Children's Key Competencies: An Introduction to Its Theoretical Constructs, Impact, and Formation through the Comprehensive Practical Activity Curriculum

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Abstract

The comprehensive practical activity curriculum can be said to be created to cater to children's curiosity and nature of exploration. Through the creation of problem situations, children are guided not only to explore what the world is, but also to pay close attention to what the world will be and cultivate children's key competencies in the real process of exploring and experiencing the world by following the behaviors of participation, reflection, service, protection and improvement of the world, such as humanistic connotation and scientific spirit, responsibility consciousness and feelings of family and country.

Keywords: comprehensive, practice, experience, children, competency

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In 1918, the publication of Franklin Bobbitt's (2017) *Curriculum* marked the birth of curriculum as a specialized research field. The curriculum revolves around the interaction of the four elements of teachers, children, teaching materials, and the environment to form an organic "ecosystem" (Schwab, J.J,1973) to explore the world. And in the four elements, teachers and children are the most vivid, profound, subtle and complex interactive subjects, which also shows that children have played an important position on the date of the birth of the curriculum.

As we all know, the links between regions and countries are becoming closer, more interdependent and more complex, and in the era of increasing uncertainty, the rapid development of science and technology has led to the continuous update of knowledge and presents a trend of rapid changes, forcing education to reduce the transmission and storage of knowledge as much as possible so that children can seek the method of acquiring knowledge in the process of curriculum integration, that is, learning to learn. Children can learn about animals and plants in the vast nature, in the fields, in the streets, in the countryside, in the workshop, in the rivers even lakes, and learning to do in the process of making their own decisions and assuming their duties in a real social classroom. In order to realize the sustainable development of human beings in the increasingly interdependent world, it is necessary to regard unity as a common value of human beings and regard education and knowledge as global common good (UNESCO, 2017), so as to enhance the sense of responsibility for each other (UNESCO, 1996). In the face of a complex and changeable global development model, it is essential to recognize common core values, but also to recognize the diversity of our society. Due to the existence of diversity of culture and world outlook, the concept of human well-being presents such a diversified definition. Therefore, the current international regulations and policies formed by subjective factors and background factors are not complete and sufficient for children to "learn to be" (UNESCO, 1996). So as to learn to change in making rational choices and solving practical problems in the face of unpredictable complex situations. This is

both the essence of comprehensive practical activity curriculum and our appeal to children's key competencies.

Theoretical Background

From the end of the 18th century to the beginning of the 19th century, Rousseau (1985), the Enlightenment thinker of France in the 18th century, Pestalozzi (1992), the Swiss democratic educator, and Herbart (1936), the German educator, were deeply influenced by the European Enlightenment at that time. They were committed to freeing people's spiritual needs from the ignorance, superstition, and blind obedience of the Middle Ages, advocating the glory of reason to shine on people's minds, especially emphasizing the intrinsic correlation between nature and human beings and giving absolute significance to the particularity of each specific educational practice. They actively advocated the curriculum implementation and children's training in the understanding and interaction of nature and specific practice situations, and also presented the original ideas and practical demands on curriculum integration. From the end of the 19th century to the beginning of the 20th century, American progressive educators Dewey (2005), and reformists such as Theodore Brameld (1976), met the needs of industrialization and social democratization. Influenced by the rapid development of experimental science, they advocated that the purpose of education was to cultivate children to adapt to the needs of modern society and have the ability to transform nature and society, starting from children's own experience and children's life, supported by Dewey's pragmatism philosophy, adhering to the nature of children's freedom independent of adults, giving children natural education to comply with the concept of free nature.

