



Research on the strategy of teaching mode reform in vocational education under the condition of intelligent learning

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Abstract: Intelligent Learning environment based on information technology provides the basis for change in learning and teaching . analyzes how teaching approaches change in a smarter learning environment potential , indicates that the characteristics of new learning and teaching methods are learning-centric , Mixed Learning and cooperative learning . Research on new learning style and teaching pattern construction investigate and propose policy recommendations , to provide specific policy guidance for teaching mode change practices .

Keywords : Industry-only education ; Smart Learning Environment ; Teaching Changes ; Learn-centric ; Hybrid Learning ; Cooperative Learning

Learning and teaching changes in information technology support the Department of Educational Informatization key . Intelligent Learning ring based on information technology [¹], refers to a perceptual learning scenario , Identify learner characteristics , provide appropriate learning resources and convenient interactive tools , Auto-remember Record learning process and evaluate learning results , to promote learner effectiveness The Learning place or activity space for is . Smart learning environment enables integration of physical and virtual environments , to better provide Learning support and services adapted to learners ' personality characteristics . This article is the analysis on the characteristics of new learning and teaching methods under the Intelligent learning Environment , and proposing strategies for learning and teaching changes , for education letter to provide targeted policy guidance .

1. Strategies for changing students ' learning styles in a smart learning environment A Little research

Human-goose-stepping Information Age , in the broad view of network culture Nonaka Create a new era of people-oriented digital survival , message Web Course popularization , mobile software identification , translation Intellectualization apply , something to ask Niang study habit , highlights the Internet + Learning styles are changing dramatically . Traditional learner 's Emphasis on student acceptance of knowledge and independent completion of tasks , is a kind of passive , accepted , closed Learning . with the Mooc and other forms of learning platform gradually adding people to students ' virtual learning Environment , greatly enrich students ' learning style . new -style learning ways to emphasize students ' constructive and cooperative study of Knowledge , is an active , found , Cooperative Learning methods . based on The Information Technology Intelligent learning environment helps students understand transformations , so that it adapts to the new learning side type .

1.1 features of new learning styles

1.1.1 Learn-centric . Information technology has a profound effect on learning and teaching engraving effects , New learning style that highlights the status of students isappears , includes exploratory learning , problem based learning , based on any study , Group Cooperative Learning and personalized learning new from main learning .Learning as a center "" Learn with a clear Innovation-creating learning directions and Goals , Use all kinds of information learning tools , Leveraging various learning resources and platforms , good self Reflection , to correct and optimize your own learning behavior .

1.1.2 Hybrid Learning . The so-called hybrid learning is to combine the advantages of the traditional learning styles with the advantages of networked learning , that is,, Play instructor-led , heuristic , Monitor teaching past The

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leading role of the process, also fully embody students as learning process main initiative, Initiative and creativity.

Hybrid Learning integrates traditional classroom teaching with online learning up to schedule, Solve traditional learning challenges. the package includes learning activities that provide extensibility for some students, for students for More Feedback, to help students complete practice assignments, even Promotion Group, Learning Exchange within classes.

1.1.3 Cooperative Learning. New Learning style focus on cooperative learning, Create a learning organization in team learning. The Learning organization is a A expertly created, Organization for acquiring and passing knowledge, at the same time, is also good at correcting its own behavior, To accommodate the new knowledge and seesolution. Cooperative Learning enables students to turn passive learning into active parameters and, Develop a spirit of cooperation, Innovative and communicative capabilities.

1.2 Strategies for learning how to change

1.2.1 developing students' digital learning capabilities. in wisdom learning ring border, Real-world space is intertwined with virtual space, Information technology inChange the way students learn, Also on students' learning quality and learning results higher requirements, Making digital learning and innovation gradually become a key factor affecting the competitiveness of the information society. number Learning and innovation refers to individuals who pass the assessment and choose the common number word-processing resources and tools, Managing learning processes and learning assets effectively source, creatively Troubleshoot problems, to Complete the learning task, form The ability of innovative works.

higher vocational students' critical thinking ability is less than, in Great data times vast information resources, How to choose from Develop what you need to learn, require students to have a certain Information Awareness, to keenly perceive information, correctly judge information, mention High ability to solve problems with information. suggestion Reference "" Vocational education Health Universal Information Technology application capability standard [2], promote student's letter Interest and information technology, to accommodate learning in the information Age and Life. where, connotation of information literacy includes access to information Ability, ability to learn and communicate, Civic Ethics, Emotion, legal meaning Social Responsibility.

so, you need to improve your students' digitization from the following three aspects literacy.

(1) in a digital environment, can proactively take advantage of numbers Resources for learning and innovation activities.

(2) can play the advantage of a digital learning environment, has policy to reduce the limitations of digital technology applications. for students to develop a goodnetwork Learning behavior Practices, The practice of the in Singapore is worth borrowing check. The Singapore Ministry of Education has established the " Network Health Framework Plan ", Guide Schools to implement their own network health plan projects, and make Measures instruct students to complete self-management in the network learning space.

