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A Study of Current Situation of Knowledge, Attitude, Beliefs and Practices of "Double Reduction" Policy Among Primary and Secondary School Teachers in Chenzhou City

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Abstract. China has been carrying out nationwide efforts to reduce the academic burden of primary and secondary school students over six times from 1949. In June 2021, the Ministry of Education (MOE) established a department to supervise the out-of-school education and training, and suggested to further reduce the homework burden and out-of-school training for students in compulsory education (hereinafter referred to as "Double Reduction"). In order to understand the teachers' literacy in implementing the "double reduction" policy, the study administered questionnaires to 242 primary and secondary school teachers from Chenzhou City, Hunan Province, to survey their knowledge, beliefs, practices and policies. The results showed that primary and secondary school teachers in Chenzhou city have a high degree of awareness, importance, and sustainable implementation of the "double reduction" policy in three aspects viz., students' arrival and departure time, extracurricular training and homework management. Though, the "quantitative change" in the implementation of the "double reduction" policy is obvious, but the "qualitative change" is relatively petty low, and there is a significant difference between urban and rural areas in terms of awareness, recognition and practice. In order to reduce the burden and improve the quality, it is suggested to promote collaboration among schools, government, teachers, parents and other relevant parties to build a new ecology of lifelong education for primary and secondary school teachers, increase teacher training and support for "double reduction", improve the ability of teachers to know, believe and act on the "double reduction" policy and give priority to rural primary and secondary education.

Keywords. primary and secondary school teachers, "double reduction", knowledge, attitude, belief and practice.

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1. Problem formulation

In Chinese education system, "double reduction" is short for "effectively reducing homework burden and off-campus training burden of students in compulsory education". Its purpose is to effectively improve the education level of schools and continuously standardize in-school and out-of-school training. Though, China has been reducing the academic burden of primary and secondary school students on six occasions from 1949 but both in-school load and out-of-school load remain unchanged in large number of rural primary and secondary schools. In June 2021, the Ministry of Education (MOE) officially established Department of Supervision of Out-of-School Education and Training which reported in July its Opinions on Further Reducing the Homework Burden and Out-of-School Training for Students in Compulsory Education (hereinafter referred to as "Double Reduction") [1].

Primary and secondary school education subsequently became the hot research topic among the scholars. The "knowledge" search "homework burden" related literature themes amounted to 2982 whereas, the "outside training" related literature had 5459 sightings. The main aim of the researchers was to create better education environment to realize quality education goals in policy implementation. The relevant information revealed that the study of education burden theme mainly includes: primary and secondary school teachers, quality education, burden policy, and other related aspects. However, the current "double reduction" policy has failed to achieve the ideal intended effect therefore, it is necessary to probe this aspect in-depth for better and effective policy implementation.

In July 1955, the MOE published instructions on reducing the burden of primary and secondary schools pointing out that it is necessary to improve the relevant teaching material, optimize teachers' teaching level and increase extracurricular open activities to improve students' mental and physical abilities.

Subsequently, the MOE continuously issued following policies to reduce the burden of education: on May 4, 1964, the Report on Overcoming the Overburden of Primary and Secondary Schools and Improving the Quality of Teaching, the Issuance of the Provisions on Reducing the Overburden of Primary School Students on May 11, 1988, and the Emergency Notice on Reducing Student Overburden in Primary Schools was issued on January 3, 2000. From 1985 till date more than 50 times several policies were issued on Education burden-reduction indicating the concern of Chinese government but many of the policies ended as anticlimactic.

The government is forward-looking and sincere in its efforts to reshape the education ecology and promote education equity from various perspectives, including institutional setting and policy protection. After the issuance of the "Double Reduction" Opinions, the MOE has held eight press conferences and briefings related to "Double Reduction" to explain the policy objectives, its significance and initiatives, and held pilot city promotion meetings to take stock of progress in the work. In 2021, the MOE conducted a comprehensive investigation and cleanup of out-of-school training advertisements in which the market supervision departments around the country closed 2,119 cases of out-of-school training advertisements [2]. The data during the week from March 4 to 11, 2022, revealed that "double reduction" was one of the top hot issues of education in China's "two sessions" [3]. At one time it was debatable that whether the implementation of "double reduction" education policy is more crucial than the program itself, since the implementation of the policy involves many influencing factors, the most central of which is the front-line teachers in primary

and secondary schools, who execute the education policy and function as drivers of educational change.