At the same time, World UNESCO held a conference to discuss comprehensive issues of disciplines. In the early 1970s, UNESCO carried out some comprehensive scientific research projects and published related series of research results in the *Education Prospect* magazine. After the 1980s, the International Education Conference continued to discuss the integration of courses until the 40th International Education Conference clearly pointed out in the Final Report that "In order to meet the challenges of the modern world, the curriculum should be less centered on this or that subject, but more comprehensive and interdisciplinary courses should be designed" (UNESCO Institute for Education, 1996), and emphasized that games are an

educational method for organizing a happy and happy childhood and a preparation for future life. Course facts also shifted from emphasizing subject content to emphasizing the experience and experience of learners; from emphasizing goals and plans to emphasizing the value of the process itself; from emphasizing the single factor of teaching materials to emphasizing the integration of the four elements of teachers, children, teaching materials, and environment; from emphasizing only the explicit curriculum to emphasizing both the explicit curriculum and the implicit curriculum; from emphasizing only the school curriculum to emphasizing the integration of the school curriculum and the external curriculum (Hua Zhang, 2001). Curriculum research methods have also changed from quantitative research to qualitative research. Since qualitative research originates from the influence of art, humanities, and social theories, and due to the recognition of researchers' self-worth and the respect for the personality and uniqueness of the research subject, the arbitrariness of majority and objectivity (Hua Zhang, 2001, p.421) in quantitative research is made up, forming a complementary humanistic research paradigm and scientific research paradigm dominated by value research, and the corresponding "humanistic spirit" and " scientific spirit" (Research Group on Core Competencies and Values, 2016) are integrated into the value orientation of curriculum research. In the process of integration, it is found that when children are playing, they are motivated to continue to complete an activity due to their spiritual focus on the game process. That is to say, the use of game teaching and the creation of practical activities can enable children to complete a certain teaching task and curriculum implementation without any obstacles and receive a positive exercise. It is this positive exercise that helps children gain the power to do what they thought was impossible, and then gain the confidence and courage to complete other things. In the process, parents and teachers only need to give necessary help, guidance or participate in activities. This confidence and courage is the strength of the growing children gifted by game activities and comprehensive practical activity courses and can also be regarded as the value and significance of practical activities courses for children.

The two poles of existential phenomenology represented by Pinar (2003) and critical curriculum theory represented by Apple (2000), the conceptual reconstruction movement that emerged in the 1980s, challenged the behavioral tendency in curriculum development,

enhanced the significance of individual existence and promoted human liberation by criticizing the hidden ideology in curriculum. It embodies the concept of irrational humanism curriculum philosophy, embodies the holism and natural organic theory (Pinar, 2003) advocated by the reconstructionist curriculum paradigm, abandons the binary opposition between subject and object, humans and nature and takes a holistic and organic view of the relationship between humans and nature. As constructors of knowledge, human beings are both creators and transmitters of culture, they are constructing and transmitting knowledge based on existential philosophy, phenomenology and radical psychoanalysis, and drawing on interrelated humanistic disciplines such as sociology, anthropology, and political philosophy for their conceptual reconstruction (Pinar, 2003; Apple, 2008). Fundamentally, the theme of conceptual reconstruction is not conclusive and can only be identified and constructed through continuous discussion and research by participants. Only when we truly participate in the construction and improvement of our selves and our research can we give a definition of continuous conceptual reconstruction, whereby conceptual reconstruction is intended to clarify the dialectical relationship between the knower, the ongoing cognition, and the known. The concept reconstruction of curriculum means rethinking and describing the actual experience of curriculum, revealing the real experience hidden by the concept structure in the process of curriculum description. It can be said that the concept reconstruction of curriculum is a kind of "reflexive scrutiny" (Hua Zhang, 2000, p.138) and also a process of self-knowledge exploration. Through autobiography, we can restore the vividness and immediacy of the actual experience of life (curriculum). The re-statement analysis of the experience explained by us is essentially the return of learners' inner voice and the significance of educational experience based on this. Therefore, as learners, children are the curriculum center of subjectivity generation, the process of curriculum concept reconstruction is the process of constructing self and constructing subjective life experience.

