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Research on the Development of Primary School Students' Key Literacy in Western China

Shu Han, Xinyu Wang, Yushun Li*

Education Department, Beijing Normal University, Beijing, China

Email address:
18833510261@163.com (Shu Han), wangxinyu2019@mail.bnu.edu.cn (Xinyu Wang), lyshun@bnu.edu.cn (Yushun Li)
*Corresponding author

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Abstract: With the continuous advancement of global education reform, "key literacy" has become an important indicator to measure the development status and potential of students. To develop students' key literacy in western China, researchers went deep into the actual education situation in western China and collected status data, then summed up outstanding experiences and found challenges and put forward feasible strategies. The research subjects were students from six urban primary schools and four rural primary schools in Lanzhou, Gansu Province. This research adopted questionnaire survey, focus group interviews and individualized interviews. 3025 students were quantitatively investigated by using network-based questionnaire in the early stage. Later, focus group interviews and individualized interviews were conducted to investigate the development of students in all aspects. The quantitative and interview data shows that the development level of primary school students' cultural understanding and inheritance competence, communication competence and cooperation competence in the western region are good, while the critical thinking and innovation competence need to be strengthened. The development level of key literacy of urban school students is generally higher than that of rural school students. The development of rural schools is relatively backward, which is not only reflected in hardware equipment and resources, but also in the literacy level of teachers and students. Finally, some feasible strategies are put forward, such as increasing investment in rural schools and resources; developing urban and rural teaching community; exploring the development path of in-depth integration of information technology and curriculum.

Keywords: Key Literacy, Primary Education, Questionnaire Survey, Field Survey, Interview

1. Introduction

At present, the concept of quality-oriented personnel training has become the international consensus of basic education reformation, and it has become an important feature of today's educational activities to promote and implement the key literacy education that meets the needs of talents in the 21st century. "Key literacy is the essential character and key ability that students gradually form to meet the needs of personal lifelong development and social development in the process of receiving the education of corresponding sections" [1]. Keeping up with the trend of the times, China has also attached importance to the cultivation of students' key literacy in compulsory education from the multidimensional aspects of theoretical research, policy guidance and practical exploration, trying to make the "literacy-based" educational principle gradually replace the traditional habit of "knowledge-based", and then developing curriculum system, improving teaching methods, promoting evaluation reform and improving teachers' quality [2], so as to cultivate future talents with high-level key literacy.

For a long time, the western region of China has been affected by the unbalanced and inadequate level of economic and social development and the allocation of educational resources, and there is still a certain gap between the development quality of basic education and that of the eastern region. With the western region gradually changing from the objective demand of "going to school" to the educational development goal of "going to school" [3], how to achieve fair education quality has become an unavoidable historical proposition for developing and revitalizing the western region in the new era. To develop the education of

the western region, we must base on the current situation and objective needs of local students' key literacy, transfer and improve external experience according to local conditions, and promote the balanced development of regional education in a targeted manner, so as to realize the fundamental fairness of education quality. Based on the evaluation of the development and training status of primary school students' key literacy in Lanzhou City, Gansu Province, this study clarifies the potential problems and challenges of the development of students' key literacy in the primary stage of compulsory education in western China, and provides reference for promoting the balanced development of China's education quality.

2. Literature Review

"Literacy" first appeared in the research project "Definition and Selection of Literacy: Theoretical and Conceptual Basis" (DeSeCo) of OECD, and then the concept of "key literacy" was put forward by OECD and the Council of the European Union. They believe that "key literacy represents a collection of knowledge, skills and attitudes, which are transferable and multifunctional, and these literacy are necessary for everyone to develop themselves, integrate into society and be competent for work". There are many expressions of key literacy, among which the more common expressions are "Key Competencies" and "21st century skills". After that, the United States took the lead in carrying out a research project on 21st century skills, and then other countries began to carry out related research one after another. In 2014 and 2016, China issued some official documents on "key literacy", which guided the development direction of China's education.

International research on key literacy mainly includes: analysis of the essence or connotation of key literacy, research on the elements and model construction of key literacy, construction of key literacy evaluation system, research on the development of discipline key literacy, research on instructional design under the guidance of key literacy, challenges and feasible solutions of key literacy, research on teachers' professional development facing key literacy, and so on.

