Research on Challenges and Strategies of Career Development of Young Teachers in Application-oriented Colleges and Universities in the New Era

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Abstract. This paper aims to explore the challenges and strategies for the career development of young teachers in application-oriented colleges and universities in the new era. With the deepening of education reform, young teachers, as the main force of teachers in application-oriented colleges and universities, are increasingly concerned about their career development. The research points out that young teachers face many challenges in the process of career development, including the improvement of teaching skills, the stimulation of teaching motivation, and the pressure of survival and development. These challenges not only affect the teacher's personal career satisfaction and teaching effect, but also have a profound impact on the educational quality and personnel training of colleges and universities.

Keywords: Strategies, education reform, teaching effect.

1. Introduction

The report of the Party's 20th National Congress pointed out that employment is the most basic people's livelihood, strengthen the employment priority policy, improve the employment promotion mechanism, and promote highquality full employment. At present, China's politics, economy, science and technology, culture and other fields are developing rapidly. In order to meet the needs of the current rapid economic development and improve the social competitiveness of college graduates, colleges and universities should carry out more reform and exploration in the process of student training [1,2]. In this context, application-oriented colleges and universities need to combine their own characteristics, constantly improve and optimize the construction of their own talent training system, so as to better promote the employment and entrepreneurship of college students. At the same time, application-oriented colleges and universities should focus on the demand of talent in the job market, strengthen the training of students' practical skills, and broaden the channels of employment and entrepreneurship for students [3].

2. The Development Dilemma of Applied Colleges and Universities

The development of application-oriented colleges and universities is a complex systematic project. On the one hand, it includes the development of students' body and mind, the reserve of knowledge and skills, and other key standards of personnel training. On the other hand, it includes the core resources to support the teachers, the main platform of the discipline and the important means to realize the innovation and transformation of science and technology. So, from the perspective of core elements, At present, there are many outstanding problems in the construction of application-oriented colleges and universities, such as homogenization of school positioning, free targeting of training objectives, lack of participation of industry subjects in training mode, shortage of double-qualified teachers, obvious tendency of academic management system of teachers, unclear specialty characteristics of disciplines, emphasis on "theory" over "practice" in curriculum structure, weak scientific research strength, and difficulty in translating achievements into practice It affects the construction and development of applied colleges and universities [4,5].

First, application-oriented colleges and universities lack their own characteristics in the orientation of running a school, and excessively imitate research-oriented colleges and universities, and the orientation of running a school is homogenized. With the government's power penetration into the governance structure of colleges and universities, the autonomy of application-oriented colleges and universities has been missing for a long time, resulting in the restriction of the behavioral independence and economic independence of application-oriented colleges and universities, resulting in the dependence and mandatory homogenization of application-oriented colleges and universities. A study analyzed the differences between [6-8] research-oriented universities and 75 application-oriented universities in nine aspects, including social service, scientific research, personnel training and teacher

teaching, and the results showed that there was strong homogeneity of school-running positioning between them. Under the influence of homogenization of school-running orientation, application-oriented colleges and universities fail to combine their own advantages and school-running conditions, connect with local economic and social development needs, and achieve characteristics and due level. Therefore, application-oriented colleges and universities should uphold the spirit of forging ahead, give full play to the autonomy of running schools, find the right positioning of running schools, and strive to create their own characteristics of running schools, to eliminate homogeneity [9].

Second, in the construction of application-oriented college talent training system, the training target is free, and the training mode lacks the participation of industry subjects. First of all, the talent training goal of applicationoriented colleges and universities is free from targeting, failing to focus on the output of "application-oriented" talents, and some even only include "application-oriented" as a word expression in the talent training goal. The core meaning of application-oriented personnel training is that the target orientation should find the matching point between the needs of industry talents and the training of university talents. At present, application-oriented colleges and universities lack the orientation of talent training goal setting, lack of endogenous motivation, and fail to take regional economic and social development needs and students' individual development needs as the starting point, which eventually leads to the structural contradiction between effective supply and ineffective supply in the talent market [10,11]. Therefore, application-oriented colleges and universities should reform their old ways, strengthen mission guidance, clarify The Times value of cultivating application-oriented talents, deeply analyze the personal qualities and abilities that application-oriented talents should have, combine the basic requirements of the teaching steering committee with the talent needs of local social industries and the overall talent training orientation of the colleges and universities, and formulate talent training goals. Secondly, there is a single participant in the talent training mode. Application-oriented colleges and universities fail to abandon rigid thinking inertia and still follow the talent training mode of research-oriented universities, focusing on the inheritance and improvement of basic theories while ignoring the training and training of practical operation. The Decision of The State Council on Accelerating the development of modern vocational Education pointed out: "We should deepen the integration of production and education, school-enterprise cooperation, and cultivate hundreds of millions of high-quality workers and technical talents." At present, the talent training mode of application-oriented colleges and universities is still limited to the traditional structural elements and lacks the participation of industry subjects, which cannot meet the needs of large-scale application-oriented talents for the development of regional economic structure, resulting in graduates being unable to meet the needs of local economic development for talent training specifications. Therefore, application-oriented colleges and universities should get out of the thinking inertia of higher education elitism, abandon the traditional talent training mode, incorporate the new needs of the new era and new situation on the basis of science and system, and deepen the talent training mode integrating "production, learning and research".

