A Preliminary Study on Eliminating Nonsensical Courses and Creating First-rate Courses: Taking the Basic Mathematics Course in University as an Example

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Abstract Universities should take undergraduate education as the fundamental connotation of the times, and we will return to common sense, duty, original aspiration and dream, which is the basic principle of the reform and development of colleges and universities. Speeding up the construction of high-level undergraduate education and improving the ability of talent training in an all-round way, eliminating nonsensical courses and creating first-rate courses has become one of the important tasks of teaching in higher education. Starting from the standard of first-rate courses, this paper deeply analyzes the reasons for the prevalence of nonsensical courses, and expounds some ways to control nonsensical courses and create first-rate courses.

Key words Undergraduate education, First-rate courses, Nonsensical courses

1 Introduction
Chen Baosheng, Secretary of the Party Leading Group and Minister of Education, pointed out; "talent training is fundamental, undergraduate education is the root, and the essential function of talent training has never been changed or shaken." Talent training is the essential function of the university, and undergraduate education is the root and foundation of the university. It can be seen the undergraduate education is important, how to do well in each class is a problem for all educators. On November 24, 2018, at the 11th China University Education Forum, Wu Yan, Director of the Higher Education Department of the Ministry of Education, put forward the standard of first-rate courses for the first time—high level, innovation and challenge. On the contrary, the nonsensical course is a low-level, old and frivolous course. Eliminating the nonsensical courses and creating first-rate courses is an arduous task in front of every university teacher.

2 The background of the prevalence of nonsensical courses
2.1 The evaluation mechanism of teachers in colleges and universities leads to the existence of nonsensical courses At present, university teachers pay more attention to scientific research projects and papers in terms of performance assessment, professional titles and advanced evaluation. As a result, most teachers focus on scientific research projects and do not attach importance to classroom teaching. In addition, most students like courses with low difficulty, loose classroom requirements and that are easy for them to get high marks. And for the difficult courses with strict classroom requirements, students give lower teaching evaluation scores. Over time, there are more and more nonsensical lessons.
2.2 The easy enrollment and easy graduation in universities lead to the existence of nonsensical courses Since the expansion of enrollment in colleges and universities in our country, the proportion of admission in the college entrance examination has exceeded 86%. The average quality of admitted students has generally declined. However, it is reported that in the survey of more than 800 colleges and universities across the country, the graduation rate reached 98%, and the rate of those granted degrees reached 97%, with almost no elimination. Due to various reasons, colleges and universities are unwilling to eliminate students, which makes teachers lower their requirements for students again and again, bend the rules at times, so the overall quality of students is declining year by year.
2.3 More teaching content and less class hours lead to the existence of nonsensical courses For example, in 36-hour linear algebra, teachers simply do not have time to talk in detail about similar matrices and quadratic forms. In addition, in the second volume of higher mathematics, there is no way to explain surface integrals, curve integrals, multiple integrals, series and so on in only 36 class hours. This seriously affects the improvement of students’ ability to analyze and solve problems. It cannot meet the standard of "high level, innovation and challenge".
2.4 There are few high-quality teachers in the front line of teaching, and nonsensical teachers teach nonsensical lessons Some teachers are irresponsible to their students, lack professional ethics, teach classes perfunctorily, do not improve teaching methods and teaching skills, and just echo what the books say.
3 Approaches to create first-rate courses

3.1 Comprehensively organizing the teaching content of the course According to the characteristics of specific disciplines, it is necessary to reasonably enhance the degree of challenge, expand the depth of the curriculum, and appropriately increase the teaching hours. Student-centered approach does not mean blindly catering to students and meeting any needs of students, but mean realizing the transformation from "teaching-oriented" to "learning-oriented". In other words, it is necessary to change from "impairing knowledge" to "making students discover and create knowledge themselves". The significance of learning is not only limited to the acquisition of knowledge, but also lies in the training of thinking and emotion. For example, in the course of Calculus, the depth and breadth of the course content are carefully designed to put forward different requirements for students at different levels and effectively "increase the burden" for students who have more than enough capabilities to learn. We should not let students easily pass, and they must be able to attain goals through their own efforts, so that students at all levels are successful and promoted, and students can be taught in accordance with their aptitude. It is necessary to guide students to further take in-depth learning courses, give more guidance in terms of learning methods, and cultivate students’ autonomous learning ability on mathematics.