At present, the research on the components, model construction and measurement evaluation of key literacy can be roughly divided into four orientations [4, 5]. The four orientations are: (1) the key literacy of personal development orientation, which is mainly oriented to people's own development. The representative studies are: (1) The Framework of Global Learning Fields published by UNESCO, which contains seven dimensions, namely, physical health, social emotion, culture and art, written communication, learning methods and cognition, numbers and mathematics, science and technology; (2) The European Union's Key literacy Reference Framework for Lifelong Learning 2018 includes eight dimensions: mother tongue communication ability, foreign language communication, mathematics literacy and basic literacy of science and technology, digital literacy, learning to learn, social and civic literacy, initiative and entrepreneurship, and cultural awareness and expression. (2) The key literacy of social value orientation is mainly oriented by social value and demand. The representative studies are as follows: (1) OECD (2005) framework, which divides key literacy into interactive use of tools, interaction among heterogeneous social groups and independent action; (2) The key literacy structure of Japanese "21st Century Ability" is a group of concentric circles [6]. The innermost layer is basic ability (language, mathematics and information), the middle layer is thinking ability, and the outermost layer is practical ability. (3) Focusing on the key literacy needed for career development in the 21st century, the representative research includes the American core skills framework for the 21st century (as shown in Figure 1), which mainly describes the skills, knowledge and professional intelligence that students must master in future work and life, including three dimensions: learning and innovation skills, information media and technical skills, and life and professional skills [7]. Later, in the practical field, its core part was simplified as a 4C model of learning and innovative skills/accomplishments, namely Critical Thinking, Creativity, Communication and Collaboration, which had a far-reaching impact on the world. (4) Key literacy framework highlighting core values and attitudes, mainly reflected in Asia, taking Singapore and China as examples: (1) Singapore's key literacy framework in the 21st century (as shown in Figure 2) is also a group of concentric circles, with core values (respect, honesty, care, resistance to adversity, harmony and responsibility), social and emotional intelligence abilities and skills in the 21st century (criticism, communication, information and cross-culture) from inside to outside. (2) In 2016, China released the overall framework of "Key literacy for Chinese Students" (as shown in Figure 3), which focuses on "cultivating people with all-round development" and is divided into three aspects: cultural foundation, independent development and social participation, including humanistic background, scientific spirit, learning to learn, healthy living, taking responsibility and practicing innovation [8-10]; In 2017, the literacy of various disciplines was promulgated.

On the basis of the above, in 2018, China Education Innovation Research Institute of Beijing Normal University cooperated with American 21st Century Learning Alliance to add cultural understanding and inheritance literacy based on the 4C model of key literacy in the 21st century, and formed a 5C model, namely, cultural understanding and inheritance literacy, critical thinking literacy, innovation literacy, communication literacy and cooperation literacy (Figure 1). "Cultural understanding and inheritance literacy" reflects the process and behavior of students' cognition and understanding of culture, inheritance and sublation, development and innovation. "Critical thinking" means that students can keep questioning, rationally analyze and constantly reflect on different situations, draw reasonable conclusions or put forward effective solutions, carefully consider other people's views, and respect the right of others

to question their own views. "Innovative literacy" reflects that students can use relevant information and resources to produce new and valuable ideas, programs, products and other achievements. "Communication literacy" reflects that students can effectively communicate information, thoughts, emotions and values with others or groups by using verbal and non-verbal media, so as to achieve specific communication goals. "Cooperative literacy" reflects that students can actively undertake the responsibilities within the group and negotiate with team members on an equal footing on the basis of agreeing with the goals and core values of the group or team, and achieve common goals [11-15]. This study takes this model as a reference to evaluate the development of students' key literacy.

Figure 1. *5C model of key literacy in the 21st century.*

3. Research Design

3.1. Research Method

In this study, the explanatory sequence design in the mixed research method was adopted. First, the basic situation of the research problem was analyzed and presented through quantitative data, and then qualitative data was used to deeply mine and explain the quantitative data. Therefore, the empirical investigation and analysis of this study included two stages: first, the questionnaire survey was used to quantitatively describe the development status of the key literacy of primary school students in Lanzhou; secondly, the interview method was used to deeply understand and explain the data obtained from quantitative research.

3.2. Research Objects

In the quantitative research stage, the selected subjects were students from 6 urban primary schools and 4 rural primary schools or teaching spots in Lanzhou, Gansu. In order to ensure that the subjects could accurately understand each question in the questionnaire and ensure the validity of the questionnaire measurement items, the subjects were senior primary school students from Grade 4 to Grade 6. The number of students participating in the questionnaire survey in each school should be no less than 300. For schools with less than 300 students in Grade Four, Grade Five and Grade Six, all students in Grade Four, Grade Five and Grade Six would participate in the questionnaire survey. A total of 3,234 questionnaires were collected within the specified survey time, among which 3,025 were valid and the effective rate was 93.54%. Sample demographic information statistics are shown in Table 1.

