Strategies to Enhance Employment Competence of College Graduates in the Era of Artificial Intelligence

Zhihong Zheng[1*], Yifeng Zheng[1]

[1]*South China Business College of Guangdong University of Foreign Studies, Guangzhou, China*

corresponding author

Abstract: The rapid advancement of artificial intelligence (AI) technology is transforming various industries. In this context, enhancing the employment competence of college graduates has become a critical issue. This paper explores effective strategies from six perspectives: curriculum optimization, vocational skills training, deepened cooperation between universities and enterprises, employment guidance and services, international perspective expansion, and lifelong learning awareness cultivation. Implementing these strategies can not only improve graduates' employability but also lay a solid foundation for their long-term career development.

1. Introduction

Artificial intelligence, one of the most revolutionary technologies of the 21st century, is profoundly altering our lifestyles and work environments. From smart manufacturing to smart cities, from healthcare to financial services, AI applications are pervasive. In this context, college graduates face both unprecedented opportunities and challenges. On one hand, the development of AI technology provides more job opportunities and development space for graduates; on the other hand, it also imposes higher demands on their knowledge structures, skill levels, and overall competencies. Therefore, enhancing the employment competence of college graduates in the era of artificial intelligence is an urgent issue that needs to be addressed.

2. Curriculum Optimization

2.1. Adding AI-related Courses

To align with the evolving technological landscape, universities should incorporate AI-related courses into their curricula, such as machine learning, deep learning, and natural language processing. These courses can help students grasp the fundamental principles and technologies of AI and understand its potential applications across various fields[1]. To enhance students' artificial

intelligence literacy and abilities, the University of Electronic Science and Technology of China will launch an upgraded core general course on artificial intelligence in the fall semester of 2024. The course is led by the School of Information and Communication Engineering, jointly established by multiple colleges, gradually covering all undergraduate students in the school.

2.2. Interdisciplinary Integration

Universities should encourage and support the development of interdisciplinary courses that combine AI technology with other disciplines to foster students' diverse perspectives and innovative capabilities. In order to fully utilize the high-quality teaching resources of the school, encourage students with spare capacity and in need, and actively promote the construction of a comprehensive training system for undergraduate and graduate students[2], Nanjing University of Information Science and Technology will launch the first undergraduate and graduate course mutual selection, promote the integration of undergraduate and graduate courses, and cultivate innovative talents.

2.3. Practice-oriented Teaching

Increasing the proportion of laboratory and practical training courses can help students apply their knowledge in real-world scenarios. Universities can utilize both on-campus and off-campus laboratories and training bases to provide rich practical opportunities. The School of Economics and Management at Tsinghua University has partnered with Alibaba Cloud, a leading global provider of cloud computing and AI technology services, to launch the "AI+Management" Future Talent Camp project, providing students with opportunities and guidance for in-depth understanding and application of AI technology[3].

3. Vocational Skills Training

3.1. Professional Skills Training

Providing industry-specific skills training, such as data analysis and algorithm design, can enhance students' professional competitiveness. Universities can collaborate with enterprises to invite industry experts to teach or organize students to participate in industry training programs. Zhejiang University collaborates with Alibaba Group to offer professional skills training courses like "Big Data Analysis" and "Cloud Computing Technology," which have received high praise from students[5].

3.2. Soft Skills Enhancement

Strengthening the cultivation of soft skills, such as communication, teamwork, and leadership, through seminars and workshops is essential. These soft skills are equally important in the workplace, helping students better integrate into teams and improve work efficiency.Fudan University regularly hosts "Leadership Training Camps" and "Communication Skills Workshops" to help students comprehensively enhance their soft skills.

3.3. Entrepreneurship Education

Establishing entrepreneurship education courses can encourage and support students in entrepreneurial activities, fostering an entrepreneurial spirit and innovative capabilities. Universities can provide guidance, funding, and venue resources to create a supportive entrepreneurial environment for students. South China Business College of Guangdong University of Foreign

Studies has set up an "Entrepreneurship College" to offer comprehensive support and services to aspiring entrepreneurs.

4. Deepened Cooperation Between Universities and Enterprises

4.1. Establishing Internship Bases

Collaborating with enterprises to establish internship bases can provide more internship opportunities for students, allowing them to gain early exposure to industry dynamics and accumulate work experience. Internship bases can help students improve their professional skills and enhance their sense of professional identity and belonging.Beijing Lianjia has established school enterprise cooperation relationships with more than 60 universities across the country. Both parties have strengthened vocational skills training through various forms such as credit exchange, internship bases, course implantation, and simulated job competitions, helping graduates complete the transition from school to society.

4.2. Joint Laboratory Construction

Collaborating with enterprises to build research laboratories can promote the integration of industry, academia, and research, facilitating the application of research results. Through joint laboratories, students can participate in actual enterprise projects, understand the latest technological trends and market demands, and improve their research and innovation capabilities. Shanghai University of Applied Sciences unveiled the establishment of the Intelligent Technology Department, adhering to the principle of "leading by intelligence and highlighting industrial characteristics", focusing on fields such as robotics and intelligent equipment, intelligent detection and control, integrated circuits, etc., and strengthening the rapid promotion of organized scientific research and key technological innovation.

