

Diversity of teaching evaluation methods in primary and secondary schools

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Abstract: The diversity of teaching evaluation methods in primary and secondary schools means that in educational practice, the methods for evaluating students' learning process and results are rich and diverse. The emergence of this diversity is mainly due to the advancement of educational reform and the renewal of educational ideas. Therefore, the traditional examination evaluation methods are gradually replaced by diversified evaluation methods. In addition to the traditional written test and oral test, educators began to pay more attention to the cultivation of students' comprehensive literacy and ability, and gradually introduced a variety of evaluation methods such as network evaluation and instant evaluation. Through the use of electronic classroom, online assessment platform and other tools, teachers can more conveniently collect, organize and analyze students' learning data, so as to evaluate students' learning situation more objectively. Based on this, in order to increase student engagement, it is important to deal with real-life issues and expose students to the complexities of chemistry education. However, due to the imbalance of educational resources, test scores have become the only way to evaluate teachers and students. Therefore, this study aims to analyze this situation and propose different evaluation methods for chemistry learning.

Keywords: Chemistry education; Evaluation method; Primary and secondary schools; Classroom teaching

1. Introduction

The purpose of classroom teaching evaluation in primary and secondary schools is to evaluate students with different personalities, comprehensively understand students' learning situation and ability development, so as to provide effective feedback and guidance and promote students' learning progress. Specifically, the purpose of classroom teaching evaluation includes the following aspects:

1.1 Understanding students' learning situation: By evaluating students' performance in class, we can understand students' mastery of knowledge, understanding ability, thinking mode, etc. This helps teachers to understand students' learning needs and make targeted teaching adjustments and guidance.

1.2 Evaluation of learning effectiveness: Classroom teaching evaluation is an objective evaluation of teaching effectiveness. By evaluating students' learning outcomes, we can judge the imparting of knowledge and the absorption of students in the teaching process, check the completion of teaching objectives, and provide references for schools and teachers to improve teaching quality.

1.3 Promote students' independent learning: Classroom teaching evaluation can stimulate students' learning motivation and initiative. Through timely feedback and guidance, students can understand their own strengths and weaknesses, so as to better adjust learning strategies and improve learning results. The evaluation results can also stimulate students' self-reflection and self-assessment, and cultivate their self-learning and self-management abilities.

1.4 Providing basis for teaching improvement: Classroom teaching evaluation is an important basis for teachers to improve teaching. Through the evaluation results, teachers can understand their own teaching effect, find out the existing problems and shortcomings, and make targeted teaching adjustment. At the same time, the evaluation results can also reflect the quality of schools, teaching materials and teaching resources, and provide reference for education administrative departments to improve and make decisions.

However, due to the uniform standards of teaching evaluation in China, the individuality of most students will be suppressed by written and written tests. Evaluation methods based on written and written tests make students dislike and even fear exams, which become the opposite of quality education.

Due to the imbalance of educational resources, test scores have become the only way to enter the upper class, especially the university. To some extent, it will determine the trend of students' future life. This makes it obligatory for students whether they like it or not. However, this does not mean that teachers or academics cannot do something to change the situation.

Core competence is the essential quality and key ability for students to adapt to the long-term development of life and the needs of social development. Starting from the subject teaching reform, the newly promulgated Chemistry Curriculum Standards for Senior High Schools (2017 edition) proposes to take core competence of chemistry as the teaching basis and advocate evaluation based on core competence. The core competence of chemistry is the guarantee for students to form correct values, necessary character and key ability in the process of chemistry learning. These core competencies not only contribute to students' academic development, but are also important for their personal growth and social participation. For example, students should develop values such as respect for scientific facts, rational thinking, prudent judgment and scientific integrity, as well as concern for global issues such as environmental protection and sustainable development. Through the study of chemistry, students should realize that science is objective, neutral, and verifiable, and develop an interest in scientific research and a spirit of exploration. In addition, students can develop the necessary qualities, such as observation, experimental skills, work discipline, teamwork and responsibility. These qualities help students to observe and operate accurately in experiments and scientific research, while also cultivating students' self-discipline and cooperation skills, improving their ability to solve problems and

respond to challenges. Chemistry should also cultivate students' key abilities, including scientific thinking ability, experimental design and data analysis ability, problem solving ability, etc. Students should learn to apply scientific principles and related skills to solve practical problems, while being able to conduct rational experimental design and data processing, and develop critical thinking and innovation skills.

2. Literature survey and research questions

The ontology function of evaluation should be the detection function of "what to learn and what to test". Its purpose is to test the level of knowledge mastery and ability development of students at this stage.

However, through the literature search of chemical education evaluation, we find that most of the people who pay attention to the evaluation goal are experts and scholars in colleges and universities, rather than teachers in primary and secondary schools. This shows that primary and secondary school teachers still do not emphasize diversity evaluation criteria. The main manifestations are: wrong evaluation objects, wrong evaluation habits, wrong evaluation methods and so on.