Therefore, is necessary to establish a conducive environment which will help teachers to internalize and externalize the "double reduction" policy and eliminate teachers' cognitive and behavioral disorders against the policy to make it more effective. This is the only way to remove the teachers' perceptions and behavioral barriers against the "double reduction" policy and make relevant adjustments in educational governance and the change the concept of talent training implied in the "double reduction" policy.

The measures taken abroad to reduce the burden of education have domestic reference significance. Primary and secondary schools in Finland emphasize stimulating students' originality in the classroom teaching process. Meanwhile, the schools adopt the incentive education evaluation mode to timely optimize and adjust according to the curriculum needs of the students to nurture high-quality school leaders and teachers. The specific content of Japan's "loose education" measures can be summarized as "two reduction, two reduction and one increase", that is, to reduce the teaching content, reduce the teaching difficulty, shorten the teaching time, shorten the weekly class hour to achieve a complete Friday system, and increase comprehensive learning time. At the same time, the Japanese government uses advanced IT means to carry out online courses which is no longer limited to on-site teaching. Online teaching is more transparent than that in China and is cheaper than on-site teaching and its combination with the workload of primary and secondary school teachers and reduces the burden on teachers. The British solutions include: carrying out periodic workload survey, paying attention to the pertinence of the burden reduction policy, testing the implementation process and effect, and providing training to teachers. On the other hand, Germany and Japan governments strictly prohibit in-service teachers to conduct part-time classes. They classify in-service teachers into the civil service system and follow strict requirements for in-service teachers in accordance with the relevant civil service system. Most scholars in the United States advocate the control of intervention in off-campus training institutions.

Learnings from some foreign countries public school systems can improve the status of domestic teachers, cultivate teachers 'professional ethics, constantly optimize the quality of education in public schools, increase the government's support for public schools, so that students can fulfill their needs and demands as much as possible in school. We should closely adapt to China's national conditions, absorb the essence of foreign ways and methods of education burden reduction, and improve the deficiencies in the implementation of China's education burden reduction policy.

Therefore, it is important to investigate and analyze the awareness, attitude and implementation of the "double reduction" policy among the front-line teachers in primary and secondary schools in order to analyze the difficulties in the implementation of the "double reduction" policy in a targeted manner. The knowledge, attitude, belief and practice model (KABP model), focuses on the whole process from cognition to belief building to behavioral practice and provides a scientific perspective for analyzing the "double reduction" policy. This empirical study is a survey and analysis of the current situation of the frontline teachers' knowledge and beliefs about "double reduction" in Chenzhou City, Hunan Province, based on the KABP model, which can lead to effective implementation of the "double reduction" policy.

2. Study Design of the KABP Model

Since the implementation of the "Double Reduction" opinion, the primary and secondary schools across the country have taken corresponding actions including teachers from Chenzhou City. The city has 1951 schools of all levels and types, including 29 secondary vocational schools, 44 general high schools, 263 junior high schools, 388 primary schools, and 75,253 teaching staff in 2020. The high school student population (including technical secondary school) is 745,066, junior high school 1,864,176 and 1,205,918 students (including graduates, undergraduates and current students) from various schools. The city's resident population has an average of 9.58 years of education for those aged 15 and above [4].

The consolidation rate of nine-year compulsory education is 98.5% and the gross enrollment rate of high school is 93.1% [5]. The strong promotional measures of the national "double reduction" policy in Chenzhou City resulted in lot of fruitful reforms in the areas of arrival and departure time of primary and secondary students, extracurricular training, homework management, etc. The burden of homework and extracurricular training on students is reduced, and both teachers and schools have supported and approved the "double reduction" reform. A conducive atmosphere of "reform" has gradually formed, with a certain degree of representation.

