of emotion always reach the brain, compared with other informaiton. Also, it is the key that the positive emotion to engaged in the learning process and emotional memory has the most efficiency. It is more meaningful to make full use of the situation to awaken and develop the children's potential, so that their thinking, imagination and memory form a series of intellectual activities wrapped in emotional color, active and agile. In this way learning activities will bring them satisfaction and a sense of accomplishment. Realizing the unity of the line of knowledge to reach a higher than expected goal of teaching is a much richer, a much broader realm, so that the original monotonous and boring knowledge of learning becomes a child's love of fun, happy learning and creative activities.

4.2.3 Fostering Aesthetics According to the Understanding of Beauty

I deeply understand that children's hearts and their intellecutual activities need to be moistened by the beauty. In a word, children cannot develop without beauty.

Therefore, I put forward the idea of "aesthetic beauty" as one of the five strategies to promote children's happiness and efficient learning. A few years later, I further put forward the significance of principles of aesthetic nature.

It is a nature that pursuiting for beauty for children. They feel comfort and joy when they are satisfied from the aesthetic feeling. Instinctively, they are attracted in the state of active learning and then produce the "force" of entering the teaching process. The frequency of neuronal connections and the growth of dendrites both increase, and the mind is active in the infinite, free psychological world. Therefore, the aesthetic is the "magnet" of education and will produce endless charm. Teachers should make full use of this magnet when preparing their lessons.

In choosing the way to create situations, I chose art. Started from understanding the image, then breakthrough from beauty and activily implementing the aesthetic education. Selecting the ways of "re-apperrance", mixing with music and understnading the P.E, teachers employed such kinds of teaching methods with befutiful teaching language to present the contents and images. The original teaching was boring, abstract and full of complicated symbole in classroom now covers the aesthetic aura, in which resulting in a strong influences on children's intelligence, emotion, learning attitude and their values, which has a positive impact. So that the teaching of all subjects can get rid of the simple instrumental tradition, the cultural connotation of the subject needs to find its natural embodiment. In the meantime, guide the students to feel beauty and understand beauty (including appreciating the aesthetic), and then express how beauty creates beauty (which is, of course, superficial). In the long term, because children love beauty they will find beauty, pursue beauty and abandon ugliness, thus gradually understanding the distinction between beauty and ugliness. Thus, this teaching way not only changed the status of knowledge, which become more alive, but children's life had been riched. This aesthetic education is the fundemental for children's personality and life-long development. Therefore, it is important to establish an important foundation for children's personality and lifelong development.

4.2.4 Connecting Learning and Practice

We ultimately learn knowledge so that we can use it. Many schools today focus on imparting knowledge, often with a large number of exercises to practice the use of alternative knowledge. In fact, exercise-style training is not equivalent to the use of knowledge, which is a major disadvantage of traditional education. In order to make children learn happily and efficiently, contextualized education adopts a "learning to combine" strategy. Children could actively employ the knowledge as the contextualized curriculum has diverse form and practical content as it stresses that contextualized curriculum makes children feel that knowledge is the whole. Also, it optimizs situations, when children are learning knowledge, they could combine the practices.

"Focusing on development, focusing on the foundation" is a consistent proposition of contextualized education. Therefore, the contextualized curriculum and the specific operation of the teaching of each section will be embodied in the teaching process, in order to strengthen the application for the purpose of the overall training, combining the subject knowledge with children's activities, as the contextualized curriculum, the system of knowledge, the operation of activities could arouse the enthusiasm of students in classroom. The diversification of the form and the practicality of the content make the children use the knowledge actively. The

contextualized curriculum emphasizes "understanding knowledge in application, learning to use in practice," in order to promote the children's ability to cultivate and improve continuously, so that the "learning to combine" strategy is implemented. Therefore, the data and examples of contextualized education experimental classes show that children are not only happy but also efficient in optimizing situations. Their basic skills are solid and flexible in use. This is inseparable from the strategy of "learning to combine."

4.2.5 Linking Children's Learning with Their Life

Any knowledge is produced in a certain life situation and ultimately will be used in social practice. Social life itself is an inexhaustible curriculum resource, which affects, guides and sustains the children living and studying in it. Our curriculum should be connected with the practice of life. However, schools teach abstract symbols, away from the children's lives, so that the imparting of knowledge has lost its positive meaning and value.

Contextualized courses form an open system, which is devoted to developing children's living and growing space, extending to the family and society. Many means of recording people's thoughts, ideas, emotions and aesthetic tastes create a more vivid "text," which acts as a foundation for children to get to know the world around them. The children gain many distinct and beautiful impressions in the meantime. These appearances are stored in their minds with a passionate mood, providing them with a wealth of linguistic images and a steady stream of thinking materials. In the construction of the contextualized curriculum, field contextualized courses have been specially established as one of the five main elements of the development of children. In these children perceive, observe, experience and learn to relate aspects from pluralistic, multiple angles to gain knowledge. Society becomes the indispensable classroom for children's learning activities, and the most vivid experimental field of comprehensive practice.

At the same time, the experience and feelings gained in life provide a rechargeable source of knowledge for children's classroom learning. The knowledge that they learn is ultimately used in society. I propose to train disciplinary ability as the means, through practice, to emphasize innovation. Therefore, contextualized curriculum could promote children to apply various knowledge with their brain and hands based on on-site operation, interactive communication and other operating contexts. This seeks a clever, attractive intermediary, so that symbolic cognition and life are connected, so that knowledge has roots, links and a background, to attract learners through interaction with the situation to build knowledge.

4.3 Five Essentials of the Contextualized Curriculum

I have stressed that an enthusiastic mood can be evoked in the specific climate of contextualized learning. Students are engaged in the activities and immerse themselves in an optimized learning situation, which ingeniously weaves together cognitive activities and emotional activities. Also, children encourage each other in dialogues and discussions and their development is promoted in an all-round way.

The following points are summarized from my explorations of certain common features from the implementation of contextualized learning in classes on Chinese literature, science, moral education, music, PE, art and English. There are five operational essentials for the implementation of the contextualized curriculum.

4.3.1 Aesthetics as the Conception

I selected aesthetics as a breakthrough and started from there in subject contextualized learning. However, to primary school teachers, aesthetics must be addressed beyond being a means of education and making use of it. Not unnaturally, this reminded me of my process of exploring. I may say that it was then that I revealed aesthetics in the teaching of composition, and then in the teaching of reading. As a teacher, my mind had been deeply affected by the Chinese philosopher who claimed "the precondition of discovering aesthetics is pursuit for it." What I am consistently after is aesthetics. Hence, the subject, as part of the contextualized curriculum, is also my pursuit. One of the reasons that I argue that is based not only on my understanding, but on rational consideration. I recognize the irreplaceable functions of aesthetics and attempt to specifically interpret the functions of teaching according to my studies of aesthetics and confirmation of the relations between children, aesthetics and enrichment of the spiritual world; aesthetics and children's initiative; and aesthetics and building personality.

In essence, teaching is an activity of integrating human civilization, wisdom and emotions. This essential quality of teaching determines that the teaching process cannot lack aesthetics, because the object of teaching for primary school teachers is a group of children who have an inherent love of beauty. Meanwhile, their textbooks are full of the beauty of nature, society and art. The goal of primary school education is to promote the all-round development of the child. Therefore, aesthetics should be fully demonstrated in the subject curriculum. The practices of teaching indicate that numerous successful teachers and all pupils' favorite classes are linked with beauty, which has all-pervasive influences on children's development of emotion, wisdom, body and mind. There is a need for the influence, activation and promotion of aesthetics for a child's mind, particularly for pupils' learning process and teachers' teaching process. In a word, pupils cannot develop without aesthetics. The subject contextualized curriculum's pursuit of aesthetics as its ultimate goal is regarded as a breakthrough in specific practices.

The reason that I pursue beauty as there are three realms in my pursuit for the aesthetics education.

4.3.1.1 The First Realm: Teaching Is Not Only for Pupils' Learning, but for Their Learning of Initiative

Teaching needs aesthetics; however, beauty is too often ignored by teachers in reality and has been for a long time. Therefore, I constantly think that beauty is the magnet of education. The aesthetics education just like the shining magnet that is setting on the side of teachers's notes and lesson plans. Such kind of teaching just like droping off the magnet as teaching is lack of beauty. Simply employed the way of telling and emphasizing, the teaching just tell children the knowledge itself. It is that kind of teaching that gives up the magnet of aesthetics. The teaching process becomes a simple symbolic activity without color, spirit or interest, because it lacks aesthetics. It is doomed to be boring. When the requirement for aesthetics which is inborn for a child cannot be satisfied, their joyful mood and the energy to engage in learning cannot easily be produced. As a result, it is hard for the subject of the teaching to take shape.

4.3.1.2 The Second Realm: Teaching Is Not Only for Pupils' Acquisition of Knowledge, but for Building Their Minds

In a certain sense, the aim of primary education is to learn the cultural legacy, then understand the process of the history of civilization and experience its brilliance. Via that knowledge, the acquisition of spiritual power from the world created by humankind can ultimately be transformed into spiritual resources for the child. What a rich and significant educational aim and a brilliant realm for education. However, simple symbolic activities, extensive exercises and frequent examinations cannot be converted into spiritual assets. If we link with the disciplinary, actually, no matter the liberal arts or science, they have aesthetics education. Wisdom and experiences are created by humans in the history of civilization. The subject itself reflects and implies aesthetics. As primary school teachers, how could the vivid teaching process just be simplified to questions, abstract concepts and exercises? How could we just focus on delivering knowledge and giving up aesthetics if children are to be led to a fulfilled spiritual world in the process of teaching?

4.3.1.3 The Third Realm: Teaching Is Not Only Preparation for Pupils' Life, but for Their Initial Happiness

It is often said that education is the cause of tomorrow. That is true but strictly, education is also a need for today. Pupils need their own spiritual world and need to

prepare for their brilliant future when they walk into school and are engaged in teaching. They should enjoy the happiness that belongs to them in their initial period, rather than suffer labor or hard work. It does not seem to be reasonable to say that you have to endure hardship willingly if you want to enjoy a brilliant future. Moreover, our children's future development will be deeply affected if they can obtain aesthetic enjoyment from teaching. Teaching which lacks aesthetics and takes a boring approach lags behind the requirements for education and spiritual needs. It is far away from the great future goal of all-round education.

Obviously, beauty cannot be ignored in any realm. The magnet of beauty is held by the teachers in the experimental class, which is full of charm and vitality. The children are deeply attracted and inspired by the teaching process. Empirical and theoretical studies indicate that aesthetic feeling will help children to be nurtured by the aesthetic, form the perfect personality and arouse their desires and a spirit of creativity. If so, contextualized learning is a reasonable approach to quality-oriented education, starting from understanding the beauty in the classroom. As countless facts in the experiences of great figures and scientists have proved, beauty has been invaluable to the growth and development of humans.

That is why beauty has a magical glamour, because the educational functions of aesthetics have been opening up:

- *Wisdom can be evoked by aesthetics.* Pupils are continuously gaining immense representations of the world and too often they are in a state which could be described as "there is an end to the words, but not to their message." Their little souls are free. Their thinking travels to lands far away in the beauty prevailing in the contextualized teaching process and they are positively at their best, trying to exceed their own experiential world. With the motivation of pursuing beauty and spreading the wings of imagination, children's potential creativity, including their intuition and perceptivity, can be developed.
- *Diction can be evoked by aesthetics*. Aesthetic images in contextualized teaching are vivid, which raises pupils' attention, interest and needs for aesthetics, and then their desire for expression can be evoked. Driven by the motivation of language, the image in front of the child coincides with the vocabulary saved in their mind, and then contextualized learning can effectively improve their skill of expression, which is called "diction changes with emotion" (Zhang 1982). On the other hand, it is not only beautiful, but it is a simple or rough situation created though intuition with contextualized teaching. Contextualized teaching, which has the indistinct beauty of the aesthetic object, emphasizes similarity in verve rather than in shape. Guided by teachers' language which is full of beauty, children's imaginations are aroused. Their imagination is promoted and, as a result, their language becomes more enriched, since contextualized learning provides the advantages of language with multiple meanings.
- *Mind and spirit can be uplifted by aesthetics.* Contextualized teaching that is richly aesthetic will help children to accept knowledge and lead to positive

emotions, as it is perceptive and joyful. Children will have emotional experiences of objective reality when they stably appreciate the aesthetic in various ways. With their experiences deepened, their aesthetic emotion, moral emotion and rational emotion will be cultivated.

- *Morality can be aroused by aesthetics*. The teaching of aesthetics has spurred pupils to pursue beauty and a lofty moral standing, which will definitely influence the formation of their principles of morality and behaviors. Certainly, there is a good side and an ugly side in society. The reason that I pursue and emphasize beauty is that I am attempting to have an impact on pupils' pure hearts by leading them to understand beauty. Ferocity and ugliness will be denied because pupils love beauty, and they will choose and follow what is good. Surly pupils will abandon bad things if they really choose the good and they will reject ugliness because they love beauty. It is said that beauty and ugliness, good and evil, can be differentiated by children because they have an implicit attitude toward them. As a result, the promotion of affection is based on good moral qualities.

4.3.2 Thinking as the Core

Every single child who has a well-developed brain has creativity, just like the seed which is lying dormant in the soil and waiting urgently to push out of the earth. As the gardeners of humanity, teachers need to select the soil, wake up the seeds and feed their minds.

Japanese educator Kimura Kuchi, in his book *Early Education and the Gifted Child*, asserted the importance of the development of early wisdom among humans. He argued that the "possible capacity" of intelligence has its own golden period, developing early since the little chick cannot follow the hen within four days of birth if they are separated. Also, Kimura Kuchi presented similar examples of the law of decreasing returns, which indicates that child's possible capacity also has its own development period. That means it cannot be evoked and is hard to grow, and finally that it can be drowned, which is just like splendid fireworks being extinguished due to a lack of oxygen.