Third, in the construction of application-oriented colleges and universities, the number of "double-qualified" teachers is short, and the tendency of the teacher management system is obvious. It is difficult for outstanding technical talents from industrial enterprises to enter colleges and universities to teach, and the existing theoretical research-oriented teachers lack good applied research and development level. The practical application-oriented colleges and universities have inherited the value of talents centered on theoretical research, and pay one-sided attention to the teachers' theoretical teaching and academic research ability, as well as their professional practice ability, which is difficult to cultivate and improve. In addition, application-oriented colleges and universities basically refer to research-oriented universities in terms of teacher management system, focusing on academic standards, deviating from the "double-qualified" teacher team construction standard, emphasizing academic title, academic degree, academic research ability and other academic standards in the process of teacher recruitment, training, professional title and assessment system, and lacking the requirements of "practicality, skill and professionalism" of teachers [12-14]. It is not in line with the requirements of the current application-oriented university teacher team construction, resulting in the management system of application-oriented university teachers out of line. Mr. Pan Maoyuan stressed that the criteria for evaluating and hiring teachers should be changed, and that "double-qualified" teachers and teachers with practical experience should be introduced into application-oriented colleges and universities, and the construction of "double-qualified" teachers should be strengthened by "doublequalified" teachers and "double-qualified" teachers should be integrated and interactive. Therefore, applicationoriented colleges and universities should adhere to the principle of "internal training and external introduction, professional combination", train "double-qualified" teachers and introduce excellent technical talents from industries and enterprises in parallel, and combine their own development characteristics, improve the management and operation mechanism of teachers, and avoid the "academic" tendency of teacher management system [15].

Fourth, in the construction of disciplines in application-oriented colleges and universities, the characteristics of disciplines and specialties are not distinct, and the curriculum structure emphasizes "theory" and ignores "practice". The adjustment of the discipline construction direction of applied colleges and universities cannot keep pace

3

with The Times, and does not highlight the applicability and regional characteristics. As a key link and key field in the construction of application-oriented colleges and universities, discipline construction needs to cater to local needs. Application-oriented colleges and universities have not yet been able to fundamentally clarify the essential difference between them and research-oriented universities in the construction of disciplines and specialties. They imitate their experience and practices at low cost, ignore their own positioning and the needs of regional economy for personnel training specifications, and lack forward-looking analysis of industrial development. As a result, the "application" of disciplines and specialties is not prominent and "regional" is not clear. In the construction of disciplines, application-oriented universities should dialectically draw on the construction experience of researchoriented universities, combine with their own orientation in running schools, and create special disciplines with outstanding "application" and "regional" characteristics. In addition, the proportion of theoretical courses is much larger than that of practical courses, and the content of theoretical courses is disconnected from practical skills. As we all know, curriculum, as a link and subject to educational objectives and training objectives, is the concrete embodiment of training objectives and the basis for realizing educational objectives, while the current curriculum setup of application-oriented colleges and universities seems to be unable to be used. This situation reflects that application-oriented colleges and universities fail to take students' individual value and social value as the logical starting point in curriculum setting, which leads to the emphasis on theory and the lack of application training, so that the practical ability of graduates is weak. Therefore, the curriculum of applied colleges and universities should be based on the concept of "people-oriented" education, aiming at the humanistic spirit, and organically integrate the three curriculum value orientations of knowledge-oriented, social-oriented and people-oriented. We should base on the individual value, focus on the social development, follow the logic of knowledge, focus on adjusting the curriculum structure, and build the "application-centered" curriculum system [16-18].

