



Improving Classroom Ecology Under the “Double Reduction” Policy in China

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Abstract. China’s “Double Reduction” Policy has reduced the burden of heavy homework and extra off-campus tutoring for students, but the quality of teaching and learning in schools and the validity of student’s learning have been questioned. The policy proposes “to improve education ecology”, which leads to a possible key point, classroom ecology: focusing on the teachers, students, teaching and learning activities, the environment and the interactions between them in the classroom. Teachers need to update their teaching skills as well as assignment design concepts with the support of schools. However, as teachers are faced with prolonged working hours and higher social expectations infused by the policy, schools and the community should also pay attention to teachers’ needs and help them adapt and respond positively to it. In addition, a harmonious teacher-student relationship ensures that the classroom ecology function properly.

Keywords: Double Reduction Policy · Chinese Education Reform · Classroom Ecology

1 Introduction

In China, the excessive academic burden of primary and secondary school students has always been a major problem in its education system, so reducing the academic burden of students and providing a better learning environment for children has been a significant task in the development of compulsory education in China [1, 2]. The motivations and goals of China’s education policies have varied during various historical periods. In the 21st century, China’s education policy has focused on systemic reform of compulsory education, with demands to update curriculum content, improve teaching methods, and enhance students’ scientific and cultural literacy. The “Double Reduction” policy, which was introduced on July 21, 2021, also provides direction for the reform of compulsory education management and education evaluation system. The overall requirement is to build a good ecology of education. In order to break the tradition of teaching to the test and to cultivate students who are not overburdened and who are physically and mentally healthy, Chinese educators should study school education from an ecological perspective and pay attention to the performance of teachers and students in the classroom.

2 Background

2.1 Double Reduction

The National College Entrance Examination (NCEE), a standardized college entrance exam held annually in mainland China, is the threshold for entering university in the mainland. Given the large population and the relative lack of quality higher education in China, most students and parents believe that a higher score in the college entrance examination means a more promising future, and thus education to the test has become a prominent phenomenon in China [3, 4, 5]. Students learn intensively and have little free time to enjoy their childhood. Hence, it is evident that while primary and secondary school students have even been found to have mental health problems [6], many successful college entrants lack social skills or adaptability [7]. In addition, before the policy was introduced, China had a large number of private teachers and off-campus tutoring institutions. Parents were often willing to pay exorbitant amounts for such off-campus tutoring in order for their children to perform better academically than their classmates [8]. However, the additional cost of education adds to the burden on Chinese families; the disparity in educational resources between students from wealthy families and those from poor families further exacerbates educational inequality and class stratification in China [9, 10]. In this context, the Double Reduction Policy aims to reduce the homework burden of students, shut down off-campus tutoring institutions, and therefore, a rising new question is how to improve the quality of education in schools.

2.2 Classroom Ecology and Double Reduction

Classroom ecology, a concept in education ecology, refers to a series of interactions and relationships between students and teachers around teaching and learning activities [11]. In this system, all elements together form a dynamic, interactive, developmental, diverse, harmonious and holistic teaching ecosystem through material circulation, energy flow and information transfer, which includes students, teachers, classroom environment and other related elements.

The general requirements of China’s Double Reduction policy emphasize “focusing on building a high-quality education system and strengthening the role of schools as the main educational ground” and “building a better ecology for education”, reflecting China’s unprecedented attention to the “humanization” of the education system. By considering China’s current educational reform from the perspective of education ecology, we can study this topic in a comprehensive and open manner, emphasizing the complex and dynamic relationship between various environmental factors and educational teaching practices, and exploring ways and means to optimize the teaching environment. This kind of education research based on the ecological perspective places special emphasis on the “growth” of students, which responds to the rejection of “test-centered” education and the concern for humanistic care in China’s education system.

3 Improving Classroom Ecology Under the Background of Double Reduction

To ensure that students may acquire sufficient knowledge while reducing their workload, teachers and administrators should pay attention to the classroom, the place where teaching and living occur together. Improving classroom ecology is the key to improving the overall quality of teaching and learning, and requires consideration of several elements, including students, teachers, and the environment [11, 12].

3.1 Improving Teaching and Learning Ecology

Before the double reduction, the traditional Chinese education ecology was dysfunctional. Students learned more by paying for off-campus tutoring than by attending school; more attention was paid to “whether the score has improved” than to whether students and teachers could successfully adapt to the education ecology. In the traditional classroom, students learn inefficiently and receive knowledge passively with a lack of active participation and thinking. Schools are also less able to meet the individual needs of students than extra-curricular institutions: in a classroom setting, with a large number of students, teachers fail to introduce a program that best meets students’ individual needs based on their abilities, personalities, hobbies, and other specific requirements.

Research related to subject teaching practices in the context of Double Reduction shows that teachers are beginning to focus on developing students’ key competencies and subject concepts [13, 14]. Teachers are emphasizing a holistic perspective and adopting a large-unit structure for instructional design, designing core questions under contextual propositions and leaving students to learn on their own. The requirements of China’s “New Curriculum Reform” also reflect the contemporary call for ecological, endogenous education. The emphasis on ecological features of teaching and learning not only rejects the knowledge-centered and even score-centered education, but also emphasizes the important guiding role of the teacher in this ecosystem.

