

# O2O Model of Higher Mathematics Teaching in Local Colleges

Jianping Huang

School of Mathematics and Information Engineering Taizhou University, China

541920436@qq.com

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**Abstract.** The classroom teaching quality of higher mathematics directly influences the study of College Students' professional courses. Under the background of the highly developed information age of the Internet, in this paper, a new model of higher mathematics teaching is proposed---O2O model. Through the online and offline interaction between teachers and students, to achieve the effective teaching of teachers, students learn to be happy, to achieve the perfect blend of teaching and learning.

## Contents

Higher mathematics as a compulsory public basic course in colleges and universities across the country, involving a professional range, number, which directly affect the quality of teaching specialized courses of study, the overall teaching quality of colleges and universities upgrade also plays an important role. Improve the teaching quality of higher mathematics is an important task the major colleges and universities, especially the main local colleges and universities for local services, composite applications are the basic requirements of today's society for college students, many professional knowledge and mastery of the basic skills needed to have a good quality of advanced mathematics as a precondition.

In today's rapid development of the Internet, traditional enterprises are faced with is the Internet Enterprise impact of fate, put in front of them only two roads: either accept the new Internet business thinking, abolished the old system, to meet new challenges; or complacency, followed the old thinking, and ultimately avoid the fate of being eliminated. Under the traditional system of many major brands are now declining is the best footnote. So is classroom teaching of higher mathematics in local colleges and universities, formerly a classroom, a Blackboard, a box of chalk,

Teaching methods have been inadequate to meet the current needs have how teaching forms in order to adapt to today's Internet environment?

Now very popular word in the community is O2O, abbreviation for the Online to Offline, as a modern business vocabulary, its general meaning is: the use of the Internet for commercial market-ing, direct traffic to offline Internet access customer store experience, customer satisfaction can be sold face to face or final payments can go online, to combine offline. [1, 2, 3]

We now learn from it, porting it to the classroom teaching of advanced mathematics, Its meaning can be explained this way: QQ Group or micro-group classroom through media such as extends, not only in normal class time for students to classroom learning, courses are able to continue learning through the QQ Group or micro-group.that following we to discussion about this O2O form of specific implementation steps: first, class Qian stage, teachers will students group, each group specified a leader, group way can to bedroom for units, convenient students Zhijian at any time face-to-face Exchange, addition teachers online Shang released information, information main including two class: first class is teachers put next class Shang to learn of content recording into teaching video, second class is teachers collected to of and this Hall class related of extracurricular information (like mathematician of story).Students using computers or cell phones will be able to learn, and discussions between the groups, everyone doubts their feedback to the team leader, team leaderand then feedback to teachers these questions.Secondly, the classroom phase, teachers based on student prerequisite questions,targeted to be addressed one by one. Did not think of the problem before the students can also

be made in person, if the teacher answered less than perfect, can be put to a class and then add to it. Of course, teachers can extend deeper issues raised by students for further reflection [4, 5, 6, 7].

What is the meaning of the O2O model in classroom teaching?

First, let the students learn independently, flexible arrangement of study time, promote the development of students' personality. Due to the traditional classroom teaching time is limited, students often difficult in the short span of the last dozen minutes to all the mathematical concepts, mathematical methods and skills to master, especially for around the entrance examination of the volume, regional differences caused by student's knowledge of the breadth and depth is not the same, so the traditional way of teaching difficult to each student will benefit. And in o2o mode, students can arrange their own study time, see the video does not understand place can pause, can also be repeated until understand so far;

Second, can fully mobilize the students' subjective initiative, change passive learning to active learning. Traditional teaching methods have always stressed the importance of mathematics, but students do not see the importance of the embodiment, often fall into the "what is the use of learning mathematics" trap. Investigate its reason, a factor that can not be ignored is the teaching, teachers always want every student to listen to their words, but it is very difficult to do, we change a way effect may will be much better, now is: before the class learning textbooks video content at the same time, also to provide students and content related Extracurricular Information and let them know that knowledge context, knowledge to understand the practical application, this will stimulate the learning motivation, so as to achieve change from passive learning to active learning, greatly improve the learning effect.

Third, can greatly shorten the distance between teachers and students, university teacher-student relationship is relatively weak, because the university teachers not imprisoned, often under the class can not find people, all between teachers and students the opportunity to exchange is not much, so to ask the students caused inconvenience, students by Keqianyuxi accumulation of questions not resolved in a timely manner naturally influence learning motivation, with the passage of time, it is easy to lose their interest in learning. Through this O2O model, between teachers and students can communicate anytime, anywhere, the relationship between the natural will be very harmonious, which is very beneficial to the teaching and learning.

Fourth, can enrich the teaching form, stimulate learning interest. Mathematics is an abstract subject, this feature determines that it is abstract, understand obscure, so many students do not like mathematics, mathematics on a headache. To downplay this awareness, teachers can before class in the group of inside hair some class to talking about the content of the relevant literature, for example, origin of the mathematical concept of background, legend of the mathematician, mathematics knowledge of practical application and so on some interest, practical things, this is bound to arouse the students' desire for knowledge, the so-called interest is the best teacher, once had the interest, things are not afraid to do bad.

Fifth, the teacher from the daily repetition of the classroom teaching, so that teachers can spend more time and energy to improve other teaching links. The content of advanced mathematics has an obvious characteristic compared with other subjects. The knowledge frame is very stable. The traditional mode of teaching every class to teach over the fixed content is bound to cause great waste of artificial, the fixed textbook content recorded video teaching, later can be reused, even after the need to supplement can also be through the communication between teachers and students come to solve.

Sixth, expand the students knowledge, the traditional 40 minute class magnified indefinitely, the textbook knowledge radiation to the social production and life, enhanced application of knowledge to solve problems of consciousness, and not as in the death of reading, read the book death of embarrassment. Graduate to be able to quickly do the job to lay a good foundation for the future.

Today's times are changing, because knowledge is always on the update. The times are changing, the way we do things should change, and so is the teaching of advanced mathematics. The education informationization ten years development planning (2011-2020) "[8][9] pointed out:" development of education informatization to with innovative education concept as the guide, based on the quality

education resources and information technology learning environment construction as the basis, to learning and education model innovation as the core, to system and team building for protection. " Classroom teaching mode of o2o of higher mathematics doesn't mean completely overthrow the traditional mode of education, but on the basis of the traditional mode of education, adding new elements in the network era of information technology, online education resources, through the expansion of educational space and the elements of the re group, to build real full of dialogue, autonomous and collaborative classroom[10].

Of course, the teaching reform of higher mathematics has been on the road, the study of teaching methods to adapt to the new era has not stopped. The only constant aim is to give full play to the leading role of teachers in the premise of students as the main body, so that teaching and learning can achieve organic integration and unity.

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