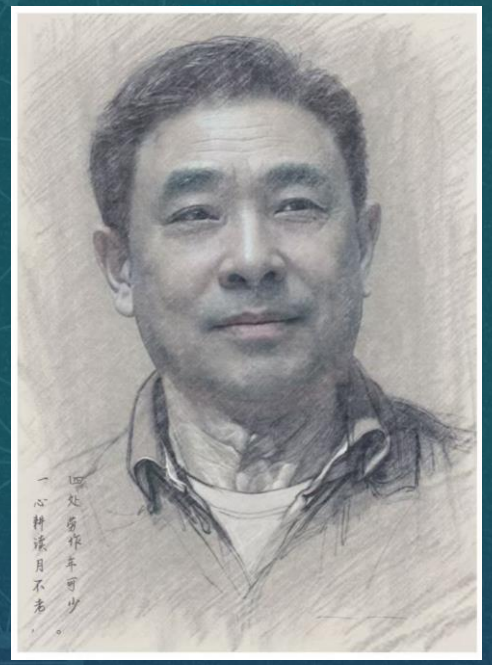
SEAMEO CENTRES POLICY RESEARCH NETWORK (CPRN) SUMMIT 2025

Building Bridges to a Sustainable Future: Inclusive Collaboration and Innovation in Education, Science, and Culture

Innovative practices of national-level digital artisans



Speaker: Zhou Mingxing Professor Doctoral Supervisor

Positions:Deputy Principal of Chongqing College of International Business and Economics
Deputy Principal of Chongqing Telecommunication Polytechnic College

Research direction: Education Theory and Policy

Tel: 18075143635 Email: 1902451109@qq.com

HOSTED BY
SEAMEO VOCTECH
Regional Centre, Brunei Darussalam

SUPPORTED BY
MINISTRY OF EDUCATION BRUNEI DARUSSALAM
Southeast Asian Ministers of Education Organisation
CfBT Education Services
german cooperation
Implemented by giz

IN CONJUNCTION WITH
RECOTwin
BRUNEI MYCE 2025

1
Policy Context

"Vigorously cultivate national-level master craftsmen, skilled artisans, and high-skilled talents."
——Chairman Xi's instructions on vocational education work

"Cultivate high-caliber digital artisans"
——MOE & 4 ministries jointly issued 2024 Work Priorities for Digital Literacy