With the introduction of modern concepts in the field of education, I realized that the teacher's role is more than to pass on general knowledge, but to sow, arouse and inspire, sowing the seeds of intelligence, arousing potential wisdom and inspiring the enthusiasm of innovation.

I am aware that all children's language, cognition and even emotional activities are related to domination and control of their thinking. Hence, based on children's future development, the focus of subject contextualized learning considers teaching as it is today. In its theoretical construction, subject contextualized learning

develops thinking as the core of theory and the principles of operation are regarded as important aspects. Also, it argues that teachers' pedagogy and the design of teaching procedures should be based on the development of children's thinking. "Children should be cleverer through learning" is a particular assignment for teachers and "developing children's innovative spirit" should be the relentless pursuit of teaching goals.

4.3.2.1 Building Potential Talent in the Process of Constructing Aesthetics

For a long time, I consistently pursued the perfect realm for teaching literature, in which I obtained the feeling and even the impulse of aesthetics. Therefore, I could feel the shining of joy, in which children's potential wisdom will be evoked and starts from the broadening of realms. As Hegel argued, "real creativeness is the activity of art imagination" (Hegel 1979). Thus, beauty is regarded as the realm of the subject curriculum that I pursued. I discussed the function of beauty above. In this section, what I intend is to explain my feelings and understanding from the perspective of the development of children's thinking and the function of potential capacity.

Children will be attracted by beautiful items. As the subject of aesthetics, children's need will be satisfied and it will cause a sense of joy. Therefore, their thinking will be activated in the infinitive psychological world. Finally, the seeds of their potential innovation will sprout in the field of aesthetics. It can be seen that the pleasure of aesthetic feeling can have an impact on children's imagination, association, emotions and actions. The beauty of all teaching activities displays positive motivation, imparts wisdom to children and affects their minds. Also, I often think that the reason contextualized teaching and education has been favored by children and developed over the past years, to a large extent, is that they are the gift of heaven. According to my own pedagogical experiences, "Beauty" is the soil for cultivating innovative seeds. Also, I was inspired by an academic lecture, titled "Aesthetics and Physics," delivered by the Yang Zhenning, a Nobel laureate in physics. In his lecture, Professor Yang pointed out that the theoretical structures created by generations of physicists left the feeling of a sense of dignity and sacredness. Also, this indicates lofty beauty and the beauty of the soul, which are the psalms of their creators. I had never realized that style and aesthetic sentiment have a direct impact on the goals of research and its contributions. Therefore, beauty affects life and academia, and it also creates the world. This further shows that beauty is not only the motivation for innovation, but a fundamental element of aesthetic appreciation. A child's noble aesthetic temperament can be cultivated by beauty and creates the desire and motivation for innovation.

4.3.2.2 Lighting the Spark of Intelligence in Good Relationships Between Teachers and Students

Frequently, children's thinking activities are influenced by the context. Children are inhibited when they feel burdened and repressed. It is inevitable that the relationship between teachers and children affects their thinking and latent energy when there is a gap between teachers and students. Subsequently, the children's spirituality and perception will be weakened and ruined. Their valuable potential wisdom, just like a young shoot, will gradually wither. Therefore, in the contextualized curriculum which links with children's emotion, the psychological distance between teachers and students will be shortened and the eager expectation of children formed in teachers' hearts will be advocated, with stimulating children's creative potential regarded as a sacred mission. Accordingly, teachers' love will be embodied in tolerance, which will be displayed as a comfortable and easy context for learning. Loving children and enjoying teaching form the motto of the experimental class of contextualized education. When the teacher is in the classroom, they cannot conceal their feeling for children, respectfully expecting and firmly believing that students' will be successful through motivating, arousing and inspiring them. Accordingly, the children gain confidence and strength from their teachers.

As a matter of fact, teachers' expectations of pupils come from their love and faith. As American psychologist Sierveno Anridy said, "A kind-hearted mother's love, along with the trust of believing the child will become a valuable and creative person," is the premise of creativity. Also, he argues that "the child's mind effort could project into inner mind, understands to share mothers' affection, accept her predictions and prove mother is right. The mother's image, which is full of confidence always, supports him." These sentences enlightened me. I feel deeply that the expectancy effect has a more widespread application value in our modern time of encouraging pupils to be innovative. The experiment of Rosenthal's expectancy effects is the most powerful demonstration. The reason that pupils who were randomly selected got the best development was that they accepted the teachers' cues and could not help expecting the outcomes, as pupils' development needs confidence and teachers' function is provide support. Is a pupil always yearning for a mother's love from their teacher? If the teacher does like the mother and devotes their expectations to the child, then the child could understand and feel the support and catalysis from their teacher. The impact for an innovative child will be long-lasting. Ardent expectations must be applied to the inner world of pupils, from which they will obtain strength, and then inspiration and motivation will be formed. Thus, expectations transform into self-confidence.

After children have confidence, that will be positively transformed into motivation, which leads to the goals of teaching. Children cannot help examining the information and representations saved in their brain, communicating with each other, integrating the information, then via their activities of thinking accessing the best state of mind. Finally, the sparks of wisdom will burst out. So far, when

teachers praise with eagle eyes and pupils experience confidence, they will enjoy the fun of thinking and innovation. Their inner mind will gradually stimulate the psychological tendency of self-potential wisdom with frequent expectations and incentives.

4.3.2.3 Enlightening Vision in the Typical Context of Understanding the World

The subject contextualized curriculum aims to cultivate children's quality of thinking on creativity. Informally, it attempts to lead and encourage pupils to have wider and newer thinking, to consider differently. Academically, it intends to develop children's wider, more fluent and more original thinking. All of these need a wider space of thinking for the child.

I think that the width and narrowness of the thinking space are closely associated with the width and narrowness of pupils' thinking space, which is provided by teachers. It is like the eagle spreading its wings. Even if it does not fly very high, the space in which it flies is the vast expanse of blue sky. As a result, there will be hard wins after children grow up. The optimized context of the subject contextualized curriculum will effectively stimulate pupils' imagination; it is the best-suited wide thinking space for the child, since there are aesthetics, motivation of emotion and far-reaching artistic conceptions. Children can have far-reaching vision and thinking. Consequently, they may try to figure out and shape their dreamland, and then the desire to promote creativity could be started and their innovation ability will be developed.

4.3.2.4 Promoting Observation and Gearing up for a New Image

How could pupils think wider and further? They need a store of thinking materials, which are based on the child's recognition of the contextual world. Thus, it is essential for the child to foster a sharp pair of eyes. Knowledge of the world mainly could be obtained by the child's vision. To the child, observation is not only the need to recognize the world, but the need to enrich their childhood and the need to grow up. Children always open their eyes to look at the world because it is strange and novel. They perceive the world around them through their whole mind, as well as through their eyes and their wisdom. Observation opens the windows to beautiful scenes and is infinitely subtle.

The teachers and myself pay serious attention to observation. Students are guided to discover aesthetics and the inquiry process, which connects with the child's thinking, imagination and language activities. It not only discovers the wonders of nature but also triggers a wonderful language. Constant observation could cultivate eyes that are good at finding beauty and then develop instinct and perception. That is undoubtedly an important quality of creative talent.

To a child, observation could satisfy their curiosity and their desire to discover newly emerging forces and challenges. How many question marks are embodied in things around the world? It is in the process of looking at the world that scenes, sounds and color are inscribed and experiences recorded in the child's mind in the form of three-dimensional space. Those experiences and representations, as vivid materials of thinking, become the important stockpiles of new images.

Even in the same field of guiding children to conduct observations, there are new connotations when contextualized teaching expands to contextualized education. That means not only thinking, imagining and describing in the process of observation, but inquiry too; not only recognizing the phenomena of things, but also further observing and analyzing their characteristics. It also emphasizes developing the fine and tough essence of studies from rough and general observations.

4.3.2.5 Developing the Ability to Imagine Through Gaining Direct Impressions and Creativity

Observation is the basis of thinking, and imagination is the best way of broadening children's thinking space. Children are imaginative and their thinking will go to any place based on their imagination. We can also say that imagination is a child's great wealth. However, as they grew older, the assets of imagination will be reduced and there will be more poverty in adulthood. Schools and teachers have to seize the opportunity to develop children's imagination and cherish the golden time when they are full of innovation.

In fact, cultivating pupils' imagination is not a mysterious thing. According to their imagination, children can widen their reading materials, their essays may be full of their temperament, they even could create all kinds of devices by their nimble fingers; also, they could generate different methods in mathematics and science to learn knowledge. Hence, primary school teachers should allow pupils to bring imagination to reading, writing and making artistic creations, even to learning and inquiry in science and mathematics. This kind of reading is full of wisdom and the writings are an expression of activating pupils' intellect, in which they embody creation and truly show themselves. That inquiry is the sprouting of innovative.

The imagination always connects with children's perceptions and feelings. In the optimized learning context, pupils will get a direct impression due to the intuitive nature of painting, music and performing arts. That direct impression of the beauty of art will enter the child's consciousness. There will be effective psychological and emotional preparation for their imagination, even in a state of being. Actually, imagination is the connection of a direct impression with a new image of "impetus of need" and making a new combination. In the classroom, teachers would likely describe this as "it seems that we are," "we seem to see," "we seem to hear" or "now you are…" When child hear these signals, they cannot help entering the context of the imagination while they obtain authentic perceptions.

The contextualized curriculum develops pupils' thinking capacity in this interesting space full of beauty. Meanwhile, the contextualized curriculum prompts children with fascination to expand their imagination and develop their thinking, inspiring the potential wisdom that is motivated by context. For a child's development, the contextualized curriculum also emphasizes symbolic manipulation and cultivation of critical thinking with abstract logical learning assignments. So children will be much cleverer and their potential ability could be improved earlier if the two hemispheres of their brain could be coordinated and the whole function of their brain could be employed.

4.3.3 Affection as the Bond

I deeply understand that traditional teaching places too much emphasis on rationality and neglects emotional biases. It is not able to complete the sacred task of improving children's overall quality. As Sukhomlynsky argues, it is impossible to have lofty ideals for people who have no subtle emotion and lack sympathy. They will be ruthless as they are apathetic toward others. As a result, they develop from apathy to ruthlessness. Affectivity is one of the characteristics of human beings. Also, any beautiful human sentiment is not born with them but nurtured and cultivated by the educational context.

I always think that developing noble moral sentiments is the lofty mission of primary education. Teachers should make children compassionate, caring about and being kind to others, loving their homeland where they were born and raised, which is lofty and great emotion. In the final analysis, education is for the people. Teachers' mission is to educate pupils to be human. Based on this goal, it is necessary to actively guide and nurture our children's emotional world. The tendency of worldwide education has been transformed from focusing on knowledge to ability, from emphasizing development of intelligence to paying more attention to the emotion of education, which embodies the needs of people-oriented education.

Emotion has an enormous amount of energy. Teachers should let it step into schools, classrooms and every field of pupils' cognitive activities. The subject contextualized curriculum proposes the theory of shortening the psychological distance linked to love, according to the educational goals and characteristics of the children.

Focusing on children's features, the subject contextualized curriculum employs the visual art of pictures, music and performances or typical scenes of real life. The curriculum accesses the children's senses, causing feelings and producing experience based on long-term and short-term goals. So when children are in such a context, their enthusiastic mood will be provoked, which drives them to not stop being involved in the process of learning and expressing love in their mind. Then

"love" will be turned into "power," so there will be unexpected educational results in the classroom. Meanwhile, this is not only the reified function of context, but conveys the emotion of teachers, pupils and education. That means that the subject contextualized curriculum could consciously create an emotional literacy training environment, which is the finest field of teaching art and the essence of educational quality.

4.3.3.1 Teachers and Children Sympathizing with Each Other

Children are full of emotion. Teachers are the most authoritative and beloved people in children's minds. They always like to express this love and always expect that the teacher loves them. A child's immature mind could sensitively touch their teacher's emotion when the child wants to know whether they could love their teachers and whether their teachers love them. Hence, I propose the holistic requirement of "all services (in school) for the child's development," which emphasizes treasuring pupils' emotion, being devoted to their love and promoting the relationship between teachers and pupils as a way of affective interaction. Teachers should touch pupils' emotion through their love, then become the emotional supporter of loving to learn and active learning. A new relationship between teachers and children has the features of loving school, helping each other and taking pleasure in learning, to realize the interpersonal emotion in the situation.

Children feel the input of teachers' emotion, then react to the relationships between teachers and pupils. Finally, there will be a mutual synergy of teaching and learning. This constitutes their psychological world, which appropriately promotes children being actively engaged in the teaching process. Maximizing pupils' development will be the goals of teachers' work and the targets of class and children's self-development.

4.3.3.2 Evoking the Spirit Between Textbooks and Children

For each pedagogical subject, there will be a distance between what the child knows and does not know. Actually, most contents of learning are not coming from experiences of children themselves. There are distances in time and space. Children feel strangely far away from this distanced pedagogy, which makes it hard to evoke their emotion for learning.

The bridge which links emotions between textbooks and pupils is teachers' emotion. In particular, it relies on being conveyed and strengthened by teachers as the thoughts and feelings embodied in primary school textbooks affect children's hearts. With the advancement of the teaching process, teachers' emotion will resonate with children. So the example of teachers' emotion is the kernel of whether there is a resonance between children and teachers. First of all, teachers should fairly pour out all their affection on each pupil. There is no "poverty or wealth," no

"great or small," no preference, no discrimination, no utilitarianism; rather, vulgarity should be disdained and there should be frankness. Pupils then are influenced by the pure and noble character of teachers. Also, teachers show the trend of their emotional world according to their attitudes to figures, scenes and events in the textbooks. In my teaching, I always naturally display my emotion and excitement when I show my admiration for great people and heroes. I do not just generally explain the scenery described in articles, but rather focus on it as part of the splendid mountains of the motherland's treasures. Then my love for country is more explicit in my expression of what is pleasant and proud from my mind. The so-called conveying of feelings has been seeping into the classroom bit by bit and time after time.