Fifth, in terms of scientific and technological innovation and transformation of application-oriented colleges and universities, the scientific research strength is weak, and the results are difficult to transform. The scientific and technological innovation and transformation of applied colleges and universities are still in the initial stage, with few scientific and technological achievements, low conversion rate, lack of policy support, many research achievements are out of line with social needs, lack of application value, and difficult to be transformed into real productivity. The reason is that there is a big gap between applied universities and research universities in terms of academic research level and scientific and technological innovation ability. In addition, applied universities do not identify their own research positioning, resulting in poor research results and achievements, and it is difficult to compete for government and social resources and attract high-end talents. In addition, application-oriented colleges and universities have low conversion rate of research results and low actual conversion value of research results, which makes it difficult to attract the results conversion platform to transform them into technologies or products to serve social production and life, resulting in low enthusiasm of application-oriented colleges and universities to transform results and weak awareness of scientific and technological innovation, forming a vicious circle. Strengthening its own scientific research strength is the only way to improve the scientific and technological innovation ability and the conversion rate of results, and a high level of scientific research strength is the guarantee of the quality of scientific and technological innovation, but also a prerequisite for the transformation of results. Application-oriented colleges and universities should identify their own research advantages and combine regional characteristics, aim to enhance scientific and technological innovation ability, rely on projects, and strive for local resources to strengthen scientific research ability [19].

3. The Development Direction of Applied Universities

To accelerate the development of application-oriented colleges and universities, we should clarify the diversity and complexity of the causes of their difficulties, start from China's reality and learn from foreign experience, and optimize the allocation of resources. This paper puts forward the following suggestions on the development direction of application-oriented universities in China:

First, the construction and development of application-oriented colleges and universities must deepen the reform of the government's "release, management and service" and give them autonomy in running schools. On the one hand, clarify the power boundaries between application-oriented universities and the government, ensure the autonomy of application-oriented universities in professional construction, personnel system, teacher assessment and other aspects, follow the rules of education and take into account their own advantages, and try to explore a path suitable for their own development. On the other hand, the local government must increase the policy preference, ensure that the investment of education funds is effectively in place, take the initiative to include it in the medium and long-term planning of local regional economic and social development, provide special financial support for the newly established majors, implement the incentive mechanism of industry participation, and promote the government's management of application-oriented colleges and universities from direct administrative instruction management to indirect management Service adjustment and macro-supervision, giving applicationoriented universities the right of economic independence. Through the decentralization and empowerment of the government, application-oriented colleges and universities can get space for construction and development, and present a diversified educational pattern [20-22].

Second, guided by the market orientation, we should promote the construction of application-oriented colleges and universities' talent training system as a whole, and realize the mutual promotion and common progress between application-oriented colleges and universities and the market. First of all, the setting of talents training objectives in application-oriented colleges and universities should adhere to the orientation, comprehensiveness and coordination. Take the needs of regional economic and social development as the guide; Promote students' ideological and moral construction, knowledge and culture cultivation and comprehensive practical ability training; The multi-subject collaborative evaluation model should be adopted in the evaluation of talent training objectives in applied colleges and universities, and the evaluation of students' learning effect and society's evaluation of talent training quality should be included in the evaluation system. Secondly, application-oriented colleges and universities should adhere to the personnel training mode of integrating production, learning and research, make full use of social resources, and break the barriers between colleges and universities and industrial enterprises. Application-oriented colleges and universities should fully strengthen the role of the main channel and the main position of talent training, and transport application-oriented talents with theoretical teaching ability and practical guidance ability. Enterprises should give full play to their own platform, technology and other advantages to participate in the process of talent training in a positive attitude and flexible way. Through the thinking transformation of dialogue, interaction and symbiosis, the two have a close relationship, docking needs, and building a long-term cooperation mechanism of symbiosis and win-win. By improving the talent training system, absorbing social resources to serve talent training, and feeding social development with talent transportation, colleges and societies can achieve mutual benefit and win-win and coordinated development [23].

