Effective management of junior middle school chemistry homework under the background of double reduction

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Abstract: The introduction of the double reduction policy provides a strong policy basis and development power for the scientific implementation of quality education. Teachers' educational ideas, teaching methods and homework design have also changed accordingly. Homework is the main means for students to consolidate their knowledge, exercise their ability and develop their thinking. It is also an important extension of teachers' classroom teaching. It is an indispensable part in teaching and learning. In this educational context, when the "double reduction" policy comes, it is obviously a one-sided interpretation of the policy if only the number and difficulty are "reduced". Before that, the junior middle school chemistry homework management would increase the burden of students because of the lack of hierarchy, systematicness and life, which could not meet the requirements of the new era. Re-examination of the function of chemical operation under the background of "double reduction". Facing the sudden "double reduction". Chemistry homework management in junior high school not only needs to reduce the total amount of homework, carry out homework publicity system and implement education and teaching monitoring system, but also needs to solve problems with systematic thinking, and promote the reform of homework management through all-round education and teaching reform, so as to optimize the education ecology, promote the sound development of teaching environment and promote the steady improvement of education and teaching quality.

Keywords: Double subtraction; Junior high school chemistry homework; effective management

1. Introduction

In the context of the "double reduction" policy, it is urgent for schools in the stage of compulsory education to comprehensively reduce the total amount and duration of junior middle school chemistry homework and reduce students' excessive homework burden. In fact, homework has always been the focus of attention in the field of education. It is not only an important part of students' learning activities, but also intrinsically related to the quality of school teaching, but also directly affects the family's attention to school education [1]. For students, after-school homework can not only improve and consolidate the knowledge and skills to be learned in the classroom, but also provide students with ways to improve and expand beyond classroom knowledge [2]. Under the background of double reduction policy, teachers are required to scientifically design the actual quantity and specific content of students' homework [5]. In all educational work, only management can integrate all educational resources, and only through overall planning, planning, organization, implementation and improvement can the systematic function of education be brought into play, and only in this way can the development and progress of education be realized [6]. As the detection link of classroom teaching effect and the experience link of students' learning effect, chemical homework is the way and platform for teachers to understand students' learning status. At the same time, according to chemical homework, teachers can timely adjust the difficulty and progress of teaching content [7]. Under effective homework management, students' learning efficiency will be improved, and the time spent on
homework will be reduced accordingly, so as to help students better learn new knowledge and more
difficult knowledge, provide more space for students' development, and provide a broader platform for
improving students' comprehensive quality.

2. Problems in the improvement of junior middle school chemistry homework under the
background of "double reduction"

2.1. The homework after class is repetitive and rigid

Some teachers often habitually take the number of homework as the standard when assigning
homework. Many students have neat handwriting and high accuracy rate at the beginning of
completion, but they gradually become tired after completion. Moreover, the homework assignments in
primary school mainly focus on synchronous workbooks, but this kind of homework form is relatively
fixed, which leads to students' low interest in homework and learning, and more often they only do
homework to complete homework. Quite a few teachers follow the old method of assigning homework
after class, and simply understand English as a subject that can be learned by memorizing and copying
silently. The original meaning of education is to educate people, guide and inspire different people's
own potential, and develop the necessary ability and character to adapt to society and transform the
world. The overall situation is as follows: the "quantity" of operation is well controlled; The "quality"
of homework is "three more and three less", that is, more basic homework to consolidate knowledge,
less comprehensive (exploratory, practical and long-term) homework to cultivate comprehensive
quality, more "separate" arrangement, less overall planning and design, more judgment (cross grade)
review and less descriptive review. Teachers should regard students' classroom learning and after-
school homework as a closely related process. Therefore, they should make better use of 45 minutes in
class to teach each class and improve classroom efficiency [8]. Homework assignment is a key link to
form a complete closed loop of education and teaching. The author believes that chemical homework
has at least the following functions: first, it helps students consolidate the basic knowledge and skills
learned in the classroom in the form of completing tasks; Second, it plays an important role in
stimulating students' interest and attitude in the development of chemistry teaching, which is the same
as that of other disciplines. The exercises on the synchronous exercise books in junior middle school
are quite comprehensive. The quality of homework handed in by students every time often appears the
phenomenon of polarization, which does not well reflect the characteristics of teaching students
according to their aptitude [9]. As shown in Figure 1 and Figure 2, the mode diagram of "three more
and three less" is shown.

![Figure 1: More than three aspects](image-url)
2.2. The amount of operation tasks is large and the form of operation design is single

Chemistry is a subject with strong hands-on ability, which requires students to find the answers in the learning process by doing experiments by themselves. Under the background of long-term "score" and "sea tactics" homework management, junior high school chemistry teachers are influenced by traditional teaching ideas, and adopt a high-task mode to manage homework. As the saying goes, "Practice brings true knowledge". Only through personal practice can students have a firm memory of the knowledge they have learned, and they can also make use of the knowledge in books. If teachers can't adjust the quality and quantity of homework in time according to the actual situation and subtract homework, then chemistry homework will not only fail to help students internalize knowledge, but also directly reduce students' learning efficiency. Chemistry homework improvement must adhere to the basic orientation of all-round education and take promoting students' all-round development as the fundamental purpose of homework improvement. This kind of development is not the superficial development that students get high scores through repeated practice in homework, nor is it the single development that students master knowledge and realize cognitive ability in the process of completing homework. It is not to promote the one-sided development of some students through homework, but to promote the real positive and structural changes in students' body and mind through homework. There will always be students with different levels in the same class, and their chemical foundation or learning ability are different [10]. If the teacher always keeps the same level of homework assignment and does not assign it according to the students' level, the students with weak foundation will be frustrated and even perfunctory because the topics are difficult. With education, there seems to be homework. Homework is an important means of educating people, like three meals a day, which is closely related to teachers and students. However, today's chemistry homework problems are not positively correlated with education, but negatively correlated. The "quality" and "quantity" of homework are not positively correlated. The number of operations will affect the quality of operations, but not the more the number of operations, the higher the quality. The existing research on the number of homework is often related to students' academic performance. In junior middle school chemistry homework management, most teachers will choose some single form and lack of innovative homework forms and materials based on teaching materials, resulting in more mechanical and repetitive content and forms of chemistry exercises.