(3) enables collaborative learning in a digital environment, and the Learning Guy sharing knowledge, Develop innovative habits.

1.2.2 Building Personalized Network learning space. Network learning space high -end form of intelligent learning environment, is based on the student's personalityDevelopment as the core goal, to provide students with the virtual wisdom of learning hui environment. from the consumer's perspective, This environment provides all student-related (resource, tool, and so on) all appear in the available, to help students develop further studies XI. This wisdom comes from the data on student individual information analysis and related large data analysis results.

Is based on this, proposes a network learning space from the following three areas Construction Recommendations.

(1) to maximize the Unicom value of network learning space. will Network Learning space Complete Connection class, Campus, Family and community Important carrier, to support collaborative communication between different roles, Mutual assistance and other learning XI Community Activities. space-based hybrid learning, unicom line down,

Reality vs . Virtual, inside and outside the classroom and outside of the school Learning activities , Different learning places are seamlessly formed through space for learning environment . through data exchange , Learning Community etc path , Implementing dynamic interaction with external environment .

(2) enables personalized learning based on large data analysis . from [number [] on-- [] Word toward Data is important for network learning space construction direction. with the development of data acquisition technology and its application in the field of education , Network Learning space will persist during run , Real Time collection to finer , all , Better education data . pass number According to mining , Learning Analytics provides services for personalized education , pass Precision Learning Resources Services Push , learning tools recommended and Learning Activity Design , Personalized Learning Results diagnostic evaluation and anti- Feed and Learning Path guide ,Implementing personalized applications and Tubes reason . to enable students to adjust and improve in a timely manner, effective support student Develop on-demand learning anytime, anywhere , Let each student have more " get feeling " "" Growth , and implement comprehensive and personalized hair show .

(3) focus on the learning status of space learners , Perfect Network science Learning safeguard mechanism . instructs and dynamically tracks learners ' learning-like states, Establish a system-complete personal Learning profile . to establish a learning assessment and feedback mechanism based on the null , Learning Incentive and boot mechanism series of network Learning guarantees .

from the learner , Personal Network Learning space challenges Learning Learner's ability to learn , especially learner's ability to recognize , decision Ability , associative ability , Reflective Capabilities , High- order capabilities such as collaboration capabilities and autonomy , subjective affective factors such as positivity , for learning effect to critical role . face new information , learner to actively screen Select , Insight the relationship between different concepts , between the new and old knowledge join .

1.2.3 Building Accessible Network practice Communities . Smart Learning Environment Primary Learning Resources , Smart Tools ,, Learning Community and teaching community four elements make up . Learning Community and teaching under intelligent learning Environment The community is interconnected . Learner's knowledge construction is a Result of the the The body constructs and the community constructs together the effect . The purpose of the Learning Community building is to encourage frequent communication between learners , To each other flow . Teaching community can be difficult for learners to learn hard to provide support .

for Learners , to be good at cooperative learning , Both pay attention to the connection between the two. , also pay attention to with the teacher , with Home long between , connection to society . to create learning and behavior culture , for Unicom learning , Building information in a flexible way net .

2. Strategies for the transformation of Teacher's teaching model under the Intelligent Learning environment A Little research

In recent years , with wearable devices , ai , 3 D To print New technology development , Integration of information technology and education increasingly tight , under Intelligent Learning environment based on information technology , teaching mode is great Change .

2.1 features of new teaching mode

Change in the teaching model of information technology Support as a knot construct change , moving to learner-centric " mixed teachings Learning " " Teaching Integration " Trend Development .

2.1.1 Teaching mode to Learner-centric Transformation . wisdom learning environment , Flip Classroom To move the information technology forward , creates a humanized learning style , is learner-centric teaching mode Typical delegate . and Problem solving class , Game Learning class , Cooperative Inquiry class etc , also show Learner-centricfor Typical case .

2.1.2 Mixed-mode teaching innovation Education Revolution . mixed teaching Learning mode is a truly personalized educational pattern , It is concerned with to pass knowledge at the same time , focus more on Discovery

and Discovery . current , the Consensus of the International Educational Technology Community is , only face-to-face teaching with Network teaching combined , to complement each other , to get the most Good learning effect .

2.1.3 Teaching mode highlighting Teaching is integrated . " teaching to do a format" Teaching Mode , working with classroom and training integration close , guide students to autonomous learning , Experiential Learning , to have students in secondary school , in experience secondary school , to reach the organic knot of Theory and practiceclose .

Information technology is Teaching is integrated Implementation of teaching mode provides strong support , virtual reality and augmented reality space , number The Lab Professional experience Pavilion digital venues , embodiment Pro text down , provides an interactive experience that conforms to the authenticity of the professional process ; emulation Practice Training Platform Support Practice training procedure , reaching pre XI , Hardening , Mock Assessment , Trial and error and explore the purpose of innovation .

