Teaching Thinking from "Teaching" to "Guiding Learning" under the Background of "Internet +"

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Abstract: Under the tide of "Internet +", the development of Internet + education is not surprising. The Internet provides high-quality learning resources for the teaching process, and realizes the individualization of teaching forms. But at the same time, there are also problems in the teaching, such as the inefficient use of high-quality resources, and the passive learning of students. The innovation of teaching mode reform from "teaching" to "introducing learning" breaks through the existing teaching mode, and puts forward the educational concept of "introducing learning by environment", "introducing learning by asking" and "introducing learning by guiding", which aims to change the communication mode between teachers and students. From the perspective of teachers, this paper attempts to explore a way for teachers to guide students' autonomous learning, so as to enhance the positive interaction between teachers and students, promote the analysis, evaluation and monitoring of teachers' teaching activities in Colleges and universities, and ensure the sound development of colleges and universities and teachers.

1. Introduction

According to the strategic plan of the 17th National Congress of the Communist Party of China on "prioritizing education and building a strong country with human resources", in order to promote the scientific development of education and comprehensively improve the quality of the people, the National Education Plan (2010-2020) clearly stated that students should play the main role with the dominance of teachers , giving full play to the initiative of students, and promoting the healthy growth of students as the starting point and foothold of all school work [1]. In order to achieve this goal, how colleges and universities adapt to the development of the "Internet + education" era, innovate teaching models, and give students more space for thinking has become the starting point and foothold of all the work of Colleges and universities. "Internet +" is a hot word with a high frequency of application today, applied to all walks of life, from promoting and enhancing the productivity and creativity of social and economic entities to providing a comprehensive network platform for various social changes, innovations, and development, knowledge sharing has become inevitable [2]. When "Internet +" is integrated into the course teaching, the closed state of the

original teaching mode is opened, and the deep integration of "teaching and learning" in Colleges and universities is realized, which brings new opportunities for the development of new teaching methods under the background of the Internet. The reform of the teaching mode from "teaching" to "introducing learning" under the background of the "Internet +" will break the existing teaching methods, teachers will maximize the role of "introducing learning" with students as the starting point, and the role of teachers will also change from "teaching teacher" to "leader" [3]. Under the guidance of teachers, students can use the mobile Internet platform to build their own learning framework, constantly explore and study to find methods and ideas to solve problems in confusion, and fundamentally promote students to explore the unknown world. But there are also many difficulties currently facing. For teachers, they should improve some traditional teaching methods, recognize the concept of "Internet +" applied in teaching, and adapt to the characteristics of the times in the course teaching. In addition, teachers should also trend towards the development of modern educational theory, stand at the forefront, and use their knowledge and abilities to design and arrange the entire teaching activities for students. The purpose of this process is to inspire students, stimulate students' curiosity and thirst for knowledge, and guide students to correctly sort out the memory knowledge base, and finally enable students to acquire valuable knowledge to achieve the purpose of promoting the reform and development of classroom teaching.

2. The drawbacks of " teaching" under the background of "Internet +"

Although with the introduction of the concept of "Internet + Education", Colleges and universities education has renewed its vitality. However, in the specific teaching practice, there are still some drawbacks. Analyze these drawbacks and find out the way to solve the problem. This is a problem worth thinking for every Colleges and universities educator. Firstly, "emphasis on theory, less practice" in teaching. In the traditional teaching mode, teachers usually spend more time teaching theoretical knowledge, but the practice link is greatly missing [4]. This model causes students to slowly lose their autonomous thinking, autonomous learning ability and lack of enthusiasm. Although some universities have strengthened teaching practice at present, teaching practice has the characteristics of no pertinence, derailment from practice, and poor application. Students repeat the teacher's steps according to the book requirements. Although the correct results are obtained, the students cannot use them flexibly. Such a practical process does not help the students to improve their creative ability and practical ability. Practical activities in the teaching process should select cases that are fitted to practical application, highly targeted, and focused on cultivating students' innovative ability. Secondly, the teaching form is single. Although "Internet +" has been introduced into the field of education, present many teaching methods are still based on the "teaching" mode. This teaching method is relatively boring and difficult to arouse students' interest in learning, which is not conducive to the development of innovative thinking [5]. For teachers, the exploration of new forms of teaching is even more urgent. Teachers should constantly sum up their teaching behaviors in teaching, taking teaching practice, typical teaching cases and detailed records of student activities as important materials for analysis and exploration, and constantly sort out, modify, and summarize teaching modes suitable for teachers and students. Thirdly, the separation of learning and use. Although contemporary Colleges and universities students have a solid theoretical knowledge foundation, they are unable to closely integrate the familiar theorem and conclusion of the book and application. They do not know how to apply knowledge, the relationship between learning and use, and how to apply the theoretical knowledge they have learned in real life. This is the status quo of "learning without thinking leads to confusion"

in contemporary Colleges and universities students [6].