Third, deeply optimize the structure of the teaching staff and improve the management mechanism of the teaching staff. On the one hand, application-oriented colleges and universities should, according to their own school-running positioning, abandon the talent values of theoretical research-oriented teacher team construction, and increase the number of "double-qualified" teachers around the needs of application-oriented personnel training. Through the establishment of the "university-enterprise" two-way joint training mechanism, actively carry out school-enterprise cooperation, build a platform for on-campus teachers to learn, broaden channels for recruiting outstanding technical talents from industrial enterprises [24], increase the proportion of "double-qualified" teachers in the teaching team, and optimize the level and structure of teachers in application-oriented colleges and universities. On the other hand, application-oriented colleges and universities should build a systematic and comprehensive teacher management system through the combination of teacher training, teacher titles and teacher evaluation. The teacher training system should be built by government, colleges and universities, enterprises and teachers. Reduce the restrictions on the evaluation of teacher titles, focus on the quality of research results, and add evaluation indicators of practical service experience: Establish different types of teacher evaluation index systems and evaluation methods based on practice. Optimizing the teaching staff structure of application-oriented colleges and universities and improving the management system of teachers can not only improve the level of application-oriented colleges and universities, but also improve the overall efficiency of serving local economy.

Fourth, focus on creating characteristic disciplines and specialties, and reconstruct application-oriented curriculum system. Application-oriented colleges and universities should pay close attention to the dynamic changes of local industrial structure, absorb the power of various industries, and build application-oriented disciplines with distinctive regional characteristics. According to the needs of regional social and economic development and industrial structure, formulate discipline and professional development plans with clear focus, prominent characteristics, matching regional industrial chain and innovation chain, continuously improve discipline and professional direction, and maintain close connection with local society. Create disciplines with outstanding advantages and distinctive characteristics, make effective use of brand effect, lead related disciplines and specialties to develop together to form cluster effect, and improve school-running efficiency. In the course setting, we should improve the compatibility of the course system with the individual development of students and the local industrial structure. Further add practical courses to enhance students' professional skills and support students' career development. We should also adjust the teaching content, enhance the coupling degree of theoretical knowledge and practical skills, improve the content of students' knowledge, optimize the way of thinking, and guide practice scientifically and effectively. The curriculum system is combined with the development needs of students and society, and the logic of curriculum knowledge is coordinated with the needs of vocational positions, so that theoretical knowledge and practical skills are integrated, and the training goal of applied talents is completely implemented [25].

Fifth, implement the applied research strategy and strive to increase the conversion rate of scientific research results. First of all, it is necessary to give full play to the advantages of application-oriented colleges and universities that are different from high-level research universities and higher vocational colleges in the region, combine

the characteristics of market demand and local industrial development, take advantage of the situation, rely on the leadership or guidance of government departments, and integrate into national or local development strategies. Secondly, with the support of the strategic plan, we will seek the support of funds and policies, jointly build R&D centers and key laboratories, introduce outstanding technical talents from industrial enterprises and senior experts from research universities for exchange and discussion, and enhance our own applied research strength. Relying on the scientific research platform, highlight their own characteristics, improve innovation ability, participate in the regional higher education division of labor system, seek cooperation with regional high-level research universities, further enhance their own scientific and technological innovation ability, improve industry influence. On this basis, application-oriented universities rely on high-quality output and influence in the industry to obtain the right to speak in school-enterprise cooperation, build a platform for the transformation of scientific research results, improve the conversion rate of results, and realize the social transformation power of scientific research results [26].

4. The Principles of Establishing the Core Quality System of Teachers in Application-oriented Undergraduate Universities Under the Background of the New Era

In the era of knowledge economy, China has implemented the macro strategy of innovation-driven development. The report of the 19th National Congress proposed to speed up the construction of an innovation-oriented country and build a knowledge-oriented, skill-based and innovative workforce to meet the new requirements of the global era of knowledge economy. Knowledge economy has strengthened the extreme importance of scientific and technological innovation for economic development, and innovation is the first driving force leading development, which requires education to cultivate students' "innovation ability" in the first place. In the domestic research on students' core accomplishment, most of them put forward innovation ability as the core accomplishment, and even call innovation ability the core of the core. In order to adapt to the new change of talent training requirements, China should also build an innovative teacher team. Only "innovative" teachers can cultivate "innovative" students. Therefore, innovation literacy should be included in the core literacy framework system of teachers in application-oriented undergraduate universities. In order to facilitate training and evaluation, innovation literacy includes two secondary dimensions: innovation behavior and innovation effect. Innovative behavior is embodied in: being able to continuously implement new teaching methods: being able to support students' innovative ideas or behaviors with practical actions; Ability to continuously innovate the way things are done within the industry. The innovation effect is manifested in: being able to make some original works or innovative results; Able to guide students to make some original works or innovative results; Ability to drive change and progress in the industry through innovation [27].