In the 1990s, educators, entrepreneurs, and curriculum evaluation experts all over the world increasingly realized that the ability to learn and solve problems with applied knowledge was more important than simple memory and knowledge accumulation learning. According to brain science research, "the more integrated the knowledge is, the easier to learn" (Qiquan

Zhong, 2002). It shows that the construction of comprehensive courses enables students to carry out knowledge or information processing and integration in a certain connection. Compared with fragmentary knowledge accumulation, it is more suitable for the operation mechanism of the brain, and it is also an excellent way to obtain knowledge. People are increasingly aware that knowledge is not a fixed truth but a process of continuous creation and re-creation with the development of society. What is more, the world problems such as environment, climate change, international relations, medical ethics and virus transmission cannot be solved by a single discipline, a region or a country. These problems are not only concerned by children, but also related to the physical and mental health and future fate of each child. It is also possible to access and process diverse and up-to-date information due to the rapid development of electronic media and communication technologies, which makes it difficult for children to distinguish which specific subject category any particular information belongs to.

Therefore, the curriculum reform in various countries and regions tends to change to project-based learning, service-learning, comprehensive learning, and so on. One of the classic forms of project-based learning is Dewey's "active occupations" (Dewey, 1916), through "replaying some kind of works in social life or parallel activities" (Hua Zhang, 2009, p98), where children cultivate their insight and ability to solve problems through social experiences. Richards (2005) put forward "natural and social learning" and actively put it into practice. Kilpatrick (1918) clearly put forward the concept of "design teaching method" and extended the scope of design to four aspects including determination of purpose, formulation of plans, plan execution, and judgment (Kilpatrick, 1925). China promulgated the Community Service Law in 1990, which stipulates that students can obtain corresponding credits for providing services required by their communities. Service learning not only helps students to use and strengthen existing skills, but also helps them to better understand the curriculum content, fully understand the importance of discipline and enhance civic responsibility (Edwards et al., 2001).

As for comprehensive learning, for example, Japanese basic education sets up a special "comprehensive learning time" (Qiquan Zhong, Hua Zhang, 2002, p.121) in the curriculum system. The specific comprehensive learning period provides children with guaranteed time

for interdisciplinary and comprehensive learning. Comprehensive learning is beneficial to the cultivation of children's survival ability and adapts to the future society marked by informatization and internationalization. Curriculum reform in Taiwan focuses on the cultivation of students' initiative and pays special attention to students' ability to solve problems. The Hong Kong Special Administrative Region takes lifelong learning and whole-person development as its curriculum concept and aims to make students learn to learn as the overall educational goal. Entering the 21st century, the United States proposed 21st century skills, Japan emphasized 21st century capabilities, Australia recognized General capabilities, and Hong Kong, China focused on Generic Skills and key competencies（JianLiu, RuiWei, ShengLiu, XiaLiu, Xiangtan Fang &Youyi Chen, 2016). Recognized by mainland China and Taiwan district, key competencies is used in *Key Competencies for a Successful Life and a Well-Functioning Society* by the Organization for Economic Cooperation and Development, and the European Council and the European Commission jointly issued Key Competencies for a Changing World (Hongqi Chu, 2016). The reports all reflect that curriculum understanding has undergone a new turn in the 21st century, which is complex, changeable, and more uncertain. It also expresses the expectations of different countries, regions and organizations for the future citizens of education and training.

Key Competencies Contained in the Curriculum of Comprehensive Practical Activities

Competency is the transcendence and integration of knowledge, skills, and attitudes. It is a set of behaviors that can be observed, taught, learned, and measured (Mirabile, 1997). In other words, competency is the sum of a series of behaviors necessary to complete a work and the behavior performance directly determines the behavior effect. Individuals seek survival and development in practice by behavior, which means that the essence of human beings is determined by their practice or behavior patterns. This requires that the fundamental task of education be to improve children's behavior ability, that is, practical competency. Thus, practical competency is a person's ability to act is the most important core competency of children. The comprehensive practical activity curriculum is not "preaching, teaching, and solving puzzles" (YuHan, Tang Dynasty) in the traditional sense. It is a process in which children use comprehensive knowledge, skills and experience to explore the real world under

the guidance of teachers or parents. Its core is "based on the direct experience of the students, connecting students' own life and social life, focusing on the comprehensive application of knowledge and skills to solve problems in unknown areas, and a practical course that reflects the value of experience and life to the development of students" (Hua Zhang, 2007). If it is said that comprehensive, inquiry, practice, and experience are the key words of comprehensive practical activity curriculum, then comprehensive, inquiry, practice, experience, and practical competency have reached a high degree of agreement. They are the key words contained in the comprehensive practical activity curriculum. The comprehensive practical activity curriculum uses the integration of multi-disciplinary knowledge, experience, and practice to interpret the practical ability of children as future citizens to deal with problem-solving in uncertain and complex situations.