3. The thinking of "introducing learning" under the background of "Internet +"

(1) Introducing learning by "environment"

Teachers are the leaders and commanders in the teaching classroom, and students passively become the recipients and implementers, this kind of "cramming" teaching leads to the inability of teaching vitality, which is a major drawback in traditional teaching. The advent of the "Internet +" era has transformed Chinese education from a blackboard, a textbook, a piece of chalk, a traditional teaching model that has lasted for hundreds of years, to a new educational model based on information technology. "Internet +" has made education from closed to open, in an open environment, a global knowledge base is accelerating. High-quality education resources are being enriched to a great extent. The Internet connects these resources together, making people always can get the learning resources they want anytime and anywhere, which injects new vitality into teaching activities, so that students have a strong desire to explore knowledge [7].

(2) Introducing learning by "asking"

If you have doubt about learning, you will have an opportunity to enlighten. Some awareness, some progress. When the mind is in doubt, there is only thinking, and the desire to explore knowledge is generated, which leads to interest in learning. Although questions raised by educators are a teaching method that stimulates students' interest in learning, the key to introduce learning by "asking" is to cultivate students' awareness of question, the motivation for learning and the spirit of innovation stem from the awareness of questions, only students who ask will have motivation to learn and the possibility of innovation. In the initial stage of learning, due to the limited knowledge reserves of students, they do not know where to start in the learning activities. As the "leader" of teaching activities, teachers can take the form of asking questions to start the first step in the cultivation of students' problem awareness, students' thinking patterns are led [8]. In this process, students can only initially cultivate their awareness of problems by carefully thinking and completing the answers to their questions. When the students' knowledge has been accumulated, students with different knowledge reserves quickly generate problem awareness of different sizes in the face of new knowledge. It is called "small doubt bring small progress, big doubt bring big progress". In the era of "Internet +", knowledge is like a net, and each net node is a question. Under the background of open knowledge, learners continue to explore knowledge.

(3) Introducing learning by "guiding"

With the introduction of the concept of "Internet + Education", Colleges and universities education has renewed its vitality, teachers have gradually realized the new concept, in classroom teaching, and more attention is paid to guiding students to learn, not blind teaching. "Guiding" is based on students' learning ability, according to the teaching goals, "guiding" through the situation of students "learning" and teaching content [9]. "Guiding" must be directional, according to the difficulty of the course content and the requirements for training students, which determines the direction of teachers' "guiding", that is to say, the teaching goals determine the direction of guidance; "guiding" must have diversity, for effective guidance in the classroom, we should also pay attention to the diversification of "guidance" methods. Teachers should take the initiative to contact the students and participate in the students 'learning, which will help teachers fully understand the students' learning situation. In teaching curriculum design, multiple application cases can also guide students to think. "Guiding" must be timely, and the effective guidance of teachers should be timely and appropriate. In the classroom, if teachers give guidance before students have thought about it, they miss the opportunity for guidance.

4. The reform of the teaching mode from "teaching" to "introducing learning" under the background of the "Internet +"

4.1 The reform of the teaching mode path based on the "Internet +" from "teaching" to "introducing learning"

The teaching mode under the background of "Internet +" takes students as the center and uses "introducing learning" as a means to form an innovative teaching method of "teaching preparation →self-study before class → systematic teaching → consolidation after class", which guides students to become active learners and designer, the logical structure of the teaching model is shown in the chart.
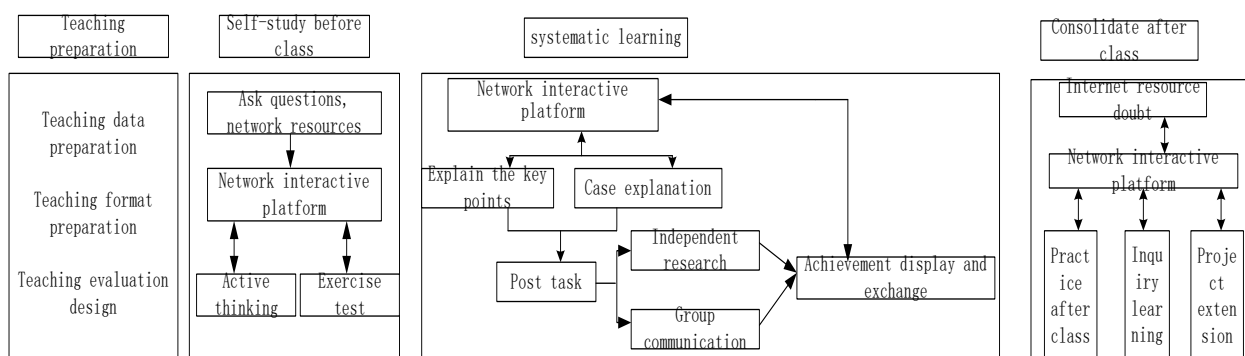

