



New ideas on the mode of self-study education in universities

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Abstract: Higher Education Quality a is a hot topic for social attention , The should change the current teacher-centered teaching model , fundamentally mobilizes the learning students ' enthusiasm , stimulating students ' awareness of autonomous learning , make students the subject of educational activities , Let students learn to learn ,fall in love with learning . Flip class as an effective attempt of students ' self-study education mode , The effect has been validated by practice , using social media and information networks , Explore New Effective method , is an important direction of educational reform efforts .

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1. Primer say

Former Soviet educator Suhomlinski once said : Education The true meaning of the is to teach students to learn, and to let students learn ^{[1]81} . Flip Classroom as one (New) Teaching mode , is on network information technology , Multimedia technology developed to a certain stage of the resulting . in this type teaching mode , Teacher is no longer the protagonist , but from starring to director , instructing students to explore in class , Exchange Reflection , as a classroom bootstrapper , FAQ , Learning promoter , The is intended to allow students to Autonomous Learning and independent thinking . Flip class is for traditional classroom teaching mode completely subversion, This will cause the teacher and student role , teach Learning mode , Evaluation system etc _ Series Change .

Flip Class The reason why the classroom has a huge Impact , because flipping classrooms cater to the needs of universities in the new Era seek , turn students from knowledge passive recipient to active digestion and biography Sow , students can not only take the initiative to choose which course to learn , can also free from space-time restrictions , make each student press itself Requirements Control learning progress and rhythm , give the learning initiative a real return Student .

2. The connotation of college students ' autonomous Learning

College students ' Autonomous Learning refers to the guidance of college students in education under , from where you want , Self-setting learning goals , Learning meter Row , based on personal interests and professional selection learning content and learning side method , and flexible control of learning progress and time , tocomplete The active learning process for the service ^{[2]75} .

2.1 the need for autonomous learning for college students

2.1.1 Autonomous Learning to meet the objective requirements of higher education compared to primary and secondary level , Higher education offers students a deepknowledge , broad field , Autonomous time and variety of choices

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optional , This requires students to be highly autonomous and independent , from Plan your own college life and future career paths . should be completely get rid of dependency in primary and secondary schools , completes to learn to I to learn "" psychological transitions . Higher education focuses on advanced learning , culture Foster innovation Ability . University teaching can only play a guiding role , and key to the student's awareness ,Interest and autonomous learning can power . addition , University student management relatively relaxed , makes the university The students learn with greater autonomy and selectivity . University four non- frequently short , College students should not only know what to learn on the learning content

? , Learn addition , and know what not to learn , Learn minus negative " , " is targeted and selective in the autonomous learning process Learn , otherwise , Learning will be blind .

2.1.2 Autonomous learning is the fundamental driving force for individual development

The effectiveness of a student's study depends largely on the learning Autonomous degree . student autonomy is divided into three levels : First cram memorization ,This is the lowest level , has the worst effect . Two is self-conscious adaptive level , Students accept and understand what the educator is proposing and Tasks , to devote a positive attitude to learning activities , Complete the task in the learning process and play its potential . mostly students ' learning belongs to this class . Three is active create level , Student's attitude is not only self-conscious , and Proactive [3]58-59 , to implement the learning goals , Active Learning and creative learning , Critical Thinking questions , daring to suspect authority , never conform to the crowd , take a variety of measures to make the own learning effect Optimized .

2.2 The basic idea of promoting college students ' autonomous Learning

The teaching model is under the guidance of certain educational ideas or theories , for completion _ teaching Tasks , implementation _ set teaching goals , the process of a Stable and systematic teaching activity formed by the and or Schedule for teaching activities . It's a variety of teaching factors. complex [4] « . The teaching mode of college students ' autonomous learning should conform to the following Basic Concepts .

2.2.1 sets the student-centric The education philosophy of

student-centric The educational philosophy of indicates that students are teaching Active Body , This has several implications : One is everything in college work is all about getting students to know , Improving innovation Awareness , Development Create Force ; Two is to correctly recognize students , Respect students ' principal status ,pay attention to students ' personalities and differences , teach in accordance with the same characteristics ; Three is to balance students Comprehensive development relationship to professional development , and throughout school education All aspects of a learning activity , Both teaching and Educating., culture only Generalist and versatile , and training professionals , Eccentric and geek .