Table 1. *Demographic information statistics of samples.*

Demographic characteristics	Categories	Total number of people	Percentage
Gender	boy	1568	51.85%
	girl	1457	48.15%
Ethnic group	Han	2824	93.36%
	Ethnic minorities	201	6.64%
Grade	Grade Four	1009	33.35%
	Grade Five	1074	35.52%
	Grade Six	942	31.13%
Region of school	city	2846	94.07%
	township	179	5.93%

Based on the quantitative research results, this study selected 24 students and 12 teachers from urban primary schools, rural primary schools and teaching points in Lanzhou. The interviews were conducted in the form of face-to-face focus group interviews or individualized interviews, and the data obtained from the interviews were open coded and analyzed in depth to further supplement the discussion of quantitative research findings.

3.3. Research Instruments

In the quantitative research stage, based on literature research and comparison of evaluation tools for students' key literacy at home and abroad [16, 10], and through expert consultation and trial revision, the researcher finally compiled the Evaluation Scale of Primary School Students' Key literacy Development as a quantitative research tool. Referring to the "5C model" of key literacy in the 21st century put forward jointly by China Institute of Educational Innovation of Beijing Normal University and American 21st Century Learning Alliance [17], this study divides the evaluation dimensions of students' key literacy into five qualities: cultural understanding and inheritance literacy, critical thinking literacy, innovation literacy, communication literacy and cooperation literacy. The scale consists of 28

items, and adopts the Likert five-point scoring system, with scores ranging from 1 to 5, corresponding to "very inconsistent" to "very consistent" respectively. Test the reliability and validity of the scale: the overall reliability of the questionnaire is α=0.955 (>0.9), indicating that the scale has good overall reliability, and the reliability of each dimension is above 0.9, indicating that the reliability of each dimension of the scale is better. Bartlett's spherical test showed that Sig.=0.000 (<0.05), indicating that there was correlation among the variables, and KMO test value was 0.965 (>0.9), which was very suitable for factor analysis. Principal component analysis was used to extract the factors, and Kaiser standardized orthogonal rotation method was used to rotate them. After rotation, the number of extracted components was consistent with the preset number of factors, and the load number of each item was between 0.645 and 0.858, indicating that the questionnaire had good structural validity. Confirmatory factor analysis shows that the value of RMSEA is 0.058 (<0.08), indicating that the model is reasonable, the value of RMR is 0.023 (<0.05), the value of AGFI is 0.884 close to 0.9, the values of PGFI and PNFI are all greater than 0.5, and the values of NFI, RFI, IFI and TLI are all greater than 0.9.

Table 2. *Model fitness index.*

Model parameter	Threshold	Actual value
RMR	<0.05	0.023
AGFI	>0.9	0.884
PGFI	>0.5	0.756
PNFI	>0.5	0.857
RMSEA	<0.08	0.058
NFI	>0.9	0.953
RFI	>0.9	0.947
IFI	>0.9	0.957
TLI	>0.9	0.952