Context is created through vivid images in contextualized education, especially in those that render atmosphere with a certain strength, when pupils' relative mood will be provoked. There would be six ways to bring children into the context and strengthen it, if they could be comprehensively employed. For instance, displaying their life, demonstration of material things, rendering in music, showing pictures, playing roles and descriptions in language, which have effects on children's senses and lead them to have deep feelings. Children could understand the emotion from close to true, then from true to cordial. They start from concentration to have more emotion, and cannot help but move their own emotion to the subjects of the textbooks, helping them in the field of psychology under the affection of imagination. At the beginning stage of teaching, it seems that figures in textbooks look like pupils themselves and the deepening of their emotional experience will evoke sympathy with the textbooks, even in mathematics and science classes. Because of shape or beauty or some relative roles provoked by teachers' emotions, children can gain access into textbooks, which could constitute an important emotional foundation for grasping knowledge and learning.

4.3.3.3 Promoting Collaboration Among Children

Close cooperation, which certainly exists between pupils, bonds with affection. Each pupil in the classroom has their own advantages or disadvantages. In order to activate their potential wisdom, pupils should inspire and learn with each other in the study of subjectivity. Then they would engage in interaction and achieve complementarity. Collaborations in subject learning could guide pupils to listen to peers' views and search for various answers, thinking about and discovering questions from different angles. Children's potential wisdom would be developed in the process of comparing or contrasting. They would also experience the joy of cooperation and the importance of collaboration in such frequent mutual interactions and supplementation, which help cultivate pupils' team spirit and collective inquiry.

It is worth mentioning that teachers should foster students' ability to think independently when they emphasize cooperation through interaction, which should

be based on independent thinking. Also, each child's individual thinking will be fully developed only through independent thinking.

According to my classroom practices and studies, I deeply understand that children's positive thinking, in particular their innovative activities, can be carried out in an easy and relaxed classroom. Teachers' expectations and inspiration, true blended emotions between teachers and children, active interactions among pupils —all of these could help children unlock the doors of wisdom when they hold the golden key in their own hands. In such a harmonious and mutual context, pupils' innovative courage and enthusiasm will be built when they are shown to be smart and innovative. Eventually, their potential innovation could be activated.

Teaching in the classroom becomes more irresistible because of the links to and influences of the bond of emotion. The psychological distance between teachers and pupils, between textbooks and pupils and among pupils would be shortened, so that children would be actively involved in learning. The experiment conducted by Ivan Pavlov (1849–1936), a Russian physiologist, proved that emotions have a tremendous effect on the cerebral cortex, which means that positive emotions could enhance its work and negative emotions will block and suppress its work. The scene of each subject for teaching and learning in the classroom indicates that the implementation of the subject contextualized curriculum will arouse positive emotions in children.

So with continuity, repetition and development in the different grades and disciplines, children's emotion will gradually deepen. Finally, when emotion is relatively stable, attitudes and values will be internalized and access the child's personality.

In a word, the development of children's higher-order emotions is based on the improvement of talents. Therefore, cultivating higher-order emotions is not only the goal of pedagogy, but an effective way of promoting children's active development.

4.3.4 Children's Activities as Channels

Pupils, especially primary school pupils, always know the world, experience life and learn skills based on their own activities. Hence, the subject contextualized curriculum select children's activities as the approach to fully promote such activities in the teaching process.

4.3.4.1 Integrating Children's Activities into the Subject Curriculum as the Basis of Contextualized Learning

Children are real people who contain wisdom and are brimming with emotion; they also have plasticity and a strong thirst for knowledge which adults rarely possess. Children are more emotional, more energetic and have more initiative than adults. Only when those activities can be integrated into the curriculum can children's

principal position be guaranteed. The subject contextualized curriculum emphasizes the specific climate in the classroom, which aims to provoke pupils' emotions and prompt them to be engaged in the learning process. For instance, there are a series of activities in the classroom, including generating motivation, fully engaging, actively inquiring, comparatively identifying, judging correct or wrong, simulating operating, expressing in language; one can add contextualized activities including drawing, music and drama, and then there are also some artistic activities including singing and dancing. Those activities in the subject contextualized curriculum should abide by the textbook system so that children's knowledge, intelligence and emotions will get as much development as their goals.

Children engage in the optimized context and display their energy, show their wisdom, and as a result they are extremely excited. Their innovation is easy to enlighten and develop. As the objective context and subjective activities can be harmoniously developed, the children can then immerse themselves in learning and obtain full development through understanding, operating and experiencing. These classroom practices will make hard things simple and provide pupils with a wide space for themselves if activities can be integrated into the subject curriculum and add more power to their learning.

There is one point that should be clarified: this does not mean that teachers' leading role should be rejected when pupils are fully engaged in activities in the teaching/learning process. On the contrary, children will be fully involved in learning only under teachers' guidance.

4.3.4.2 Making Full Use of Roles to Initiate Contextualized Learning

Children must love the activities which link with the subject curriculum. Using the effects of roles, when children engage in role-playing and take on a role from their textbook, they learn content by retelling or reading, presenting their experiences or displaying demonstrations, drawing and showing or making judgments—all of these prompt children to learn with emotion. They are excited to have fresh and emotional experiences when they take on and play roles.

The roles children play can be summarized as three types: "aspired roles," "roles in fairy tales" and "roles from real life." One way to play a role is to use some relevant props, such as an ornament for the head, a pair of glasses, a hat, gloves, an apron or even a beard. Just let children play a role simply with such props. Then the vivid image will be represented as dramatic color in front of the children and strengthen their feeling of the image in their textbook. Another kind of role-playing is "hint and do." For instance, the teacher hints "now please play the role of a poem writer," "now we are somebody in the textbook" or "let's be the waiter." The children do not need to conduct a real role-play, they just need to have a consciousness of the roles. This kind of role-play also could help children to enter into roles and shorten the distance between image and textbook to enhance their experience.

In the process of teaching and learning, children change from traditional acceptance and a negative role to an enterprising and positive role. Once they take on an active role, pupils will positively accept knowledge, image and inquiry in the learning process. They will be actively involved in operations and comprehensive practices. Consciousness of the subject will be effectively aroused and then strengthened, so that the children can be actively developed.

4.3.4.3 Connecting Activities and Practices to Apply Contextualized Learning

Compared with single ways of tranditional teaching ways, role effects could be used with children's activities when what happens in the classroom integrates with the subject curriculum. However, pushing children in the process of teaching does not mean only pursuit of the vivid form, but letting them learn by pleasurable, interesting activities that have the obvious characteristics of the subject, have been designed thoroughly to suit the teaching process and are connected with cultivating their practical ability. That means that children's activities have obvious goals in the contextualized curriculum. Pupils could develop their academic and practical competences and comprehensive ability through activities which embody their autonomy. In fact, many children will gradually form and improve their abilities. The main reason for the phenomenon of high scores and poor competence is a lack of activities embodying pupils' autonomy.

It should be mentioned that each subject has to take responsibility for cultivating pupils' practical ability. The cultivation of competences such as listening, speaking, reading and writing in language and literature; verbal arithmetic, mental arithmetic and calculation ability in mathematics; and singing and painting in music and art are tasks that cannot be ignored. The key problem is that in the subject contextualized curriculum, children's academic abilities should be cultivated and improved in practice and application. The subject contextualized curriculum should be constructed from three dimensions, including children, knowledge and society. What we should do is consider that today's teaching and learning are based on children's future, and cultivate their practical competences as early as possible based on the needs of society. Ultimately, each child will be a member of society: they will enter society and survive, develop and display themselves. Teachers should have broadened horizons and their pupils should be fully involved in classroom activities. Studying for the purpose of application is one of traditional educational principles in China. Today, it has been given a new connotation by us (the author and the teachers who participated in the project), in which children's activities are the agent of "practices in learning" and "practice promotes learning."

For instance, in Chinese literature, people enjoy reading for leisurely browsing or for retrieval of information, hence there are various requirements and forms of reading, including extensive reading, skimming, speed reading and skim reading,

instead of all being the same or just the difference between reading aloud and reading silently. In real life, literature expressly requires that readers can clarify a scene, a view, a piece of news or even people's feelings, with application in every day. Then the teaching of writing should not be as simple as guided writing, which overemphasizes description and conveying sufficient information. Anybody who ignores the literal language should focus on various expressions, including narrative, explanation, description and other practices in the classroom. Children need to communicate with both their family and strangers on the requirements for their further development. To do so they could present their reports or requirements for learning, including statements, descriptions, dialogues, questions, debates, discussion, evaluation. All these practices can be explored in a simulated scene.

As a further example, mathematics is a necessary tool for living and working. Pupils need to know numbers, understand the relationship of bigger and smaller numbers, and employ numbers to express and communicate information. They also should be able to select an appropriate algorithm and get results. They should be capable of describing data and having a preliminary concept of statistics in order to collect data related to their own life. Specifically, primary school pupils need to identify Yuan, Jiao and Fen. Then, they are required to tell the time on a clock and use units of weight; moreover, they need to know conversion, measurement, estimation and so on. The teacher should design a series of appropriate activities which link with what happens in life. Pupils should learn mathematics through their own practices; in this way they could deepen their understanding of mathematics through its application and cultivate an interest in maths.

If children can clarify the contents and goals of subjects, and their application to life, they will be able to apply simulations of real-life situations created in a disciplinary course. Via applied operations in a role-play, or collaborative activities based on various senses and thinking or language connected with emotion and cognition, children can feel, guess and apply what they learn in the classroom. Then they will live in the truth on a sound basis.

Children's learning motivation will be extremely inspired if they have the chance to be involved in activities in the teaching and learning process. They will be able to feel their own power. Meanwhile, their power of the spirit and wisdom will grow, since it seems that they can discover themselves when they are feeling joy. Classroom activities broaden a wide space of creativity and even a kind of higher aspiration.

If children have more opportunities for activities when they are engaged in learning, it will arouse their learning motivation and they will feel extraordinarily happy. It seems that they find themselves, feel their own power, and their spirit and wisdom develop as well. Activities broaden children's innovative space and represent a higher pursuit. There is a growing desire in the classroom when children want to be more perfect. At this moment, their teacher has suddenly discovered that activities make children more clever and capable. It seems that children have grown up. This way of "drawing the bow without shooting," when pupils are patiently and systematically taught, will inevitably happen in the classroom.

4.3.5 The Contextual Environment as a Resource

Nature is the foundation of human life and sapiential resources, since humans are children of nature. Various gestures, colors and the sound of music again become a textbook for children's aesthetics. The contextualized field curriculum, based on the principles of contextualized education, follows the essence of a curriculum connecting education and nature. The poems, drawings and music of nature perform the irreplaceable, vital functions of arousing children's emotion, consciousness and wisdom. Certainly, it is inadvisable to overemphasize the function of nature and neglect systemic knowledge. All teachers, including the author and teachers who engaged in this project, are in consensus: there is no textbook that could substitute for the function of education and refine the mind. The incomparable aesthetic feeling of nature, with the causal relationships reflected by nature, stimulates children's joy, astonishment and thinking. It is a revival of the vocabulary children have grasped and leaves a vivid image on their memory. Children's development is largely a forward movement interactively connecting with the environment.

Based on the rules of knowing the world and learning language, the contextualized curriculum emphasizes the connection between children and nature, guiding them gradually to understand the environment, from the close to the distant and from the superficial to the profound. There are classes on presentation, writing and outdoor activities so that the type of curriculum can be guaranteed to connect with nature and the environment and keep the balance of the two systems of signals. A child who is constantly in contact with the environment and feels the beauty of nature can gradually understand social society. The spark of the child's wisdom has been lit and their feeling has been comprehensively based on images of the environment, which develops the resources for their second system of signals. I focus on the environment and systematically combine it with the inspiration of intelligence and education on morality and aesthetics.

4.3.5.1 Gradually Understanding Nature

The environment is a colorful world that consists of nature and social life. Nature with its incomparable beauty and unique charm becomes a scene that is particularly attractive to children. However, it is not appropriate to thoroughly expose the child to nature; rather, the veil of nature should be gradually removed before them.

I selected a typical scene when school environment could not provide better senarios for students' learning. For instance, I always consider how I could take children to the creek in front of the school. The first time, the teacher took the children to the creek and helped them to recognize it: "this is the creek," "it is a crooked creek," "on the creek there is a bridge, trees and reeds." The children could understand the shape of the creek, its position and the main scene on the shore.

When we came to the creek again, the children were asked to silently watch and listen to the water splashing as it flowed forward, the boat weaving leisurely along the creek and the small ducks quacking behind it. Then the children were asked to guess what was lying on the bottom of the stream. Suddenly, mussels, clams, fish, small pebbles, little snails and tiny turtles—all these images flashed into the children's minds. They thought of fairy tales of small fish meeting shrimp, or running races between turtles and snails. All these stories were born in the bosom of nature. Their short essays with eight vocabularies included a thin crescent, running across the stream, bypassing the field, going the distance; it is amazing what first-grade pupils could easily grasp. With the vivid color and sound, these vocabularies entered the children's minds and left an enduring visual memory. If the children had not stood by the stream and got to know the river, then how difficult would it have been for them to understand the stone bridge, field, distance and some verbs like "bypass," "cycle" and "run"? Perhaps they would not even have understood.

This fully indicates that only the first signal provides resources, and then the second system of signals is developed and offers a sound base. With increases in grade, pupils were able to discuss in subsequent lessons things like the unusual experience of the bridge over the creek, going along the stream, the flowers beside the river, the frogs' concert on the stream, where was the mom of the little tadpoles, the reeds on the river and the frozen creek. Pupils could feel beauty, interest and emotion just from this small corner of the area. Many other scenarios are also available in such a gradual manner. The beauty of nature in the child's mind is always fresh. Children's feelings for nature, consciously or unconsciously, accumulate over time. Conversely, any talk of leaving nature or natural beauty and ecological balance is just an empty seat.

