Teaching Practice in Biology Classroom Based on "Internet+Education"

Qu Fengjie
Department of Primary Education, Beihua University Teacher’s College, Jilin 132013, Jilin, China
email: 68182274@qq.com

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Abstract: Biology is a basic course of natural science. It takes experiment, observation and exploration as its main learning methods, and trains students' biological quality through autonomous or cooperative learning. Biology practical teaching is the main form of biology teaching, and is a process in which students learn to use knowledge and comprehensively utilize knowledge. With the advancement of reform and opening up, China has gradually strengthened its educational reform and pushed forward the reform of the educational system by formulating a series of policies. Combined with the experience of biological practice teaching, the "Internet+" teaching mode can make up for the deficiency of different teaching methods and improve the effect of biological practice teaching. Internet+ classroom is becoming a new normal in biology class. The Internet+ biology class has more and more forms of visual and auditory stimuli. In the practice of biology teaching, the application of "Internet+" teaching mode should first analyze the advantages of its application and understand the feasibility of the application of this teaching mode.

1. Introduction

The main forms of biological practice teaching are school base teaching, internet teaching and school-enterprise cooperation teaching. In these kinds of teaching, each teaching method has its advantages and disadvantages. The cultivation of core literacy has become a key goal of senior high school curriculum education at this stage [1]. The biology class based on "Internet+Education" guides, helps and promotes students' personalized learning under the background of "Internet+", realizes the personalized, diversified and high-quality development of students, realizes the overall improvement of all students at different learning levels, and realizes the high-quality balance of the overall teaching quality of the school [2]. Combined with biological practice teaching experience, the "Internet+" teaching mode can make up for the deficiencies of different teaching methods, maximize the advantages of each teaching method, and improve the effect of biological practice teaching [3]. Biological industry is not only a strategic emerging industry determined by the state, but also a traditional industry that starts from meeting the needs of human life. It originates from practice, sticks to practice and develops synchronously with the progress of social science and technology. Biology is a comprehensive discipline that has certain internal relations with life science, natural science and social science [4]. For example, with the advancement of reform and opening-up, China has gradually strengthened its educational reform and promoted the reform of the educational system by formulating a series of policies.

At present, the demand of social development for diversified talents and the demand of economic era for educational reform all require new teaching theory system and teaching methods. So as to break through the shackles of the traditional classroom teaching mode, adapt to the needs of the current social development, and can effectively guide the classroom teaching practice activities [5]. The construction of "Internet+Education" classroom learning system aims at taking learners' learning as the basis, insisting on students' standpoint, following students' perspective, accepting the differences in students' foundation and ability, and respecting the differences in students' learning level and learning methods [6]. With the implementation of the new curriculum reform, personalized teaching has become one of the innovation points of the educational curriculum reform because it pays attention to the development of students' personality and adapts to the individual
needs of students. Biology practical teaching is the main form of biology teaching, and it is the process of students learning and using knowledge and comprehensively utilizing knowledge [7]. The discussion on the teaching advantages of "Internet+" can help us better understand the application direction of this teaching mode and make a more scientific and objective analysis of its application status quo [8]. In biological practice teaching, the application of "Internet+" teaching mode should first analyze its advantages and understand the feasibility of this teaching mode.

2. Advantages of "Internet+" in Biological Practice Teaching

2.1. Improving the Teaching Efficiency of Biological Practice Teaching

"Internet+" is analyzed from two aspects to improve teaching efficiency. Students who are not good at mastering knowledge can watch video and data repeatedly and learn autonomously. Biology teaching based on mobile internet personalized learning is to master the knowledge required by biology teaching through students' autonomous and personalized learning with the help of mobile internet platform and centering on students' personalized learning of biology. The physiological essence of learning is a process that relies on receptors such as visual organs, auditory organs and olfactory organs to receive external information stimulation and form reflex through nervous system processing. The teaching mode of "Internet+" breaks the time and space constraints for students to study. Students can study anytime and anywhere. When students study, they only need a tool connected to the Internet and can choose any teacher's class to study. This kind of learning method has greatly aroused the enthusiasm and initiative of students to participate in learning, and has stimulated the enthusiasm of students to actively acquire knowledge. Compared with the traditional classroom, although biology teaching is based on mobile Internet personalized learning, the learning method is more flexible, the learning content is richer, and the learning process is more open. However, the objectives of the two courses are still the same. They both aim to acquire basic knowledge and skills in biology and to cultivate students' correct scientific ability, scientific spirit and values.