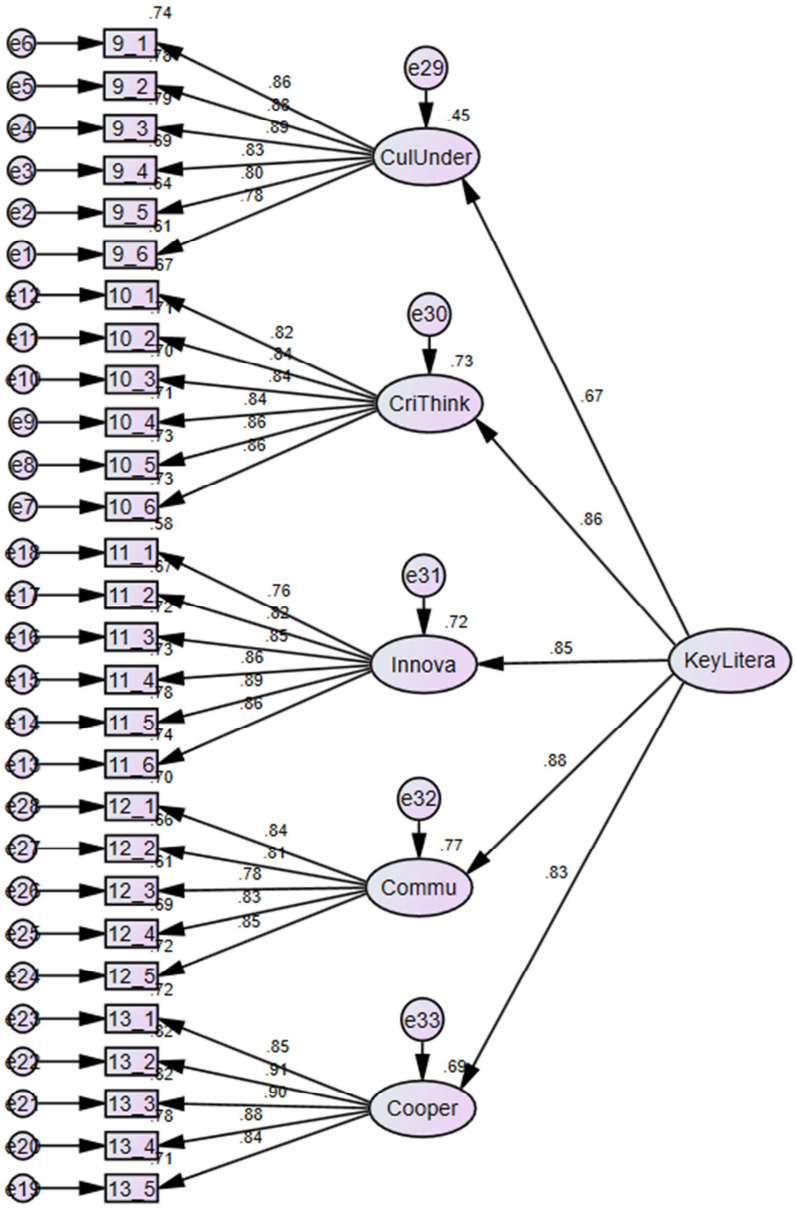

Figure 2. *Structural equation model of key literacy.*

In the qualitative research stage, according to the preliminary findings formed by quantitative data analysis, the interview outline is drawn up, focusing on the forming factors that are concerned about the development status of primary school students' key literacy, and focusing on the influence of urban and rural education differences on the development of primary school students' key literacy in the western region. During the interview, a recording pen or other electronic equipment was used for recording, followed by text transcription and open coding.

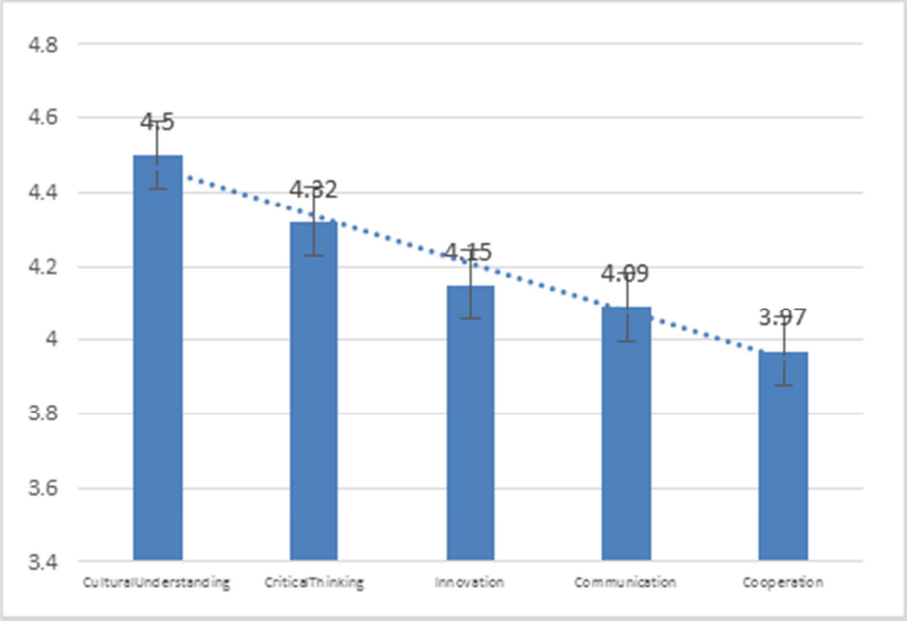

Figure 3. *Development level of primary school students' key literacy in Lanzhou.*

4. Findings

4.1. The Overall Performance of the Key Literacy Development of Primary School Students

According to the "5C model" of key literacy, the researchers evaluated the development level of key literacy of students in ten primary schools in Lanzhou from five dimensions: cultural understanding and inheritance, cooperation, communication, critical thinking and innovation. On the whole, the self-evaluation scores of the key literacy development level of the primary school students in Lanzhou are cultural understanding and inheritance literacy, cooperation literacy, communication literacy, critical thinking literacy and innovation literacy from high to low (Figure 3).