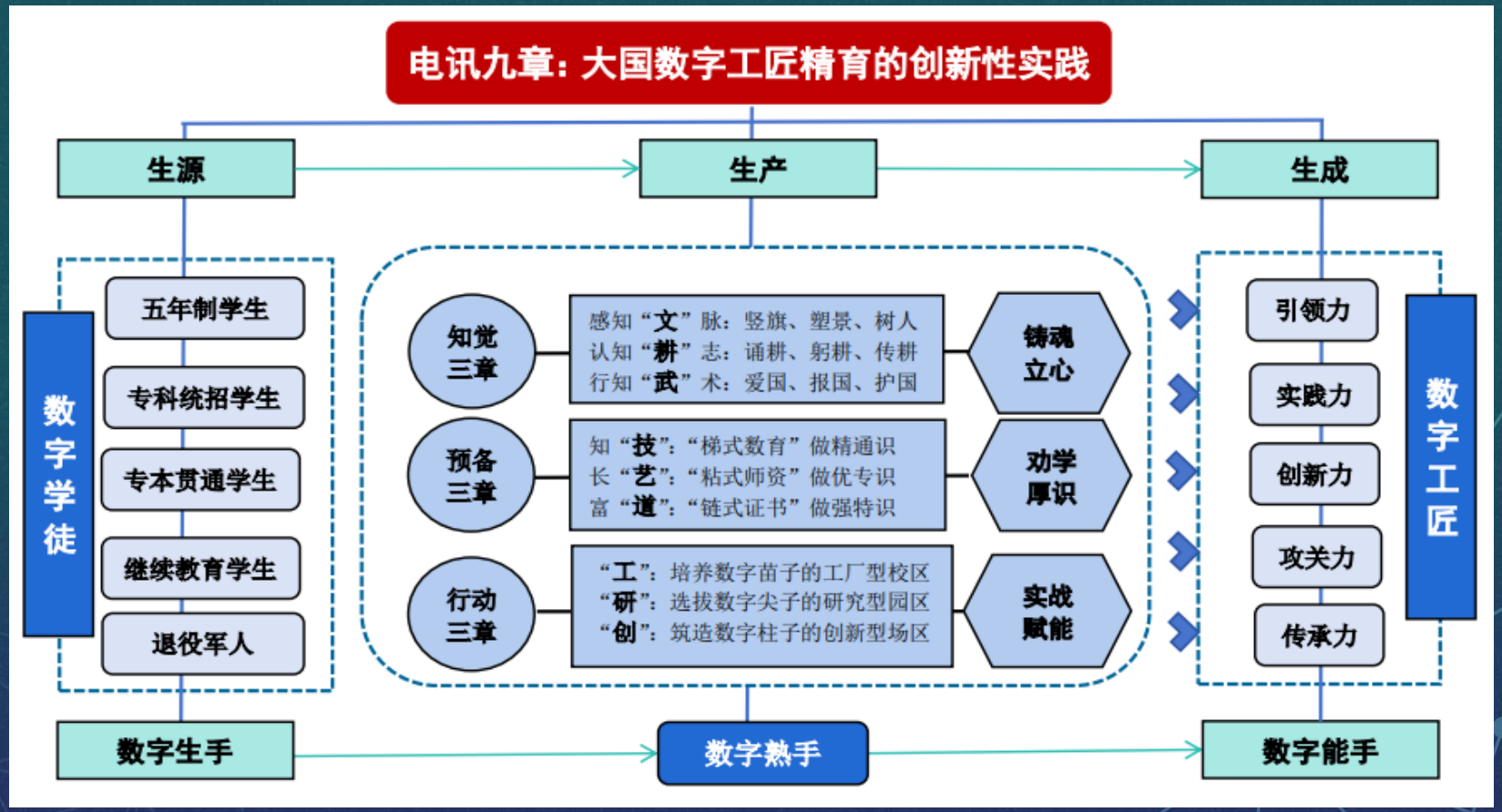
In 2025, the National Plan for Education Power (2024–2035) called for "AI-driven educational reforms."

In response, MOE & 8 departments issued the **Digital Education Acceleration Guidelines** to drive digital transformation as a core strategy for educational modernization and global competitiveness.

Vocational colleges need to "incubate a batch of digital artisans, drive clusters of digital industries, boost local digital economies, and contribute to building a Digital China"!

2
Reform Practice

In the full lifecycle of digital talent cultivation, based on the "student source-production-generation" and "beginner-proficient-expert" dual-helix progression principle, the "Dianxun Nine Chapters" precision cultivation paradigm for digital artisans is implemented.



Summarize a "K-P-A" (Knowledge-Preparation-Action) digital craftsman education and training law, i.e., learn through teaching, prepare through learning, act through doing, forming the "Dianxun Nine Chapters" model of digital craftsmen: "Three Chapters of Knowledge (Culture, Agriculture, Martial Arts) to Cultivate Spirit"; "Three Chapters of Preparation (Skills, Arts, Philosophy) to Encourage Learning"; "Three Chapters of Action (Work, Research, Innovation) to Empower Practice".

知觉三章
（文、耕、武）

预备三章
（技、艺、道）

行动三章
（工、研、创）

(1) Cultivate Spirit: strengthen the moral character of talent cultivation, and enhance digital perception ability

Cultural Awareness： **Launched the "Dianxun Red " digital artisan education brand**.Set up one municipal-level model Party branch and won two municipal-level Party-building awards.Created the "the Red Boat Square – the Red Army Road" landmark, engaging 23,096 participants.Promoted talent through the "Red Signal – Skilled Artisan" program, recognizing 10 "Spirit Inheritors" and 82 "Young Bud" teachers.。

Cultivating the Farming Spirit： Won 13 municipal-level reading awards through reading, writing, and promoting farming culture.Held spring plowing ceremony, built a 1,260 acres farming education park, planted 25 crop types； Established 5 "Rural Digital Workshops" in towns like Delong, Guang'an, training 850 rural digital artisans.

