万方数据

# Contents

Precision and Teaching

04 High-quality Developments in Technology-enabled Education: The Frontiers of Artificial Intelligence, Blockchain, and Robots
*YUAN Lei, ZHANG Shuxin, LEI Min, QIN Ying & ZHANG Wenchao*

17 Cognitive Decryption and Skill Unlocking of Educational Data Interpretation
*LIN Shubing & ZHANG Xuebo*

27 Towards a More Effective Feedback Model: A Perspective of Visible Learning
*WU Shaoyang & PENG Zhengmei*

41 The Lesions and Governance of Online Education in Primary and Secondary Schools
*LI Mang & GE Nan*

50 Survey on ICT Application Development in Basic Education and Strategic Adjustment from an International Comparison Perspective
*DONG Yuqi, BI Jinggang, QIAN Songling, BIAN Jiasheng & QIAO Peixin*

59 Research on Intelligent Education Literacy Framework for K – 12 Teachers
*HU Xiaoyong & XU Huanyun*

71 Academic Performance, STEM Interest and 21st Century Skills: Based on the Mediation Effect Model Analysis
*PU Xiaosong & KANG Jianchao*

85 Research Progress and Enlightenment on Dynamic Grouping in Cooperative Learning: A Literature Review
*ZHONG Baichang & HUANG Shuiyan*

98 Current Status and Influencing Factors of Chinese Pre-service Teachers' Computational Thinking: An Empirical Research on Universities in Tianjin, Hebei, and Shandong
*FANG Min, SUN Ying, CHEN Wei & LV Shenmin*

111 Research on the "Enabling" Effect of Visual Interaction in Artificial Intelligence Education Application
*QUAN Guolong, GU Xiaoqing & WANG Jing*

Beginning and Ending



万方数据

# 目　　录


**开放视点**

二　文　青/ **精准与教学**

**本刊专稿**

04　袁　磊　张淑鑫等/ 技术赋能教育高质量发展:人工智能、区块链和机器人应用前沿

17　林书兵　张学波/ 教育数据解读的认知解密与技能解锁

27　伍绍杨　彭正梅/ 迈向更有效的反馈:哈蒂“可见的学习”的模式

**理论探究**

41　李　芒　葛　楠/ 中小学在线教育病灶与治理

50　董玉琦　毕景刚等/ 基础教育信息化发展的问题审视与战略调整

59　胡小勇　徐欢云/ 面向 K-12 教师的智能教育素养框架构建

**研究报告**

71　浦小松　康建朝/ 学习成绩、STEM 兴趣与 21 世纪技能

——基于中介效应模型分析

85　钟柏昌　黄水艳/ 合作学习动态分组的研究进展与思考

——基于国际文献的系统综述

**教师教育**

98　房　敏　孙　颖等/ 师范生计算思维发展现状与影响因素

——基于津冀鲁三地高校的调查分析

**技术支撑**

111　权国龙　顾小清等/ 人工智能教育应用的视觉交互“赋能”效应研究

**编余札记**

三　禾　风/ **开头与结尾**




万方数据