(1) Comprehensive

Comprehensive can be interpreted as the process of solving practical problems by the comprehensive application of two or more subjects in the humanities knowledge discipline composed of literature, history, and philosophy and the scientific knowledge discipline such as mathematics, science, and chemistry. In the process, knowledge, skills, and attitudes are also integrated. The literature, history, philosophy and the basic education in the fields of humanities correspond to the courses of Chinese, foreign languages, art, history, politics, and philosophy. The courses of natural science such as mathematics, science, and chemistry are not only reasoning, deduction, demonstration, and logic, but also permeated with scientific history and humanism. Each course has a certain value orientation and is knowledge oriented. The implementation of subject-based courses objectively only allows students to remember those scattered knowledge and information fragments and separates the integrity of humanistic knowledge and feelings. Only by breaking through the boundaries between disciplines and integrating the knowledge of disciplines, that is, students' practical experience of the humanistic knowledge they master, such as solving a comprehensive problem, can humanistic knowledge be transformed into the attitude towards human cognition. The Core Competencies and Values for Chinese Students' Development pointed out that "the key is to have a people-oriented awareness, respect and maintain human dignity and value; be able to care about

people's survival, development, and happiness..." (Research Group on Core Competencies and Values, 2016) and then a broader humanistic understanding, considering comprehensive practice activity courses that enable children to develop humanistic feelings of respecting individuals and caring for the world based on multi-disciplinary humanism. The comprehensive practical activity curriculum advocates the integration of artistic knowledge, skill training, love for beauty, and pursuit of poetry to cultivate children's aesthetic taste. The key competencies of humanistic heritage are constructed by humanistic accumulation, humanistic sentiment, and aesthetic appeal.

(2) Inquiry

Inquiry comprises the activities or processes of questioning, thinking, discussing, analyzing, synthesizing, judging, and reasoning about problems that have no ready solutions. It is the process of solving problems. In order to solve the problem, we must think about it, and the thinking that starts from questioning is the key to inquiry. In this way, the inquiry competency in the comprehensive practical activity curriculum is embodied in the core competencies of critical thinking and questioning, solving problems, and rational thinking. The Core Competencies and Values for Chinese Students' Development pointed out that "the value standards, thinking styles and behaviors formed by students in learning, understanding, and applying scientific knowledge and skills, including rational thinking, critical questioning, and the courage to explore, are the basic points, that is scientific spirit" (Research Group on Core Competencies and Values, 2016). The comprehensive practical activity curriculum interprets the cultivation of children's scientific spirit through the process of problem creation, rational thinking, and critical questioning.

Rational thinking is a way of thinking based on evidence and logical reasoning. In the overall vision of human cognition, it is not difficult to find that rational thinking is reflected in both scientific thinking and the argumentation process of humanities. There may be neither an answer nor a ready-made solution to the problems created by the course of comprehensive practical activities. Only by relying on students' knowledge and existing experience can they consciously find evidence and consciously observe, compare, analyze, synthesize, abstract, and summarize the phenomena and problems until the problem is solved. Students consciously

