2021 IEEE 3rd International Conference on Computer Science and Educational Informatization (CSEI 2021)

Xinxiang, China
18 – 20 June 2021
## Contents

Research on the Cultivation of Scientific Research and Innovation Ability of Computer Specialty Postgraduates in Local Universities.................................................................

Lang Li, Qiuping Li

Achievement Degree Evaluation Method of Operating System Course Targets Under the Background of Engineering Education Accreditation............................................................................

Fan Zhang, Xinhong Zhang

Online and Offline Hybrid Teaching Mode on Computer Course under Medical Background..........................................................

Jie Chang, Kezhong Lu, Qing Bao, Tingting Wang, Yuting Liu, Shangzhi Zheng

Research on Flipped Classroom Model of Information Technology Based on Online Teaching System........

Fuzhen Hu, Xiaodong Wang, Peichao Jiang

Research on the Architecture of Smart Campus System Based on Data Middleground in University........

FENG Yong, CHEN Wen, ZHANG Yan, YU Guo Tao, LIU Yao, XU Hong Yan

A Solution of WebRTC-based Interactive Smart Classroom for College Teaching...................................

Xiaohui Li, Yufeng Yan, Yajie Ma, Min Zhao, Feng Dan, Wenli Feng

A Review of Embodied Learning Research and its Implications for Information Teaching Practice..........

Wenhao Zhang, Zhixia Chen, Ruibin Zhao

Management and Practice of International Science and Technology Innovation Cooperation Driven by Big Data.................................................................

Ziyu Li, Xiaoping Ren, Yunyi Shen, Xinliang Zhang, Yun Yang

Construction of an Output-Oriented Teacher Evaluation System based on Normal Professional Certification..

Lilin Fan, Siqi Ye, Yu Wang

Analysis of Students' Learning Behavior under Network Learning Environment........................................

Zeping Wu, Bo Zhao, Yong Wang

The Research on the Influencing Factors of Students' Advanced Mathematics Score Based on Hierarchical Multiple Regression Model.........................................................

Bin Wang, Yong MingYao

Exploration on Cultivating Innovative Ability of Graduate Students by Teaching Lightweight Block Ciphers....

Qiuping Li, Lang Li

Evaluation of CET-4 and CET-6 Courses on Online Learning Platform............................................................

Shi Hongjian

Research on the Characteristics and Mode of Online Teaching in Colleges and Universities During the Covid-19 Epidemic Based on CiteSpace............................................................

Mingli Lu, Yatao Li

User Model Construction of Chinese Learners Based on Learning Style.....................................................

Shu Wang, Lingyun Yuan, Hongzhi Yang

Construction Mode and Application of Business and Tourism Service Specialty Group in Higher Vocational Colleges Based on Big Data Information Flow..........................................

Jie Yin, Ren pu Li, Yuan Luo, Shan shan Cheng

A Computational-thinking-oriented Progressive Teaching Mode for Python Course.....................................

Haodong Ren, Li Yang, Liheng Jiang, Yu Bai, Wei Lu, Jie Chang
Construction and Application of Knowledge Graph of Teaching Arrangement for Cross-disciplinary Majors...........85
Wang Panpan, Lin Jinjiao

Analysis of College Students' Cognition upon PE Study and Their Physical Conditions During the COVID-19 Pandemic Era.................................................................89
Zhang Ying, Xu Wenya, Liu Ruiqing, Xu Shujie

Automatic Generation of Chemical Auxiliary Graphs Based on GDI+.........................................................94
Silun Chen, Shunqing Lin, Dongfeng Liu*

Research on the Construction Method of Knowledge Graph for Power Grid Education Resources..............99
Yajie Ma, Doudou Hong, Feng Dan, Xian Yang, Xiaohui Li

Application of a Hybrid Curriculum based on MOOC+ SPOCs in the Teaching of ‘Medical Data Processing and Its Implementation in MATLAB.................................................104
Jiarui Si, Hong Guo, Ting Si, Yin Yuan, Tao Zhang, Lizhi Hu, Weimin Deng, Xiaoxia Li

MSK A Grade Mining Method for Second-Class Based on MeanShift and K-means..................................109
Yao Dong, Yongfeng Dong, Jin Shi, Yahan Deng, Shaoyuan Pang

Impact Analysis of College Entrance Examination and General Education on Graduation Achievements......115
Jinguo You, Zixuan Hu, Xiaoli Zhang, Shuxing Zhao, Guifu Zhu, Wei Xu

Influencing Factor Analysis of Teacher Teaching on Non-main Subject Grade in Primary School..............121
Jinguo You, Jingwen Xu, Xiaoli Zhao, Hexian Yin, Mengni Pan, Xia Li

Exploration and Effect Evaluation of Teaching Reform of Big Data Course Oriented by Professional Application.................................................................127
Mingyou Liu, Yingxue Zhu, Li Li

Development of Virtual Simulation Experiment Driven by Project Data for Online Teaching and Impacts on Motivation and innovation Under 2019-nCoV.....................................................135
Jianhua Wang, Jiandong Duan, Junpeng Ji, Mengying Hu, Jie Li

STL Performance Experiments and Analysis in Undergraduate Data Structure Course..................................148
Chen Jierui, Su Fang

Research and Practice of Blending Teaching of Database System Integrating Ideological and Political Theories.................................................................153
Jinyang Yao, Fudong Liu, Junchao Wang, Bo Zhao, Zheng Shan, Peng Xu