Figure. 1 The teaching mode block diagram from "teaching" to "introducing learning" under the background of the "Internet +"

Teaching preparation: This link is the starting point of the teaching process. When the teacher changes from "instructor" to "leader", he must prepare teaching resources and set up teaching forms according to the characteristics of the course and the learning situation of the students [10]. This process is not only an environment for teachers and students to objectively understand the confusion in the teaching process. This link needs a method and path to solve the confusion, and it must be based on reality.

Self-study before class: In the self-study before class link, teachers release course-related video materials, questions and learning goal through an online interactive platform, students use online learning resources to conduct relevant theoretical studies and exercise tests to fully prepare for classroom teaching. Teachers can view the students' learning situation on the Internet platform, answer the difficult problems of the students who have failed to communicate on the platform, and promote the benign interaction between teachers and students. in the "Internet +" environment, the use of mobile networks in the field of education has not only changed the role of teachers in the teaching process, but also changed students' learning concepts and behaviors.

Systematic learning: Since students have a rough framework for the curriculum knowledge before class, in this systematic learning, teachers will illustrate various problems encountered by students in the previous link and help students sort out the whole knowledge system. In addition, the exploration and learning of "problems" should be implemented in practical experience, so it should be synchronously explained in conjunction with relevant course cases to make students understand the problems more thoroughly. Teachers publish practical tasks according to the learning goals of this course. Students choose autonomous exploration forms and group cooperation forms for practical learning according to their learning ability, for the group that conducts cooperative learning, they arrange their own tasks according to the internal conditions of the team members to

design and implement. In the process of learning and practice, teachers observe and record the student's learning situation, make preparations for the assessment, and give relevant guidance to the progress of students' practical tasks to promote the realization of teaching goals. After discussion and communication between the groups, the results obtained were displayed and communicated. Throughout this process, students' self-learning ability and teamwork spirit are fully exerted.

Consolidation after class: The law of forgetting shows that what students learn in class in a short time will forget some content after class. Only by understanding and mastering the laws of scientific memory and doing a good job of consolidating and reviewing in time can we reduce the forgetting rate, this link plays an indispensable role in the entire learning process. Teachers use the online interactive platform to further screen the difficult points, and the teachers and students communicate with each other to inspire students to continue innovative exploration and consolidate classroom theoretical knowledge and practical activity knowledge. The use of an online interactive platform can enhance the interaction between teachers and students, creating an active learning atmosphere.

4.2 The assessment and evaluation standards based on the "Internet +" from "teaching" to "introducing learning"

In the context of the Internet, the assessment and evaluation standards have developed in response to the change in the teaching model from "teaching" to "introducing learning". The assessment and evaluation model under "introducing learning" is no longer confined to the traditional teaching assessment model-"score determines everything", but diversified assessment of teachers and students in all aspects of ability. In the process of "introducing learning", teachers and students learn from each other in practice and develop in the assessment. The traditional teaching assessment model ignores the examination of teachers, whether the teaching model achieves good results and whether it is beneficial to student progress is ultimately up to the students. Adding the assessment of teachers in the process of "introducing learning" helps teachers adjust existing teaching modes in time and promotes benign interaction between teachers and students [11]. The assessment under the "Introducing learning" model is based on the "teacher-student self-assessment and teacher-student mutual assessment" model, which focuses on the popularity of teachers' teaching methods, the degree of completion of teaching objectives and the realization of "introducing learning", and multiple assessments are based on the absorption of knowledge around students, situation of learning and interaction and practical problem-solving skills.

1. Evaluation of teachers' teaching ability

(1) The popularity of teaching methods. The evaluation of teaching methods is based on student evaluation and teacher self-evaluation. Students go through a stage of learning, and have different levels of love for the teaching methods of each course teacher. After each learning stage, the teachers of each subject are evaluated by voting and the students give suggestions to teachers for each subject.   Furthermore, teachers reflect and summarize through students' learning motivation, interaction, etc in each stage of the curriculum.