2.1 Research indicators and survey tools

The "double reduction" problem is reexamined by using "KABP" model to structure and measure the "double reduction" effect and necessary countermeasures. The first is the horizontal composition of the "double reduction" effect, including the four dimensions of the policy namely, students' arrival and departure time, students' homework, the participation rate of extracurricular tutoring institutions, and the impact on teachers. The horizontal structure of the "double reduction" policy includes four dimensions: students' time away from school, students' homework, the participation rate of extracurricular tutoring institutions, and impact on teachers. The second is the longitudinal structure of identity, including three levels of knowing, believing, and practicing, which is the "double reduction" effect of knowing, believing, and practicing: knowing is cognition and knowledge, which is the knowledge level of mastery and understanding; believing is trusting and agreeing, which is the positive construction of belief level; practicing is action, which is the behavioral level of practice correction [6]. A questionnaire was designed on "double reduction" based on the "Opinions on Double Reduction" and the preliminary interviews with some primary and secondary school teachers, with a cross-section of horizontal and vertical dimensions. There were 19 questions, including 3 basic relevant information questions, 13 single-choice questions, 1 multiple-choice question, and 2 open-ended questions.

2.2 Sampling and survey methods

In 2022, a stratified random sampling method was used to select teachers from 12 primary and 12 secondary schools in Chenzhou City (6 in urban areas and 6 in rural areas, 6 in secondary schools and 6 in elementary school), and the questionnaires were administered to 242 respondents through the Chenzhou compulsory education teachers' group, of which 10 invalid questionnaires were excluded the effective rate of the valid questionnaires was 95.9%.

2.3 Statistical methods

Excel software was used for real-time statistical input of the data, and SPSS22.0 software was used for statistical description. One-way ANOVA or independent sample t-test was used for the agreement of the "double reduction" effect in different regions, and $p< 0.05$ was considered as statistically significant.

2.4 Study hypothesis

H1: There is no significant difference in the awareness of the "double reduction" policy among primary and secondary school teachers between city and township areas in Chenzhou.
H2: There is no significant difference in the beliefs of the "double reduction" policy among primary and secondary school teachers between city and township areas in Chenzhou.
H3: There is no significant difference in the practices of "double reduction" policy between primary and secondary school teachers between city and township areas in Chenzhou.

2.5 Reliability test

Reliability is the consistency of the same object when same measurement is carried out in the same method, in other words it reflects reliability of the measured data. The scale adopts three aspects: the awareness, beliefs and practices of the "double reduction" effect. The measurement dimension includes the time when students enter and leave the school under the "double reduction" policy, students' homework, the participation rate of extracurricular tutoring institutions, and the impact on teachers. The Cronbach coefficient was used for the reliability analysis of each measured dimension, and the overall (Cronbach's Alpha) coefficient is 0.832 indicating high reliability. The Cronbach coefficient of all dimensions is above 0.7 indicating that the questionnaire has good reliability.

3. Empirical Results of the KABP Model

3.1 Awareness of the "double reduction" policy among primary and secondary school teachers

Table 1 shows that all primary and secondary school teachers in Chenzhou are totally aware of the "double reduction" policy namely, 67.5% and 61.2% in urban and rural areas while the rest exhibit general awareness. The chi-square test for independent samples shows that the chi-square value is 0.897 and the progressive significance is $0.344 > 0.05$ hence, the null hypothesis is accepted representing that there does not exist a correlation between the region and the degree of knowledge.

Table 1 Awareness of the "double reduction" policy among primary and secondary school teachers

Region	Number of surveys	Knowledge level (Ratio)			*Pearson's chi-squared test*	*P*
		More familiar	General Understanding	No knowledge		
City	160	67.5	32.5	0		
Township	72	61.1	38.9	0	0.897[a]	0.344
Total	232	128.6	71.4			

Note: The expected count of a. 0 cells (0.0%) is less than 5. The minimum expected count was 24.83.

3.2 Degree of belief among primary and secondary school teachers in the "double reduction" policy

Table 2 to Table 5 show that the standard deviations of urban recognition and township recognition are 0.716 and 0.776 respectively in all dimensions indicating that the recognition is relatively stable. The proportion of overall support and firm support for the "double reduction" policy is higher between urban and rural areas, the proportion of general implementation and above is higher, the proportion of importance attached to the "double reduction" policy is higher, and the degree of agreement that the "double reduction" policy can develop sustainably is higher. However, there are statistical differences between urban and rural areas in the overall attitudes of primary and secondary schools towards the "double reduction" policy, primary and secondary school teachers belief "double reduction" policy ; and schools implementing the national "double reduction" policy and the "double reduction" policy. There are no significant differences in the implementation of the national "double reduction" policy, the degree of importance attached to the implementation of the national "double reduction" policy, or the attitude of getting sustainable implementation in primary and secondary schools.