It can be seen that the average self-evaluation score of students' cultural understanding and inheritance is 4.5 points, which indicates that local primary school students have a good understanding of the importance of Chinese culture. During the interviews, many of the interviewed students expressed their strong interest in the traditional cultural associations or activities of students, especially in urban schools with more adequate resources for traditional culture education. The schools enriched the dissemination of Chinese traditional culture in daily classroom teaching and extracurricular activities of students through various forms, and students gained a preliminary understanding and experience of Chinese traditional culture and local culture.

The average score of students' cooperative literacy is 4.32 points, which is relatively high among the five dimensions that constitute students' key literacy, but there is still room for improvement. Enhancing students' awareness and ability of learning cooperation is one of the key tasks in the curriculum reform of basic education in China. Curriculum standards of all disciplines affirm the importance of "cooperation" and advocate developing students' ability of "cooperative learning" through collectivism learning strategies such as "group cooperation" [15]. Through further interviews, it can be found that "cooperative learning" has become a normal form of classroom organization in primary schools in western China, and teachers can consciously organize students to study in cooperation according to the characteristics of knowledge content, which explains why local students have a slightly higher cooperative ability.

The average score of communication literacy is 4.15, which indicates that the students' communication ability is generally high, but there is still room for improvement. In the interview, we found that there are two main ways for students to develop their communication skills. One is to communicate and express around learning tasks in the regular classroom. Second, they communicate with each other during the specific activities of the school, such as a short class lecture at noon, book exchange meetings, etc. It also reflects that local schools and teachers have consciously cultivated the development of students' communication and expression ability, and provided students with more and more popular opportunities to express themselves.

The average score of critical thinking is 4.09, which indicates that the students' critical thinking ability is generally qualified but still needs to be strengthened. Critical thinking is helpful for people to correctly view and effectively deal with social problems, scientific problems and real life problems, and is of great value in promoting students' academic progress and career development [18]. Based on the students' description of their study and life experiences in school, it can be inferred that primary school students have a good awareness of information discrimination and can evaluate and compare new information with different opinions according to their own knowledge and experience, but they are not conscious of critical thinking, and have "prejudice" in examining and debating information, and over-trust suggestions from adults around them, especially those from teachers, parents and other adults, and they are more inclined to take them as "instructions".

The average score of innovative literacy is 3.97, which is the lowest among the five dimensions that constitute students' key literacy, indicating that the students' innovative thinking ability is generally qualified but not very satisfactory, which needs to be improved in a targeted manner. Promoting the development of students' innovative spirit and ability is the long-cherished wish of our basic education curriculum reform. Some studies have pointed out that the overall level of innovation literacy of primary and secondary school students in China has been low for a long time due to practical difficulties such as the statute of examination evaluation system, the lag of talent training mode, the social atmosphere attaching importance to examination results instead of innovation ability, the excessive restrictions of educational administrative departments on independent training of schools, and the indifference of principals and teachers in innovative training [19, 20]. Primary school stage is the period when students' imagination is richest, but in school life, students can hardly put their novel ideas into practice: subjectively, students' creative thinking is still obviously imprisoned by book learning, and the proportion of taking extra-curricular classes in their spare time is extremely high, which makes them unable to think deeply, design or explore their own ideas. Objectively, at present, teachers' ability to cope with students' innovative opinions emerged in the learning process is insufficient, and their awareness of encouraging students to innovate is not strong. Schools are not fully equipped by software and hardware to support students to develop innovative literacy, especially in rural schools.

4.2. Analysis of Regional Differences in the Key Literacy of Primary School Students

By analyzing the influence of region on students' key literacy, it is found that there are significant differences in the overall level of key literacy development between urban and rural primary school students ($p=0.012<0.05$). By analyzing the influence of regional differences in various dimensions, it is found that regions are in cultural understanding ($p=0.000<0.05$), critical thinking ($p=0.001<0.05$), innovation ($p=0.002<0.05$), communication ($p=0.000<0.05$) and cooperation ($p=0.000<0.05$). Figure 4 shows the average differences of pupils living in urban and rural areas in different key literacy dimensions.