3. Methods to improve the management of junior middle school chemistry homework

3.1. Combine students' interests and integrate interesting elements

Higher interest in subjects can encourage students to actively finish homework after class. If students are interested in homework content, they can show strong self-control and are willing to put their energy and time into homework. When designing junior high school chemistry homework, teachers must pay attention to students' interests and highlight the interest in the content and way of homework. Change the monotonous and boring traditional homework forms such as "copying" and "reciting" into various and colorful forms such as "sharing with others", "interesting conversation" and
"hands-on experiment". Break up problems into parts and let students learn to learn in practice. Only when teachers design scientific and reasonable hierarchical, flexible and personalized homework can students choose. In the innovative design of chemical homework, we should start from the students’ reality, highlight the hierarchy of homework, and divide homework into three to five grades according to the difficulty coefficient, so as to meet the learning needs of students of different foundations and make every student develop. Students' cognitive style is the basis for division, such as independent homework and group homework according to field dependence and field independence, and text homework and drawing homework according to speech and image. In this way, we can not only effectively implement the teaching idea of teaching students according to their aptitude, but also effectively reduce the burden of students’ homework and improve the quality of homework. In this way, the homework arrangement is reasonable, reasonable and scientific, and the students can finish the homework easily, so as not to lose interest and confidence because they can't understand and do it, so as to copy the homework and deal with it. The questions raised in some after-school exercises are relatively general and vague. Teachers should divide the big problem into several small learning activities or learning steps. Only after these learning activities can students have an in-depth understanding of this problem. Design homework content that can stimulate students' interest, so as to promote students to actively complete after-school homework.

3.2. Change the form of homework and stimulate interest in learning

Traditional intelligent evaluation takes language and mathematical logic ability as the core, but it is obviously biased to measure students with this ruler. After all, the difference of students' development can not be ignored. For the form of homework, teachers should promote the integration of cooperative homework and personal homework. In arranging cooperative homework, let each student have their own answers and thoughts through group discussion and merging answers, so as to solve medium difficulty homework problems; In arranging personal homework, you can choose some basic and more difficult topics. The school may consider introducing compliant art off campus institutions in after-school services to help students cultivate their art talents. Homework management is an important part of teaching. With the further implementation of "double reduction", primary school teachers should constantly update teaching ideas, improve teaching literacy and optimize homework management, so as to promote the progress of teaching. When guiding the optional homework, teachers focus on the basic homework in class, and focus on the analysis of ideas for challenging and individualized homework; After class, face-to-face homework guidance can be carried out according to the individual needs of students. Before designing homework, teachers can analyze students' scores of many exams, and then deal with them hierarchically. Then, teachers design homework at different levels according to students' learning ability. It is necessary to enrich the operation content and change the operation form; Carefully design original homework, scientifically select recommended homework, increase life practice homework, and establish hierarchical menu homework; Refine the rules and procedures of job management and establish a scientific job monitoring mechanism; Fully grasp the total amount of students' homework in each class, implement early warning and interview mechanism, and standardize the management of excess behavior. For homework assignments, teachers should adhere to the principle of "quality" over "quantity", and carefully select homework contents suitable for students to be in class or to test self-learning achievements or consolidate and improve at this stage.

4. Conclusions

The book "learn to survive" published by UNESCO points out that "the illiterate in the future is no longer the illiterate, but the person who has not learned how to learn." Students' independent thinking and learning are indispensable for completing chemical homework, so homework is an appropriate carrier for developing students' learning literacy. In the context of double reduction, teachers should take "10 minutes" as the activity stage, strive to promote the miniaturization, modularization, simplification and accuracy of homework, effectively promote the efficiency of after class preview for middle school students, and provide more independent activity time for middle school students. The purpose of reducing homework is not just to reduce the burden on students, but to increase higher requirements for our school education and promote teachers and students to teach and learn more efficiently. From the perspective of "double reduction", schools should clearly clarify the requirements of "double reduction", and realize the sustainable development of teaching and management according to the school's education and teaching conditions, the actual needs of students and the available education and teaching resources around the school, so that students can get full and lively development. Homework management reform needs to be supported by systematic educational evaluation reform,
and comprehensively guide teachers to focus on teaching students in accordance with their aptitude, paying attention to their specialties, cultivating their interests and improving their abilities, consciously abandoning the tactics of asking questions about the sea and strictly regulating homework behaviors. Scientific homework design skills can consolidate students’ knowledge, enrich students’ knowledge reserve, develop students’ intelligence and cultivate their innovative spirit. In a word, the renewal of ideas is the forerunner of action, and the cohesion of wisdom and creativity is the thrust of action. To realize the deep reform and optimization of homework and reshape the education function of homework under the background of "double reduction", it is inseparable from the thinking and exploration of the majority of front-line chemistry teachers.

References