Table 2 Attitudes of primary and secondary school teachers towards the "double reduction" policy

Region	Number of surveys	General Attitude (Ratio)				*Pearson's chi-squared test*	*P*
		Strong support	Support	Not much support	Against		
City	160	54.3	41.2	3.7	0.8		
Township	72	45.8	40.2	8.5	5.5	8.330[a]	0.053
Total	232	100.1	81.4	12.2	6.3		

Note:a. 3 cells (37.5%), the expected count is less than 5. The minimum expected count was 1.55.

Table 3 Teachers' opinions on implementation of "double reduction" policy

Region	Number of surveys	Implementation (Ratio)				*Pearson's chi-squared test*	*P*
		Very well implemented	Better implementation	Implementation of general	Poorly implemented		
City	160	33.8	40.6	20.6	5		
Township	72	27.8	34.7	34.7	2.8		
Total	232	61.6	75.3	55.3	8.3	5.517[a]	0.147

Note:a.1 cell (12.5%), with an expected count of less than 5. The minimum expected count was 3.10.

Table 4 Importance of school leaders in "double reduction" policy implementation

Region	Number of surveys	Level of Importance (Ratio)				*Pearson's chi-squared test*	*P*
		Attention	More important	Not much important	No attention		
City	160	51.2	36.3	11.3	11.3		
Township	72	50	37.5	6.9	5.6	4.524[a]	0.237
Total	232	101.2	73.8	18.2	16.9		

Note: a. 2 cells (25.0%), with an expected count of less than 5. The minimum expected count was 1.86.

Table 5 Teachers attitudes towards the sustainable implementation of "double reduction" policy

Region	Number of surveys	Sustainable Implementation (Ratio)			*Pearson's chi-squared test*	*P*
		Able to	Hardly	Not sure		
City	160	62.5	28.1	9.4		
Township	72	62.5	33.3	4.2	2.189[a]	0.335
Total	232	125	61.4	13.6		

Note: The expected count of a. 0 cells (0.0%) is less than 5. The minimum expected count was 5.59.

3.3 Degree of implementation of "double reduction" policy in primary and secondary schools

3.3.1 Students' arrival and departure time under "double reduction" policy

Generally, the degree of implementation of the students' arrival and departure timings in urban and rural areas is obvious. The results of the survey show that students have a higher percentage of time of arrival between 7:30 a.m. and 8:00 a.m. and a higher percentage of time of departure between 5:30 p.m. and 6:00 p.m. There is statistical difference in students' arrival time in the morning, with the urban students arriving at school before 6:30 a.m. is more than the rural students and after 8:00 a.m. urban students arrived at school is significantly less than rural students (p = 0.000).For statistical differences between students leaving school in the afternoon, urban students leaving school was significantly lower than rural students before 5:30 PM; urban students leaving school from 5:30 to 6:00 PM were significantly higher than rural students (p = 0.000).

Table 6 Students' arrival time in the morning

Region	Number of surveys	Time of Arrival (Ratio)					*Pearson's chi-squared test*	*P*
		Before 6:30	6:30 to 7:00 pm	7:00 to 7:30	7:30 to 8:00 pm	After 8pm		
City	160	0	11.9	37.5	34.3	16.3		
Township	72	2.8	15.3	5.6	50	26.4	28.979[a]	0.000**
Total	232	2.8	27.2	43.1	84.3	42.7		

Note: a. 2 cells (20.0%), with the expected count of less than 5. The minimum expected count is.62;
**p<0.05

Table 7 Students' departure time in the afternoon

Region	Number of surveys	Time of Departure (Ratio)					*Pearson's chi-squared test*	*P*
		Before 5:30 pm	5:30pm to 6:00pm	6:00 p.m. to 6:30 p.m.	6:30pm to 7:00pm	After 7:00 pm		
City	160	24.4	56.9	5	3.8	10		
Township	72	56.9	27.8	2.8	0	12.5	27.619[a]	0.000**
Total	232	81.3	84.7	7.8	3.8	22.5		

Note: a. 3 cells (30.0%), with the expected count of less than 5. The minimum expected count was 1.86; **p<0.05.