Practicing Martial Knowledge： Built 12 bases for patriotic education with two immersive programs annually； Co-founded a National Defense Institute with a communications unit, training 1,036 national defense digital artisans； Trained 485 national security digital artisans and completed a major municipal-level project on adapting professional clusters to the Chengdu-Chongqing military industry's digital transformation.

(1) Cultivate Spirit: strengthen the moral character of talent cultivation, and enhance digital perception ability

(2) Encourage Learning: promoting knowledge is key to talent development and strengthens preparation for digital career

"Stepped Education" cultivates "skills". A general education stepped curriculum system of "principles + literacy + methods" is constructed:

Develop 5 digital principle courses such as Nine Chapters on Arithmetic to understand the underlying logic of digital technologies (abbreviated as "5 digital principle courses").

Launch 4 digital literacy courses like Introduction to Artificial Intelligence to optimize the digital algorithm ecosystem ("4 digital literacy courses").

Offer 3 digital methodology courses including Digital Innovation Experiments to enhance digital innovation capabilities ("3 digital methodology courses").

Beneficiaries: 82,051 person-times.

(2) Encourage Learning: promoting knowledge is key to talent development and strengthens preparation for digital career

Faculty enhances "craftsmanship" . A faculty team integrating "academia + industry + AI" is established:

Academic teachers refine "Three Golds": 6 golden majors, 23 golden courses, and 71 golden teaching materials ("6 golden majors", "23 golden courses", "71 golden textbooks").

Industry craftsmen provide "Three Guidance": 1,287 project guidance, 3,400 team mentoring, and 34,100 competition coaching person-times ("1,287 projects", "3,400 teams", "34.1k competitions").

AI teachers support "Three Fulls": all-day online teaching, omni-directional knowledge expansion, and full-process assessment ("24/7 online teaching", "comprehensive knowledge expansion", "end-to-end assessment").

(2) Encourage Learning: promoting knowledge is key to talent development and strengthens preparation for digital career

"Chain Certifications" enrich "competencies". A competency map integrating "academic + vocational + technical expertise" is created:

Reconstruct the "culture + skills + digital" curriculum system to strengthen academic certificates.

Develop 8 types of vocational qualification standards with HR departments to refine vocational certificates ("8 vocational qualification standards").

Independently formulate Digital Craftsman standards with the China Association of Small and Medium Commercial Enterprises (Standardization Committee) to innovate technical certificates, issuing 10,258 Digital Craftsman Certificates ("10.258k Digital Craftsman Certificates").

(2) Encourage Learning: promoting knowledge is key to talent development and strengthens preparation for digital career

Digital Practice Base

AUTHENTICATION CERTIFICATE
HIGHER VOCATIONAL EDUCATION QUALITY CERTIFICATION
CERTIFICATE NUMBER: GZZLRZ20240012
Chongqing Telecommunications Polytechnic College
Photoshop Image Design
has met the requirements of Chongqing Higher Vocational Education Course Certification Standards (Level 1) and has been achieved with authentication.
DATE OF ISSUANCE: SEPTEMBER 2023
VALIDITY PERIOD: SEPTEMBER 2023 – AUGUST 2029 (CONDITIONAL)
CHONGQING EDUCATIONAL EVALUATION INSTITUTE
CHONGQING EDUCATION EVALUATION CENTER OF THE BELT AND ROAD
HUAXIA EDUCATION EVALUATION ALLIANCE

认证证书
高等职业教育质量认证
证书编号：GZZLRZ20240012
重庆电讯职业学院
《Photoshop图像处理》课程
达到重庆市高等职业教育课程认证标准（第一级）要求，通过认证。
发证日期：2023年9月
有 效 期：2023年9月—2029年8月（有条件）

