Research on Improvement Strategy of Primary Teachers' Core Literacy at the Background of COVID-19

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\textbf{Abstract.} The novel coronavirus pneumonia outbreak in early 2020 has raised a great effect on all walks of life, including the area of education. The Ministry of Education launched an initiative entitled "ensuring learning undisrupted when classes are disrupted", which exposed many questions concerning teachers’ online teaching. It’s not enough for traditional teaching experience to guide online teaching, and the online teaching model has exposed the shortages of primary teachers’ core literacy. As a primary school teacher, we should actively adapt to changes and meet new requirements to complement our own shortcomings. Combined theory and practical experience, by using literature research and observation, this study will explore the shortages of primary teachers' core literacy exposed during the online teaching and raise the improvement strategy. This study aims to promote frontline teachers to self-examine and to perfect our own shortcomings, which will have a certain reference value to the online teaching.

1. Research Background

1.1. COVID-19

The 21st century is full of opportunities and challenges: Global non-traditional security issues such as food security, resource shortages, climate change, cyber attacks, population explosions, environmental pollution, disease epidemics, and transnational crimes have emerged one after another, posing severe challenges to the international order and human survival. General Secretary Xi Jinping stated that the international community has increasingly become a "community of destiny" in which you have me and you. In the face of the complex situation of the world economy and global issues, no country can stand alone.

At the beginning of 2020, a new type of coronavirus pneumonia came fiercely and disrupted people's lives. At the end of the winter vacation and the beginning of school is just around the corner, the Ministry of Education issued an important instruction to “suspend classes without stopping studying”. In the face of uncertain challenges, all walks of life need to be fully prepared to meet the challenges, especially the education industry. In response to the call, teachers of all types and levels have also switched from offline to online, urgently investing in online teaching, using various platforms and adopting various forms to provide online guidance for students' home learning.

1.2. The Importance of Teachers’ Core Literacy Research

In September 2016, the Ministry of Education officially announced the core literacy framework for student development, and the training strategy for the core literacy of students in my country has been officially launched. The cultivation of student core literacy will inevitably require teachers to reshape the new role of education, and the study of teacher core literacy is particularly important.\textsuperscript{[1]}

2. The Significance and Purpose of Research

This research combines theory and practical experience, uses literature research and observation
methods to explore the shortcomings of traditional offline classroom teachers' core literacy exposed by online teaching under the background of the Covid-19, and proposes corresponding improvement strategies. This research aims to promote the self-examination of front-line teachers, complement their shortcomings, and continuously improve their core literacy. It has a certain reference value for the online teaching of primary school teachers, and also has a certain inspiration for teachers' offline teaching.

3. Concept Definition

3.1. Suspend Classes without Stopping Studying

"Suspension of classes without stopping studying" is a product of the Covid-19. It is implemented under the call of the Ministry of Education, using a network platform, through a unified deployment at the provincial level and a combination of local and school conditions. The purpose is to prevent the spread of the epidemic, ensure the progress of study while ensuring the safety of students.

For students to study at home efficiently, teachers need to use various online platforms to guide students' learning online through various forms of recording, live broadcast, micro-classes, and video conferences, so that teachers can teach online and students can learn online. Online teaching is not simply moving the classroom online, but a huge challenge to teaching thinking, teaching mode, and teaching philosophy.

3.2. Teachers’ Core Literacy

In the book “The core literacy of teachers in the 21st century”, the author summarizes the basic framework of the core literacy of teachers based on the research foundation of predecessors and the background of the 21st century, condensing three types and eight literacy: teacher ethics and philosophy literacy includes teacher ethics and educational ideals; knowledge and ability literacy includes knowledge literacy, education and teaching ability literacy; comprehensive literacy includes humanistic literacy, information literacy, research literacy, and independent development literacy. These eight literacy have their own focus, and point out the direction from all aspects for the development of teachers in the new era. \(^2\)