2.2.2 gives college students more autonomous learning rights

under the influence of traditional educational ideas , teachers have been in the teaching of to main position , students are often passive , Obedient , obeys , unify "" kill students ' autonomous learning rights , so set "" to learn Health Center "" Education Concept , to give students more autonomy Right becomes the inevitable requirement of today's education reform . the student's "" " right to autonomous learning mainly includes : Self-determination of learning goals , Autonomous determine learning ,Autonomous Selection Learning method , to think independently Rights , the right to participate in a research project , Enjoy the right to freedom of study Benefits etc .

2.2.3 leave students with sufficient autonomous learning time

Learning is _ Long-term procedure , requires sufficient time to secure certificate , Not enough time , Learning effects cannot be guaranteed , Create New awareness and creative power play more than that .. current , many University deprives students of their spare time , students follow teachers every day due to job and exams , Students ' autonomous learning time is hard to get guarantee . to establish student dominance and achieve student autonomy Learning , can establish four 1/4 Classroom Teaching Mode , is in the class Church teaching time assignment :1/4 Teacher Explanation ; 1/4 Classroom Answer suspect ;1/4 Student Interactive Discussions ; 1/4 students learn by

themselves . can also be used flexible use including case type , Student participation in the class and so on. Way of teaching , can be based on the class content Adjust the proportions of appropriate periods , make teaching richer with flexibility , So students participate in class discussions , student interaction answer "" , The time for students to study autonomously is guaranteed , Not only active Classroom Atmosphere , The subject status of the students is also reflected in the , student is no longer a passive recipient of knowledge , to become active knowledge creation New Person , participation and enthusiasm for learning will also be increased , student really become master of learning .

2.2.4 respect for personality differences , Discover Strengths , tolerate leaning branch

encourage students to do things that their predecessors have not thought about or done. , to try , Bold Innovation , No innovation , no outstanding person only . Respect students ' personalities , first admit that teachers can also have personalities , for school level , need to promote a freedom of thought , remarks from by Vogue , include and Even encourage teacher personality to play . break the pass The ideological bias of the unified , to some " biased " " " geek , should be fully respected Its personality difference , discover their potential and expertise in some areas , make it a professional or expert in a field , This is the end of education. tasks and destinations .

2.3 Teachers ' guidance in the course of students ' autonomous Learning

with Teaching is the means , with Boot for the purpose , The instructor is introducing The following methods can be used to guide students to Autonomous learning .

2.3.1. through the QQ Group Online Interactive FAQ , makes the classroom time Inter-class extension

class time is relatively limited , _ Course in _ Semester Classes teaching time is generally arranged between 30-60 hours , Multiple people also but hours about , If you can use the effectively in your spare time , Extracurricular time is relatively plentiful , extending classroom instruction to outside class , then enough to ensure students have sufficient time for autonomous learning , for this , ? to be established on a per-course basis QQ class or micro-group , teacher can publish jobs in group with , , questions , can also be asked by students Teacher Answer FAQ , Or the class students discuss with each other . See , This enriches students ' learning channels , zooms in on the students ' psychological distance , Relationship between teachers and students by previous subordinate to become equal relations .

2.3.2 The students are required to submit their papers on their own topics on a per-course basis or course design and as an important basis for performance review

The student submits the course paper or completes the course with the students ' own topic Count , give students the choice and initiative of Learning , student KnotSelf- Expertise and hobbies complete the course Autonomous Learning , embodies the material teaches , NCLB teaching Principles , This kind of Aptitude, full Respect Heavy students ' individual differences , instead of sameness , , thousand people , , so that students can reach in their learning process Students a course , Accept Get different ""teaching effect .

2.3.3 Student Learning process Flexible , is self-managing , Final check rigidity , teacher Strict

Assign learning schedules and initiatives to students , by the student from Has decided on the study schedule for each course , student self-management primarily to feature , on the one Hand can exercise student self-management and self-study ability Force , on The other hand keep students motivated , Active to play , body the subject status of students in the learning process , Teachers should not overrun excessive intervention during the students ' study of the , But you need to monitor ,, Strict requirements for final assessment of course , To transfer pressure to learn live , Convert to student learning motivation , If you compare students to " player " the , Teacher is on the field "" .