职业技能等级证书
Certificate of Vocational Skill Level
2021 年 12 月参加物联网工程实施与运维职业技能等级水平考核，成绩合格，核发物联网工程实施与运维职业技能等级证书（中级）。学习成果已经职业教育国家学分银行认定。
This is to certify that this certificate owner has passed the assessment in December 2021, and is qualified for the Intermediate Level of Implementation, Operation and Maintenance of the Internet of Things Project. The learning outcomes are recognized by the National Credit Bank for Vocational Education.
王翔
Wang Xiang
身份证号：5116222002
ID Number
发证日期：2022 年 12 月 14 日
Date of Issue
发证机构负责人（签章）：
Person in Charge of Issuing Authority
考核站点负责人（签章）：
Person in Charge of Assessment Site
查询网址：http://www.ncb.edu.cn
Website of Verification

(3) Combat empowerment: a key part of talent training, boosting digital service capabilities

"Factory campus " trains "digital seedlings". Super factories: Built a municipal software super factory with the Municipal Commission of Economy and Information Technology, totaling six digital factories. These factories trained and educated 4,489 digital talents. **Industrial factories:** Established the Chongqing Modern Communication Industry Institute with China Unicom, and the On - site Engineer Institute with Aviation Information Co., Ltd., introducing factory production lines. **Apprentice factories:** Set up seven master studios, implementing a modern apprenticeship system in a factory - like environment.

"Research" - oriented parks nurture "digital elites". R & D - driven industrial parks: Jointly built an industry - education integration center with "West Food Valley", developing 12 digital food projects. **Research - and - innovation campuses:** Approved for a Chongqing post - doctoral research station, established the Future Vocational Education Research Institute and the New Productivity and Digital Skills Research Institute, undertaking eight digital projects. **Research - and - training campuses:** Leveraged a high - skilled talents training base to win 375 digital skills competition awards.

(3) Combat empowerment: a key part of talent training, boosting digital service capabilities

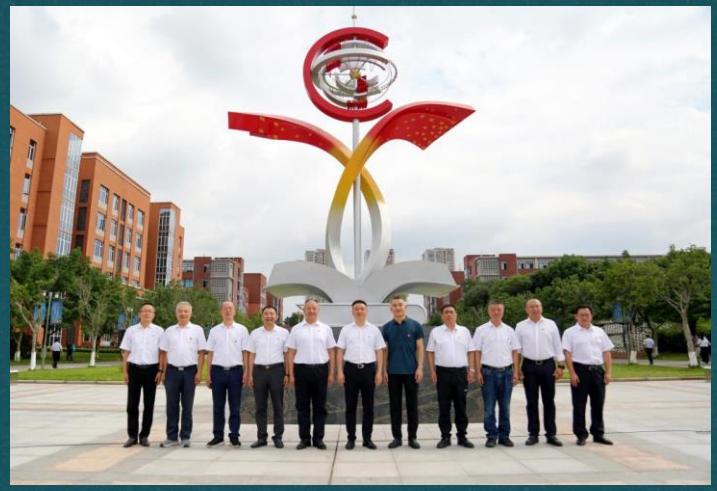
"Innovative" sites build digital pillars. Scientific sites spur innovation: The Huawei Developer Innovation Center in the science city park has launched 356 "Innovate Me" projects. **Incubation sites aid startups:** A college student entrepreneurship platform in Chongqing's Jiangjin District has incubated 128 digital entrepreneurship leaders. **Rural sites boost incomes:** Eight "Wealth Creation Schools" in places like Hechuan District's Xiaoji Town have trained 56 rural innovation craftsmen CEOs, promoting farmers' common prosperity.