3. Analysis on the causes of distortion of teachers' teaching evaluation in primary and secondary schools

3.1 Evaluation object error

Most primary and secondary school teachers think that the object of evaluation is only students. They believe that teaching evaluation is only a way to discover students' mastery of knowledge through paper-and-pencil tests. Because of this, pen and paper tests are abused by teachers. Teaching evaluation includes not only students' learning, but also teachers' teaching. It is a traditional way to evaluate students' mastery only through paper-and-pencil tests, but it can not fully reflect the actual learning situation and ability development of students.

3.2 Wrong evaluation habits

Many teachers have noticed that there are many drawbacks in grade evaluation, such as the separation of paper knowledge from practice and the neglect of knowledge application. However, even though the score evaluation has many shortcomings, people still insist on following the old habits. What causes people to cling to the old system and resist the new one? Because the evaluation method is simple. This kind of evaluation habit will lead to one-sided evaluation results, which can not fully reflect the true level and potential of students.

3.3 Error of evaluation method

Most exams in China are teacher-led. In the whole examination process, the students as the object of the examination have a passive attitude towards the examination. The abused written and written tests only improve students' ability to memorize knowledge, ignoring students' ability to innovate, think critically and solve problems.

4. How to change the old evaluation method

4.1 Relying on the network to achieve instant evaluation

Online teaching is the best way to achieve "the school is not there, but the classroom is there". The existing evaluation methods pay too much attention to the results of evaluation, so that evaluation can only play the role of screening and selection, and can not fully mobilize their learning enthusiasm. Therefore, we need to find a new way to change this situation. There is no doubt that the network technology is a good way to realize the interactive evaluation of teachers and students. Using network technology to achieve instant teaching evaluation is an effective way to obtain students' feedback on teaching content and teachers in time. However, when using the network to achieve real-time evaluation of teaching, it is necessary to ensure the privacy of students and data security. At the same time, teachers should flexibly use these tools, combine the characteristics of the curriculum and teaching objectives, choose a suitable way to evaluate, and apply the evaluation results in time to improve teaching and improve teaching quality.

According to students' learning situation, online instant evaluation can organically combine student self-evaluation, group mutual evaluation and teacher evaluation to form a multi-dimensional and multi-angle evaluation system. For example, students can be provided with a platform or online form to evaluate and reflect on their own learning. Students can review their own learning goals, efforts, difficulties and achievements, and give their own opinions and suggestions. This self-evaluation can help students gain a deeper understanding of their own learning situation and stimulate their enthusiasm and initiative for learning. In addition, through online platforms or tools, students can rate the performance of group members. They can evaluate other members' contribution, cooperation ability and communication effectiveness according to the process and results of group cooperation. This can promote mutual learning and communication between students, cultivate a good sense of cooperation and team spirit. Teachers can also design online evaluation questionnaires or questionnaires to collect students' opinions and feedback on teaching content, teaching methods and teachers' personal performance, and assess students' learning engagement and understanding through classroom observation and real-time interactive tools. Teacher evaluations can provide students with feedback about the quality of teaching and lead them to think and discuss the teaching process more deeply. This comprehensive evaluation method can help stimulate students' learning motivation, cultivate their autonomous learning ability, and provide teachers with effective feedback and guidance to further improve teaching quality.

4.2 Immediate assessment

As an evaluation method with supervision and guidance, teachers need to listen to the voice of students carefully and pay attention to the personality and characteristics of students. In the evaluation process, teachers should control teaching and conduct targeted evaluation according to students' current learning status. The following points need to be considered: First, teachers should give students some time to

review knowledge in the classroom to realize knowledge transfer. In the process of evaluating students' answers, teachers should not evaluate students' learning attitude in the classroom, but evaluate students' mastery of each lesson and the application of the learned knowledge, and give teachers verbal encouragement. Second, instant evaluation should pay attention to the expression of students' subjectivity. In the process of evaluation, the teacher's guidance is more powerful than the evaluation itself. For students' answers, teachers should not directly point out mistakes, but supplement them with basic chemistry knowledge, so that students can find mistakes and revise them on the spot, so that they can reflect on and summarize their learning situation and progress. Students can express their feelings and knowledge about learning according to their own experience and understanding, so as to enhance their initiative and responsibility for learning. Finally, immediate assessment needs to focus on student responses. When students show different emotional states in teacher evaluation, teachers need to appropriately change the tone and modify the evaluation content. By focusing on the expression of students' subjectivity, students' learning enthusiasm and enthusiasm can be stimulated, and their independent learning ability and critical thinking can be cultivated.

5. Conclusion

To sum up, due to the single form of evaluation and the mistake of teachers' evaluation view, the current evaluation function has been distorted, which is mainly manifested in the alienation of evaluation function and the neglect of realistic function. Therefore, it is necessary to explore the diversity of evaluation methods to play an important role in education, which is conducive to a comprehensive and accurate evaluation of students' learning process and results, promote the development of students' individual abilities, and provide a useful reference for the continuous improvement of education and teaching.

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