

Original Research Article

# Research on the Working Mode of Open Innovation Laboratory based on Internet

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Abstract: Open experiment practice teaching mode is a kind of new teaching model on the Internet technology, is a teacher on an open platform for modern network to cultivate the students' comprehensive ability and innovation ability of important ways, from various universities, in the process of the implementation of the current open innovation laboratory work mode, there are many shortcomings, Colleges and universities still has no real will modern technology such as Internet, mobile media completely used up in the open laboratory work mode, each major is through the university's overall guidelines for open innovation laboratory work mode of the Internet, no in-depth excavation of the professional characteristics and the actual teaching situation, lead to insufficient resource utilization in the practice teaching, The teaching platform is not perfect and other problems, this paper discusses the work mode of open innovation laboratory based on the Internet, and finds a way to combine the work mode of the Internet and open innovation laboratory.

Keywords: Internet; Open Innovation Laboratory; Working mode

Quote: Along with the continuous development of science and technology, modern teaching level is also rising, on teaching reform has been on the Internet, open innovation laboratory work mode is also in the education teaching in colleges and universities continuously explore and produce a kind of new practical teaching mode, is based on the advantage of the functions of storage and transmission of Internet form of efficient teaching methods, Only by reasonable use of the Internet, open innovation laboratory work mode, to improve the experiment teaching of colleges and universities, perfecting the teaching authority and the Internet in the process of teaching management software maintenance upgrade is not timely, truly achieve Internet remote teaching and sharing resources, form a complete perfect laboratory teaching mode. To achieve online communication of students on the Internet, improve the comprehensive ability of students, so that the students of automotive NUMERICAL control technology major to achieve relying on experimental practice teaching mode.

### 1. The status quo of the working mode of the Internet Open Innovation Laboratory

Though Internet open innovation laboratory work mode in universities have begun to spread, but still exist many problems, the use of Internet resources on each college requirement inconsistent phenomenon exist for a long time, do not do real communication study, make the Internet open laboratory work mode has been in the use of primary state, Automobile NUMERICAL control technology as one of the main majors in colleges and universities, in the use of shared knowledge of the Internet is still in the data search for a long time, there is no real use of Internet experimental teaching, teachers in the work of the Use of the Internet is also more with the help of network information database for information search, The traditional education teaching mode still occupies the main field of automobile NUMERICAL control technology teaching. Open innovation laboratory work mode of the Internet is still can't make a comparison, and offline experiment led to the current Internet lab work pattern remains open degree is insufficient, the online experiment practice teaching resources utilization rate is low, practical problems such as imperfect communication platform, is now the important obstacle of open laboratory work mode to promote, Only by innovating according to the specialty characteristics can colleges and universities change the current state, make the working mode of Internet open laboratory truly serve teachers, and improve students' comprehensive ability and innovation ability<sup>[1]</sup>.

### 2. The virtual teaching of the open innovation laboratory working mode of the Internet

As an emerging teaching mode, the working mode of The Internet Open innovation laboratory plays an important auxiliary role in the current education and teaching of colleges and universities. As one of the major emerging majors relying on the automotive industry chain, Internet open innovation laboratory work mode can effectively improve the car of numerical control technology professional knowledge extensibility, theoretical teaching and experimental teaching, make students get rid of the limitation of traditional teaching, the car of numerical control technology lab from offline to online, realize offline online combination mode of laboratory work, Internet technology provides a professional and guaranteed basic platform for the open laboratory. Network virtual teaching is a kind of Internet teaching based on its own characteristics and forms an open innovation laboratory working

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mode with the help of network system technology. Automobile numerical control technology the main teaching content involves the automotive mechanical processing technology, mechanical design, no machining technology, CNC programming principle of electric control, numerical control machine tool maintenance, such as a variety of virtual technology on computer network course, only the real application of Internet technology to open innovation lab, In order to reduce maintenance costs and enhance students' understanding of the subject. In addition, the openness of Internet virtual teaching enables teachers to have more teaching knowledge and freedom in the teaching process. In the teaching process, they can add courses through the Internet platform at any time, so that students' knowledge absorption is no longer limited to textbooks, and the Limitation of time and space can be broken through through the Internet. College can also build a virtual laboratory teaching platform by means of professional science, will be scattered open laboratory work mode through the network of the realization of the function of the database network management modernization, in this way will be combined use of teachers' knowledge and network knowledge, support teacher open laboratory reform the innovation unceasingly, Continuously enhance the practical value and educational significance of network laboratory<sup>[2]</sup>.

## 3. The construction of the experimental platform for the working mode of the Open innovation laboratory on the Internet

Based on the Internet is open innovation mode for the construction of the laboratory work, is just a specific operation to implement, establish a perfect experiment platform is open innovation laboratory is a summary to the traditional laboratory teaching resources, there has always been the traditional laboratory through the phenomenon of not in time, the teaching resources waste, time is not reasonable, lack of knowledge to repeat the phenomenon such as, Only reasonable use of the open characteristics of the Internet, can make the traditional laboratory data online intersection, make the automobile NUMERICAL control technology of each branch of knowledge blend transformation. Therefore, the establishment of a perfect Internet cloud experiment platform is a necessary teaching means for the experimental teaching of automobile NUMERICAL control technology. Only by making good use of the teaching characteristics of the Internet open laboratory can it effectively avoid various conflicts existing in the traditional course scheduling and help teachers to manage the automobile NUMERICAL control technology laboratory<sup>[3]</sup>.

Finally, perfect the construction of experimental platform for the Internet cloud at the same time, also need to pay attention to the open innovation laboratory work mode of communication platform construction, only by establishing the perfect communication platform, open innovation laboratory work mode can really use in Internet teaching, teachers, managers, technicians and students to exchange platform for professional communication, Through resource sharing, question raising, question answering, sharing experimental ideas, experimental process and experimental results and other means of communication, to complete the automobile NUMERICAL control technology in the relevant knowledge of the answer and improve, so that students' experimental results can be quickly shared, be corrected, and truly the experiment and practice of mutual combination, Through the open innovation laboratory, students can learn independently and improve themselves, and give play to their awareness of collaborative innovation and active participation.

### 4. Conclusion:

Open innovation laboratory work mode based on Internet is a kind of innovative teaching modes, nc professional as on modern car manufacturing industry and the rise of the new professional, teacher can reasonable use of the Internet open innovation laboratory work mode, is effective to improve students' accomplishment and ability to innovate teaching mode, Only promote Internet open innovation laboratory work mode reform and innovation, and can be found in the process of practice teaching, the present colleges and universities in car deficiencies existing in the teaching of numerical control technology, can also enrich the teaching of practice teaching resources and widen the students' knowledge absorption, promote the students' independent innovation ability and learning ability, So that students can break away from the traditional passive learning into active learning, comprehensively improve students' learning ability, for China's automotive NUMERICAL control technology to provide more professional talents.

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