4. Core Literacy Weaknesses of Primary School Teachers under the Covid-19

4.1. Teachers’ Mental Health Literacy is not Perfect

The outbreak of the Covid-19 has become an important source of stress. Facing the huge impact of the epidemic, elementary school students will have emotions such as fear, anxiety, depression, and because of their young age and immature mind, they often cannot express their emotions correctly or correctly understand the causes of their own negative emotions, so that you can't adjust your mentality and ease your bad emotions. The students felt that they were too far away from themselves when they heard the “new crown pneumonia” for the first time and they realized the seriousness of the problem when the community was blockaded; with the spread of the epidemic and the aerial classes held after the postponement of school, the students’ emotions further expanded: the nervousness from the spread of the epidemic, the worry about the infection of the family, the anxiety about not starting school on time, the worry about the delay of the course caused by online learning, etc. These responses are called stress responses in psychology. During the prevention and control of the epidemic, how to guide students to correctly understand these reactions and make positive psychological adjustments is a problem that teachers cannot ignore. \(^3\)

On February 3, General Secretary Xi Jinping presided over a meeting of the Standing Committee of the Political Bureau of the Central Committee to study the next step in the prevention and control of the epidemic. The meeting emphasized the need to strengthen psychological intervention and guidance, and provide targeted humane care. Since the outbreak, relevant departments have issued the “Guiding Principles for Emergency Psychological Crisis Intervention in the Epidemic of the Covid-19”, providing powerful guidance for scientific, standardized and
orderly strengthening of psychological intervention and guidance in various regions. It can be seen from this that the party and the state attach great importance to the adverse psychological effects of major disasters on people, and take effective measures to actively prevent and respond to the negative effects of psychological problems. In the book "21st Century Teachers' Core Qualities", the author proposes that teachers should understand the psychological knowledge related to students' cognition; master related knowledge of emotions, willpower and other related knowledge, guide students to do a good job in the control of emotions; fully understand each students' needs, motives and interests to cultivate their abilities and shape their personality in a targeted manner. The traditional core literacy of teachers pays more attention to teachers' mastery and application of cognitive psychology knowledge, while less attention is paid to individual counseling and psychological crisis interventions caused by students in stress situations. In our country, the school aims at "cultivating builders and successors of the socialist cause with comprehensive development in moral, intellectual, physical and other aspects". To achieve this goal requires the support of psychological counseling, because the development of morality, intelligence, and physical fitness is to a certain extent restricted by mental health. Mental health education is also an essential part of student management. In the context of Covid-19, it is even more important for teachers to have good mental health literacy.

4.2. Teachers Lack of Online Student Management Literacy

Student management is the general term for the school to plan, organize, coordinate, and control students' learning and activities inside and outside the school. It is the school's educational administration administrator who organizes and instructs students, according to the educational standards stipulated by the education policy, to carry out various educations for students in a purposeful, planned and organized manner, so that students can develop in moral, intellectual, and physical aspects, growing into a successor to the cause of socialism.

The epidemic has forced students’ learning locations from schools to homes, changes also exists in teachers' teaching plans, student organization, and especially in student supervision. It’s a necessary skill for teachers under the Covid-19 to well manage students and teaching, so that students can maintain online and offline to keep pace. Air classroom has changed the traditional classroom model, and teachers' classroom management has also shifted from offline to online. Student attendance and classroom efficiency cannot be visualized; how to submit high-quality homework and in what form to carry out the assessment; how to regulate daily behavior and how to cultivate life skills, all have become a series of problems before teachers; teachers use various network platforms to establish air classes, so how to keep the management of the class consistent with offline, and how to enable students to realize self-management at home is also an issue that teachers need to explore.

4.3. Teacher's Information Literacy is Incomplete

Today's world has entered the "Internet plus" era of global economic integration, science and technology informatization, and the popularization of big data. Information technology will change the way of human existence. The "air classroom" that emerged under the Covid-19 will undoubtedly put this informatization change into practice in advance, and teachers will enter the all online teaching mode. Under the background of the information explosion, the knowledge imparted by teachers can no longer meet the needs of students in the new era. The task of the school is no longer to blindly instill knowledge, but to provide students with core capabilities for future development. As a guide for students' learning, teachers need to have the consciousness of lifelong learning and strengthen their own information literacy in time. How to seize the opportunity to change ideas and make a qualitative change in their own educational work is a question that every teacher has to think about.
5. Strategies to Improve Teachers' Core Literacy in the Context of the Epidemic

5.1. Strategies to Improve Teachers' Core Literacy in the Context of the Epidemic

5.1.1. First, Teachers Must Have a Healthy Psychological Quality and the Ability to Self-Adjust under the Background of the Epidemic

Teachers' healthy mental quality mainly means that teachers should have a relaxed and happy mood, high spirits, optimistic and humorous emotions, and perseverance. The mental health of teachers not only directly affects the success or failure of education, but also affects the mental health of students. In the context of the epidemic, the delay in the start of school led to the disruption of teaching plans and the transformation of teaching methods. Teachers must first accept the fact that “teaching has entered the information age” at the cognitive level. Facing this change with an open mind; it is also necessary to actively accept various trainings from the practical level and actively learn the corresponding information and knowledge to meet the needs of the new era. It’s necessary to make positive adjustments and corresponding changes in psychology and action.