(3) Combat empowerment: a key part of talent training, boosting digital service capabilities

3 Achievements

High-level incubation of the "Red Cradle" for digital craftsmen

Develop " Dianxun Red" Party - building brand; establish "Spirit of Red Radio Waves R & D Center"; first in China to honor 10 inheritors of the Spirit of Red Radio Waves



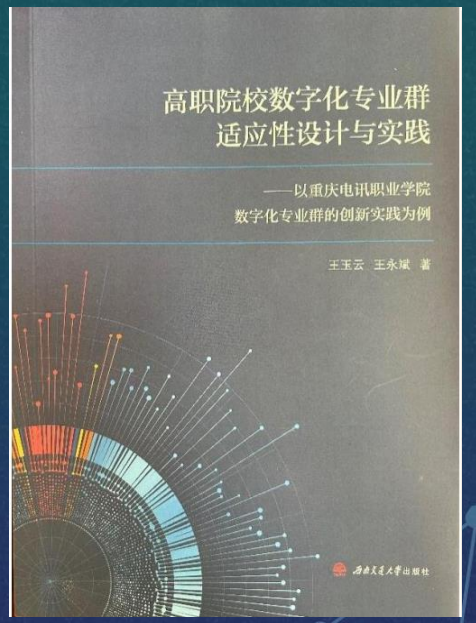
Multi - dimensional efforts build a "high - ground of theory" for digital craftsmen.

22 research projects on digital craftsmen at provincial and ministerial level

5 monographs published

26 core journal papers published

"Challenges and Solutions in Education of the Nation-level Digital Craftsmen" got first prize in **Chongqing's education consulting paper contest.**



A big - picture approach trains "elite educators" for digital craftsmen.

Diverse paths like the "Green Branch Project", "Master Teachers' Studios", "Corporate Mentors", and "AI Instructors" have trained a team of well - rounded digital craftsmen teachers. The team has 2 national model workers, 1 national advanced teacher, 2 national special - allowance receivers, 7 municipal - level skill masters, and 3 provincial - and municipal - level teaching masters.

获奖证书

2023未来设计师

全国艺术设计教师教学创新大赛全国总决赛

一 等 奖

课程名称：非遗苗绣直播设计

参赛类别：媒体设计类

参赛组别：专科组

主讲教师：朱亮

团队教师：王婷，李春燕

参赛院校：重庆电讯职业学院

大赛官网：www.ncda.org.cn

证书编号：HJNCDA202312000030

工业和信息化部人才交流中心

2023年12月01日

重庆市教育科学规划领导小组办公室

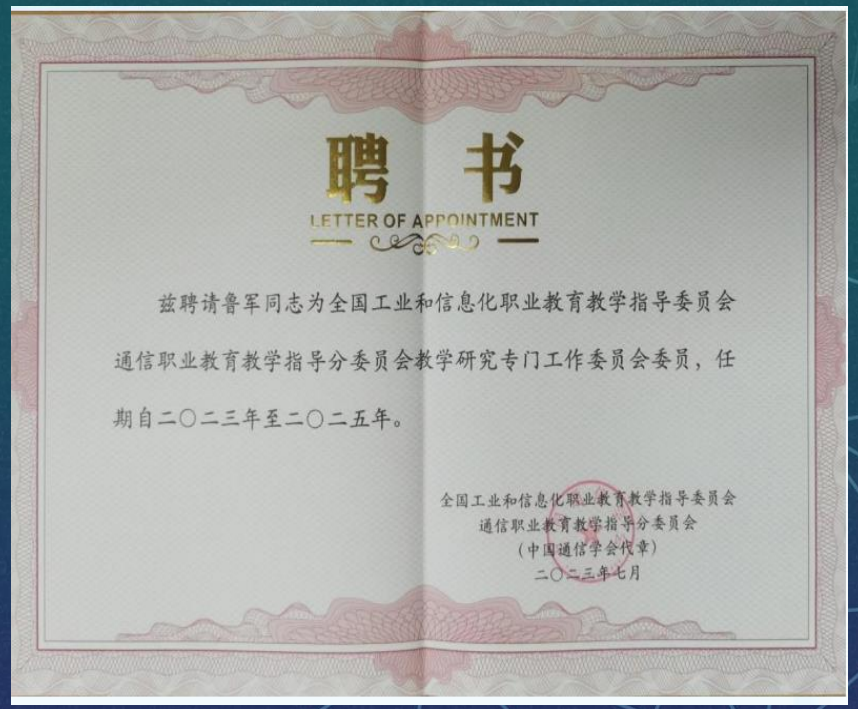
贺 信

重庆电讯职业学院：

全国教育科学“十四五”规划2023年度课题立项名单公布，贵校**周利梅同志**主持申报的“‘三融’框架下职业院校高水平专业群生态系统重构研究”，喜获全国教育科学规划**教育部青年课题**立项，也是近几年来我市民办高职院校的首次获全国教育科学规划课题立项。在此，谨向贵校表示热烈祝贺！并通过你们转达我办对周利梅同志成功立项的祝贺和教师节日的问候！