4.3.5.2 Developing Wisdom

The contextualized curriculum introduces the child to an understanding of the world, focuses on contact with nature and guides them to know the world from near to far and from outside to inside. Therefore, I tried to expand their horizons and educational spaces, setting up the contextualized curriculum in the field as their learning resource.

Although the scene around them is just a tiny corner of a vast world, each of the issues and their cause-and-effect relationships can provoke pupils' thinking. Their thinking will have resources to work with and their logical reasoning will be based on the evidence of a specific context. This is more appropriate for school-age children who are experiencing the transition from imaginal thinking to abstract, logical thinking. For example, third-grade pupils are guided to understand the bridge in their hometown. They recognize and observe the bridge over the Hao River and the changes that have been introduced. This way of focusing on observation and perceiving a distinct target triggers tremendous interest among children. It gives them a sense of archaeology. As they are confronted with such rich resources, their thinking starts positively. They ask the questions by themselves:

How did the bridge originally hang? How could ancient people have the idea of building a suspension bridge? In addition to the three apertures of this bridge, there are some small archways. The children asked whether ancient people employed experience from the Zhaozhou Bridge (built 1,200 years ago in Hebei Province). In my memory it was hard to cycle cross the bridge in local park as it was steep, but now the slope has decreased, it is better for riding bicycles and walking. What are the principles of the new cable-stayed bridge?

The training in language skills is then transformed into the activities of children's thinking, imagining and understanding the culture of architecture. All the elements of outside education, including nature and societal life, have direct impacts on the children's senses. The open ways of saving information, which provide rich resources for pupils' second system of signals, provide a steady stream of thinking materials; as their thinking widens, they have broader horizons. The facts of classroom activities indicate that children's thinking will be extensive, deep and flexible if they have balanced systems of signals.

4.3.5.3 Connecting Moral and Aesthetic Education

Connecting with nature and society links with moral and aesthetic taste. So when my experimental class pupils began to understand the world, I systemically introduced them to ideological education, moral education and aesthetic education. They have opportunities to experience the promise of spring, the flourishing of summer, the harvest of autumn and the fecundity of winter. They observe the sun and the moon, trying to understand how they could save humanity from the darkness and bring them into a world of light, and how the moon walks through the clouds following children on the earth. Pupils feel the momentum, brightness and color of the sunrise; they also experience the unique mood of the moon rising. All these magnificent natural scenes were observed, enjoyed and described by my pupils. Education in the love of nature and protecting natural resources permeates through them in the process.

In the beautiful fields, everywhere is included in education, from the love of laboring to the love of people, life and their hometown and motherland; from the old ox's "mooing" to the sound of the tractor motor rumbling; from the shape of the farm to the peasants working in the field; from a few low cabins to a new small building standing on the edge of the village; from the narrow paved path to the wide and busy avenue. This kind of education about the nation was introduced to experimental class pupils by teachers to help them to recognize the world.

When children gradually understand nature, it inspires their wisdom and connects their moral and aesthetic education, so they can feel, think and have something of an epiphany when they explore the infinite world. They can launch associations of thought, imagination and logical analyses related to model-based reasoning. These living information resources greatly enrich the cognitive activity in the classroom.

Contextualized education leads with beauty as the breakthrough, thinking as the kernel, emotion as the relationship, the child's activities as the avenue and the environment as the source of learning. Children acquire an interest in inquiry, aesthetics, knowing and creating, and therefore this kind of teaching vividly meets their needs. Consequently, children's interest in learning, aesthetics, knowing and even pursuit of a rich spiritual life will be encouraged.

4.4 Findings of Quantitative Research: Case Study of the Contextualized Curriculum

4.4.1 Analysis of Survey of Literacy and Teaching Improvement

For many years in Chinese primary schools, there was no doubt that children had to learn based on the arrangement of the curriculum when they entered school. However, do the new first-grade students know no vocabulary? The simple fact is that many children have unconsciously learned some words. As to how many words and how large the difference is among students, teachers know little. We decided to conduct a survey after discussing this problem and select 620 words from a list of new vocabulary. There were 155 children participating in this test of the degree of literacy (Table 4.1).

The statistics showed that some of these new primary school students could recognize all 620 words and that the average literacy rate was near 200 words. Even students who had lowest literacy rate recognized at least 26 words. Therefore, if the teacher started teaching from the word "one" (*yi*), it would not meet the increasing needs of children in modern society. Eventually, children's interest in recognizing words would be frustrated at this beginning stage of learning.

Thus we carried out the reform of literacy education according to this situation. The first element was to feel the mystery of Chinese characters, stimulating students' interest in literacy. We combined Pinyin teaching with pictographic words and teaching of word knowledge, so that students could fully feel the mystery of Chinese characters and get a feel for the writing culture. The second element was to open a "literacy paradise" so that students could read while playing. The combination literacy and game is one of our explorations in the process. We set up the

Table 4.1 Statistics from the literacy survey

Degree of literacy	Number of children	Percentage (%)
>200 words	41	28.28
100–200 words	45	29.03
<100 words	69	44.51

"Literacy Paradise", with the form of interactive game to let students know. For example, the game, picking fruit, find friends, you play my guess, Chinese mother to find dolls, mail messengers. Children could learn more Chinese characters when they are playing various games. Thirdly, adjusting the teaching focus, the difficulty of literacy in preschool children is writing, so we focused on teaching students to write good Chinese characters as a first step.

Our second area of research was to use students' literacy experience to set up contextualized literacy courses. Children know so many Chinese characters before they are enrolled, but how are these words acquired and what experience do students have when they are literate? So we conducted a second literacy survey, letting students talk about the first grade before their own literacy story, recorded by mom and dad. The survey showed that the degree to which students are literate is mainly due to their life situation. Fully based on their experiences of self-study in recognition of words, on the one hand, students were required to learn words in the context of their family, so we prompted parents to participate in their children's enthusiasm for literacy, putting names on cards attached to common items, in the "more meet" in the comparison of physical literacy. On the other hand, the experimental class also gave children an understanding of colorful nature in the combination of scenes or a simulated situation of literacy, so that students' mutual inquiry independently focused on the combination of knowledge. This let children into the life situation and simulated the situation of middle school literacy, to allow conscious words and unintentional literacy to combine, thus enhancing the interest in literacy and its efficiency.

Also, we edited a literacy book about the environment, but made sure that it did not increase the burden of learning and that students could learn in a very relaxed way. The improvement of literacy efficiency saved teaching time so we began to read early, and in reading also achieved the goal of consolidating literacy. At the end of the semester, we carried out a quantitative survey. The textbook requirements the 1st grade students to grasp the correct rate of 123 words. There are 98.7% students who had our contexualized Chinese curriculum could grasp these basic requirments. It is amazing result that there are 30% of the students could grasp more than 1,000 Chinese characters when they are only 6 year old and 62% students to achieve more than 300 Chinese character, even 8% students literacy up to 500.

4.4.2 Comparative Study of Situated and Desituated Learning in Essay Writing

In the years of teaching practice, we obviously felt that the observation of contextualized composition are much better than traditional writing training in classroom. However, in the past we did not have a separate quantitative comparison and did not collect detailed data, so we specially designed a control experiment and conducted further case analysis.

Table 4.2 Standard deviation of average heart rate and heart rate changes

Indicator	Average heart rate	Change in heart rate
Learning in optimized situation (A)	100.26 ± 9.91	5.04 ± 0.54
Learning in natural environment (B)	91.48 ± 5.79	7.13 ± 1.16
p value	0.302	0.014*

Note *p = < 0.05 is a significant level

We chose one third-grade class for the next semester as the experimental object. The first time the class language teacher showed a cloth doll, we had students write a propositional composition called "My Cloth Dolls." The second time, the teacher led the class to carry out a series of "My Socks" activities. First of all the art teachers guided each child's hands to make creative sock dolls according to their imagination. The children happily produced a variety of images and vivid and interesting sock dolls. They made the dolls like babies and exchanged them with their peers, to mutual appreciation. Then the grade group teacher put the children's sock dolls into a fairy tale of the "Sock Dolls' Paradise," setting up the background and roles to fully show the results of the children's creations. After the performance, the children wrote an essay entitled "Into the Paradise of the Sock Dolls."

The comparison of the two pieces of writing is shown in Table 4.2.

The survey data show that in the contextualized composition the expression of desire, composition length, true feelings and the rate of three indicators of excellence are significantly higher than in the propositional composition. In this case, the team carried out a further analysis from the angle of the situation and the children's learning: the creation of the simple proposition of the composition of the first motive force from the exercise is not enough, for children, this is to complete the teacher assigned to the writing task. So the quality and quantity of the exercises are still good. We do not want to choose to let children have no actual experience in order to open a distance between the two compositions.

For the second contextualized composition, the children had to make their own favorite sock dolls and carry out the process of incorporating their emotions and imagination. The sock dolls' exhibition in "Paradise" also let the children experience the achievement of having their results shown in front of everyone. They saw other children make all sorts of sock dolls, as if in a fairy tale world, and this feeling for children was both fresh and profound, naturally producing an excited mood and the potential expression of desire. At this time the teacher gave a little guidance for the children to write "Into the Paradise of the Sock Dolls." This essay had a foundation in the motives for its creation and the genuine feeling for the sock dolls.

The world of children is a world of emotion. Contextualized composition is "the environment of sentient beings" and "the environment of activities," which is a vast space for interactive interaction between teachers and students. The situation provides the colorful background and finds a specific situational resonance in children's hearts. Children's experience, thinking, imagination had been fully activated, which triggered their expression.

In the course of our control study there was a "failure" experiment, but from the actual results of the experiment we carried out in-depth reflection and questioning and found the answer to the question, gaining a new understanding and inspiration.

Our choice was for a third-grade experimental class to write a simple essay, with "Autumn Leaves" as the title, before the class had observed any autumn leaves. The composition was not difficult to write without prior instruction, and some of the children were very interested in it. So we were very surprised when we read the children's assignments.

We also carried out a preliminary statistical analysis on the numbers. There were 52 students in the class. Regarding the length of the essay, 2 students wrote 200 words or fewer; 33 students 200–360 words; 16 students 360–400 words; and 1 student over 400 words. The quality of the essay was rated as gifted for 16 students, excellent for 25 students and good for 11 students. There were descriptions of the ginkgo, sycamore, maple, willow, Guang Yulan, pine and cypress, more than 10 kinds of common leaves, of which 15 students described 1 kind and 39 students described more than 2 kinds. The children caught the characteristics of the autumn leaves and wrote about the different colors, the shapes of various leaves in autumn, and even the way they fluttered in the autumn wind. Moreover, 4 of them described the use of a variety of leaves to make bookmarks or a leaf collage, and 11 students imagined the story of the leaves.

Our original hypothesis was that the students would find it more difficult to complete the essay, but the results of the test were greatly beyond our expectations. At this time our hearts were full of confusion. Why had this happened? In the absence of observation, the students were able to write excellent propositional compositions. Although the test results were different from our hypothesis, experimental research on educational science must respect the facts and seek the truth from them. We needed to conduct analysis and find out the reason behind it. Where could we find the answer? What we wanted to study was the secret of children's learning, to seek answers from students. Therefore, we interviewed the students: "This composition is very good writing, can you tell me how you wrote it? How do you know so many different kinds of leaves, and how could you write the scene of the autumn leaves falling?"

The students replied cheerfully:

"I think it's particularly easy to write when I think of the way the leaves fall."

"Teacher, have you forgotten? In the first grade, you took us to the people's park to observe the fallen leaves."

"Later, I also observed the changes in the leaves, found that the leaves are yellowish, but also with green in the yellow."

"We picked up the leaves and went back to school to make a leaf collage."

The students' answers made us suddenly realize that in the experimental class two years before we had taken the students on a field observation activity, "The Autumn, the Spirit of the Ghost." The beauty of the scene of autumn leaves falling was vividly imprinted in students' memory and, because of "beauty," because of "love," so far they had found it hard to forget. It had provided the basis for writing this composition. Is this not a more vivid illustration of the validity of

contextualized composition? This seeming "failure" of the experiment enabled us more clearly to recognize that contextualized observation can play an important role because it enriches children, stimulating the expression of enthusiasm, improving the level of composition and even promoting the development of children's imagination.

4.4.3 Comparative Heart Rate Study Based on Empirical Studies

The individual learning process must be accompanied by physiological and psychological changes. The validity of classroom teaching must be embodied in students' learning. "Attention" and "mood state" are the main behavioral characteristics of the degree of students' learning input in class, and the "heart rate" is often the "barometer" of the physiological and psychological condition of these two behaviors. We borrowed the Polar portable heart rate measurement table from the Academy of Education, Nantong University, and collected the heart rates in the classroom in order to understand children's mood changes in the optimized situation and in the natural situation.

The heart rate measurement instrument consists of a heart rate transmission belt and a data record table. The data collected by the heart rate transmission belt is sent through a Bluetooth module to the data record table. At the end of the test, the data record table can be imported into the computer for analysis. The heart rate indicators collected include the standard deviation of the average heart rate and the average heart rate against the baseline value of the heart rate. The standard deviation of the heart rate is used to indicate the degree of students' heart rate change.

We chose two classes in fifth grade and five students (three boys and two girls) in two classrooms. Two teachers were invited to teach this group of students with differernt methods by using the same material, a Chinese literature, named as "Monuments". One teacher led a lesson on according to his normal teaching method. And on the next day, another teacher used contextualized teaching to teach "Monuments." First, in Class B, the teacher led a lesson on "Monuments" according to his normal teaching method. The next day in Class A, the teacher used contextualized teaching to teach "Monuments." We gathered the heart rate data both times. Then we analyzed the heart rate index of students under the influence of the two types of classroom teaching and the selected teaching resources, according to the classroom video, using SPSS13.0 and the Polar records.