Tables 6 and 7 show that there is significant difference in the arrival time of urban and rural areas besides , there is difference in the students' departure time e. g,, the percentage of students leaving schools after 5:30 and 6 p. m. in the townships is only 56.9% while, it is 27.8% in the cities.

3.3.2 Students' homework situation under "double reduction" policy

It is noticed in the study that the primary and secondary school teachers systematically take students' homework. Table 8 shows that the amount of homework for students is limited to 1 to 2 hours daily barring few schools in both city and township schools. Training on the homework design is conducted in both urban and rural areas to more than 70%, whereas around 25% schools neglect it. The frequency of training sessions on the assignment design in both urban and rural areas is once a semester. However, around 15% of the schools in both types do not conduct training sessions. It is evident from Tables 8-10 that there is not significant difference in the frequency of training sessions on the homework design in all schools (p = 0.015), and the proportion of urban students doing homework for less than 1 hour per day is lower than that of rural students'; while there is significant difference in the amount of homework held and students' homework per day for example, about 20% of urban and township primary and secondary schools did not conduct training on homework design.

Table 8 Daily homework done by students

Region	Number of surveys	Workload (Ratio)					*Pearson's chi-squared test*	*P*
		No more than 1 hour	No more than 2 hours	No more than 3 hours	No more than 4 hours	No more than 5 hours		
City	160	35	39.4	16.9	8.1	0.6		
Township	72	52.8	37.5	9.7	0	0	11.952[a]	0.008**
Total	232	87.8	76.9	26.6	8.1	0.6		

Note: a. 3 cells (30.0%), with an expected count of less than 5. The minimum expected count is.31;**p<0.05.

Table 9 Status of Primary and secondary school teachers on assignment design

Region	Number of surveys	Convening (Ratio)		*Pearson's chi-squared test*	*P*
		None	There are		
City	160	25	75		
Township	72	27.8	72.2	0.200[a]	0.655
Total	232	52.8	147.2		

Note: The expected count of a. 0 cells (0.0%) is less than 5. The minimum expected count was 18.62.

Table 10 Frequency of training sessions on assignment design

Region	Number of surveys	Training Frequency (Ratio)				*Pearson's chi-squared test*	*P*
		0 times a semester	Once semester	Once per year	Twice per year		
City	160	16.9	64.4	4.4	14.4		
Township	72	15.3	77.8	0	6.9	6.800[a]	0.028**
Total	232	32.2	142.2	4.4	21.3		

Note: Note: a. 2 cells (25.0%), with an expected count of less than 5. The minimum expected count was 2.17; **p<0.05.

3.3.3 Participation rate of extracurricular training institutions in the "double reduction" policy

Table 12 shows that after the implementation of the "double reduction" policy, the participation rate of extra-curricular tutoring institutions in Chenzhou City has dropped significantly and more than 60% of teachers believe that the participation rate of students in extra-curricular tutoring is hardly 10%. This shows that the students' learning burden has reduced after the implementation of policy. Tables 11 and 12 show that there is a significant difference between urban and rural school students' participation in extracurricular tutoring before the implementation of the "double reduction" policy (p = 0.000), and urban students' participation is significantly higher than rural students indicating that the such training in urban areas is gradually decreasing.

Table 11 Students' participation in extracurricular training institutions before implementation of the "double reduction" policy

Region	Number of surveys	Participation (Ratio)					*Pearson's chi-squared test*	*P*
		Around 10%	Around 20%	Around 30%	Around 40%	About 50%		
City	160	11.9	15.6	27.5	15	30		
Township	72	40.3	22.2	12.5	4.2	20.8	32.019[a]	0.000**
Total	232	52.2	37.8	40	19.2	50.8		

Note: a. The expected count of0 cells (0.0%) is less than 5. The minimum expected count was 8.38; **p<0.05; the time cut-off points before and after the implementation of the "double reduction" policy in Chenzhou is defined on July 24, 2021.