3. Flip Classroom reform and revelation of traditional teaching mode

Learning Channels and teaching methods for traditional teaching models _ , Learn Student acquisition knowledge mainly in class and after Class review self-study main ,severely restricted by time and learning venues , students are completely closed Environment Accept Education , students mainly follow teachers in learning schedule , What is the purpose of learning and whether it is in accordance with individual interests? No under student control , students learn only for learning , causes students to blindness during learning . with the development of information technology and

the General and, The way students learn has changed profoundly .. Teaching Capital Source no longer limited to classroom teaching materials , teacher lectures and libraries etc , pass Internet and other modern information technologies , Students accept information and knowledge The channel will be greatly expanded .

from century Since the age of , on the computer , Internet on behalf of information technology-driven , Social into the information Age . under informational conditions ,The educational idea of higher education , Education goal , Teaching mode , Teaching Process , , and so on all have changed radically .. its Core is the innovation of teaching mode , performance is based on class teaching , Emphasis on knowledge transfer , The closed knowledge passive inculcation model of teaching facilitation The step is to place emphasis on the in an open information-based environment title (can also be expressed as a project or task) is the center , students as the principal

Active Participatory learning mode for .

3.1 The connotation of Flip class

Flip Class (flipped Classroom) in Information technology bar to create the one the innovative teaching mode , It means resize the the time inside and outside of the classroom , to let students watch videos instead of teachers after class Classroom Lectures , classes focus on completing exercises and working with teachers and class communication for students . This practice overturns traditional schools "" the teacher teaches , complete the job after class teaching arrangement for , will learn The initiative was actually transferred by the teacher to the student. ^{[5]32}. teacher roles turn into student learning designer , Bootstrapper and helper .

3.2 Flip Several aspects of classroom transformation of traditional teaching

3.2.1 After-school learning and classroom practice

Traditional classes are Classroom Learning + practice after class , and flip the lesson Hall is after-school Learning + + Classroom Practice . instructional video advance record OK upload to network server , students use extra-curricular time from the server Download and watch instructional video , in class with teachers and classmates Exchange , discussing and completing the exercise .

3.2.2 Four transitions and four focus

four Transitions : from the focus on teach to focus on Learn Transition ; from off Note knowledge transfer to focus on capacity development Transition ; from teachers primarily body " to teacher-led , Student as principal transition ; from Traditional teach education concept to Modern Education Concepts Transition .

four focus on : Focus on the learning process ; focus on students ' creative thinking dimension culture ; focusing on students ' autonomic learning habits ; Focus on Foster culture of collaboration .

3.2.3 teach less Learn more

Instructional video is usually for a specific topic , length on minutes around , Teachers less , intensive talk , The student has a large number of from the main learning time .

3.2.4 Learning Progress is entirely controlled by students

Flip Class instructional video due to early recording and opening to learning Live , students can learn in advance or focus on a Window time to Complete the study , learning progress completely controlled by students , The makes the student truly the master of learning .

3.2.5 Avoid teachers repeating

An important feature of university courses is the multiple , instruction Speed Fast , for students with less understanding, it's often hard to have a full palm at once. hold teacher-taught course contents , and teachers are not limited by class hours repeatedly explain the knowledge points , After class, teachers face a lot of learning health due to time limited can not be a pair of one Guidance , causes a phase when proportional student due to knowledge unable to grasp digest influence follow-up The learning effect of the course , even giving up learning , generate weary thinking to want , Flip class solves this disadvantage , to make one-to-one teaching is possible . students watch instructional video can be played over and over again . put , have enough time to take notes and deepen understanding , until you know .

simultaneous , Learning is not limited by time and space , to Learn whenever and wherever you want to . Learn , make full use of spare time , .

3.3 Flip Classroom advantages over traditional teaching

3.3.1 Borrow information technology Wind , Personalized Education Sea First , Flip class in the form of a lot of video teaching ,

Video is vivid , Intuitive , Consolidated , benefits such as large amounts of information , to convert text , picture , sounds, and so on, all kinds of media integrate , with its His single _ Media unmatched Advantage . second , video with good The interactive features of the . video can be paused at any time , replay , Fast forward Rewind , is a very humane way of learning . again , Flip class make Instructional video with " Short Refine " features , easy to ask topic or knowledge point to focus on learning . Instructional Video general control in 10 minutes [] , the conforms to the human eye's visual presence and concentration pattern It is not easy to cause visual fatigue and reduce learning efficiency . to increase view frequency Interesting and attractive , Some instructional videos will also be based on the learned subject for ads , An element such as an animation or even a movie fragment , greatly High performance and appeal of instructional video . Fourth , instructional video to Go to all professional institutions to recruit prestigious masters recorded by famous teachers , have helps improve the quality of teaching .