全国教育科学规划课题是我国教育科学研究领域层次最高、资助力度最大、权威性最强的研究项目，代表了教育科研领域的最高研究水平，也是衡量高校教育科研水平的重要标志。周利梅同志申报课题最终获批立项，标志着其研究主题得到了国家的关注和认可，这是贵校高度重视教育科研的结果，也是贵校教育教学水平的体现。

成绩来之不易，希贵校高度重视全国教育科学规划课题研究工作，科学谋划、精心组织，督促课题负责人扎实做好课题研究。在研究过程中，希与我办保持密切联系，及时通报课题研究进展，配合相关管理流程，确保研究工作质量。我办将组织有关专家，



聘 书

LETTER OF APPOINTMENT

兹聘请鲁军同志为全国工业和信息化职业教育教学指导委员会通信职业教育教学指导分委员会教学研究专门工作委员会委员，任期自二〇二三年至二〇二五年。

全国工业和信息化职业教育教学指导委员会
通信职业教育教学指导分委员会
（中国通信学会代章）
二〇二三年七月

A big - picture approach trains "elite educators" for digital craftsmen.

Many outstanding young teachers have emerged, winning 7 first prizes in provincial - level teaching contests. In 2023, the team gained 1 national youth topic in educational planning, one of 15 nationwide in higher vocational education. Three members were appointed to the Ministry of Education and the National Committee for Vocational Education in Industry and Information Technology.