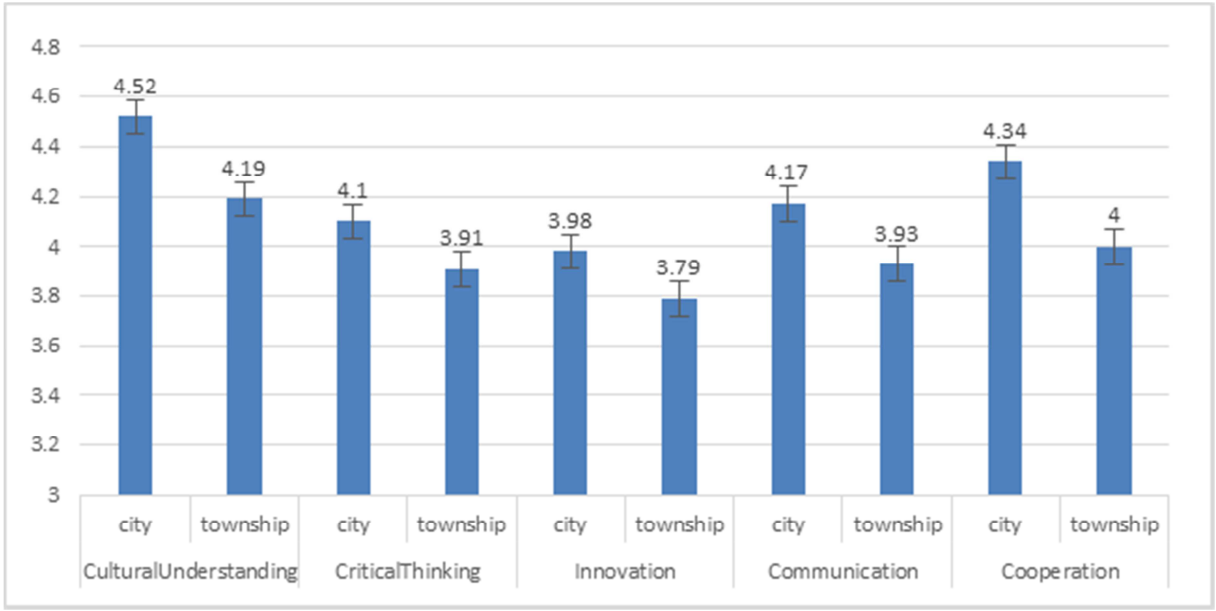

Figure 4. *Geographical difference distribution.*

The educational level difference between urban and rural areas still exists, which is further verified in the interviews. Through interviews, it is not difficult to find that urban schools generally form the idea of developing students' key literacy and have the necessary resources to organize educational activities on related topics. However, rural

schools still aim to improve the enrollment rate of students. Although local teachers have been exposed to the concept of key literacy to varying degrees, the limitations of objective conditions such as resource conditions make the educational activities aimed at developing students' key literacy almost nonexistent. This is reflected in the cultivation of students' communication literacy, cooperation literacy and critical thinking. Due to the guidance of national policies and the special investment of local education departments, local urban and rural primary schools have generally increased the implementation of traditional culture education for students in recent years, so that the traditional culture understanding and inheritance literacy of urban and rural primary school students can be better cultivated and improved. Based on the overall assessment of local primary school students, it can be seen that the innovation literacy is a weak link in the primary schools in western China, and it is also reflected in urban primary schools and rural primary schools. However, in daily education and teaching activities, urban primary schools and rural primary schools can pay different attention to the development of students' key literacy, which makes primary school students studying in different regions show development differences in communication, cooperation and judgment thinking.

Interviews with primary school students in urban schools fully reflect the positive influence of the rational turn of key literacy training in schools and resource reserves on students' ability to develop qualities other than subject knowledge. "I think the reason why I like school is because our school has diversified courses besides some main subjects, and there are many other expanded ones, such as doing exercise. This semester, we have also added self-selected courses, and the categories are very diverse, which make me interested. I am willing to actively participate in these school activities, and grow up in the activities. (20210408-BEF-S)"; "Physical education class is a shift system, and our fourth-grade students can choose their favorite sports freely when they go to class together. We have club activities every Wednesday afternoon, and there are many clubs in the school, which can enrich our hobbies. (20210407-DJ-S4)"; "There is a class lecture activity for primary school students in our class. Every student shares his/her speech at noon, so I use PPT to make my speech more wonderful and complete. (20210406-QLH-S)". Primary school students in urban schools can enrich their ability development process outside the regular schoolwork with the help of diversified learning resources and channels provided by the school, and fully exercise their team cooperation skills and communication skills, thus promoting the development of high-level literacy such as critical thinking.