Under the "Internet+" model, the classroom has changed from traditional classroom to traditional classroom plus network classroom. Biology teaching has been obviously optimized under the double-class mode. On the one hand, the teaching methods and methods in regular classes have been improved [9]. After the reform of classroom teaching, the students' practical ability has been obviously enhanced, and teachers' help is rarely needed in experiments, which proves that the students' practical ability has been improved. Biology teaching based on mobile Internet personalized learning is consistent with the basic goal of the above new biology curriculum concept, emphasizing the development of students' autonomous learning ability. Through personalized learning based on mobile internet in biology teaching, students can not only grasp the relevant biological knowledge more appropriately, but also grasp the relevant principles, concepts and laws of biology more flexibly, so as to realize active learning and application.

2.2. Improving Students' Innovation Ability

"Internet+" itself is an innovative teaching mode. This teaching mode can not only improve the teaching efficiency, but also improve the students' innovative ability. The application of "Internet+" in biological practice teaching faces many challenges. As far as schools are concerned, the practice of biological "Internet+" teaching mode requires schools to provide a lot of support. In Internet flip classroom teaching, students should collect their own data, organize and study the data, and analyze the discussion topics themselves. Network class is an open class, anyone can listen to it, anytime and anywhere. This teaching method can attract students to participate more, change the state of students' passive participation in learning, and make students study harder and more actively. In the personalized learning of biology teaching based on mobile Internet, teachers are given new roles. In addition to imparting knowledge, teachers also play the roles of commander, organizer and helper, so as to cultivate students' awareness and habits of autonomous learning. The biological practice teaching under the "Internet+" mode can effectively cultivate students' innovative consciousness,
innovative ideas and innovative ability.

3. "Internet+Education" and Biology Classroom Learning Depth Synchronization and Integration

"Internet+" is a new teaching mode. There are some problems in the development of every new thing. In the process of participating in the "Internet+" teaching, students must clearly define their learning objectives and learning tasks, and cannot waste their time on other unimportant things. In personalized learning activities based on mobile Internet, teachers can set up situations and students can obtain a large amount of information through mobile Internet under the guidance of teachers. In today's society with rapid development of science and technology, the development of biology is very rapid, and the compilation of teaching materials for biology teaching often lags behind the development of biology. Mobile Internet not only links book theoretical knowledge with real life, but also provides a rich supplement to book knowledge, which not only enables students to have a more intuitive and profound grasp of relevant knowledge, but also helps students to form correct emotional attitudes and values. The application of "Internet+" in biological practice teaching is still in the exploratory stage. Facing the opportunities and challenges in teaching, teachers should actively explore the skills and rules of application of this teaching mode, constantly improve teaching methods and teaching ideas, and make full use of the advantages of "Internet+" teaching mode.

In biological practice teaching, teachers can combine their own teaching experience with the development of "Internet+" teaching mode to think about the sustainable development of "Internet+" teaching mode, so that this teaching mode can be continuously optimized and improved to provide a better teaching platform for biological teaching and promote the success of biological teaching reform. "Internet+Education" is used to support preview before class and to strengthen the classroom application and value of students' questioning. Students can check the effect of classroom learning and the degree of achievement of classroom learning objectives through the matching exercises provided in "Internet+Education", and can also carry out extended and extended learning on the problems associated with this lesson through the configured micro video to meet the learning needs of students of different levels [10]. Under the Internet mode, there are abundant teaching resources. These resources are provided by databases. The data sources in the databases are extensive. Users of each database data resource are also producers of database data resources. In "Internet+" teaching, the Internet is only an auxiliary tool for biological practice teaching, which is the same as other teaching tools. Teachers and students cannot rely too much on the Internet in teaching, and teachers' classroom teaching should be paid more attention to in teaching. Students should have innovative consciousness, actively solve problems in biological practice teaching, pay attention to communication and communication with other teachers and students, and participate in social practice according to their professional characteristics. In the joint participation of biological experiment base, network experiment teaching and social practice, they should continuously improve their understanding and research depth of biology.

4. Conclusions

With the development of information technology, innovation of existing teaching methods and introduction of personalized learning mode based on mobile Internet in biology teaching in senior high schools can further enrich teaching methods and improve teaching effect. The purpose of learning in the "Internet+" era is not only to learn and accumulate knowledge, but also to stimulate and cultivate students' interest in learning, so that they have curiosity and ability to learn, thus becoming lifelong learners. The curriculum content of different regions and systems all contain different core literacy content. Teachers should pay attention to selecting appropriate curriculum content as the starting point and actively use computer systems and Internet platforms when cultivating students' core literacy. Teachers should be keen to catch the changes of students' learning state. In the process of long-term and continuous learning, through the changes of their
own sign language and voice and the combination with other stimulus sources, to maintain students' learning interest, and try to avoid the problems such as the decline of learning interest caused by cognitive overload. Facing the opportunities and challenges in teaching, teachers should actively explore the skills and rules of applying this teaching mode, and constantly improve teaching methods and ideas so as to make full use of the advantages of the "Internet+" teaching mode.

References