2.2 Policies for innovative teaching mode

2.2.1 builds with Learner-centric Teaching Mode . launch Flip class , Micro-lesson , mu class Learner-centric New Teaching Explore Applications . to flip the classroom for example , teaching mode The design is three modules in the first lesson of the lesson . front , student Watch instructional video early , based on teacher's Autonomous Learning either Bill Learning from custom progress , same time , Teachers Learn about learning difficulties confused students give personalized guidance in due course ,enables autonomous learning to have any service , have evaluation , has a target , Effective ; classrooms become students classroom do job Seminar or experiment site , The Instructor passes the Learning Management flat table " in-time discovery learning perplexed students , and give it a one-to-one immediately guidance ; after class , Exchange Discussions , Evaluate and expand .

2.2.2 A hybrid teaching model based on web-based learning space . (1) Prepare for Work : Course Resources development Policy . Mini class , more Media Courseware ,Special Learning Web site , Network Course and simulation practice Training platform etc with its rich information resources , flexible Interactive features , increasingly applied to the information technology environment Learn vs . Teaching "" . Resource development to be in the base of instructional Design Foundation . First is the analysis ,for learning needs , Learning content learner Analysis ; Second is design , including writing learning subscript , determine teaching resources , teaching policy , writing teaching Process , design test questions key Links ; and finally developing , includes making instructional vision frequency , Mini class , test questions and many other forms of teaching resources , and collects Related network resources , including excellent jobs for previous students , experiment , send cloth on online teaching platform , for students to download learning . (2) space Construction : Network learning Space Design policy . Network learning space ^[3] , Includes learner- oriented learning space ,training for teachers null and management space for managers . where , Learning space principal is learner , under clear learning goals , learner support with tools ,Community collaboration and compliance responsibilities with related rules , will pass the knowledge outside of the classroom , within the knowledge in class . , in the knowledge transfer , learners See Learning interface , to explicitly point to learning goals , Learning Guide and media Resources , Media resources The source can be the system according to learner learning behavior characteristics Analysis and a with selection . to ensure that the learner's vote is , also need to set the test Anchor Point ,Monitoring learning attention during learning , on learning Quiz The student's learning effects after the end . other , in this link , Learn survivor can help teachers answer ,Exchange with classmates and other activities . (3) Teaching Implementation : blends based on network learning space teaching mode implementation policy . blended teaching mode is the new teaching mode of wisdom learning environment . Instructional implementation process design the following three links . ① Pre-session learning Check . on the one hand , students explicitly teach Learning Objectives and task requirements , Learn teaching resources as required , can also be Gather other related resources in your own space to learn , then Test , You can also learn from teachers and students during this period Learning Exchanges ; on the other hand , Teachers focus on students learning dynamic and timely Troubleshoot , View student test results , to analyze questions raised by students , Find difficulties , Optimizing teaching Activities . ② Lesson Resolution . one aspect , Teachers Organize classroom activities , Guide students to apply what they have learned Knowledge resolution ;

On the other hand ,students actively engage in group exploration learning , actively sharing experience , Exchange results . ③ after-class evaluation total knot . on the one hand , Network learning space can manage each student's learning behavior , like hits , Exchange Statements , Online time , teaching division can discover points of interest in students ' learning , Difficulty , can be adjusted in a timely manner the content and manner of the entire session ; On the other hand , Web Learning space with for multiple evaluation methods , Includes summative assessment and formative evaluation , Formative evaluations through group project completion and student performance in class (student self-assessment and peer review) giving results , where , Online peer review requirements clearly identify the problem and give the improvement See . through evaluation ,reinforces students ' understanding of what they have learned and Bring them a sense of achievement .

2.2.3 Build Teaching is integrated Teaching Mode . based on internship training platform Teaching Integration " teaching mode is " teaching integration " Typical representative of the teaching mode . (1) preparation : site Preparation and task development . Internship site and Internship task is " teaching Integration " prerequisites for implementation of the teaching mode . task's edit row recommended from engineering practice , is close to industry reality . by writing Integration text , design Case Integration Courses Resource development . (2) platform design : The setting of simulation practice training platform count policy . ① to support internship training process ,up to pre XI , hardening , mock evaluation , trial and error and explore innovative purposes ; ② to emphasize the internship organization , emulation of business rules and business processes ,. (3) Teaching Implementation : Use a variety of teaching methods , Promote integration Teaching . such as task-driven and project-oriented pedagogy ,make learning live on the basis of familiarity with the business that they undertake , promote related professionals integration and linking of Karma , Thus improving the overall quality and ability of the .

3. Epilogue

Smart Learning Environment , Information Technology and teaching depth fusion , at the same time as the teaching method has undergone profound changes , also proposed New Issue . such as : How to guide students to actively participate in course line learning ? How to prevent students from appearing online learning bad learning line to ? This requires research teaching , Learning behavior Management policy , through the Collection and analysis of data , Dynamic observation of students throughoutthe Course always , to monitor students ' learning behavior , and from to better optimize teaching strategies , Promote teaching effectiveness . at the same time , mentionout of teacher training development policy , is also the change of teaching mode The guarantees .

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