获奖证书

2023未来设计师

全国艺术设计教师教学创新大赛全国总决赛

一 等 奖

课程名称：非遗苗绣直播设计

参赛类别：媒体设计类

参赛组别：专科组

主讲教师：朱亮

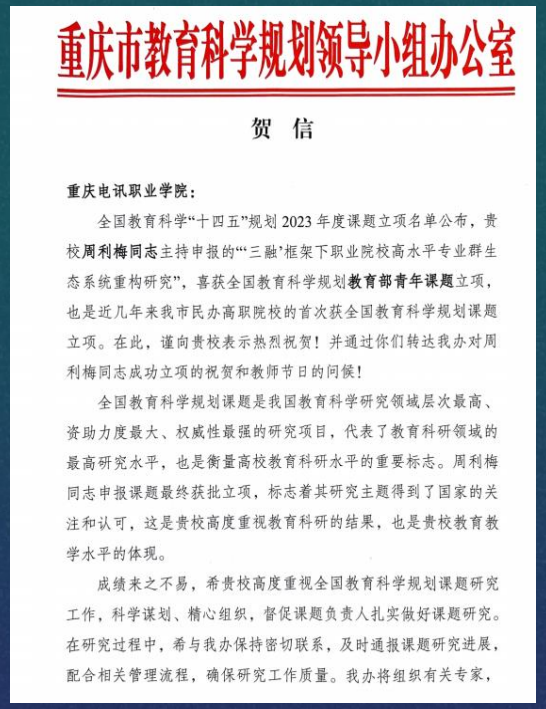
团队教师：王婷，李春燕

参赛院校：重庆电讯职业学院

大赛官网：www.ncda.org.cn

证书编号：HJNCDA202312000030

2023年12月01日



重庆市教育科学规划领导小组办公室

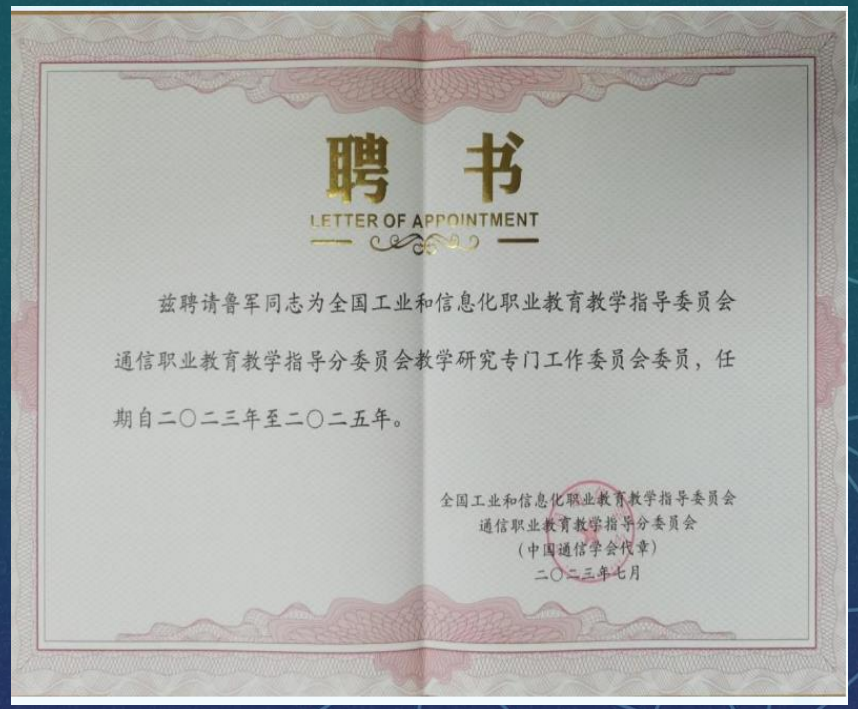
贺 信

重庆电讯职业学院：

全国教育科学“十四五”规划2023年度课题立项名单公布，贵校**周利梅同志**主持申报的“‘三融’框架下职业院校高水平专业群生态系统重构研究”，喜获全国教育科学规划**教育部青年课题**立项，也是近几年来我市民办高职院校的首次获全国教育科学规划课题立项。在此，谨向贵校表示热烈祝贺！并通过你们转达我办对周利梅同志成功立项的祝贺和教师节日的问候！

全国教育科学规划课题是我国教育科学研究领域层次最高、资助力度最大、权威性最强的研究项目，代表了教育科研领域的最高研究水平，也是衡量高校教育科研水平的重要标志。周利梅同志申报课题最终获批立项，标志着其研究主题得到了国家的关注和认可，这是贵校高度重视教育科研的结果，也是贵校教育教学水平的体现。

成绩来之不易，希贵校高度重视全国教育科学规划课题研究工作，科学谋划、精心组织，督促课题负责人扎实做好课题研究。在研究过程中，希与我办保持密切联系，及时通报课题研究进展，配合相关管理流程，确保研究工作质量。我办将组织有关专家，



聘 书

LETTER OF APPOINTMENT

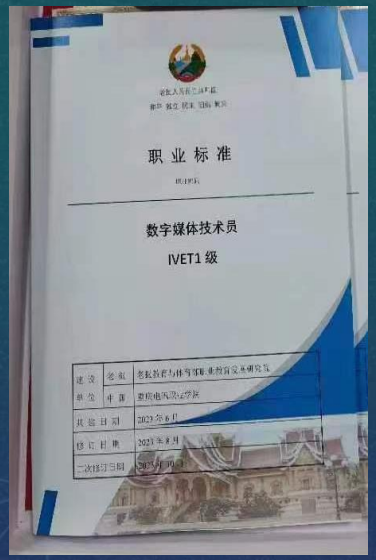
兹聘请鲁军同志为全国工业和信息化职业教育教学指导委员会通信职业教育教学指导分委员会教学研究专门工作委员会委员，任期自二〇二三年至二〇二五年。

全国工业和信息化职业教育教学指导委员会
通信职业教育教学指导分委员会
（中国通信学会代章）
二〇二三年七月

Comprehensively shaped the digital craftsmen "professional stronghold"

Partnered with Sichuan Information Vocational and Technical College and Hunan Industry Vocational and Technical College to build a nationally significant modern communication technology program, securing 1 national-level course and 7 "14th Five-Year Plan" textbooks.