In the era of economic globalization, China has vigorously promoted the national strategy of "One Belt and One Road" and embraced the international trend of globalization with concrete actions. Globalization requires good cooperation among different countries and regions. Cooperation literacy should be included in the core literacy framework system of application-oriented undergraduate teachers, which includes two secondary dimensions of cooperation behavior and cooperation effect. The concrete manifestation of cooperative behavior is: to establish a close relationship between teachers and students; Ability to work with colleagues to build a team and achieve team goals; Able to establish good cooperative relationship with enterprises (practice base). The results of cooperation are as follows: It can guide students to establish good cooperative relations with people around them; It can cultivate students' ability to identify and manage differences. It can cultivate students' ability to solve differences through negotiation and achieve goals.

In the information age, "Internet + education" develops rapidly, and educational informatization redefines the role of teachers. Information literacy should be included in the core literacy framework system of applicationoriented undergraduate teachers, which covers two secondary dimensions of information application behavior and information application effect. Information application behavior is embodied in: being able to learn and be willing to implement wisdom classroom; It can promote the level of education informatization; Can embrace and drive the flipped classroom revolution. The results of information application are as follows: it can promote the improvement of students' information processing ability; Can use information means to improve teaching effect; Can use information means to promote students' independent development.

At present, China's industrial upgrading and economic structural adjustment are accelerating, and the demand for technical skills in all walks of life is becoming more and more urgent. The Implementation Plan of the National Vocational Education Reform has made clear provisions on many fields related to the development of teachers, such as the positioning of application-oriented undergraduate colleges, the development direction of in-service teachers, and the sources of new teachers, which indicates the future development direction of teachers in application-oriented undergraduate colleges. In the future, application-oriented undergraduate colleges and universities should connect with the development trend of science and technology and market demand, and strive to cultivate high-quality laborers and technical talents with the orientation of promoting employment and adapting to the needs of industrial development. This orientation should be implemented in the training of students' practical ability, so whether teachers have practical ability is the first problem to be solved. The Ministry of Education clearly defines the new teachers' 3-year working experience in enterprises, in-service teachers' 5-year rotation training in enterprises, and the proportion of "double-qualified" teachers, which reflects the core requirements of application-oriented undergraduate teachers in the new era, that is, the requirements of practical ability. Therefore, the core literacy framework system of application-oriented undergraduate teachers is of practical experience and practical level. Practical experience is embodied in: having enough practical experience to meet the teaching needs of the major; being able to actively create opportunities to learn the latest practical skills; and often attending various training in enterprises or practical level is embodied in: being able to master the practical skills of the major; being able to teach both theory and practice; being able to grow into a highly skilled person.

Classroom is the main battlefield for teachers, and classroom revolution is the central battlefield for the transformation of application-oriented undergraduate colleges and universities. How teachers teach and how students learn is not only the main place to measure teachers' core literacy, but also the main position to temper teachers' core literacy. First, establish the principal position of students in learning. Teachers play the role of mentors, guides, designers and helpers, fully stimulate students' enthusiasm for independent learning, cultivate students' self-learning ability in the learning process, create a relaxed atmosphere to encourage students to ask questions and question, and cultivate students' academic responsibility. Students are the master and first responsible person of learning. Cultivate students' sense of social responsibility to become great craftsmen; Second, to cultivate students' ability of cooperative learning, teachers and students to form a democratic, harmonious and close relationship between teachers and students, students and students to form mutual assistance, friendly group cooperative learning organization, the formation of interest groups, project learning and other forms of cooperative learning forms, give full play to the social attributes of teaching activities; The typical characteristic of traditional classrooms is that teachers are busy and students are idle. The classroom revolution with students as the main body should shape the classroom state in which students are busy and teachers are also busy. Discussion, question answering and inspiration should become the mainstream forms of the classroom The strategy of students' growth is to teach students according to their aptitude.

"Internet + education" enables anyone to learn any content at any time and any place. Information technology has given birth to the educational information age, and the information literacy of teachers is the core requirement of the educational information age. Various forms of network teaching platform, Internet-connected classroom multimedia teaching platform, infinite expansion of teaching space, seamless online and offline connection, realtime interconnection between teachers and students, online topic discussion and classroom face-to-face discussion switch freely, information technology for classroom teaching provides unlimited possibilities, not only requires teachers to master the Internet teaching technology, but also requires teachers to be creative Creatively combine various elements and carry out teaching with imagination. Remote observation, remote sharing and cloud space are also conducive to promoting the professional growth of teachers. Teachers can quickly, quickly and effectively obtain massive information. Equal access to information resources is conducive to teachers' self-development, information literacy and other core qualities.