examine the unknown problems, seek evidence, and rationally analyze evidence until the problem is solved. In general, the comprehensive practical activity curriculum focuses on the awareness of evidence and logical analysis to cultivate children's rational thinking, which lays a solid foundation for the development of children's scientific competency; critical questioning is a kind of thinking attitude that criticizes and questions existing knowledge and experience. Since it based on rational thinking, children will naturally consider the mystery of the world and will not unconditionally accept adult experience and authoritative conclusions, but rather will try to explore unknown comprehensive problems in order to crack the mystery of the world and explore the root causes and logical process behind the authoritative conclusion, highlighting their independence. The comprehensive practical activity curriculum has built a stage for children to understand the world, examine others and liberate themselves, which contains the qualities pursued by modern people such as independence, equality, and liberation (Qingchang Liu, 2017). It also means that critical questioning is the key to the cultivation of scientific spirit, and it shows that scientific spirit and humanistic appeal are fundamentally connected. Problem creation refers to the comprehensive practical activity course, which is mainly centered on the problem and follows the problem-solving learning mode of the American empirical research tradition. It follows the method of Dewey's reflective thinking to solve the problem. It is implemented in the order of "discovering the problem – determining the theme – putting forward the hypothesis – setting the plan – verifying the hypothesis – summarizing" (Dewey, 2004). It aims at organizing course learning from students' autonomous discovery of the problem to independent thinking and seeking solutions to the problem. Many of the problems that students encounter and seek out involve modern issues such as international understanding, environmental pollution, information flooding, physical and mental health, and ethics, which are complex problems that are difficult to find answers or solutions for and are most likely to be impossible for children to deal with. Do not try to find definitive answers and countermeasures, but start from the perspective of exploring the problem, feel the process of exploration and personal experience and, in the process, the once complicated and difficult questions gradually become clear and solved in turn to become part

of childrens' knowledge and experience, and then "internally and substantively connect the individual child with the external world" (Tiefang Liu, 2004).

(3) Practice

The form of human existence in some ways is behavior. Expressing children's competencies from the perspective of behavior is conducive to decomposing a large behavior goal into several small behavior steps, making the cultivation of core competencies feasible. The integrated practical activity curriculum provides at least two practical paths for children to explore the world. First, children who enter nature or society perceive the real world through observation and listening. This perception needs to start with people and things that children already know, that is, to combine new topics and experiences with the purpose pursued by an activity rather than just putting strange things in front of children. Because only when children use natural materials, tools and various types of energy, that is, use things and perceptions to control their bodies, coordinate various activities to complete continuous tasks (Dewey, 2008) can children think about the interrelationship between practical activities and perceptions and the goals to be achieved. Perception through reflection evolves into perception and knowledge. After refined and thoughtful expression of knowledge, it becomes children's description of the world, that is, what is the world. This kind of practice path returns the world to the world through the eyes of children, and each person and everything in the world is as it is. Through the world expressed by children, it returns the world to the truth and the children's personalities. It is itself the value appeal of the comprehensive practical activity curriculum. Second, children who have already had doubts about nature and the real world, such as why the flowers turn red, why do whales commit suicide collectively, what is the impact of the Second World War on the world and so on, have been clear about the research topic through data search and literature research. After teachers' guidance and on-the-spot investigation to determine the research topic, they return to field visits, interviews, listen and survey all information related to research questions in detail. Based on the analysis and collation of actual data, a detailed research plan is formulated, and possible problem hypotheses are proposed. Carry out the research according to the predetermined plan, decompose a phased task and subject problems and periodically verify or modify assumptions until the problem is solved. This is a way to explore the world in

the process of practicing the world. It systematically and delicately implements Dewey's empirical philosophy and promotes "reflective thinking" (John Dewey, 2004) in the practice of progressive education to try to answer the question what will happen to the world.

(4) Experience

That is, the interaction between people and the environment, including people actively acting on the environment and the results of people acting on the environment in turn affect people themselves (John Dewey, 1990). From this point of view, the experience between children and the environment is gained through the "reflective thinking" (John Dewey, 2004) of the individual being aware of the internal connection between the active effect on the environment and the result of this effect. The experience here includes both the experience of the subject and the experience from the environment. Although all education and everything depends on the existing experience, but not all experience has a certain educational value, but depends on the experience has two properties : one is reflected in those obvious, easy to judge and affect the individual after the direct experience ; the influence of another characteristic is not reflected in the appearance, but through the educator's creation of experiences that neither tires students but also arouse them to actively participate in activities, which is enough to trigger students' desire for the future. This kind of experience has more educational value than appropriate experience directly obtained. As a result, the comprehensive practical activity curriculum removed the fence between schools, families and society, opened the line between disciplines, faced the life situation, and selected from a variety of practical experience those who can enrich later experience and have creative continuity of experience, or transfer competency (Hongqi Chu, 2016). The application of transferable competencies to different social fields and occupational fields is bound to be the core competencies for children to achieve successful life and build a sound society in a rapidly changing environment in the future. If continuity is regarded as a principle of experience, it means that each experience has adopted something from past experience and changed the nature of future experience in some way (John Dewey, 2004). The interaction between individuals living in a certain living situation and all kinds of things around them and others is seen as another principle of experience. The two principles of continuity and interaction are regarded as the longitude and latitude of