(2) The degree of completion of teaching objectives. The way to measure the completion of teaching goals is composed of staged goal completion, assessment of students' theoretical knowledge, and assessment of students' practical ability. At each stage, the evaluation of completion of the current teaching objectives is helpful for the arrangement of the next stage of planning; theoretical knowledge is the basis of the entire learning process, regular inspection of the students' degree of mastery of theoretical knowledge is conducive to the smooth progress of practical activities; practical ability assessment is an important way to train applied talents, which helps students to have a deep understanding, consolidation and flexible application of theoretical knowledge.

(3) The degree of realization of "introducing learning". Whether the "introducing learning" teaching mode really plays a substantial role is mainly judged from three aspects: evaluation of teachers' introducing learning methods, students' exploration ability, and achievement evaluation [12]. "Introducing learning" focuses on "introducing", which is realized by the teacher, and is evaluated from the theory of the introducing learning method itself by referring to the previous successful cases; "Introducing learning" focuses on "learning", which is realized by the students, the ultimate goal of "introducing learning" is to realize the autonomous learning of students, and whether the "introducing learning" method plays an effective role depended on the students' exploration ability; at each learning stage, the student's learning results are quantitatively evaluated.
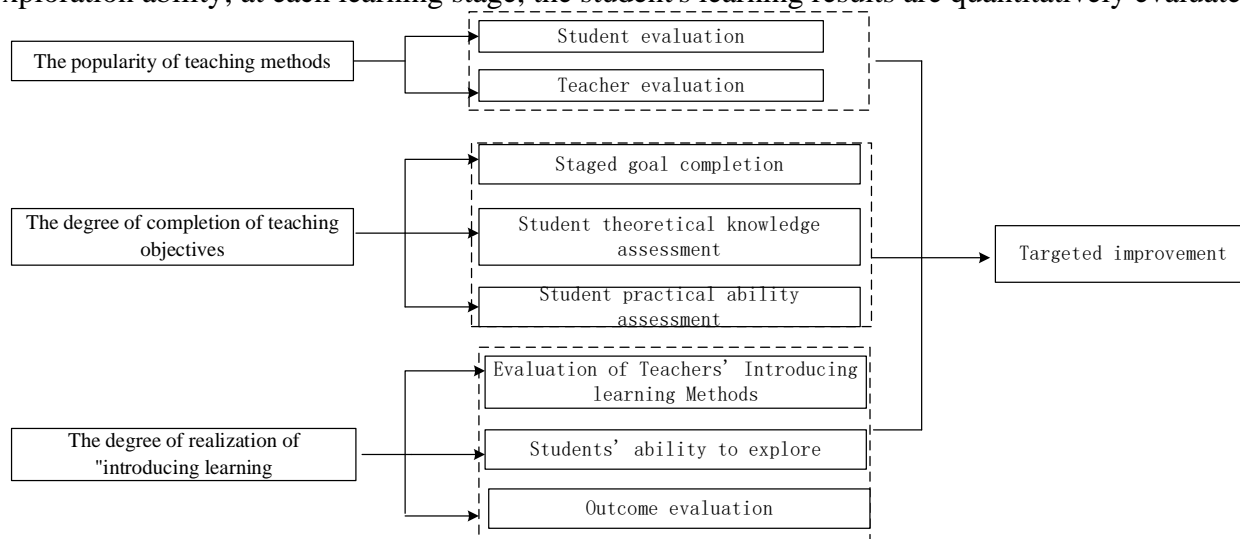

Figure. 2 Block diagram of teachers' teaching ability evaluation from "teaching" to "introducing learning" under the background of the "Internet +"

2. Evaluation of students' learning ability

(1) Autonomous learning ability. Cultivating students' autonomous learning ability as the ultimate goal of "introducing learning", tapping from students' preparation before class and consolidation after class. Pre-class preparation consists of basic knowledge preparation, use of network resources, active thinking and asking questions, and exercise tests, teachers check the degree of completion of various tasks of students in the background of the network and score them as part of the usual scores [13]. Students use the network platform to discuss difficult problems as the evaluation standard for after-school consolidation. This link can fully arouse students' enthusiasm for learning and lay the foundation for further achieving the goal of "introducing learning".

(2) Learning behavior performance. As a criterion for judging students' learning enthusiasm, innovation and self-discipline, learning behavior performance is evaluated from group interactive communication, learning achievement display, and usual homework completion.