Table 12 Students' participation in extracurricular training after implementation of the "double reduction" policy

Region	Number of surveys	Participation (Ratio)					*Pearson's chi-squared test*	*P*
		Around 10%	Around 20%	Around 30%	Around 40%	About 50%		
City	160	60	19.4	10	5	5.6		
Township	72	68.1	15.3	8.3	2.8	5.6	1.691[a]	0.782
Total	232	128.1	34.7	18.3	7.8	11.2		

Note: a. 2 cells (20.0%), with the expected count of less than 5. The minimum expected count was 3.10.

Table 13 reveals that only 40% teachers believed that students' participation in extracurricular training would be beneficial to their physical and mental development. However, teachers were relatively conservative or on wait-and-watch mode about the physical and mental development benefits from students' participation in extracurricular training. At the same time, it is noticed that there was no significant difference among the expectations of urban and rural teachers.

Table 13 Teachers' opinions on students' participation in extracurricular tutoring institutions under the "double reduction" policy

Region	No. of surveys	Impact (Ratio)				*Pearson's chi-squared test*	*P*
		Useful	Not beneficial	Harmful	Harmless		
City	160	42.5	40.6	3.8	13.1		
Township	72	45.8	41.7	2.8	9.7	0.752	0.855
Total	232	88.3	82.3	6.6	22.8		

Note: a. 1 cell (12.5%), an expected count of less than 5. The minimum expected count was 2.48.

Thus, in general, it can be concluded that primary and secondary schools are able to implement the basic requirements set by the national "Double Reduction" policy to a significant extent with positive changes in the arrival time of students in the morning and in the leaving time of students in the afternoon, students' participation in off-campus training, the daily homework for students, and the frequency of training sessions on the home assignments design. At the same time, majority (60%) of the school teachers are skeptical about sharp dropping in extracurricular training institutions attendance after implementation of the "double reduction", which subsequently would reduce students' learning burdens. Whereas, only 40% of teachers believed that students' participation in extracurricular training institutions would have a positive impact on students' physical and mental development. However, there still remain some problems which need to be addressed. First, there are inherent differences among urban and rural schools in the implementation of the "double reduction" due to demography. In urban schools, the implementation efforts are significantly higher than those in rural schools in terms of students' arrival and departure time, students' participation in off-campus training before and after the implementation of "double reduction", training on the homework design, and the frequency of training sessions on homework design. The daily homework is higher in urban schools than in rural schools, so it is recommended that the "double reduction" rules should take into account the differences between urban and rural areas. Second, the "quantitative change" is greater than the "qualitative change". The "quantitative changes" in the time of arrival of students in the morning, the training on the homework design, and the frequency of training sessions on homework design is more obvious in all schools. However, the magnitude of the "qualitative changes" in students' afternoon departure time, students' participation in off-campus training before and after the implementation of "double reduction" is relatively small, which indicate that the promotion of "double reduction" should pay attention in improving quality, effectiveness and persistence.

4. Conclusions and Recommendations

The results of the present survey of 242 primary and secondary school teachers in Chenzhou City, Hunan Province, indicates that the "double reduction" policy has been implemented for more than one year, and the overall recognition, importance and

support from school teachers is high. At the same time, China's regional differences, imbalanced development of urban and rural areas and schools demand top-level design and coordination of education policies to promote the orderly operation of the education system. There are significant differences between urban and rural areas in terms of awareness, recognition, and implementation of the national "double reduction" program as narrated below.

4.1 Knowledge level differences between urban and rural school teachers

It is noticed that the overall awareness of the "double reduction" policy among primary and secondary school teachers in Chenzhou is significant. However, urban primary and secondary school teachers are more aware of the national "double reduction" policy than their rural counterparts. Therefore, education authorities and schools should continue to increase teacher training on the "double reduction" policy with an appropriate focus on rural teachers.

4.2 Attitudes and beliefs differences between urban and rural areas teachers

It is observed that majority of the primary and secondary school teachers are positive and optimistic about the meaning and effects of the "double reduction" policy on students' healthy growth and support the policy. However, specific attention needs to be given on: many primary and secondary school teachers do not have positive expectations about the impact of "double reduction" on student' learning. Urban school teachers believe in the national "double reduction" policy more than rural school teachers, and nearly half of the rural teachers have a negative attitude towards the "double reduction" policy in general. Therefore, education authorities and school management should focus on the "double reduction" work in townships by strengthening, guiding, supporting to recognize the "double reduction" work in townships，so as to enhance the teachers' belief in the "double reduction" policy.