Training and developing students' key literacy has also become an important basis for teachers in urban schools to carry out daily education and teaching, and explore the reform of teaching content, means and evaluation mechanism. For example, one school has innovated the evaluation system according to the framework of students' key literacy: "We have made many attempts, how to make a good school-based development of national curriculum, and the evaluation system of colorful flowers (multiple evaluation system). We have made a lot of efforts in recent years. (20210406-QLH-T) "It can be seen that from the top-level design of the school to the concrete implementation of the teachers, all of them are devoted to developing students' key literacy and trying to develop students' various abilities in a pluralistic and comprehensive way.

Different from urban primary schools, rural primary schools pay relatively limited attention to students' key literacy, and there are few related curriculum systems. Even in some remote rural schools, how to offer courses other than English and Mathematics is still a big problem. For example, a student in a rural primary school said, "Most science classes are occupied by Chinese teachers... Our class is also short of science books. During class, we will crowd in one chair and read one book together. (20210408-WSY-S) "The lag of education development in rural areas is still obvious. Influenced by subjective and objective factors, local primary school teachers' awareness of cultivating students' key literacy is far weaker than that of urban school teachers, and some courses to expand students' abilities are mostly occupied by teachers of main courses. At the same time, the supporting resources to support students' key literacy development needs are very poor, and even remote rural schools are still struggling to complete necessary teaching resources such as books, computers and special equipment needed for compulsory courses. Therefore, on the whole, rural primary schools and local teachers are weak in their awareness of developing students' key literacy, backward in their concepts and thoughts, and seriously inadequate in necessary resources, which obviously restricts the development of local primary school students' key literacy.

5. Conclusion

Through the questionnaire survey of urban and rural primary school students in Lanzhou and interviews with teachers and students, this study evaluates the development level of the key literacy of primary school students in the western region, and summarizes the main demands of developing the key literacy of local primary school students. It is found that the cultural understanding, inheritance, cooperation and communication literacy of primary school students in the western region are well developed, while the development level of critical thinking and innovative literacy is relatively weak, which needs to be improved in a targeted manner. It also reflects that this may be due to the trend of higher thinking from cultural understanding and inheritance to innovation, and the development of students' higher thinking is not perfect. The development level of students' key literacy in the western region is extremely uneven according to geographical division, and the literacy level of urban school students is significantly higher than that of rural school students, which is related to the remote geographical location and insufficient investment in education in rural

areas. The development of western students' key literacy is a key task to enhance comprehensive national strength, and the Chinese government still cannot relax in developing the education of western students.

Although these schools have formed many excellent experiences and achieved certain results in the practice of cultivating students' key literacy in the early stage, they still face many outstanding challenges in the future development process.

First, the gap between urban and rural education allocation is still obvious, and rural education is developing slowly. From the allocation of teachers to the construction of digital campus, the development level of rural primary schools at present lags behind that of urban schools, which is difficult to meet the demands of rural students' key literacy development. The number of rural teachers is small, and it is very common for one person to teach multi-disciplines, multi-level teaching and campus affairs management. Young teachers "don't want to come" and experienced teachers "don't want to stay". The network communication configuration of digital campus is insufficient, and the hardware and software needed for teachers' work and students' study need to be updated urgently. This is difficult to meet the practical needs under the background of key literacy development.

Moreover, the process of urban and rural schools cooperating in running schools is slow, and the balanced model of urban and rural education has not yet been established. In order to promote regional education equity, urban and rural schools have implemented a synchronous classroom mode in one-to-one counterpart assistance, that is, urban and rural students have a class together. However, the synchronous classroom has not played its real role. The main limiting factors are as follows: (1) the shortage of hardware and equipment in rural schools, and the lack of support for synchronous classrooms. Teachers in urban and rural areas lack an effective communication mechanism to ensure effective communication, and there are no links such as preparation of lessons before class, division of labor in class, feedback and summary after class, etc. Urban teachers don't understand the personality and life characteristics of rural school students, and some concepts or things in synchronous classroom are beyond the cognitive scope of rural school students.