The results and analysis of the study are described below.

4.4.3.1 Comparison and Analysis of the Students' Overall Heart Rate

According to the data shown in Table 4.2, in contextualized teaching students' average heart rate was 100.26, and the average heart rate of students during

non-contextualized teaching was 91.48. After the T-test analysis, there was no significant difference in the average heart rate of students under the influence of two types of teaching. However, the T-test analysis of the change in heart rate found that the heart rate change during contextualized teaching was smaller than that during non-contextualized teaching, and in the case of $p = < 0.05$ there are significant differences. Obviously, overall heart rate of students who had taught by contextualized teaching change visibly than non-contextualized teaching students' overall heart rate.

There are five similar teaching sections in above two classes, according to further observation of the video, which including ① descriptions on senarios; ② descriptions on figures; ③ descriptions on themes of text.

4.4.3.2 Comparison and Analysis of Heart Rate Index with the Same Teaching Resources

The comparison of students' heart rate under the influence of contextualized teaching and non-contextualized teaching in these five groups of same teaching resources revealed that the degree of heart rate change in non-contextualized teaching is greater than that in contextualized teaching; that is, the heart rate is more stable in contextualized teaching. There were significant differences in the heart rate changes under these two forms of teaching ($p = 0.02$) (Tables 4.3 and 4.4).

Under the influence of these two different ways, there is a certain difference in the degree of students' heart rate change; that is, the heart rate changes slightly more steadily under the influence of contextualized teaching, mainly because the students had been guided in the contextualized teaching, their heart rare changed obviously. When teacher did not employ the contextualized teaching, students's emotional fluctuations is relatively small.

Table 4.3 Comparison of average heart rates between two groups of students in the same teaching sections

Teaching section	1	2	3	4	5
Optimized learning in context	99.0 ± 13.73	98.87 ± 11.29	100.9 ± 12.42	99.56 ± 10.33	102.55 ± 9.84
Learning in natural context	88.55 ± 8.62	91.11 ± 6.35	95.22 ± 5.73	94.43 ± 3.34	99.54 ± 3.44
p value	0.243	0.214	0.118	0.057	0.073

Table 4.4 Comparison of heart rate changes between two groups of students in the same teaching sections

Teaching section	1	2	3	4	5
Optimizing learning in the context	5.70 ± 1.36	3.5 ± 0.459	3.57 ± 0.58	5.09 ± 1.28	5.01 ± 2.78
Learning in the natural context	5.74 ± 2.14	6.50 ± 1.24	5.84 ± 1.62	5.85 ± 1.29	6.20 ± 3.25
p value	0.088	0.02 *	0.229	0.890	0.368

Note *$p < 0.05$ is a significant level

4.4.3.3 Measurement and Research on Heart Rate Changes in Students with Emotion in the Contextualized Classroom

Figure 4.1 shows the change in heart rate for five students under the influence of contextualized teaching. The music rendering part is the arrow sign 1 in the figure (Time is 14 24 00), 4 (Time is 14 44 00), 6 (Time is 14 58 00). It can be seen that students in this part of the heart rate changes in the peak and trough, that is, the student's heart rate change is greater, which to some extent, explained that music rendering of the situation design of the students heart rate changes have an impact on the realization of contextualized teaching emotional stimulation purposes. The arrow signs in the figure 5 (time for 14 44 48) showed no significant fluctuations in the students, heart rate. From the content point of view, because this link is mainly students in the independent thinking, has been immersed in the background music

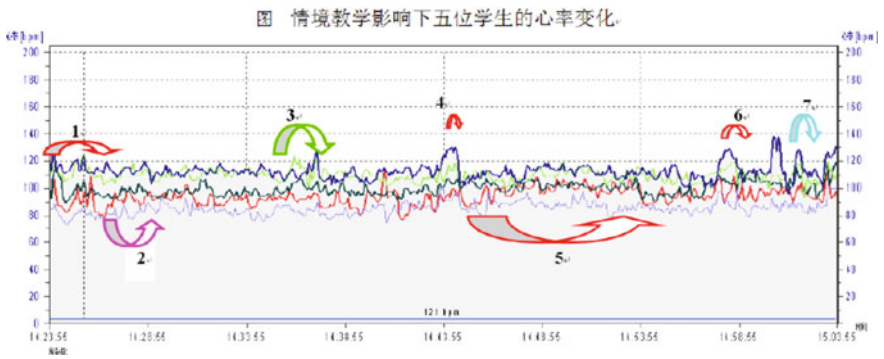

Fig. 4.1 The changes on heart rate of five testee students impacted by the contextualized teaching

created by the atmosphere, concentration, so the students heart rate changes relatively gentle.

The arrows in the figure 2 (time is 14 26 30) are pictures showing some students' heart rate changes. It can be seen that the students' heart rate changes relatively smoothly during this period.

The arrows in the figure 3 (time is 14 34 38) are the students' role-playing part of the students' heart rate changes. It can be seen that the heart rate changes in middle school students in this time period are obviously in the end part, which indicates that the students have entered into the teacher's role-changing principle design situation, the students regard themselves as generals and express the general angry feelings.

The arrow signs in the figure 7 (time is 15 02 03 00) are the students' heart rate changes in the part of the reading. It can be seen from the picture that the students' heart rate changes significantly.

Contextualized teaching, with pictures, music, role-playing and other contextualized elements, can cause significant changes in heart rate. This relates to the nature of the teaching tasks that need to be accomplished and the students' learning activities. Reading and expression can also increase students' heart rate significantly, and often music and role-play, together with teaching activities, can represent an important medium for achieving the objectives of contextualized teaching.

Chapter 5
Further Development of the Contextualized Curriculum

The previous chapters have covered all the process and gains since the beginning of the exploration of contextualized teaching, up to the recent series of reforms of the contextualized curriculum. Starting from the beginning of Chinese literacy and then expanding to other disciplines, I have gradually constructed the principles and real results of the process, which includes approaches, means of establishing the content of the curriculum and the operation of the essentials, including the modern curriculum reform of new ideas, especially the essence of the artistic conception.

During a process of exploration lasting more than 30 years, I have come to deeply understand the significance of the growing team of those involved in the contextualized curriculum when I presided over the "Project of Exploration and Research on the Contextualized Curriculum of the Tenth Five-Year Plan (2001–2005)" and the "Experiment and Study on Contextualized Education and Children's Learning of the Eleventh Five-Year Plan (2006–2010)." Local teachers, including teachers in 22 sub-project schools, experts from East China Normal University, Nanjing Normal University and Nantong University, were involved in the exploration of the contextualized curriculum. All these people promoted vitality and strength, so that contextualized courses were developed in a broader field and stepped up to a higher level. The emergence of teachers and students' positive affections and upward vision in schools made me excited and gratified.

The members of the team found something in their research and they also consciously conducted further studies. They had a large amount of first-hand data, but were also willing to do a hard theoretical summary. The school special grade Chinese literacy teacher presided over the project "The Development and Research of the Chinese Literacy Contextualized Curriculum in Primary Schools," the deputy headteacher took on the project of a "Study on Basic Strategies for Teaching Chinese Literacy in the Contextualized Curriculum in Primary School," and the directors of the research and teaching departments presided over "Experiment and Research on Creating Scenarios and Integrating Disciplines of Mathematics in Elementary School," "Experiment and Research of Multiple Ways of Developing Mathematics Curriculum Resources," "Development and Research of a Thematic

L. Jilin, *Curriculum and Practice for Children's Contextualized Learning*,
https://doi.org/10.1007/978-3-662-55769-3_5

Culture Curriculum" and "Experiment and Research on the Curriculum Development of Chinese Comprehensive Practice Activities."

The subject leaders presided over the development of and research into the field contextualized curriculum in "The Integration of Music Courses and Other Subjects in Elementary School," "Development of and Research into the Curriculum of Fine Arts in Elementary School" and "Experiment and Research on Integrating Information Technology and Disciplinary Teaching." Many young teachers presided over topics such as "Development of and Research on Essay Writing in the Contextualized Essay Curriculum," "Experiment and Research on the Strategy for Creating Contextualized Application Task-Based English Teaching," "Explorations on Teaching and Activities of PE in Primary School" and so on. In the process of completing the subject, teachers had tremendous research achievements. They grasped the rules and arts of research, so that students in the experimental school and experimental class were happy to grow and learn efficiently. It was also proved that the process of research into and construction of the contextualized curriculum is also the process of developing teachers' wisdom and curriculum resources.

Typical cases in which teachers became the forerunners of special curriculum development include the exploration of a comprehensive practice course and a thematic culture course in the contextualized curriculum, breakthroughs in oral communication for blind children, early childhood reading and the feasibility of children learning in cross-class interaction situations.

5.1 Breakthrough Progress in Special Education

The starting point of contextualized curriculum construction is to benefit more children, and I thought that I could use the relevant research to teach children more effectively in school. In particular, the difficulty of teaching blind children aroused my love and attention to them. So I tried to encourage the special school teacher to join the subject group and expanded the research object to low- and middle-grade students with a visual disability, including all those who are blind and with low vision. With the active participation of the teachers, contextualized education has brought the gospel to the oral communication of children with visual impairments.

Most such children use Braille and cannot communicate with people without disabilities in writing, so their interactions depend more on spoken language. Thus the expression of spoken language is more important to them. Although blind children can speak, for many words they lack the actual perceptual basis and do not know the words for specific things and situations. Therefore, it is necessary to establish situations of spoken communication which conform to the characteristics of school, family and social life, and to cultivate the oral communicative competence of students with visual disabilities in special teaching schools.

Because the research results of contextualized education come from children without disabilities, how can we help the learning of children with visual impairments? In order to better target the actual oral communication of blind children, we

first need to understand their oral communicative competence. We designed two questionnaires, successively for Nantong special teaching primary school and middle school, in which 80 fully blind and low-sighted children were involved. The survey found that students with visual impairments have four needs for developing oral communicative competence: more communicative objects to enrich topics of communication and develop occasions for communication; guidance on obtaining the essentials of oral communication so that they are eager to cultivate communicative competence; ways of overcoming the difficulties of their lack of vision and living in a world full of sound; and more comprehensive and richer information.

After understanding the demand, we targeted our research and also found it to be quite fruitful.

5.1.1 Promoting Oral Communication Ability for Visually Impaired Children

Choosing an interesting topic is the basis of effective oral communication learning in children with a visual impairment. If the topic is one in which children are interested, they will be emotionally engaged, forming the motivation for oral communication. Mastering the basic listening ability is the important goal of effective oral communication learning in children with visual disabilities. Oral communication is a two-way interactive process, requiring children to respond to each other, and to understand the subjective status of the listener and the speaker in the exchange. Teachers usually consciously cultivate this, so that children can speak clearly, say specific things, speak to allow others to understand and know the essentials, but also let them learn to listen to each other to ensure that oral communication can be smooth.

The use of sound is an indispensable means of effective oral communication learning in these children. Children with a visual impairment often rely on hearing, so the situation is created where teachers as far as possible provide lifelike sounds, such as performances or rich descriptions. The use of music can also enable students to obtain a richer aesthetic experience.

Timely commentary is the guarantee of effective oral communication learning for children with visual impairments. They cannot see the other side of the exchange, for example the speaker's posture, so sometimes there appears to a bystander to be a temporary interruption of communication or a stalemate, but also the teachers building the situation must pay close attention to the trend of the communication, using appropriate reviews to reverse the situation. Among these, there is a special need to note that to create an oral communicative situation that meets the cognitive characteristics of children with visual impairments and that they will like and be willing to accept, but also will pay attention to its efficacy, as far as possible the same situation should be described from multiple angles and levels.

5.1.2 Main Strategies for Promoting Oral Communication Ability in Children with Visually Impairments

The new curriculum standard puts forward the aim "to create a variety of communicative situations in and outside the class, let each student freely communicate," and for students' oral communicative competence to be developed through language practice in specific situations. If there is no specific situation, students cannot carry out meaningful communicative activities and there is no two-way interactive language practice. The preliminary attempt to make us feel that, in creating a situation to improve oral communication teaching, we can improve the oral communicative competence of children with disabilities is of great significance. The main strategies to promote the effective learning of oral communication in children with visual impairments are preliminarily proposed as follows:

1. **Display the context of real life**. Choose typical scenes that children know from life as the object of their oral communication and describe them vividly. Children with a visual impairment will feel very cordial about this and it can effectively stimulate them to produce a strong interest in communication and expressions of motivation and desire to communicate, thus creating a very active atmosphere for oral communication.
2. **Touch in the physical context**. Within the range and breadth of a blind child's life, select a familiar object or model that they can feel and touch. A group of two or more people can touch the object and then express the feeling of touch. The teacher emphasizes the distinctive physical features of the object, and clearly and repeatedly tells the children its name, shape and function.
3. **Employ audio to create a context**. It is very regrettable that children with visual impairments cannot experience the vivid pictures of multimedia. Therefore, teachers need to use audio files fully, especially by carefully selecting music suitable for the children's age. Musical images are distinct and the rhythm is generally more cheerful. Music can arouse children's happy mood, and the unique imagination of music can be aroused by the teacher's language of inspiration and encouragement. This is very beneficial and valuable to the development of these children's creativity, whether it is the language material they acquire or the spoken communication they compose.
4. **Create a context of performance**. Teachers through certain means create a performance situation, which lets students into the role of becoming *dramatis personae* through performances and participating in communicative practice. Although their small partners cannot see them clearly, through vivid performances and the role of the language, blind children receive information through auditory means, which can stimulate them to participate in communication with enthusiasm, even playing the role of a blind person and through their own performance entering unknowingly into the role. That kind of happiness is enough to make their oral communication very vivid, so that their spoken language is more consistent with the character.

5. **Enrich the context of activities.** Teachers should make full use of various resources and consciously carry out comprehensive practical activities, following through the theme with the children after the dialogue and exchanges between students, effectively improving their oral communication skills.