experience. The existence of continuity makes some things in the previous situation to be transmitted to the later situation, while the interaction helps various situations to occur one after another and be related to each other. The combination of continuity and interaction is a measure of the educational significance and value of experience (John Dewey, 1956).

Comprehensive Practical Activity Curriculum Endows Children with Key Competencies

The comprehensive practical activity curriculum that emphasizes the sense of inquiry and contains comprehensive, practical and experience literacy is divided into the factual form aimed at exploring what is the world and what will the world be like based on the value of the course.

What Is the World?

Exploring the factual form of what is the world, the comprehensive practical activity course essentially seeks what is the world in the mind of children. This type of comprehensive course explores deterministic knowledge and conclusions, as well as open issues in the vast world. It guides and helps children observe the earth, sky, mountains, rivers, flowers, birds and trees in nature, lightning, thunder, and other things with pure eyes. Natural phenomena such as fog, moonlight and wind; use dexterous hands to touch the withered flower stamens, the process of raising silkworms and other ecological changes; use pure emotion to perceive what is friendship, what is patriotism and other human social life. This type of comprehensive curriculum also revolves around the daily life composed of people's clothing, food, housing, and transportation as educational resources. It not only brings the life world into the content of school curriculum, but also facilitates children to consciously connect subject knowledge with daily life, and use the subject knowledge to participate, explore and serve the society.

Its value lies in that children directly explore and experience the real world around them with the help of relevant knowledge, constantly reflect on the similarities and differences between the world I see and the views of the others, follow the logic of the subject to explore and verify what the world is in the process of dynamic changes of subject knowledge and the real world, and on this basis, generate emotions and actions to improve the world. The implementation of this kind of comprehensive practical activity curriculum does not follow a

linear fixed order and tries to breed humanistic connotation and scientific spirit in the process of nonlinear and dynamic interaction in the state of cross integration of different age stages, development status, cognitive style and subject characteristics of children. Each class starts with "necessary knowledge, experience and problem preparation for teachers and students before class" (Hua Zhang,2007). The end of a class often indicates the starting point rather than the end of a problem. Through the "problem consciousness stimulated and accumulated in the classroom, they are led to extracurricular activities and to active exploration and thinking of the world" (Tiefang Liu, 2004). Comprehensive practical activity curriculum bridge separation between subject knowledge and the real world, so that children can not only reflect on real life, but also participate in and explore the world. In the process of interpreting perseverance and ability, vision and creation, humanistic connotation and scientific spirit, children observe, touch and perceive the world is the world in children's heart.

(2) What Will Happen to the World?

In the comprehensive practical activity curriculum that explores the value form of the global ethical issue of what will happen to the world, the value orientation of such comprehensive curriculum is that people exist in the world and the world is also in the hearts of the people. People live together with the world they live in. People have the courage to repair the damaged world and improve it. At the same time, people have the courage to protect the world that has not been destroyed (Hua Zhang, 2007). The purpose of the curriculum should not only guide children to explore the multiple values provided by nature for human beings, but also enable them to profoundly understand the reality that nature is closely related to human beings. For an overall ecosystem, each individual integrates into the whole that exists before us with its own unique richness and finds itself through connection between each other. The more profound the connection with the other, the more truly it can confirm its unique existence. It is necessary to guide children to take into account and recognize the free value of nature, to adhere to inquiry ethics with compassion, intolerance, compassion and pity for all things in the world, to foster humanistic care in the overall grasp of nature, society and self, and to interpret responsibility and mission in the process of cultivating active learners as responsible citizens and achieving responsible life.