Teachers with higher levels of core literacy, such as innovation literacy, information literacy and practical literacy, can be evaluated more highly, and the integration of specific indicators of core literacy into teaching assessment indicators and annual assessment indicators will maximize the role of evaluation guidance and guide teachers to improve their core literacy. For example, the progress of information technology provides realistic conditions for the implementation of flipped classroom teaching method. Flipped classroom takes students as the main body of learning and requires students to take the initiative to learn, discover and raise questions. A large number of learning tasks need to be completed before class, and teachers have intense and intense discussions with students in class It takes a lot of time and effort on the part of teachers. In the existing teaching assessment, more attention is paid to the number of teaching research papers published by teachers, and the number of teaching research papers and applying for projects is very important, but if its importance overrides teaching practice, it will hinder the professional growth of teachers and is not conducive to the cultivation of teachers' core qualities.

5. Conclusion

It is an urgent task for application-oriented colleges and universities to actively explore the construction predicament and development direction of application-oriented colleges and universities, and it is also the only way to promote application-oriented colleges and universities to connect with regional economic and social development, and it is also an important measure to optimize and perfect China's higher education system. To accelerate the development of application-oriented colleges and universities, it is necessary to take "cultivating morality" as the fundamental task, take the needs of local economic and social development as the guidance, and give application-oriented colleges and universities the right to build and develop schools. Promote the construction of application-oriented college personnel training system; Optimize the structure of teaching staff and perfect the management mechanism of teaching staff; Focus on creating characteristic disciplines and specialties, and reconstruct application-oriented curriculum system; Implement the applied research strategy and increase the conversion rate of scientific research results. Break the scientific hedge of college construction and social development, fundamentally resolve the crux of the construction and development of application-oriented colleges and universities" with Chinese characteristics, and cultivate application-oriented construction talents who prioritize virtue, combine theory with reality, and emphasize reality.

6. Conflict of Interest

The authors declare that there are no conflict of interests, we do not have any possible conflicts of interest.

Acknowledgments.

This paper was supported by the Research Project of Zhengzhou University of Science and Technology: Vibration Analysis and Control Based on Flexible Joints and Loads of Industrial Robots (2022XJKY05); 2023 Teacher Development Research Project of Zhengzhou University of Science and Technology, Research on Career Development Dilemma and Implementation Path of Young Teachers in Application-oriented Universities in the New Era (JSFZZXKT2023004); Key Research Project of Universities in Henan Province "Development and Research of Intelligent Gauge Detection System of Rail Transit Based on Dynamic Distance Measurement" (24B460027).