In the course of research, we were delighted to discover that the classroom was quietly changing. The teachers found that the children loved to speak, and some also spoke clearly and logically; their thinking activities were also active. Their little partners listened and made a bold evaluation, saying: "I think …," "I think what he said is not complete, if you add a word …," or, a different view, "I think it can be explained …" A good many times in oral communication class the discussion was intense and even acrimonious, so that the classroom achieved unexpected effects. Usually few classmates could talk with the teacher about the work of their family. Many children in the school were involved in reading and exchange activities and achieved good performances and good grades in storytelling competitions. One of the young girls won an award in the national blind "Voice of Mind" storytelling contest. In the school's 95th anniversary celebration, in the Children's Day activities this group of child performers was particularly prominent: they acted as the program presided over more than 10 min of dedication, and also performed a recitation, a rap and other programs. Their oral English ability also improved fast, as did the level of their writing. They composed the article "Let Life Be Full of Color and Warmth," which was published in the *China Juvenile* newspaper, and in the "Motherland in My Heart" themed essay reading contest, the children and general students participated in the same five competitions and won four awards, exceeding the overall average.

Improvements in oral expression ability and communicative competence help these children with visual impairments obtain the same experience of learning progress and happiness by virtue of their sensitive hearing.

5.2 Preliminary Results Achieved Through Contextualized Learning in Early Education

5.2.1 Creating a Vivid Context that Meets the Reading Text

Preschool is a key period in infants' growth and development, and early reading is of great value as it can open up wisdom, enrich knowledge and develop individuality. Educator Vasyl Suhomlinski thought that "the sooner a child reads, the more beneficial to intelligence development," that "learning to read before the age of seven will develop a very important skill: reading while thinking and understanding" and that "[t]herefore, when the intelligence dawns, reading should be advocated for the child." However, reading education does not arouse enough attention in kindergarten without a definite curriculum goal and plan. This kind of non-formal, unplanned, non-systematic and less scientific reading education often

makes young children cease their relationship with nature, society and life because of the study of book knowledge, let alone cultivates their social emotion, moral emotion and aesthetic emotion.

The present situation of reading in preschool has been a concern. Can contextualized education thinking be applied to children's reading? Years of practice have told me that it is possible, and one can even say that early childhood reading should be deeply rooted in the optimization of contextualized education, which is in line with children's own thinking characteristics and desire for knowledge. Young children's thinking development is in a specific image stage when they are full of curiosity and inquiry into the surrounding world, which they always understand through specific things or specific situations, and then establish a variety of contacts with it. The most important feature of contextualized education is embodying the abstract reading text in a matching situation, by using pictures, music, performance or typical scenes of real life, directly corresponding to children's senses and their inner world. This conforms to children's cognitive characteristics and rules, in line with their interests and needs.

5.2.2 Building a Favorable Reading Environment for Children

"The most effective way to promote early childhood education is to create a good environment," as psychologist Leslie White (2004) said. "Children around the environment in the natural life of children present, directly to the children's feelings of stimulation, triggering their conscious entry into the situation." In kindergarten, optimizing the living conditions around children provides the necessary knowledge base for their contextualized reading.

The creation of an optimized situation, including optimization of the environment in the garden, also incorporates optimization of the environment of the classroom. Use the garden, nursery room corridor, staircase, hall, wall or other areas to create a reading corridor, small book bar or themed reading wall. You can also add soft cushions and prepare a lot of reading material for the children to choose from; set up a special parent–child reading area, with different high and low chairs, so that parents with children can find the enjoyment of reading; or design a creative area, which displays children's own small books and newspapers, so that children can read the work of their peers, which will encourage them to learn to create. In addition, each class can create an open reading area of rich individuality. This can allow them to enjoy the experience of reading fully and freely in interaction with the objects, contents and exchange activities in that reading area, to provide them with a certain time and opportunity so that they can freely choose to read.

5.2.3 *Revealing the Fundamental Characteristics of Situated Reading*

As the experiment progressed, we gradually discovered that children's contextualized reading has a unique quality, which we generalized as the three aspects of image, interactivity and practicality.

5.2.3.1 Image

A vivid image is a typical characteristic of contextualized reading. Young children are the first to know the world around the image. The situation created in reading leads to young children's exquisite thinking characteristics coinciding and being in harmony with their life experience and attracting their attention, which stimulates their interest. We should remember that young children do have experience. We can either provide the relevant kind of image, with vivid pictures, headdresses, arm or hand ornaments and so on, or create richly aesthetic background scenes. We can also use PowerPoint or Flash media technology to create a dynamic situation with vivid colors and a clear picture, to encourage children's reading to provide the image and a clever auxiliary situation.

"The Phone in Spring" is a fairy tale happening in early spring, a topic of concern among friends. In the course of teaching, we are prepared to draw a picture using a variety of animal cards, and make a sketch of this in PowerPoint. Because each picture is vivid it has rich connotations, enhances the child's understanding of the work and dissolves the difficulty of the child reading. In the process of appreciating these pictures children are relaxed and happy to feel the beauty of spring, and find the animal-friendly text interesting. The children are attracted to the rich, vivid, beautiful pictures and their reading of the story is very focused, talking about the content.

5.2.3.2 Interactivity

Interactivity is a core element of children's contextualized reading. We skillfully use inspiration, hints, questions, discussions, performances and other methods so that children, with their peers and teachers, can fully interact with the environment and use their initiative to perceive the richness of the reading materials. They enjoy the text, their perceptions and collaboration with peers, so that their happiness has multiple angles and dimensions. Performance in particular is young children's favorite form of interaction. The experience of performance meets the intrinsic emotional needs of the work, develops the ability of language expression and encourages young children to express the beauty of literature and have a keen interest in creativity. In the relaxed atmosphere, children unknowingly accumulate the experience of reading from multiple angles to obtain a vivid, three-dimensional

impression; the interactive expression of different understandings of the work enables them to share the freedom of reading, arousing creativity and taste. It promotes the development of the latent wisdom of young children, the richness of their spiritual world and the cultivation of their personality.

Guess How Much I Love You is a classic work of foreign children's literature. The simple and sincere words of the two rabbits are touching, as is the expression of the meaning of love. In order to let children understand how deep love is, in the teaching process teachers help them to learn the story of the small rabbit by performing it with open arms, jumping up and other movements, competing to say which one loves the mother more. The young children act with enthusiasm. The performance is a good complement and reinforcement of their reading comprehension, and naturally deepens their inner experience. Children go back home and often take the initiative to tell their mom and dad to read the story of the book, and also ask them to play a role and perform together. The whole family is immersed in joy when parents read the book with child, and hence, children's language and thinking will be well developed with early reading.

5.2.3.3 Practicality

Storytelling, compare with each other in kindergarten, in addition to reading and speaking, talking is also advocated alongside "do one" practice activities and dynamic reading. "Doing" is an important part of contextualized reading: teachers let children participate fully in the creation of the situation, and under the teacher's guidance children are involved in the preliminary task of collecting materials. "Storytelling, compare with each other" is also a contextualized reading of children's willingness to participate in activities which can fully exercise their language ability, letting them experience a sense of self-expression.

5.2.4 Constructing Cognitive Ladders of Contextualized Learning

Contextualized reading for children can be linked with the practices and regularities of physical and mental development, such as attractive content, a large readership, interesting features and a progressive course. According to the laws of children's physical and mental development combined with practice, the child's situation in reading requires several points of attention: healthy content, many readers, interesting form and progression. The texts provided for children's reading are all carefully screened, and we strive to achieve both positive and clear ideological connotations and exquisite art forms, with a wide range of enduring influences, for the healthy growth of children and to play the colors and sounds of true life. Children have unique psychological characteristics and their inner subconscious

occupies an important position and proportion. Children have a game mentality and they like fairy tales and myths, often getting immersed in the dream and imagination of the world. Therefore, we pay great attention to the form of a game, play the roles of a fairy tale and so on, guiding children's fun reading in the development of a reading imagination. In addition, young children's ability at different ages can exhibit very big differences, so for small, medium and large classes we pay attention to stratification and differentiated treatment. In a small class we can use drawings and animations, heavy in imitation. In contrast, in a large class we can gradually increase the length of the story to cultivate independent reading ability, pay attention to the gradual reading process and set up the cognitive ladder of children's contextualized reading.

In practice over several years, we have been delighted to see that contextualized reading promotes the development of young children's attitudes, emotions and abilities. They want to read, love the performance of reading, and you can see the picture book shining in their eyes, or notice that in the corner game they repeatedly select the reading area. Children understand reading, and with good thinking are able to read books correctly in their turn and pay attention to books; in reading activities they dare to initiate questions, actively interacting with the teacher; furthermore, their aesthetic sentiment is manifest in the situation in focus and devotion, in the role of joy and the creation of performance. Contextualized reading makes children more intimate with the painting book, and their reading is no longer hurried but focused to watch every detail, to understand the meaning of each picture. In free activity time, many children often communicate and perform reading in threes and fours. Before their parents come to pick them up, they also linger in the reading area, sometimes refusing to leave, and many parents often stay to accompany them and share the reading fun.

The research topic of a kindergarten-based contextualized reading curriculum has been enriched and developed from scratch, from coarse to refined. Having more reading material not only forms different kinds of reading in large, medium and small classes, other kinds of relevant reading material may also be supplied. For each selected reading text, we first organized the teachers to browse comprehensively to gain an in-depth interpretation, then at the same time, according to the children's age and learning characteristics and according to the textbooks for small, medium and large classes, wrote a guide to the text and focused on the basics of its content, the organization and design of the relevant teaching situation and teaching program, and the production of PowerPoint slides, Flash, background music and other elements. Therefore, we further enriched the content of the textbook, and after many rounds of revision and perfection, we gradually accumulated and formed a distinctive contextualized reading curriculum for this course.

Postscript
Continued Exploration of the Contextualized Curriculum

After 1978, China implemented a policy of reform and opening to the outside world and its gates have been opened wider and wider. Chinese literature classes, however, were still enclosed, and were far away from the colorful life of the child. I was trying various devices to liberate children from traditional education. Contextualized education was hence the first step in this exploration. Accordingly, I became one of the first tastemakers of educational reform in China. The aim of my attempt was crystal clear, for all children's development and all children's growth, although I tested each step before taking it. This was my starting point and destination, therefore my philosophy of education was definite:

- Education is not only for children's learning, but also for their active learning.
- Education is not only for learning knowledge, but also for enriching children's spiritual world.
- Education is not only for the development of children tomorrow, but for obtaining happiness from their childhood.

Childhood is a groundbreaking, critical period in life, but children themselves do not know its importance. Therefore, teachers' responsibility is particularly significant. They need a good conscience and sincere emotion. Trust in teachers from both society and parents is very important.

Continually called by this solemn mission, I was always motivated, thinking, learning and acting on the exploration. The development of all children has been my lifetime pursuit and the core of my philosophy of education.

I am devoted to the education of the whole child and I spent the golden years of my life on children and on being fully immersed in studies of contextualized education.

L. Jilin, *Curriculum and Practice for Children's Contextualized Learning*,
https://doi.org/10.1007/978-3-662-55769-3

1 Cherishing Children's Love and Being Full of Passion and Imagination

I have been diligently striving to meet children's needs and cherishing their love without any distractions over the past 30 years. I stayed with my children for a long time and constantly felt the vitality of children, like aromatic flowers. Their potentially infinite wisdom and dormant power are waiting to burst out at any time. Children are really beautiful and full of wisdom, they are dynamic and bright, and they are supreme in my mind. I have spent much passionate time with them in my memory.

In order to understand the description of a sunrise for my students, I got up as early as midnight, rode my bicycle and headed to the Beihao Bridge before dawn. I immersed myself in watching the sun rise from the east when the horizon was dyed red. I imagined myself as a child with a red cloth and considered how excited the child would be, with what words and sentences they would describe the sunrise. What a poetic scenario it was. I walked in the fields and along the riverside to watch the buffalo in order to arrange how children could conduct observation of buffalo. I kept searching for buffalo until I found cows in a suburban district and I was released, as the child would be able to understand that cows eat grass and give us milk by observing them. As a primary school teacher, I really enjoyed my exploration. I felt deeply that love could ignite a passion that motivates students' imagination and my wisdom about teaching and education; furthermore, it would generate the wisdom of children's learning.

I am still engaged in dialogue with children, even with birds, flowers and grasses, though I am over 70 years old. So in such experiences of conversation with birds I have ideas, such as "birds are singers of dawn," "a child's thinking is a flying thought," "contextualized education is a child's wings." I think education itself looks like poetry and paintings and leads to poetic language in my mind. That is the reason I disagree with metaphors describing teachers as "spring silkworms" or "candles": "till the end of life a silkworm keeps spinning silk," "till burning itself out a candle goes on giving us light." How desolate a scenario that is. In my heart even I was compared to a silkworm: the silkworm becomes a pupa and the pupa becomes a moth, then the moth turns into a small silkworm. That is the extension of countless forms of life. It illuminates others while the candle lights others and sublimates itself. In many educational teaching activities, sparks of wisdom jumped out from my mind as passion and imagination in brilliantly elaborate pedagogical activities. I realized that children's thinking inscribes teachers' passion and imagination and they are driven by the brilliant sparks prompting students' creativity. Therefore, students' affection could be aroused by teachers' passions, and their wisdom could also be inspired by teachers' emotion. I am deeply certain that teachers who only possess passion and imagination will produce inexhaustible motivation in a good realm of education.

2 Conducting Research for Children and Remaining Committed to Educational Science

The reason that contextualized education could be implemented is that I was constantly guided by educational science. Even though it is hard on the road of exploration, I still enjoy happiness.