3.3.2 Converts a one-to-many teaching in a traditional classroom into a teaching video for one-to-one teaching

Instructional Video not only enables you to teach traditional classes Commodore , and get better results than traditional classrooms . for this Flip class can change a one-to-many teaching in a traditional classroom to a one-to-one teaching based on instructional video , so students can Learn rhythm and progress independently .

3.3.3 break through traditional classroom restrictions on the cultivation of creativity in time and space the contradictions between traditional classroom teaching and individual differences not to be avoided

free of , New curriculum reform and modern information technology integration advocates Autonomous , Collaboration , probing Modern education concepts such as ,advocating student creation New thinking and creativity , Flip class time to teach in class from class to extracurricular , keep students in control of learning rhythm , and borrow Help the teachers to master the basic conditions of students ' learning before class condition , Better design classroom activities ; Free Classroom Time between ,Interactive and exploratory learning for students , culture Critical Thinking peacekeeping innovation .

3.3.4 optimizes the teaching process based on learning goals Flip Classroom break through the time limit of traditional classroom teaching , more

Fast and better implement learning goals . in the Cognitive field Education goal category Learn theory , bloom divides the field of knowledge into 6 layers Times : recognizes, To understand , Apply , parsing , Consolidated , Evaluate [6] ® All . from recognition to evaluation , Learning becomes more difficult . Traditional School education , passalways turn "" to " " and " Understanding " These less difficult links are placed in the class () apply , parsing , Consolidated , evaluate these difficulties The Larger link is placed outside the classroom by the student . and in the Flip class teach , Students complete the lesson by watching instructional video after class learning (pre-class learning differs from pre-class preview , Learn to have a system before class and Drill-down , Learning before class should reach or exceed classroom speaking to teach effects that can be achieved . simultaneous , students can go online Instant chat anytime and anywhere interaction , in class carry out more in-depth exploratory learning . class , teachers can give give students more help and guidance .

3.3.5 Accept the organic combination of learning and inquiry learning , complement each other

Extracurricular learning through instructional video is an individual who has studied Pass , Fit accepted learning ; Classroom Learning is a collective learning process , for Exploratory learning . Flip-class with accepted learning Special sign , with exploratory learning properties , is an accepted learning and probing Learning organic unification . in

flip class , accepted learning main Implement , with quick by watching instructional video , System , side benefits , deficiencies are detrimental to critical thinking and innovation Force training . Exploratory learning is good for developing a student's critique. thinking and innovative ability , A combination of both to achieve complementary advantages .

3.4 Flip Classroom teaching model to teachers ' revelation

3.4.1 student self-study is key , Teacher guidance is guaranteed

The final foothold of the teaching process is learning , Good learning effects bad depends largely on individual initiative , Initiative and self-consciousness To play , Flip class can fully motivate students to learn the positive Sex and initiative , Also help to cultivate students ' autonomous learning and Time management Ability , Develop good learning habits , is most critical in favor of the The cultivation and improvement of students ' critical thinking and creative abilities . of course Flip class also under Teacher's guidance , probe-style in class Learning and group participation discussions all require a teacher to give positive association Help , , guidance and troubleshooting , So the teacher's role is not to drop, but more Add important .

3.4.2 The key to developing innovative ability is to inspire enthusiasm for learning and initiative thinking habits

interest is the best teacher , interest can make learning a Fun , and inspire the desire for success and the discovery of a task delight . to make the creative ability in the student's individual mental work , on Group collaboration and interaction , thinking and discussing in inquiry-based learning Process continuously improve , become a habit .

3.4.3 students have the right to choose learning content and ways

Traditional Teaching mode deprives students of their own choice of learning content and way of power , student subjectivity and motivation hard to play , The effect of teaching is predictable , under new education concept , teaching should be done with to NCLB and aptitude , the core point is to explore the students ' long and advantages to guide and harden , Become a person in some areas of specialization only , Students choose their own learning content and mode that is, students from their own actual departure , to discover your potential in combination with individual interests and strengths effect , so should be guided and encouraged .

4. The way to implement an autonomous learning education model

revelation from the flip classroom , combined with the new era of higher education Education new features , build teacher-led , Student as principal , new teacher-student relationship , Develop learner autonomy , raising students thinking and innovation capabilities , Try the following: .

4.1 Building a new practice teaching system , Strengthen practice ability training

Practice is the that teaching must follow , has been proposed : know not as good as the , Learn about the line. . line , Ming also . practice "" is exercise student creative ability , Important means of exploring new knowledge , can to enhance the cultivation of practice capabilities from the following three aspects .