5.1.2. Teachers Should Pay Attention to Students' Mental Health Education

Children and adolescents are vulnerable to stress events, and they need timely and appropriate psychological protection to prevent stress-related psychological problems. As a guide for children and adolescents’ learning, teachers must first have a certain empathy ability, patiently listen to and accept students’ negative emotions, and let students realize that they are caused by dangerous or unexpected changes in external conditions under the background of the epidemic. This is called stress response, which is a psychological factor that may arise in the psychological activities of decision-making. Secondly, strive for multiple forces and take active and effective measures to guide students to resolve bad emotions. During study at home, teachers use various methods such as thematic class meetings, thematic mental health classes, extracurricular activities, and subject penetration through the network platform to explain the epidemic reports in various ways using popular science language, so that elementary students can understand and better adapt to study at home; Strengthen home-school cooperation through parent meetings and other forms, require parents to help students maintain a healthy and regular life schedule, establish a regular schedule of work and rest, promote scientific family education methods, guide parents to create a harmonious parent-child relationship, and provide students with high-quality companionship and psychological guidance; United City Xinyu Volunteer Service Team, through psychological lectures, sending good morning messages, psychological knowledge, and opening psychological counseling hotlines to supplement the psychological counseling work for student groups.

5.2. How to Improve Teachers' Online Student Management Quality

5.2.1. Flexible Use of Various Network Platforms to Serve the "Air Classroom"

Leaving the traditional classroom, teachers need to choose a teaching platform that suits them, and use appropriate platform tools to supervise students: sign in and clock in, video conference for morning reading, supervision of eye exercises, and mic roll call to answer questions and check whether students are sitting in front of the computer, listening carefully to class and so on. Combining interesting methods with layered homework, so that students with different abilities can learn something. Home-school cooperation, in collaboration with parents, uses video conferences to invigilate the exam. Teachers summarize and share periodic issues with parents through weekly online class meetings, and put forward requirements for the next stage. Arrange the course schedule, prepare the courseware, require students to actively cooperate, explore effective online teaching methods, and improve the effectiveness of online teaching.

5.2.2. Standardize the Construction of "Air Classroom" Classes

Guide class leaders to participate in air class management and set a good example. Actively undertake class work such as filling in forms and supervising; giving full play to the active role of the group leader, striving to be a little teacher, and helping the teacher to supervise and urge the
submission of homework and check homework online. It not only exercises the ability, but also fully reflects the sense of ownership of class management.

The management of the online class collective is inseparable from the construction of good class atmosphere. When the classroom becomes a network platform and teachers cannot communicate with students face-to-face, students' words and deeds need more guidance and regulation from teachers. In online learning, some students have used network language, emoticons and other irregular words to answer questions, as well as malicious screenshots and other bad behaviors. In online teaching, teachers need to have the awareness of cyber civilization, and students in the "Internet +" era need to develop a norm of cyber civilization from an early age to be alert to the occurrence of cyber violence. Teachers use online classrooms, parent WeChat groups, DingTalk groups, etc. to conduct special publicity to students and parents through class meetings, theme propaganda videos, joint Public Security Bureau, People's Procuratorate, etc., to enhance the legal concept of young people.

In addition, starting education from standardizing students' personal online behavior is a breakthrough in gradually cultivating students' self-management ability. The epidemic also provides an opportunity for educators to guide students to learn self-management. This is the core of high-quality teaching-to cultivate student ownership.