3.2 Carefully studying the teaching materials and teaching methods, sorting out the knowledge structure, and grasping the horizontal and vertical relationship between knowledge points It is necessary to prepare lessons collectively on a regular basis, conduct brainstorming for key and difficult points, use micro-video and other means to help students master key and difficult knowledge. Different teaching methods should be adopted for different knowledge points.

For example, when talking about the Lagrange mean value theorem, it is necessary to guide the students to use reverse thinking to construct auxiliary function. Because if you want to prove \( f(x_2) - f(x_1) = f'(\xi)(x_2 - x_1) \), you only have to prove \( \frac{f(x_2) - f(x_1)}{x_2 - x_1} = f'(\xi) = 0 \), that is, you can prove that the derivative of a function at point \( \xi \) is 0. At this point, we can consider using Rolle’s theorem, with \( \phi(x) = \frac{f(x_2) - f(x_1)}{x_2 - x_1} - x - f(x) \) as an auxiliary function. It is known from the conditions of the theorem: The auxiliary function \( \phi(x) \) is continuous in \([x_1, x_2]\), derivable in \((x_1, x_2)\), and \( \phi(x_1) = \phi(x_2) \). That is, if the auxiliary function \( \phi(x) \) satisfies the condition of Rolle’s theorem, then \( \phi'(\xi) = 0(0 < \xi < x_2) \); \( \frac{f(x_2) - f(x_1)}{x_2 - x_1} = f'(\xi) = 0 \); namely \( f(x_2) - f(x_1) = f'(\xi)(x_2 - x_1) \). The use of backward thinking method-reverse thinking can help us to overcome the set of thinking, quickly find a breakthrough to solve the problem, and turn the difficult into the easy. It can stimulate students’ interest, expand their horizons, and improve their ability to analyze and solve problems.

3.3 Introducing a variety of teaching methods into classroom teaching activities to enliven the classroom atmosphere

In order to create first-rate courses, we should pay full attention to every link of classroom teaching and make rational use of modern information technology as teaching means. Because the definition, theorem and formula of mathematics course are too abstract, it is necessary for teachers to adopt different practical and effective methods for classroom teaching. The mathematical foundation of students in agricultural and forestry colleges is generally not high, and the polarization is serious. It is believed that the pure online courses or pure classroom courses are not suitable, and we should combine the online and classroom courses for mixed teaching. The use of online and classroom courses for mixed teaching can enable us to timely understand the learning situation of students, prescribe the right remedy to the case, and urge students to study.

3.4 Gradually changing from examination-centered to learning-centered, effectively and earnestly strengthening the assessment of the learning process and increasing the share of the results of the process assessment in the total score of the course Strengthening the assessment of students’ learning process is a very important part in the process of building first-rate courses and training high-quality innovative talents. In order to solve some problems existing in the assessment of existing learning courses, such as random evaluation, opacity, and lag, reform is imperative. At present, the assessment methods of usual performance mainly involve attendance, after-school homework and usual tests. The phenomenon of plagiarism in after-school homework and usual tests is serious, which cannot fairly and reasonably reflect the students’ learning situation in normal times, so it is difficult to mobilize the students’ learning enthusiasm in normal times. In order to put an end to the phenomenon of plagiarism, it is necessary to build an online test system and test questions database, and teachers can correct homework online, with test papers and scores as part of the process assessment. In addition, classroom questioning, classroom discussion, attendance, learning attitude and other factors should be included in the learning process assessment. It is necessary to combine quantitative evaluation with qualitative evaluation to build a diversified and multi-perspective assessment system of learning process. We need to urge students to pay attention to the learning process, pay attention to daily learning, and pay attention to everyday accumulation[4]. It is necessary to strictly check the discipline assessment system and gradually form "easy enrollment and difficult graduation".