(3) Students' practical ability. Practical ability is mainly evaluated from the aspects of students' application of theoretical knowledge, innovation of results and ability to solve problems. The application of theoretical knowledge is an indispensable part of the process of "introducing learning". Colleges and universities focus on the cultivation of applied talents, the application of theoretical knowledge lays the foundation for the future career direction; teachers score students' practical results mainly from innovation; It is inevitable that all kinds of difficult problems will be encountered during the practical process, and the problem-solving ability of students is also part of the ability to investigate practice.
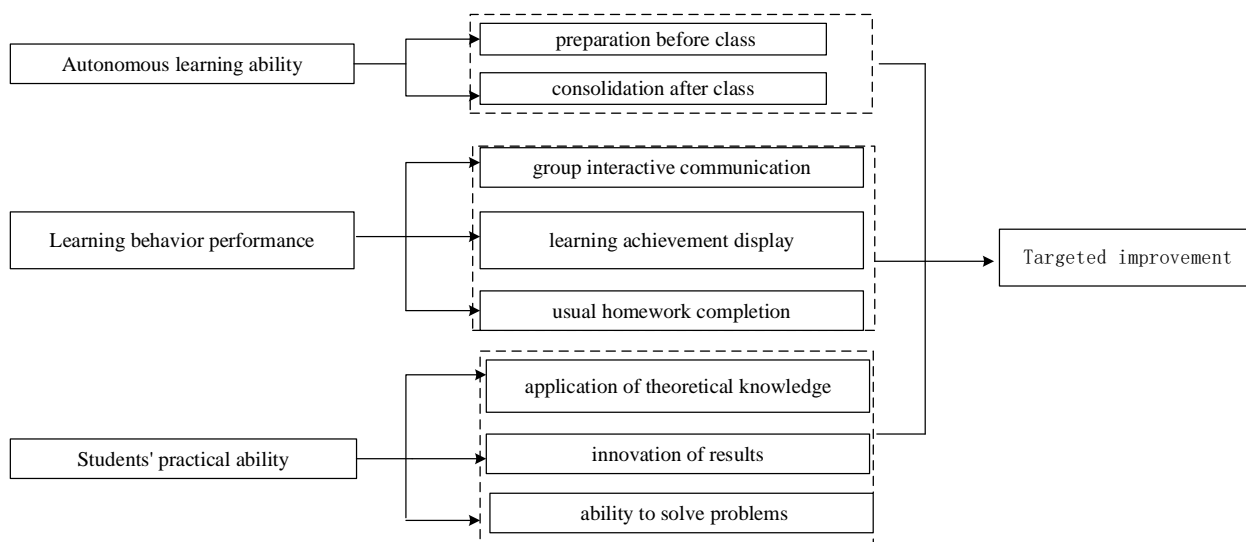
Figure. 3 Block diagram of students' learning ability evaluation from "teaching" to "introducing learning" under the background of the "Internet +"

4.3 The feasibility analysis of teaching model based on the "Internet +" from "teaching" to "introducing learning"

It is an inevitable trend for the Internet to introduce into the field of education. Internet education makes our education more flexible and changeable, and the Internet makes education development more quickly and management more convenient. Therefore, the teaching method from "teaching" to "introducing learning" proposed in the context of "Internet +" is precisely a kind of teaching reform in colleges and universities that serves the needs of national strategy, local economy and industry development for the cultivation of high-quality talents, the purpose of the trial is to promote better and faster quality of education and teaching in colleges and universities.

The proposed teaching method from "teaching" to "introducing learning" is to focus on the emphases, hotspots and difficulties of undergraduate education teaching reform in our school and even the whole province and the whole country, focusing on researching a new system to improve the quality of school education and teaching, which has practical needs, emphasis on systematic research, overall optimization, comprehensive practice, and indeed cultivate qualified university students.

I have been engaged in student teaching for a long time, and I fully realize that the teaching method needs to keep up with the pace of the times under the "Internet +" era, and it needs to be combined with modern science and technology and information technology. Changes in teaching methods are imminent!

5. Conclusion

Changes in teaching methods have led to a change in the dominant position of teachers in teaching activities. Under the "Internet +" teaching method, teachers engaged in college and university education not only have to track the development trend of the times, constantly update and perfect their self-knowledge systems, but also meet the different needs of various students under the new education concept. From "teaching" to "introducing learning", teachers have become

the role of "leaders", all teachers can do is to learn and use modern Internet education technology to correctly guide students to get started, stimulate students' desire for knowledge, and awaken students' curiosity about unknown things. Under the new teaching method, the interaction between teachers and students focuses on the exchange of knowledge and information. How to guide students to learn, cultivate a correct outlook on life and values, and explore students' training methods and means will help students better learn and master knowledge.

Acknowledgments

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