6. Suggestions

Based on the current overall situation of the development of the key literacy of primary school students in the western region, we believe that local primary education can be specifically developed and upgraded from the following aspects:

First of all, the idea of running a school based on literacy and the construction of curriculum system should be set as the key points for improving education in primary schools. Urban primary schools are at the forefront in the cultivation of students' key literacy, and have formed or are exploring the formation of educational and teaching practice forms that embody the key literacy elements of students' development, such as communication and cooperation, learning to learn, questioning and inquiry, problem solving, cooperative innovation and technology application, which effectively respond to the current practical needs of students' growth and success. Rural schools should also adapt to local conditions, combine the characteristics of regional environment and educational environment, and explore the characteristic education and teaching activities to develop students' key literacy. Relying on the idea of running a school based on literacy, the curriculum system and supporting resource pool are constructed, which are connected with national curriculum, local curriculum and school-based curriculum, have perfect structure and clear objectives, and meet the needs of students' individualized development. It is also explored to deliver high-quality educational resources and experience to rural schools through the coordinated development situation such as synchronous classroom, teaching exchange, cooperation and co-construction.

Then, explore the in-depth integration and effective embedding of key literacy development and daily education and teaching. The concept of students' development with key literacy can be a booster to promote classroom teaching innovation. At present, with the increasing understanding of the concept of key literacy among front-line teachers, how to normalize the development of key literacy in daily education and teaching has become one of the key issues that primary schools in western China should pay attention to in the next stage. Therefore, it is necessary to strengthen the relevant training of primary school teachers and the innovative guidance of school-running ideas. Teachers should be familiar with and respect the basic laws of children's physical and mental development, transform from the traditional teaching concept of "knowledge-based" to the modern educational concept of "accomplishment-based", and respect children's personality differences and development. Schools should start from the top-level design, explore and develop diversified educational and teaching forms that break through the conventional lecture-style classroom, encourage new learning methods such as project-based learning, inquiry-based learning and ubiquitous learning to be carried out in primary school, and combine educational activities outside books such as labor education, physical education, traditional culture education and farming education with the cultivation of students' key literacy in combination with the advantages of school environment, resources and culture to form a unique cultivation pattern.

In addition, explore the construction and implementation of educational evaluation mechanism to support individualized development. To improve students' key literacy, the emphasis is on development, while the difficulty lies in evaluation. Today, with the trend of examination-oriented education still in place, promoting the development of students' key literacy depends on forming an evaluation mechanism that can be recognized and followed by parents, students and teachers. It is one of the important propositions in the reform of China's educational evaluation

mechanism in the new era to respect students' individualized needs for growth and success, and to structure different evaluation schemes based on students' different personality. In the innovation reform of education and teaching based on literacy standard, we should explore the evaluation scheme that reflects the subjectivity, diversity, comprehensiveness and democracy of students' development, so that students with different specialties and different development characteristics can be promoted in school education to adapt to their physical and mental development. In practice, we can combine the basic frameworks of students' key literacy development to design diversified evaluation fields and personalized evaluation standards, in order to help students develop their personality and ability in a long term.

Finally, focus on strengthening the construction of software and hardware in township primary schools, especially in remote rural primary schools. Increase the investment of funds and resources in rural schools. Under the condition of meeting the basic conditions for running a school, rural schools should develop their own educational philosophy based on the local special characteristics, and update the school-running system, curriculum system and multiple evaluation system according to their educational ideas. Retain teachers with their own mature and unique campus culture, and then continue to develop to a higher level step by step. It is also necessary to improve the cooperation between urban schools and rural schools based on positive and effective communication, and explore the construction of urban and rural teachers' teaching and learning community. Therefore, we should start from three elements: technical, cognitive and social [21]: technical elements, that is, teachers' learning tools, communication tools and evaluation tools supported by smooth network connection and stable technology platform. Cognitive elements, that is, creating learning themes, learning resources and practical think tanks that meet the individualized needs of urban and rural teachers and promote the participation of both sides in the construction. Social elements consist of short-term goal and long-term vision to enhance the sense of belonging of urban and rural teachers, distributed and supportive leadership model, reasonable internal operation rules and highly cohesive social connection. By discussing the preparation of lessons before class, the division of labor in class and the feedback and summary after class, we can effectively pass on the advanced ideas of running schools and concrete practical experience, promote the better and balanced development of urban and rural primary schools in western China, realize the overall improvement of the key literacy of local primary school students, and cultivate high-quality talents who can meet the social development of future regions and even the country.

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