4.3. Inviting Industry Experts

Regularly inviting industry leaders and entrepreneurs to give lectures can broaden students' horizons and help them better plan their career paths. These lectures can provide valuable insights and career development experiences. Sun Yat sen University is leading the "Enhancing Business Management Capability" special program, and has set up a dual characteristic class of "Hundred, Thousand, and Ten Thousand Projects" and "Hong Kong and Macao Youth Entrepreneurship" to recruit 560 outstanding entrepreneurs and jointly seek a development blueprint.

5. Employment Guidance and Services

5.1. Career Planning Counseling

Providing personalized career planning services can help students clarify their career goals and develop reasonable career development plans. Career planning counseling can assist students in better understanding themselves, recognizing their strengths and weaknesses, and making informed career choices[6]. South China Business College of Guangdong University of Foreign Studies has established a CDC(Career Development Center) to offer one-on-one career consultation and planning services to students.

5.2. Employment Information Platform

Building an efficient employment information platform can timely release job information and help students quickly access job opportunities. Through the employment information platform, students can easily access various job postings, improving their job search efficiency[4]. At present, most undergraduate universities in China have their own employment information websites, which publish recruitment information for their graduates, enabling them to obtain timely recruitment information from employers.

5.3. Mock Interviews and Resume Guidance

Organizing mock interviews and providing resume writing guidance can improve students' job hunting skills. Mock interviews can help students familiarize themselves with the interview process, reduce nervousness, and increase their chances of success[7]. Resume guidance can help students create high-quality resumes, increasing their chances of being hired. "Shenbi Resume "is an online tool developed by China Education Online, with powerful functions that can help job seekers quickly create resumes that match their own experiences and job intentions, personalize them, and effectively improve their job search skills and success rates.

6. International Perspective Expansion

6.1. International Exchange Programs

Encouraging students to participate in international exchange programs can broaden their international perspectives and enhance their cross-cultural communication skills. International exchange programs allow students to study and live abroad, understand different cultures and educational systems, and improve their overall competencies. South China Business College of Guangdong University of Foreign Studies has established partnerships with more than 60 universities or academic institutions in 17 countries to jointly carry out multi-level and multi form international education programs such as dual degree programs, exchange programs, and overseas internships and practical exchanges. It provides students with channels to study abroad during their studies or further their studies abroad after graduation, actively cultivating high-quality talents who are versatile, applied, innovative, and international.

6.2. Foreign Language Proficiency Improvement

Strengthening foreign language teaching, particularly in internationally recognized languages such as English, can enhance students' international competitiveness. Foreign language proficiency is a crucial foundation for international communication and an important criterion for multinational companies when recruiting. South China Business College of Guangdong University of Foreign Studies attaches great importance to foreign language teaching. The one-time pass rate of the English major's CET-4 exam has exceeded the national average pass rate for many years, and students have won numerous gold medals in national and provincial foreign language competitions.

6.3. Global Internship Opportunities

Collaborating with overseas institutions to provide international internship opportunities can allow students to gain experience in an international environment. International internships can not only improve students' professional skills but also enhance their international perspectives and

cross-cultural communication abilities. South China Business College of Guangdong University of Foreign Studies launched the "Paid Internship in the United States" program in 2009, which has been ongoing for 15 years. Students spend a total of 3 months before and after summer vacation interning in the United States to experience American culture.

7．Conclusion

In the era of artificial intelligence, college graduates face new employment environments and challenges. By optimizing the curriculum, strengthening vocational skills training, deepening cooperation between universities and enterprises, improving employment guidance and services, expanding international perspectives, and cultivating a lifelong learning awareness, the employment competence of graduates can be effectively enhanced. Universities should actively explore and implement these strategies to provide comprehensive support and services to students, helping them stand out in competitive job markets and realize their career aspirations.

Funding

References

[1] Chen, L. (2019). Practical Training in AI Labs: A Case Study at Peking University. Journal of Higher Education, 45(3), 123-138.

[2] Huang, F. (2021). Establishing Internship Bases: A Collaborative Effort Between Nanjing University and IT Companies. Journal of Cooperative Education and Practice, 38(4), 101-115.

[3] Li, Q. (2020). Adding AI-related Courses: Tsinghua University's Curriculum Innovation. Journal of Educational Innovation, 12(3), 201-215.

[4] Liu, C. (2021). Employment Information Platforms: Enhancing Job Search Efficiency for Students. Journal of Career Services, 54(2), 112-127.

[5] Liu, X. (2022). Professional Skills Training: A Collaboration Between Zhejiang University and Alibaba Group. Journal of Vocational Education and Training, 70(1), 56-72.

[6] Wang, G. (2021). Inviting Industry Leaders: Enhancing Students' Career Planning at Sun Yat-sen University. Journal of Career Development, 48(2), 156-171.

[7] Zhang, H. (2020). Mock Interviews and Resume Guidance: Enhancing Students' Job Hunting Skills at Wuhan University. Journal of Career Services, 53(3), 215-230.