References

- Shuguang L, Yunyan Z, Chengwei W, et al. Path of High Quality Development of Application-oriented Undergraduate Universities in the New Era[C]//Proceedings of the 2023 8th International Conference on Distance Education and Learning. 2023: 327-332.
- 2. Zhou J, Wang Z, Wang Y, et al. Research on the Development Path for Training High-quality Application-oriented Talents in New Era[C]//SHS Web of Conferences. EDP Sciences, 2024, 190: 03026.
- Liu T, Yin S. An improved particle swarm optimization algorithm used for BP neural network and multimedia course-ware evaluation[J]. Multimedia Tools & Applications, 76(9):11961-11974, 2017.
- 4. Lin T, Li H, Yin S. Modified pyramid dual tree direction filter-based image de-noising via curvature scale and non-local mean multi-grade remnant multi-grade remnant filter[J]. International Journal of Communication Systems, 2018, 31(16).
- 5. Ma L. Evaluation of teaching quality of universities in the context of big data for the cultivation of application-oriented talents[J]. Applied Mathematics and Nonlinear Sciences, 2023.
- Liu L. Thoughts on the Application-oriented Private Universities' Implementation of Practical Teaching through Industry-Education Integration[J]. Journal of Human Resource Development, 2023, 5(4): 70-77.
- 7. Yin S, Meng L, Liu J. A new apple segmentation and recognition method based on modified fuzzy C-means and hough transform[J]. Journal of Applied Science and Engineering, 2019, 22(2): 349-354.
- Li J. Development of Applied Technology Courses in Colleges and Universities Oriented by Professional NeedsłłTaking C Programming as an Example[J]. Curriculum and Teaching Methodology, 2023, 6(1): 62-66.
- 9. Yu J, Li H, Yin S L, et al. Dynamic gesture recognition based on deep learning in human-to-computer interfaces[J]. Journal of Applied Science and Engineering, 2020, 23(1): 31-38.
- Jisi A, Yin S. A new feature fusion network for student behavior recognition in education[J]. Journal of Applied Science and Engineering, 2021, 24(2): 133-140.
- 11. Ibrar M, Sun Y. SEIR Model Based Epidemic Transmission Risk Deep Prediction[J]. Journal of Science and Engineering, 2024, 1(1): 25-31.
- 12. Yin S, Laghari A A. Multi-branch Collaboration Based Person Re-identification[J]. Journal of Science and Engineering, 2024, 1(1): 19-24.
- 13. Hu W, Wu Y, Yang Z. An Analysis of Credit Risk Prediction for Small and Micro Enterprises[J]. Journal of Artificial Intelligence Research, 2024, 1(2): 1-21.
- 14. Lu Y. Application of AI in the Field of Documentary Heritage: A Review of the Literature[J]. Journal of Artificial Intelligence Research, 2024, 1(2): 22-36.
- 15. Zhang H. Construction of Application-oriented Practical Teaching System in Private Undergraduate Colleges Based on OBE Concept[J]. International Journal of Education and Humanities, 2023, 8(3): 213-219.
- Linna W. Considerations on the Scientific Research Work of Application-Oriented Undergraduate Universities in the First-Class Construction[J]. Advances in Educational Technology and Psychology, 2023, 7(4): 92-97.

- 8 Jiyue Wang.
- Chen J. The Opportunities and Challenges for New Entrants of The Application Oriented University and College Carrying Out Vocational Education in New Period in China[C]//2023 3rd International Conference on Modern Educational Technology and Social Sciences (ICMETSS 2023). Atlantis Press, 2023: 138-143.
- Wang L, Shoulin Y, Alyami H, et al. A novel deep learning-based single shot multibox detector model for object detection in optical remote sensing images[J]. Geoscience Data Journal, vol. 11, no. 3, pp. 237-251, 2024.
- Yin S, Li H, Laghari A A, et al. An anomaly detection model based on deep auto-encoder and capsule graph convolution via sparrow search algorithm in 6G internet-of-everything[J]. IEEE Internet of Things Journal, vol. 11, no. 18, pp. 29402-29411, 2024.
- S. Yin, H. Li, Y. Sun, M. Ibrar, and L. Teng. Data Visualization Analysis Based on Explainable Artificial Intelligence: A Survey[J]. IJLAI Transactions on Science and Engineering, vol. 2, no. 2, pp. 13-20, 2024.
- Yi L U O. Analysis on the Business English Teaching Reform in Application-Oriented Colleges and Universities Based on Business English Training Platform[J]. US-China Education Review, 2023, 13(3): 195-199.
- Yang S, Sun X, Fan L. Analysis of the Internal Relationship Between the Transformation and Development of Newly Built Application-Oriented Undergraduate Colleges and Universities and the Enhancement of Social Service Ability[J]. Journal of Education and Educational Research, 2023, 2(2): 1-5.
- 23. Ao D. Application-oriented Undergraduate Talent Training and Cooperative Learning Teaching Reform[J]. Adult and Higher Education, 2023, 5(12): 96-101.
- 24. Cui Y, Wei H. Cultivation Factors of Application-oriented Undergraduate Talents: Basis for Intervention Program[J]. The Educational Review, USA, 2024, 8(1): 109-112.
- Wang S, Mhunpiew N. A Model for Developing Teacher Leadership Skills for the University Teachers in Application-Oriented Universities in Taiyuan, Shanxi Province, China[J]. ABAC ODI JOURNAL Vision. Action. Outcome, 2024, 11(2): 223-239.
- 26. Tao H, Xuexue T. Research on the Innovation of Teaching Management Models in Application-Oriented Private Universities in the New Era[J]. Frontiers in Educational Research, 2023, 6(19).
- Yue X, Wang H, Zhang W. Practical research on the construction of modern industry college in application-oriented universities[C]//2023 2nd International Conference on Sport Science, Education and Social Development (SSESD 2023). Atlantis Press, 2023: 214-220.

Biography

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