3.2 Optimizing Homework Design and Evaluation

Research has shown that the amount of homework does not show an absolute positive correlation with improved student performance [15]. In order to ensure that students can fully understand and master the premise of students, reduce the amount of homework and improve the effectiveness of homework has become another key. The policy states that homework assignments should conform to the laws of student learning and quality education. One challenge in this regard is that as policy encourages “graded, flexible and personalized assignments,” if teachers fail to design with a reasonable grading standard, most students tend to choose less challenging assignments. Therefore, in addition to designing assignments based on students’ thinking skills, teachers should also help students understand the meaning of assignments, encourage them to complete more challenging tasks, and choose assignments that are more suitable for their personal development needs; and transform assignments from being “assigned” by teachers without a sense of purpose to being “collaborative” between teachers and students on their

own. Teacher research groups in primary and secondary schools should also collaborate on homework design, designing standardized, modifiable assignments for specific sections of students in specific schools to reduce the workload of individual teachers: It is found that teachers in Beijing work 56.8 h per week, 12.8 h above the labor law maximum of 44 h per week and well above other teachers in the other 47 countries and territories in the 2018 Teaching and Learning International Survey [16, 17].

In the evaluation process of assignments, teachers should focus on the dynamics of the evaluation process and the diversity in content and approach. The policy requires that reducing students’ classroom workload while ensuring the quality of learning requires teachers to provide differentiated assignments, as well as differentiated evaluation of assignments. Teachers should discover the differences in inherent cognitive processes and knowledge structures among individual students, set individual evaluation criteria in terms of content, ability, thinking and context, and then construct multidimensional criteria to evaluate after-school assignments from a holistic perspective.

3.3 Improving Teachers’ Policy Perception

In the classroom ecology, as the dominant subjects of teaching activities, teachers have their own claims, and their job performance can be affected by the policy. Under the influence of the Double Reduction Policy, studies have found that Chinese teachers have experienced discomfort with changes and a dramatic increase in occupational stress. With the reduction of off-campus tutoring institutions, teachers take on the work of after-school training; students, parents, and even society had higher expectations of school teachers, which intensified the sense of responsibility and pressure teachers felt in their work [18]. Teachers’ attention allocation has been affected: on one hand, teachers, as the bearers of teaching work in schools, are not only faced with tasks such as teaching, professional development, classroom management, home-school communication, and after-school services; on the other hand, due to limited resources, primary and secondary schools in China have a long-standing problem of unreasonable staff organization; teachers have other distracting tasks outside of teaching, needing to receiving inspections, and other non-teaching tasks [19]. In addition, teachers in China, who are predominantly female, have shown prominent negative emotions about being overloaded with work and unable to take care of their own families compared to male teachers [20].

In teaching, teachers are subjects that cannot be ignored and also play a guiding role in the classroom ecology. Schools and society should give more consideration to teachers’ policy perceptions, improve the compensation and support mechanisms, reduce teachers’ workload outside of teaching, and meet their needs for self-development, thus facilitating the smooth implementation of the policy. A research has shown that more than 80% of teachers consider their work to be unprecedentedly stressful, and safety responsibilities (82.6%), classroom management tasks (80.1%) and prolonged working hours (79.4%) are cited as sources of stress under the new order [21]. Teachers should have a correct and in-depth understanding of the policy and their own sense of responsibility along with the process of policy; teachers should actively cooperate and participate in teaching research and practice in order to avoid greater inconvenience to their work caused by the lagging understanding.

3.4 Reframing a Harmonious Teacher-Student Relationship

The teacher and students are the main subjects in the classroom ecosystem. Teacher-student interaction and teacher-student relationships have a more direct impact on the quality of teaching and learning than student-student interactions.

The teacher-student relationship is a system of social relationships involving multiple levels of education, psychology, nature, and ethics, and is a dynamic and interactive developmental relationship. In China, test-oriented education has often given teachers in schools absolute power, and students take teachers as an inviolable authority and a tool for acquiring knowledge. The traditional culture's esteem for teachers and knowledge overshadows the needs of students and triggers a submissive teacher-student relationship, characterized by "a talkative teacher and a group of silent students" in classroom. Although teacher-student relationships are generally characterized by harmony as we enter the 21st century, there are potential risks associated with the lack of emotional communication between teachers and students. For example, male teachers, classroom teachers, and teachers of higher grade are more inclined to have conflicts with students [22]. Students may feel hurt after having perceived that their demands are not respected by teachers, which may lead to self-doubt and hostility toward teachers. As a result, in the process of modernizing Chinese education, a dialogic teacher-student relationship should be emphasized.

A good teacher-student relationship requires a joint effort by the teacher and the student. Only when both the teacher and the student are present and situated in a positive educational influence can the student's understanding, creativity, and initiative be discovered and the teacher's responsibility, leadership, and caring be demonstrated. Rather than forcing students to obey through harsh discipline, the teacher's guidance combines this "obedience" with the students' own will, encouraging them to explore themselves and their world. The double reduction policy has brought students and school teachers closer together, and a model of dialogue that focuses on "sharing" should be emphasized to help improve student-teacher relationships [23]. Teachers need to commit to open dialogue and be inclusive of students' ideas and perspectives. Dialogue can transform potential conflicts between teachers and students into opportunities to exchange and share ideas. The subjectivity of teachers is reflected in their ethical responsibility to their students, and therefore teachers should behold a humanistic care for their students; and schools should pay more attention to teachers' professional qualities as well as their ethical responsibilities when conducting teacher quality training.

4 Conclusion

The 21st century is the era of quality education. Against the backdrop of significant psychological problems among youth and rapidly rising education costs, economic quality education has become the goal of China's education reform in the past decade. The Double Reduction Policy has reduced the learning burden of students and the financial burden of families on education, but it also requires society, education administrators and teachers to maintain the education ecology from the perspective of sustainable development. To help improve the classroom ecology from a comprehensive perspective, adjusting

teaching and research programs together with providing teachers with guidance and support are the keys to the reform of China’s compulsory education system .

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