In the process of following the theories I have learned, I realized that China's education system has not been out of its own way for a century. From the beginning of the twentieth century, we have learned the Japanese education system, and then the European educational system was introduced. Since the foundation of the public country, we fully copied the educational system of the former Soviet Union, including its textbooks, and that has lasted for more than half a century. I think that we cannot simply repeat what others have done, we should have our own method of Chinese education. To go our own way, we must find the root of the Chinese classical culture. So I was inspired by *The Literary Mind and the Carving of Dragons*, written by ancient literary theorist Liu Xie, after I was deeply attracted by the broad and profound essences of the book. Then I tried to summarize my explorations of contextualized education as the four elements of *trueness (zhen), affection (qing), thinking (si)* and *aesthetics (mei)*, which are required for children's education. Hence, Chinese culture, like a bright light, showed the path for my exploration. I creatively used these elements in primary education. I started to focus on contextualized teaching, then on contextualized education and the curriculum, even touching the field of learning science. The development of contextualized education is the result of educational and scientific research leading me forward. In this long process of exploration, I paid special attention to the word "true": "true love," "tell the truth," "write the truth."

I insisted on conducting my study based on practical experiences while transforming my studies in practice. I spent months and years concentrating my studies in the field of children's development. Then I put forward the four elements of study strategies: *learning* (*xue*), *thinking* (*si*), *practice* (*xing)* and *summarizing* (*zhu*).

I constantly use reflection and introspection in the process of exploration. As the explorer of contextualized education, it is difficult to generalize and upgrade system theory in practice. I know that processes are complex and varied, but I also know that things are concise if we can catch regulations. In the process of thinking, I personally experienced various teaching scenarios in cases based on studies from perceptual to rational, from the individual to the general. I attempted to seize common rules from abstract summaries.

I always remember a saying of ancient Chinese philosophers: "(Children) could be educated based on their nature" (*shunqi ziran er yuzhi*). My personal experience tells me that it is easy to discover and grasp the rules of development for children. Their long-term accumulation has produced a leap in my cognition, so it generates my educational philosophy. It has taken nearly 30 years of effort to construct the

theoretical frame and operational system of contextualized education with the inscription of national culture.

I presided over the Eighth Five-Year Plan, the Ninth Five-Year Plan, the Tenth Five-Year Plan and the Eleventh Five-Year Plan of the Key Project of the Ministry of Education, which then developed into my four monographs, namely *Experiment and Researches on Contextualized Teaching*, *Contextualized Education in Primary School, The Poem of Contextualized Education* and *For Children's Learning: Experiment and Construction of the Contextualized Curriculum*. I gained three first prizes for the first and an Outstanding National Educational Scientific Research award issued by the Ministry of Education for the fourth. *Collected Works of Li Jilin*, which has eight volumes and more than three million words, was published in 2006 by the People's Education Press. This book won high praise at its launch organized by the Chinese Education Society and the National Institute for Educational Research in Beijing. It obtained first place in the Scientific Research Prize of the Fifth China Education Society and I received the award from the national leader Xu Jialu, Vice-Chairman of Parliament.

In order to leap from practice to theory, even though I had less leisure time and I had to work harder, I realized that my initiatives had come true when my innovations were published in journals or books, expressing the thinking, feeling and awareness of colleagues and myself. Meanwhile, teachers' experiences in classroom operation did not merely stop on the surface, but could be carried out by regulations and application in practice, when many children obtained benefits from highly efficient development models. The joy of accomplishment is indescribable, and the spiritual harvest is the highest enjoyment in my life.

Contextualized education has had a significant impact on results and contextualized education has finally left the country. In 2008, worldwide experts, including from Britain, Japan and other countries, commended the fact that contextualized education gained the power of discourse of Chinese education in the International Forum of Li Jilin Contextualized Education Exploration. The Chinese teachers' newspaper published on the front page a commentary that gave "cheers for the Chinese educator who is stepping out to the world." I understand the profound significance of my work and the value of life as a Chinese teacher.

3 Uncovering the Secrets of Children's Learning and Climbing New Heights of Study

In the final analysis, to explore the situation of education for more than 30 years is, in fact, to explore and study the subject of a whole world; that is, how children learn. I have already handed over a copy of the answer, but there is still a great distance for further research. This remains a huge challenge worldwide for teachers and experts who are engaging in contextualized education in the future.

Due to my sincerity about education, I have the deep feeling that "new heights are always in front of us." In recent years, I have paid a great deal of attention to the

study of brain science, which links with children's learning and scenarios. Finally I realized that there are still some black boxes in our understanding. I put forward four strategies based on the complexity and openness of the learning system for the further research:

1. Integrating and optimizing knowledge based on children's experiences and the aesthetics of art.
2. Connecting emotions and cognitive processes according to the necessary rules and motivation of teaching.
3. Linking children's real life and constructed knowledge, promoting students' abilities and capacities based on simulated activities.
4. Guiding innovative initiatives, paying close attention to early life and the development of imagination for children.

From the mid-1980s, I summarized a teaching model based on the creation of scenarios, arousing children's mood and connecting emotional and cognitive activities when I tried to definite contextualized teaching. My finding on the integration between emotional and cognitive activities had been supported by learning science, especially since I emphasized that "the combination of two activities is the core of learning." At the same time, children could feel aesthetics in the optimized context, arousing their affections. Brain science had also demonstrated that aesthetics make the brain happy and promote the production of neurotransmitters, which accelerate the growth of neurons and dendritic growth and improve brain function, ultimately promoting the development of children's brains.

According to brain science, emotion is a priority for the brain to receive signals. The formation of emotional memories lasts a long time and they are unforgettable. Except for psychological factors, this is the advanced scientific basis on which I was facing up to the corresponding realities in the past. Therefore, I further clarify the "integration of emotional activities and cognitive activities" as the core concept in the children's contextualized learning paradigm, with trueness, affection, thinking and aesthetics as the core elements. This is the important secret of children's learning.

This prompted me to refine the model of contextualized learning from the essence of more than 30 years of practical exploration. That is, selecting aesthetic principles to establish scenarios, arousing emotions according to those scenarios; inspiring wisdom based on their emotional development and integrating children's emotion and wisdom, children could learn, think, practice and improve in the scenarios of aesthetic, wisdom and interesting. The *China Education* newspaper reported my research findings in two articles, "Uncover the Secrets of Happy and Efficient Children's Learning" and "Hand in a report for Children's learning over the Past 35 years."

On Teacher's Day in 2014, the report "Practical Exploration and Theoretical Research on Contextualized Education" that I submitted won first prize of the National Basic Education Achievement Award of China. President Xi Jinping and other national leaders met with me. The Vice-Primary Minister, Liu Yandong, personally awarded me the prize. In the face of this gratifying opportunity, the

results of contextualized education have been further promoted throughout the country, which is a desire that I have been pursuing for long time. This will help children effectively learn and gain all-round physical and mental development.

Looking back down the road of exploring contextualized education that has lasted 36 years, there are only two key words that I keep deeply in my mind: willing and worthy.

Summary
Background to the Construction of the Contextualized Curriculum for the Child

The curriculum has been regarded as key for all countries in the world today, as experiments and research in this field have continued without stopping, effort and wisdom being dedicated to it by generation after generation. The humanistic curriculum of Vittorino da Feltre, the pansophic curriculum of John Amos Comenius, John Dewey's pragmatist curriculum, Jean Piaget's structuralist curriculum—all of these explorations of the curriculum demonstrated advantages and had worldwide influence. These patterns for the curriculum played important roles in curriculum reform throughout the world.

1 Focusing on Contextualized Education Reflects the Tendency of Contemporary Curriculum Reform

At the beginning of the twenty-first century, curriculum theories and practices are confronting tremendous fluctuations and changes in the field of international basic education. Various schools of thought and practical patterns for the curriculum have emerged. There are some tendencies that can be tracked in curriculum development, which emphasize social-centered, subject- or knowledge-centered or child-centered curriculum experiences. Increasingly, contemporary curriculum changes are committed to the pursuit of these three relationships in harmony. This resulted in the theory of context-centered curriculum design. Denis Lawton (2011), one of the UK's curriculum experts, is representative of the context-centered curriculum theory.

Lawton attempts to draw some advantages of subject-centered, child-centered and problem/social-centered curriculum theories and asserts that the child's autonomy should be developed through education, so that they can learn to adapt to various situations after they graduate from school and step into society. This

L. Jilin, *Curriculum and Practice for Children's Contextualized Learning*,
https://doi.org/10.1007/978-3-662-55769-3

curriculum theory was called the contextualization-centered curriculum by Lawton himself, and reflects a trend of contemporary western curriculum changes.

Throughout worldwide curriculum development, it is clearly indicated that most curriculum experts are focusing on contextualization of learning or contextualization of cognition and a series of new views on the curriculum around contextualization. What they have in common is that all these curriculum models are dissatisfied with existing teaching models that are class centered, teacher centered or textbook centered. They all emphasize the importance of life and practices, as well as receptivity, subjectivity, cooperation and contextualization based on real life experiences, which are a significant contrast to the traditional features of individualization and abstraction within schools. Therefore, contextualized cognition and learning theories are the focal points in educational academic research since the 1990s.

From what I have said above, international curriculum reform, particularly Lawton's contextualized curriculum, was an enormous influence and inspiration for the construction of my contextualized curriculum. It so happened that the eighth curriculum reform started during the "Tenth-Five Plan" period, just like a strong east wind blowing through the field of basic education. As the Department of Education launched new curriculum standards, it opened up a broader space for curriculum development. The macro-environment of national curriculum reform provided a background of ideas. I was deeply engaged in the great curriculum reform in China and worldwide and in the new round of curriculum changes. I have a strong wish that students could get benefits from contextualized education and, ultimately, that the curriculum could be popularized in classrooms.

2 A Series of Changes in Contextualized Education for the Child's Learning Needs

The construction of a contextualized curriculum can be traced to the end of the 1970s. I recognized that learning is supreme for each child when I stepped into a first-grade classroom. Schooling is sacred to the child. Too often preschool children have a beautiful vision and expectations of being first-grade primary school students. They feel very happy when they are coming to school with their bag, as learning has a strong attraction to these children. However, the melancholy on their faces inadvertently broke my heart and I felt anxiety for them after they started their learning at school.

During this period, I realized that the disadvantages of the current education system were trammeling the development of their mind and body. Then I began to consider how classrooms could be enriched and how children's natures could be maintained so that they could grow up healthily, which motivated me to explore the contextualized curriculum. After 18 years of exploration in the classroom and comprehensive reviews, I revealed the four realms of a systematic contextualized curriculum and the three dimensions of child, knowledge and society at a

Symposium on National Contextualized Education in 1996. In my presentation, I proposed that the contextualized curriculum would follow the direction of curriculum reform in comprehension and practice, linking with textbooks and the child's life, following theories and practices based on cutting-edge ideas and gradually constructing the theoretical framework and operational process of the contextualized curriculum.

2.1 Creating the Field of the Contextualized Curriculum: Stepping out of the Enclosed Classroom and Linking with the Child's Life and Learning

At the beginning of the 1980s, the enclosed indoctrination style of classroom teaching was far from the ideal learning place for a child. So I determinedly took children out of the closed classroom and moved toward nature and society through elaborately selected scenarios and linking children's learning and their lives.

There was beautiful scenery in the broad space of the fields. Its beauty could encourage children to embrace nature. They liked to observe the four seasons, flowers and trees, birds, beasts, insects and fish, changes in the weather, ice, fog and lightning. Students were joyful and did not want to return to school. After they conducted their observations, they described what they had seen and heard in composition exercises, in which they expressed their real feelings; the descriptions were rich in substance, even in love. They indicated that the field with living things growing was a vivid classroom for children's learning. Field education is necessary for their growth and it can be beneficial and effective. Thereby, I discovered a vast storehouse and deeply felt that nature was not a book which could be randomly opened and closed; it offers endless live sources for children's learning. During the entire five years, I was totally and inordinately passionate about conducting field work. A field curriculum was set up within the school timetable, which became the most popular new curriculum. Then I realized that important evidence of curriculum goals apparently relied on satisfying the needs of children, promoting their joy and all-around development.

So the exploration of the field curriculum, successfully linking classroom learning and nature and integrating symbolic learning and students' lives, gradually cultivated an affection for nature, cherishing life and concern for the environment. The field curriculum did not only provide cognition, language, thinking, emotion and cultivation of will, it also offered endless scenes and resources, and a broader platform for a new type of comprehensive practice and inquiry-based learning in schools.

Creating the field curriculum enabled me to obtain satisfactory results and contextualized composition at the beginning of the reform. Then it pushed me forward to changes in reading. It encouraged me to be engaged in reading changes through creating context and provoking students' enthusiastic mood along with their cognitive activities. A textbook written with a changed vocabulary, with

abstract, symbolic words and vivid field observations, provoked a livelier imagination in the child. Their potential wisdom and capacity for learning were developed based on the materials of their own thinking and imagination. Eventually, the first round of contextualized learning of the mother language was successful. When I recalled the initial stage and the preliminary findings revealed the rules of children's learning, it was an important basis for future curriculum changes in the core field.

2.2 *Natural Transition Between Kindergarten and Primary School: Stepping out on Joyful Learning During the First Six Years*

We attained good achievements in the first 5 years of exploration and studies. A group of new students were involved in the second round of experiments. I started my teaching at kindergarten in advance in order to let the children study happily and effectively. However, I soon realized that there was a steep slope between kindergarten and primary school. There were only half-hour classes at kindergarten; in contrast, primary school students learn subjects for the whole day. Thus, it was hard for preschool children to adapt to the primary school environment. I was reminded of the reality that it is essential for there to be a transition between kindergarten and primary school. Then I took advantage of this opportunity to set up a transitional contextualized preschool class. Specifically, I proposed the principle of connection between indoor class and outdoor class teaching, in which I designed the program and reduced the difficulties. The content and styles of learning were closing at the level of kindegarten while the children were at a higher level. Soon, children were adapting themselves to the life of primary school through a contextualized transitional curriculum. Obviously, from adaptation to enjoyment, they were enjoying the curriculum. Psychologically, this curriculum also paved the way for children's learning at primary school, so that they could take their first step of joyful learning.