3.5 Doing a good after-school reflection in time Every day teachers should examine themselves on three counts, and they can become famous teachers after three years of reflection. Posner, a famous American scholar, put forward the formula of teacher growth: teacher growth = experience + reflection. After each class, it is necessary to do a good after-class teaching reflection in time, summarize the bright points and deficiencies profoundly and carefully from the aspects of teaching content, teaching method and teaching effect, and study the improvement measures. For the
typical mistakes common to students, teachers should not be busy correcting errors, but think about the root causes of errors, strive to find solutions, and formulate specific methods to avoid mistakes when teaching again. During the reflection of teaching after class, the most important thing is to be timely, to persist, and to pursue persistently[5]. By reviewing the advantages and disadvantages of teaching, we can enhance our strengths and avoid weaknesses in the future teaching. In the process of continuous reflection, teaching experience and skills can be continuously improved, and the teaching quality will be significantly improved.

3.6 Further improving the teacher evaluation and assessment system It is necessary to regard teaching quality as an important basis for teachers’ performance assessment and professional and technical evaluation, so as to make teachers devote themselves to teaching research and be willing to spend a lot of time, energy and enthusiasm on lesson preparation and pay attention to every class. In addition, it is necessary to have fair and reasonable evaluation criteria for the first-rate courses. The courses that students like are not necessarily first-rate, and the courses that students do not like may not be first-rate[6]. Whether it is a first-rate course should be jointly assessed by schools, teachers, students and relevant experts of the curriculum.

3.7 Strengthening the training of teachers In the process of building the first-rate courses, it puts forward higher requirements for teachers in terms of teaching content, teaching skills and so on. In order to meet the needs of the educational development of the times, it is necessary to constantly improve the comprehensive quality of teachers themselves. Different levels of teachers are trained at different levels. Veteran teachers with rich teaching experience mainly learn new teaching skills-modern information technology. It is necessary to implement a strict teaching access system for new teachers[7], only after the teaching content and teaching ability have been inspected and assessed by the school supervisory experts, can teachers obtain the teaching qualification of the relevant courses.

3.8 Strengthening the support for the construction of first-rate courses The construction of first-rate courses requires a lot of manpower and material resources, and first-class courses should have first-class investment. Not only do teachers need to have enthusiasm, passion and responsibilities, but also the policy mechanism should keep up with it. It is necessary to attract more teachers to participate in the construction of first-rate courses.

4 Conclusion There is a long way to go to control the nonsensical courses and create the first-rate courses; it requires the joint efforts of educators and students. It is an arduous task for each of our full-time teachers. With down-to-earth and practical actions, we should meticulously create the first-rate courses that are leading, cutting-edge, diverse, and challenging, never forget the original aspiration of being teachers of the people, bear in mind our mission, devote ourselves to building virtues and cultivating students, and strive to be a good teacher to the satisfaction of the Party and the people in the new era.

References

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Surveying and mapping, the diversification of theoretical teaching methods, and organizing a series of lectures, and paying attention to the formation of systematic courses. Based on the comprehensiveness of ancient architecture surveying and mapping, we should strengthen the building of surveying and mapping teachers, consider the cooperative teaching of comprehensive subjects, and suggest the combination of historical theory (garden history and architectural history), ancient construction structure, and so on for teaching.

This paper explores deeply from the aspects of organizational planning, technical support and achievement transformation, in order to enrich the teaching methods of ancient architecture sur-

surveying and mapping practice course for architecture major, and finally improve the teaching level and improve the teaching effect.

References