A debugging-assisted Code Recommendation Method based on Knowledge Graph in Programming Course 157
Qing Du, Wei Zheng, Yongjian Fan

Research on Course Quality Evaluation System Based on Artificial Intelligence...........................................163
Li Yongquan, Wang Yanqing, Song Xiankun, Cheng Xinyu

Overview of Mobile Learning ..................................................................................................................168
Liang Zhiyong, Wang Yanqing, Huang Longfei

Challenges and Solutions Faced by Blockchain in Education Informatization.............................................176
Zhao Xu, Wang Yanqing, Cheng Xinyu and Wu Shihua
Analysis on the Application of Data Mining Technology in Wisdom Teaching...........................................181
Xu Chuang, Wang Yanqing, Sheng Ruyu

Discussion of the MOOC teaching method for postgraduate “Mathematical Basis of Information Security”.....186
Guodong Ye, Yuanju Gan, Qixiang Mei

Research on the Classified Teaching and Evaluation Mode of Computer Organization..............................191
Yingying XU, Ying Chen

Exploration of Research-Teaching Cooperation based Talent Training Mode in Application Oriented University.................................................................195
Ying CHEN, Ying-ying XU, Song-song DAI, Xiao-ming ZHAO and Wen-ping GUO

Analysis of User Behavior of Libraries at Home and Abroad Based on Citespace.....................................199
Yanli Pan, Tianwei Xu, Juxiang Zhou

Rethinking Engineering Education in Undergraduate Colleges and Universities......................................205
Zhao Xu, Wang Yanqing, Wu Haoran

Design and Implementation of Teaching Case Library for Novice Science Teachers based on App Inventor.....211
Jiamin Wang, Min Xie, Xianghong Zhang

Research on the Physical Fitness Test Results of Vocational College Students under Vocational Physical Education.................................................................221
Shen Yongji, Xu Wenya, Liu Ruiqing

Research on Evaluation of Teaching Skills of Normal Students Based on Text Mining Technology ——Take Information Technology as an example.............................................226
Binjie Wang, Min Xie, Ji Ma

Construction of Teaching Behavior Model of Information Technology Pre-service Teachers Oriented to Video Understanding.................................................................236
Binjie Wang, Min Xie, Xiaotong Hao

Towards Ubiquitous Knowledge Management: Design and Adoption of a Cloud-Based Dynamic-Video-Note Service for MOOC Platforms...........................................243
Yue Qian, Tianjun Wu

Exploration and Practice of Ideological and Political Construction of Software Testing.............................249
Rui Ding, Yao Sun, Yan Zhang, Yuxuan Xin

Research on Summative Self-assessment and Formative Assessment for Big Data General Course............254
Xinchuan Fu, Shifen Zhong, Zhongxiu He, Jianmei Tang, Honghong Chen, Dongmei Wei

The Application of Metacognition Theory in MOOC..................................................................................259
Jingyi Hou, Peng Deng

The Research on Online Learning Behavior based on Multi-source in University Courses......................263
Jing Chi, Bo Zhao, Yong Wang

Analysis of Knowledge Map of Online Educational Resources in the 21st Century..................................268
Xinhua Huang, Juxiang Zhou

Application of SPOC Based Online and offline Hybrid Teaching Design in University Computer Foundation.................................................................273
Juan Chen, Yong Wang*, Ying Yang

Research on Face Matching Algorithms for Smart Classrooms.................................................................277
Yang Tao, Xining Huang, Xuemei Ma
Learning Effect Prediction Model fused with Forum Posts Classification .................................283
Xiaoyang Feng, Lingling Mu, Shaowei Sun

Modeling The Dynamic Note-Taking Behavior of MOOC Video Learners via Representation Learning ..........291
Tianjun Wu

A Software Diversity-Based Lab in Operating System for Cyber Security Students............................296
Junchao Wang, Jianmin Pang, Zheng Shan, Jin Wei, Jinyang Yao, Fudong Liu

Research on College Computer-Computing and Information Literacy online course based on MOOC taking the North Minzu University as an example .................................................................300
Zhibao Mian, Yuqing Bai, Rahman Khalil Ur

Computer Practice Course Lightweight Online Teaching Design Based on CSCL ..................................307
Wenyu Zhang, Honghua Zhao, Rui Wang, En Yuan, Yanqin Tang, Yongfen Wu

Research and Application of Computational Thinking on Python Teaching ............................................311
Xuemei Wang, Xuelan Zou, Weifeng Yin, Qingsheng Li, Li Zhang, Liang Hong

Machine-Learning Based MOOC Education Data Analysis .................................................................315
Wei Hu, Yining Li, Tianyi Liu, Fang Liu

Research on Normalization Detection Method of Academic Papers based on Document Rule Tree ........20
Yifei Zhang, Zhezhu Li, Tingting Xie

Group Cooperative Learning Model and Its Application Based on Group Knowledge Graph ..................324
Zhijun Yang, Weilin Pan, Yang Wang

Research on Prediction Model of Endurance Running Ability of College Students Based on BP Neural Network ..........................................................................................................................328
Lei Wang, Wenyu Xu, Ran Wang, Yiqi Ying

Design of Mobile Learning Resources Based on New Blended Learning: A Case Study of Superstar Learning APP ..................................................................................................................333
Xiuming Li, Qianfuo Heng