2.3 *From Optimizing the Structure to the Birth of a Thematic Mega-Unit Comprehensive Curriculum: Meeting the Needs of the Diversified Development of the Child*

I realized the monotony of enlightenment education, as traditional mother-tongue education emphasized that literacy is the foundation of reading, while reading is the foundation of composition. There is a linear mono-structure, such as "Pinyin → literacy → reading → composition," which has a significant deficiency in that it ignores the interlinkages and interactions among the elements constitutive of

language teaching. This contributes to the monotony and lack of interest of primary schooling, and was the root cause of the inefficiency of teaching and learning in Chinese literacy.

Under the influence of the system theories proposed by Chinese philosopher of education Youlidang Zha (2009), I realized that efficiency is determined by structure. So the second round of experiments focused on the optimized structure and content, which aimed to improve teaching efficiency. Making full use of the interaction of elements for mother-tongue teaching, I proposed the "three lines" strategy, which is "literacy → reading → composition." Then the simple structures of the contextualized curriculum shifted to multiple ones, particularly to the orders of multiple directions, circles and an upward spiral. Children's curiosity was satisfied and motivated by the structure and they made tremendous progress in speed and learning outcomes, which greatly enriched their learning life in the phase of formative education.

Based on the content of Chinese literature, language tools and humanity, reading and writing, training in language and thinking development, indoor and outdoor classes were integrated by the strategy of "four-combination thematic mega-unit education." The content of teaching focused on textbook themes and similar contents were classified so that students could be intensively trained. The strategy embodied the concepts of macro Chinese language education, broadened the space of Chinese literature and enriched the content of teaching. Therefore, students were able to understand the rest by analogy, quickly grasping laws and benefits from the contextualized curriculum. After successful completion of the first round of experiments on the contextualized curriculum, the classroom became beautiful with an optimized structure and rich content. The inevitable result of curriculum reform, therefore, was based on changing content and styles through mother-language contextualized education.

I was further aware that the curriculum was gradually moving in the direction of comprehensiveness in the process of constructing the contextualized curriculum from the local view to the whole. Therefore, how could the contextualized comprehensive curriculum be set up for children's learning? I developed my ideas when I recalled the previous successful four-combination thematic mega-unit education in teaching, as the comprehensive model had been born. Further explorations were conducted and new strategies with new ideas conformed to this trend of nationwide and global curriculum development. Then I proposed the "thematic mega-unit comprehensive curriculum." Contextualization had turned a new page. The theme "leading with moral education, driven by Chinese literacy, integrating all subjects and linking indoor and outdoor curriculum" was confirmed during the 1990s. Horizontally, this vivid theme of the contextualized curriculum linked all subjects and activities in school, and meanwhile the core education was integrated vertically throughout the semester; they were complementary and mutual. As an integral role affecting the child's cognition and mind, the content of education not only gradually stepped toward comprehension, but also achieved a breakthrough for moral education, playing the important role of having a full impact on all subjects.

2.4 *Showing the New Vitality of Core Subjects in the Contextualized Curriculum: Integrating the Subject Curriculum and Children's Activities*

There is no doubt that the core area of curriculum reform has to be implemented through disciplinary teaching. In order to speed up the development of the subject contextualized curriculum, focus on building the core field and rethink my previous successful experiences of classroom teaching, I proposed the basic idea of linking the subject curriculum and the child's activities at the end of the 1990s. This maintains that the subject curriculum and the child's activities start from the child's learning and bring it into the optimized context, so that the child can engage in education and the process of learning with the implications, empathy and psychological field of *power*. They are involved in the activities of cognition, language learning and thinking, touching, imitating and operating other physical activities as well. Theoretically, what I explored was consistent with pansophism, proposed by Czech educator John Amos Comenius (2010), who emphasized integrating training activities and cognitive activities, or practices with actual activities when the child is recognizing things. Also, my attempts also echo John Dewey's (1932) curriculum theories, which highlight more the importance of activity in gaining experience for the child. When people become the main body of learning, they actively learn and construct the knowledge promoted by activities with warm emotions. They become active rather than passive learners. Children whose learning is contextualized can feel, touch and apply this content. They repeat and make further attempts to learn in various grades, and as a result their behaviors and values are influenced by aesthetic emotion, moral emotion and intellectual emotion. Learning thereby becomes the child's active requirement; active learning also brings the joy of success as the subject curriculum contents are linked with the child's activities.

These developments of the contextualized curriculum were helpful for subject teachers and provided a stage for their performance. Also, their creativity was developed: for instance, they edited many school-based textbooks and mathematics teachers won more than ten maths competitions. No matter whether they were champions or teachers, their teaching and research levels had been obviously improved.

To sum up, the content of contextualized learning for the child is determined by the above four realms, which expand horizontally and vertically, constructing an interconnected and interactive network structure, ensuring multiple open systems for the child's learning. The child is actively developed in the context; meanwhile, their knowledge is generated and constructed in the process and their social life also indicates its value and significance. Therefore, the original separation and opposition between child and knowledge, child and society, knowledge and society gradually disappears. Then the subject knowledge-centered curriculum had no existence as a series of contexts of teaching, such as aesthetics, wisdom and interest,

to ensure the needs of the child. Finally, the contexts could be developed and actively participated in.

3 Absorbing Nutrients from the National Culture: Focusing on Fostering the Child's Remarkable Competence

The advanced ideals and propositions of the contextualized curriculum do not merely borrow from contemporary theories of the educational sciences, but mainly absorb nutrients from an artistic conception of the classic national culture. I read them over and over again, deeply understood that it is extensive and profound, and summarized its four elements: *trueness, affection, thinking* and *aesthetics*. Sensitively, I recognized that these are exactly the needs of children's education. Therefore, I bravely moved across and creatively employed theories of ancient literature creation in the process of education for children. *Trueness* means giving children real-world experiences so that they can gain sound sources. *Affection* aims to promote students' learning and inner motivation by edification and influence. *Thinking* means broadening students' minds and imaginary spaces, developing potential wisdom. *Aesthetics* bring joyfulness and high efficiency in learning for the child.

The practices and studies of the contextualized curriculum sparked my passion and wisdom. I continually immersed myself in them. Children can feel a friendly atmosphere rendering beauty and wisdom, according to the textbooks. Because affection can be provoked by the beauty of context, accordingly wisdom can be inspired by affection. Therefore, contextualization displays fascination and intelligence in the integration of affection and wisdom, promoting students to move forward actively to learning. The students' process of psychological experience is a series of changes, including *feeling*, *experiences*, *provocation* and *motivation.* Meanwhile, students' sentiments are internalized by the influence of the humanities and then linked with their affection. As a result, the children are excited, propose questions and display their talents. So the status of children's involvement in learning, the interaction promoted by students and their sparks of thoughts that impressed by myself. I had been in such a classroom countless times and recognized that children's learning was no longer limited to their cognitive activities. Their affection was immersed in the classroom. So what I did was to allow this to run its course and link it with cognitive tasks and emotions. In the optimized contextualization, children were cheerful in body and mind, and their wisdom had been inspired so that their lives indicated the colors of diversity.

Influenced by the inspiration of the *artistic conception*, I sensed that the integration of emotion and cognitive activities was key to the child's joy in learning over the long term. Ultimately, I spent a couple of years on revealing and seizing this key. This teaching model can be summarized as "creating optimized context, provoking the child's affection, and integrating affectional and cognitive activities."

I am still on the path of exploration and further research. Students' learning status and methods were changed as their affections and cognition were integrated. They dramatically shifted from passive receptors to active participants. They were joyfully engaged in classroom discussion and learning. Under such scenarios, students generally had a strong affection for learning, with high effectiveness and quality along with their active development. In recent years, learning science has demonstrated that the core of learning is the integration or conjunction of emotion and cognition. I was delighted to read this, as I realized that this core secret had not only been discovered in my practical work, but also had been implemented in the contextualized curriculum. I took on this point as if I had obtained a valued treasure. Children's status and style of learning were changed along with the binding of their emotion and cognition. Different to the traditional quiet classroom, students were engaged in participation, actively involved in classroom discussion instead of passively listening. In such a context, enthusiasm for learning was generally formed. It thus encouraged students to take the initiative to develop in active learning.

Children were taken into real scenes where they were involved in conducting observations and operations, and in linking the content of a subject with real life in the process of the contextualized curriculum. Consciously, children realized their true feelings, and obtained and applied their knowledge in a real context, so that they could understand the inherent relationships of knowledge and enjoy interest along with the application of knowledge. Meanwhile, besides recognizing the true context, children were also guided by aesthetics, and teachers designed their teaching to include music, pictures and drama, visual demonstrations and materials, including high-tech simulations. Children also could feel and enjoy the contextualized curriculum. They could more profoundly understand and apply the knowledge, as this model paid much attention to the child's simulated operations combined with symbolic manipulation, which reflected the practical and societal features of the curriculum. Therefore, it is not difficult to understand that the aims of the contextualized curriculum are to help the child return to real life and link them with society, so that their classroom learning can be joined with real life and the application of knowledge when optimized real-life scenes and stimulated scenes are developed simultaneously. In particular, I put effort into the development of aesthetic appreciation and potential wisdom in the process of linking the child's emotion and cognition. I assumed that this is a way of influencing the child's mind, exploiting their inspiration, and is an early foundation project for future excellence. I believe also that this exploration will be deeply influential in the development of the child's emotion and creativity and that their operational abilities will be improved.

The unique advantages of the four core elements came into the contextualized curriculum. I always seek trueness and aesthetics and then link these with emotion and wisdom in the process of implementation. These display the fascination and form the synergy which satisfy the child's requirements and are consistent with the child's learning features. Therefore, contexts which consist of trueness, affection, thinking and aesthetics are a realization of the child's active development. These

elements in the construction of the contextualized curriculum have been considered and highly praised by many experts. The metaphor of enriched ore is a valuable resource that is worthy of further exploration. Professor Pei Xinning from East China Normal University pointed out that the contextualized curriculum was "a learner-centred curriculum system." The curriculum design focuses on the aims of "inscription of emotion, latent energy and the lived child." Such an optimized learning context ensures the display of students' autonomy. Therefore, the contextualized curriculum does not only reflect the contemporary international tendency, the common orientation of the learner-centered curriculum, it also indicates the unique characteristics of being learner centered, including effective practical approaches. Moreover, the contextualized curriculum plays the role of "linking the subject curriculum and students' life, integrating formal context and non-formal curriculum so it could promote the child's development." Thus, it adds the new field of the Chinese school of the contextualized curriculum to the international curriculum, also highlighting the style of Chinese schooling in curriculum changes.

These practices demonstrate that the contextualized curriculum should be established on optimized multiple curriculum resources, abiding by the rules of children's development. It consists of a whole system, integrating the systematization of knowledge, operation of activities, joyfulness of aesthetics and the wideness of the environment. It also emphasizes that students' warm feelings and active development can be evoked by the specific atmosphere and optimized scenarios of the curriculum. I have tried my best to mix the influences of the visible curriculum and the hidden curriculum, and to perform the multiple functions of the curriculum based on the foundation, operation and diversification from various fields, times and spaces in school.

References

Aesthetics Research Office, Department of Philosophy, Beijing University (eds) (1980) Comment on beauty and aesthetics. Commercial Press, Beijing, p 41

Arieti S (1976) (2nd ed) (trans Tian GN) (1987) Creativity: the magic synthesis. Basic Books, New York; Liaoning People's Publishing House, Shenyang

Comenius A, Johann (2010) The Great Didactic of John Amos Comenius, Florida, FQ Legacy Books

Сухомли́нский, Васи́лий Алекса́ндрович (Suchomlinski) (1970) Let (trans Huang ZR) (1987) Youngsters grow up healthily. Educational Science Publishing House, Beijing

Сухомли́нский, Васи́лий Алекса́ндрович (Suchomlinski) (2001) Selected works, II, (trans Huang ZR). Educational Science Publishing House, Beijing

Dewey J (1932, Reprinted 2007) Democracy and Education: an introduction to the philosophy ofeducation. NY: Routledge

Dewey J (1932, Reprinted 2012) Democracy and Education. NY: Simon & Brown

Diesterweg FAW. Wegweiser zur Bildung fur deutsche Lehrer (trans Yuan YA). People's Education Press, Beijing

Hegel GWF (1979) Aesthetics (trans Zhu GQ). Commercial Press, Beijing

Jensen E (2004) Brain compatible strategies. Sage, London

Pei X (2005) Teaching Design for learners, Beijning. Educational Science Publishing House

Lawton D (2011) Theory and Practice of Curriculum Studies. London, Routledge

Sprenger M (1999) Learning and memory: the brain in action. Association for Supervision & Curriculum Deve, New York

Wang GW (1990) The notes and comments Ci poetry among mortals (revised edition). East China Normal University Press, Shanghai, p 157

Wei Yu (2012) Rethinking 10-year Learning from Doing: based on explorations of science education inChina, Beijing: China Science and Technology Press

White LA (2004) Evolution and Revolution in Anthropology by William Peace. University of Nebraska Press

Zhang CQ, Zhang HE (1982) Interpretations on the literary mind and the carving of dragons (Wenxin Diaolong). Hunan People's Publishing House, Changsha, p 340

Zhong Q (2015) Modern Curriculum Theory. Shanghai: Shanghai Educational Publishing House

Zha Y (2009) Dialectical Thinking on Curriculum Reoform. Chongqing: Chongqing Press

さんは長い間, (1981) Early education and gifted child (trans Institute of Japanese, Hebei University). Hebei People's Publishing House, Shijiazhuang

L. Jilin, *Curriculum and Practice for Children's Contextualized Learning*,
https://doi.org/10.1007/978-3-662-55769-3