Conducted Ministry of Education apprenticeship pilot programs in "Automobile Detection and Repair Technology" and "Modern Logistics Management."

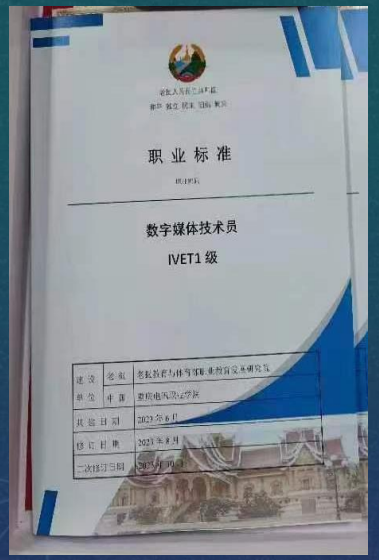


Comprehensively shaped the digital craftsmen "professional stronghold"

Approved for Chongqing Modern Communication Industry College and high-level skills training base; completed 6 provincial typical cases.

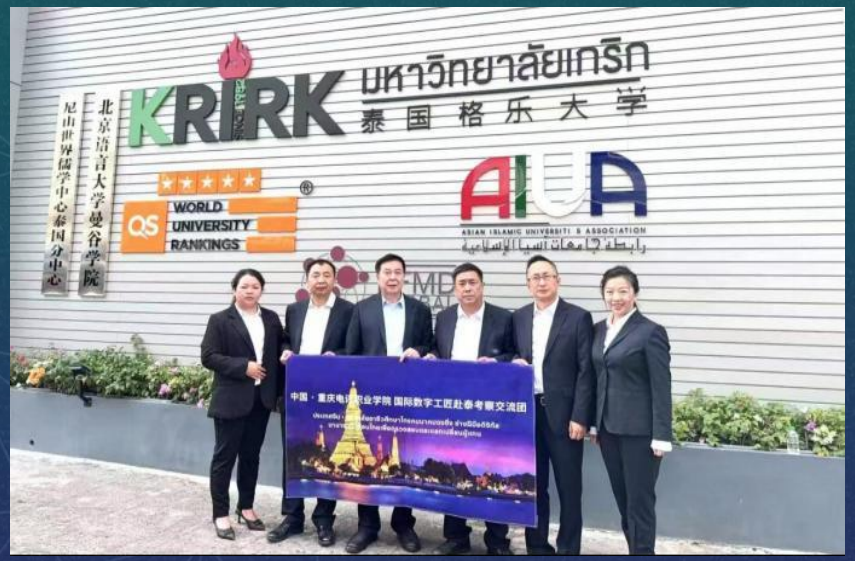
Developed 4 intl. vocational edu. standards for countries like Chad and Laos.

Led the formation of digital craftsmen industry-education integration communities for information innovation and national digital tech teaching application.



Decentralized setup of digital craftsmen "gateway"

The Big Data Technology major has been approved as the SGAVE Project of the Sino-German Advanced Vocational Education by the Ministry of Education. It has successively signed cooperation agreements with Zambia, Guinea, Thailand's Patumthani University and Krirk University; established 5 "Digital Craftsman International College", jointly cultivating 169 people. As the first private higher vocational college in Chongqing to be approved by the Ministry of Education for Sino-foreign cooperative education projects of "Communication System Operation and Management" and "Automobile Manufacturing and Test Technology", 85 Digital Craftsman graduates went to South Korea. Among them, Lei Xuefeng, a communication digital craftsman, pursued a consecutive bachelor's, master's and doctoral degree in South Korea, founded an intelligent manufacturing multinational corporation, employed 540 industrial workers, and wrote the "Digital Silk Road" in the new era.



Multidisciplinary Discourses on the Evaluation System of Vocational Education in China

China•Chongqing

4th,July,2025