Children not only believe that the world will be better, but also believe that I and my companions can take responsibility for this. The form of curriculum is to guide children to explore and experience the truth of the world through participation, reflection, service, protection and improvement of the world. In the process of exploring the real world, establish the relationship between self, knowledge and the world, and then enhance the creative consciousness and creative ability in solving real problems. The implementation process of the course is the initiation of responsibility awareness in children's participation in governance of river pollution and exploration of the root cause of haze, which are aimed at repairing the damaged world. To reflect on such ethical issues as the legality of euthanasia and how people of different backgrounds and beliefs can coexist peacefully, change the thinking mode of either/or and gradually form an objective and rational view of the complex world, learn to accept and tolerate people of different beliefs and viewpoints and learn to cooperate while seeking common ground while putting aside differences. Serve in SOS Children's Villages and Elderly Homes and other activities aimed at making the world a better place to develop compassion for others and care for the weak; Protect Shanghai Shikumen, Badaling Great Wall, Xi An Terracotta Army and other undestroyed Historic sites to understand the collective memory of the nation and the country, to form self-identity and national identity; Participate in the revision of school rules and regulations and the improvement of curriculum reform to fulfill the mission of active learners.

Conclusion

The 21st century is an era of knowledge economy globalization and information-ization. Social changes and social conditions present complex, changeable, interdependent and competitive coexistence. The characteristics of great uncertainty have forced education to pay attention to the cultivation of children's competency in order to form a sense of responsibility for themselves and a sense of mission in the country and the world in an increasingly interconnected and interdependent world. Elementary education can realize the integration of children's knowledge, skills and attitudes, that is, the development of literacy through two types of courses and comprehensive practical activities. The difference between comprehensive practical activity curriculum and subject curriculum does not lie in the different ways of

learning but in the different contents to be studied and the problems to be solved. Subject curriculum focuses on the acquisition of knowledge, and in the 21st century, which emphasizes children's literacy, it is more dependent on the integration of natural science and social science knowledge and principles than ever before. If knowledge is imparted in the form of spoon-feeding, instilling and rote, it is bound to "cannot be organized into the children's existing experience, this knowledge becomes pure words, that is, purely stimulating, meaningless" (John Dewey,1990, P.205). Furthermore, physical proximity to certain things and processes of children does not mean that they are in line with children's needs, interests or experience. Although some things are far away from the status and age, they may be a matter of concern to a child from the emotional and rational point of view and may be part of his point of view (John Dewey,2004). Therefore, by creating problem situations through comprehensive practical activity courses, subject knowledge becomes part of children's needs, interests or experience, and pure knowledge evolves into things that children care about, which can become a component of his views and thoughts. Moreover, "what people learn without thinking from childhood will affect his whole life" (Karl Theodor Jaspers, 1991). In this way, it seems that what kind of literacy children can form depends on what he learns without thinking in the curriculum, so as to provide a solid foundation for the generation of core literacy. Just as curriculum facts and curriculum value cannot be separated, the two types of comprehensive practical activity courses that explore what is the world and what will happen to the world are also closely linked. The comprehensive practical activity curriculum of fact form starts from exploring what is the world, and then extends to the question of the value of the world based on understanding the nature of the world. The comprehensive practical activity curriculum of value form believes that the process of improving the world is the process of encountering the essence of the world. The two types of courses explore what is the world and then how will the world enlighten and complement each other, and then invest in the behavior of perfecting the world. The core competencies of the comprehensive practical activity curriculum for children are embodied in the process of solving the problem. Experience stepping into reality, discovering problems, investigating and questioning, reflecting on actions, continuous

improvement is the cycle of experiencing, problems, action and reflection (HuaZhang, 2009). It refines the migrating competency to deal with the rapidly changing environment in the future.

The development of children's key competencies requires practice and tempering, according to the children's own rhythm, adhere to their own perseverance. Because both humanistic heritage and scientific literacy are built by long persistence. Just like, the growth of a tree must experience ten years of sunshine and rain, the advent of a century-old brand requires decades of precipitation, and a heritage of ingenuity needs the persistence of several generations... It is the process of exploring every problem and topic created by the comprehensive practical activity curriculum to cultivate the courage and strength for children to deal with complex problems in the future.

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