4.3 Quantitative and quantitative changes in student burden reduction

The "quantitative change" in the implementation of the "double reduction" policy is obvious and is attributed to better implementation of basic requirements of "double reduction" in terms of student's arrival time, increase in training sessions and homework checks and sharp dropping in the proportion of students participating in training in extracurricular tutoring institutions after the implementation of "double reduction", which helped to reduce students' learning burden. However, the magnitude of the "qualitative change" in the time students leave school in the afternoon and their participation in out-of-school training is relatively small. Therefore, to promote the "double reduction" improve the quality" has to be the starting point for action otherwise, it may lose the fundamental and "the original will cannot be inverted" [7]. The report clearly points out that "high-quality development is the primary task in comprehensively building the modern socialist country. " Compulsory education as a basic strategy is the process of national modernization, "quality change" is mandatory in the development of compulsory education [8]. Therefore, the present study suggests that Chenzhou primary and secondary school teachers should focus on "grasping lesson preparation". Under the background of "double reduction", teachers should study

students' learning situation and teaching materials and their current level through "grasping lesson preparation", pay attention to the recent arena of students' development, and give full play to the leading role of teachers as well as students' role. Secondly, through "grasp the classroom" concept, teachers have to pay attention to streamline the classroom content on the basis of grasping the classroom. The classroom is the core place for students to learn, and "grasp the classroom" is an effective way to highlight the position of students, stimulate their enthusiasm for active participation, guide students to carry out inquiry learning, and improve efficiency of classroom teaching. Subsequently, "grasp the homework" will guarantee improvement in teaching efficiency. Therefore, primary and secondary school teachers in Chenzhou city should consider the homework content situational. Homework integrates and assimilates classroom knowledge into specific applied situation. It is closely linked to student' learning life, and forms a typical case study or project by processing in the real world. Secondly, the homework design operation needs to consider the difficulty progression. The assignment is no longer a repetition of knowledge without difficulty gradient, but an advanced structured design and the design assignments need to be considered in a variety of ways. It is no longer a unified written homework, but an organic combination of homework with students' housework, communication, interview, social experience and so on, to form mathematics in life, so as to realize the diversity of homework methods [8]. At the same time, "double reduction" is not just a slogan to improve quality, the implementation is quite challenging and systemic project that requires synergy between government, school and family in participation and common construction. If there is no multi-party collaboration, it will be difficult for teachers to receive effective guidance and support, and they are bound to become more anxious and helpless under the demand of reducing the burden and improving the quality. Therefore, can we find a way to promote the collaborative practice of schools, government, teachers, and parents, so that the "double reduction" policy can be transformed from a confident "knowledge" to a reliable "belief" and finally to an effective "action"? This is the key point to reduce the burden and improve the quality. On the one hand, from school point of view, we should devote ourselves to integrate high-quality education and teaching resources, strengthen teaching and research guidance on curriculum and teaching; empower high-quality development with information technology, and build efficient classrooms [9], On the other hand, the education department should work with women's federations and other departments to run parenting schools or online family education guidance platforms and promote the construction of community family education guidance centers and service sites [10], Only by integrating the power of collaborative governance inside and outside the school building, developing a new ecology of lifelong education for primary and secondary school teachers, improving the ability of teachers to know, believe and act on the "double reduction" policy, and adjusting expectations for academic progress and development based on each student's personality, we can provide emotional and technical support to teachers to confidently and boldly reduce students' academic burden and fully implement the "double reduction" policy.

The study has following limitations: on the one hand, the sample range and sample size are insufficient, the fillers are subjective and random, and there are defects in objectivity and conscientiousness; on the other hand, the variable design of the personal information of the respondents is not comprehensive, and the factors such as gender, age, discipline, educational background, teaching experience, age and marriage of the respondents are not fully included and analyzed. The limitation of this study and its

discussion can also serve as an important consideration for further scientific research on "double minus" problem in the future.

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