5.2.3. Ensure the Comprehensive Development of Students' Morality, Intelligence, Physical Education, and Art

In the "Opinions on Deepening Education and Teaching Reform and Comprehensively Improving the Quality of Compulsory Education" issued by the Central Committee of the Communist Party of China and the State Council, the main task of comprehensively improving the quality of compulsory education is put forward. While online teaching enhances the level of intellectual education, it also pays more attention to the development of students' moral, intellectual, physical, and aesthetic. Moral education is the first. The Covid-19 provides a good opportunity for moral education. Teachers should seize the opportunity to use thematic red education, theme class meetings, subject penetration and other methods to let students realize the feelings of home and country and have a sense of national pride and social responsibility. Strengthen physical exercises and enhance aesthetic education. Teachers will show students the essentials and operating methods through a combination of video conference and live broadcast, regulate students' movements online, and guide students' production of works. Exercise exercises between classes and regularly organize theme exhibition activities to enrich students' cultural and sports life.

In addition, labor education is a more prominent educational content in the context of the epidemic. On March 26, the Central Committee of the Communist Party of China and the State Council issued the "Opinions on Comprehensively Strengthening Labor Education in Universities, Middle Schools and Primary Schools in the New Era" (hereinafter referred to as the "Opinions"). The "Opinions" emphasizes that labor education is an important content of the socialist education system with Chinese characteristics. It is necessary to fully implement the party's education policy, insist on virtue and foster people, incorporate labor education into the whole process of talent training, and run through the various stages of colleges, middle and primary schools, and throughout the family, schools, and society, grasp the education guidance, follow the laws of education, innovate systems and mechanisms, focus on the actual effects of education, realize the unity of knowledge and action, and promote students to form a correct world outlook, outlook on life, and values. Taking this opportunity of home learning, teachers should respond to the call, make full use of the home-school cooperation platform, vigorously carry out thematic activities, carry out labor education for students, regularly carry out special activities, develop students' various life skills, and complement the labor that contemporary literacy students lack.

5.3. How to Improve Teachers' Information Literacy Ability

5.3.1. Adapt to the Changes of the Times and Actively Transform

With the development of education informatization, the classroom teaching model has changed, and
the "stopping of classes and non-stopping of schools" that emerged under the Covid-19 has undoubtedly helped this change. Teachers must first accept the fact that "teaching has entered the information age" at the cognitive level, and face this change with an active and open mind; they must also actively receive various trainings from the practical level, and actively learn the corresponding information and knowledge to adapt to the needs of the new era. In the information age, students cannot be satisfied with the traditional classroom teaching mode. Teachers must rationally use information technology in the classroom, enrich their own classrooms with multimedia methods such as micro-classes, and create "efficient and happy student-based" classrooms; Learn to find and use various high-quality shared resources and integrate them into their classrooms to meet the learning needs of students of different levels; and guide students to pay attention to network civilization in a timely manner, and cultivate students to have the correct awareness of network security and network responsibility.

5.3.2. Combine Online and Offline to Serve the Classroom

At present, online teaching cannot completely replace offline teaching. On the contrary, as a link to integrate the advantages of online and offline teaching, the role of teachers is particularly important. At present, teachers are busy using information technology to teach online through the Internet platform. When the epidemic is over, students return to the classroom. Teachers need to reflect on the advantages and disadvantages of online teaching and deeply integrate online teaching and management experience with traditional teaching. Collect digital teaching resources, edit audio and video files, edit image files, design and produce mind maps, use instant messaging tools to communicate and share files, use online questionnaire survey statistics, use learning tools in a mobile environment to organize teaching, and use the Internet learning space to organizes teaching. Use big data in all aspects of teaching management, understand students' concerns based on data, walk into students' hearts, carry out teaching activities in a targeted manner, and continuously optimize their education and teaching work.

6. Conclusion

The Covid-19 has affected and impacted all walks of life. This is a blow, but it is also an opportunity. For elementary school teachers, we are forced to quickly enter the era of nationwide online teaching, and it's also a chance to make us grow quickly and actively. We will get a lot of new thinking from the core literacy of teachers in the context of the epidemic, which will guide our education and teaching work with emphasis. Facts have once again proved the importance of lifelong learning, especially teachers. Only in continuous learning and updating of knowledge and skills can they conform to the trend of the times and complete the creative knowledge teaching work. Those who stand still and refuse to change will eventually be eliminated by the times. May we seize the opportunity to meet the challenge with a positive and open mind, so that we can get a qualitative improvement.

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References


[8] Liu Chunyan, Yan Xinhong. Study on the Core Literacy of the Key Teachers of Primary and Middle Schools under the Background of “Internet +”[J]. Journal of Urumqi Vocational University 2019.3.43-45.