4.1.1 Increase the proportion of practice teaching

You can adjust the proportion of traditional course hours , many currently universities have begun to reform in this area . , For example guarantee each specialty Practice Teaching credits , Increase the amount of teaching hours in the practice session . " Ministry of Education " and other departments on further strengthening the practice of educating people in colleges and universities comments [] , " high " School combines professional characteristics and talent training requirements , Increasing practice teaching specific Gravity .

4.1.2 encourage students to join teacher research teams and participate in research projects

Actively create various conditions for students to participate more in social life

dynamic and scientific activities , For example encourage undergraduates to participate in a teacher's research project ,, join scientific team , Research Frontiers of Science and technology and economic and social development hot issues , to make them grow in practice. , School to mention The is guaranteed for certain scientific research expenses .

4.1.3 actively explore the schools and enterprises to jointly train the talent model

Schools and enterprises unite to train talents is the theory with practice , Culture effective ways to foster students ' ability to apply practical skills . School with Enterprise Horizontal cooperation or CO -construction Engineering Practice Education Center ",ensure undergraduates more than six months in enterprise learning and exercise , Graduation and dissertations can also be to work closely with enterprise practices and internship projects , by Enterprise the experienced master to the student "" Mentoring "" guidance .

4.2 Implement personalization , Open Teaching mode

Implement personalization , Open Teaching , Schools and teachers to invest in More resources and effort . for example some colleges and universities for students "tailored " culture scheme , Curriculum and teaching management system , taking small classes , Mentor and other forms of targeted training , for academic research typeapplied , features such as the combination of talent , To build all kinds of innovation ben , Intensive classes meet different individual learning needs .

4.2.1 Develop culture goals as required

Reverse design based on internal and external requirements , is required by Find a culture goal , Decide graduation requirement by culture goal , and then theGraduation Requirements Determine course system . reverse design , forward implementation , " inside outside demand is both a starting point and a destination , tomaximum guarantee consistency of educational goals with results .

4.2.2 target-oriented design course system

as described earlier , Requirements determine culture goals , culture goals throughout in culture always , course system settings , Learning environment and support for culture conditions , The faculty is equipped to ensure The implementation of the culture goal .

4.2.3 reform teaching mode by Ability

A course system that is designed to reverse the requirements of graduation requires that the Course teaching to achieve , including theory teaching and practice teaching , - Classroom and second , Third Classroom combination . Change Teaching Concepts , with teach "" to center to " " Learn "" Center , Guide to Learning to . The centers the knowledge system toward the ability to reach the center . reform teaching methods , Conduct research , participate , teaching models such as projects style ,extend teaching content in time and space from class to class extension , makes the student truly the master of learning . emphasis on the second classroom building set , Increase Engineering practice teaching Input , Strengthening integration with industry , Strong To Develop students ' engineering practice application abilities .

4.3 To establish teacher-inspired guidance , Student participation in teaching

Mode

4.3.1 to help students break the cult of authority

Establish a new type of teacher-student relationship of equality and mutual respect , to help students overcoming an obstacle , is worship of authority . Here's the right the Granville refers to teachers and teaching materials . old saying " do not book as far as no books Let students be skeptical and critical The Spirit, So the autonomy of the student , Creative and independent thinking is a qualitative leap. .

4.3.2 Teacher's guidance is in place without offside

knowledge should be a student's learning , Instead of a teacher pouring in ,, students ' abilities and qualities are also exercised by themselves , instead of The is a teacher-given . based on the fact that , education most taboo forced inculcation cramming education , education needs students to teach themselves . Yukon , is usually saidgrant to fish " less than " the " " is granted for fishing .

4.3.3 enable students to participate substantially in teaching activities

to enable students to participate substantially in teaching activities , teaches before class The teacher is considering designing his own teaching process , when teaching session , must to consider students ' learning activities at the same

time , Schedule students in advance when necessary preview or prepare before class ; break a student's main move think or start a study discussion , encouraging students to participate in classroom teaching , Teacher supervision and evaluation of teaching ; Students should respond to questions after class expand after class review consolidate , and feedback to teacher in time .

Improving Education Quality is a system engineering , Is by no means work also non __ Human force can be , in the current education situation , Information Extension and application of technology to change the traditional education mode opens the One door , the new educational model represented by flipping the classroom passes near ten year practice check , The idea has been accepted by people .

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