



Journal of Digital Education and Learning Engineering

ดำเนินการวารสารโดย สมาคมการศึกษาดิจิทัลและวิศวกรรมการเรียนรู้

Developing Effective Management on Increasing Skills of Employment Searching for Fourth-Year Students of Fine Arts and Design Faculty of Shaoguan University in the Digital Era

Xue Wenrou* & Aree Ussavanuphap
Dhonburi Rajabhat University, Thailand

Received: July 24, 2025 Revised: August 25, 2025 Accepted: August 30, 2025

Abstract

In the digital age, the transition from university to employment has become increasingly complex, requiring students to develop not only professional expertise but also career planning, communication, and digital skills. This study focuses on identifying the job-hunting problems of fourth-year students in the School of Fine Arts and Design at Shaoguan University and proposes management strategies to strengthen their employment readiness. A quantitative research design was employed, using questionnaires distributed to three groups: 298 students, 59 lecturers, and 11 administrators. Data were collected through stratified random sampling and analyzed using descriptive statistics, including means and standard deviations. The findings reveal that all three groups consistently recognized career planning, communication ability, and technical proficiency as the most pressing challenges, with career planning highlighted as the highest concern among students. Based on these results, the study proposes guidelines for designing courses and establishing career support systems that align with the evolving demands of the digital labor market.

Keywords: Management, student employment stress, skill of employment searching, concept of art and design

■ Introduction

Haleem et al. (2023, pp. 10-21) has mentioned that describes the concept of management from the perspective of the work process: Management is the process of coordinating the work activities of others to achieve results that they cannot obtain on their own. This concept highlights the collaborative nature of management and the characteristic of achieving goals by leveraging the efforts of others. Managers need to scientifically divide labor and collaborate, integrate the strength of team members, and complete tasks

*Corresponding author

Email address: 1453674501@qq.com

that are difficult for an individual to accomplish independently. Lee et al. (2021, pp. 519-538) has mentioned that negative impacts of students' employment pressure: 1) Mental health risks: Long-term employment pressure can easily lead to anxiety, depression, and even result in "delayed employment" or "giving up employment." 2) Wrong choice: Under pressure, one may choose a career rashly (such as blindly taking the civil service examination), which will affect one's future. 3) Misallocation of educational resources: Intense internal competition (such as inflation of academic qualifications) leads to an imbalance between educational investment and returns. Sosa et al. (2022, pp. 65-81) has mentioned that define job-hunting skills as the systematic methods and practical abilities that job seekers apply during the job-hunting stage. It encompasses specific skills such as information acquisition and resume writing, as well as strategic thinking like career planning and self-promotion. The core is to connect personal abilities with market demands through scientific means, enhance employment competitiveness, and achieve career goals. Liu (2020, pp. 12-19) has mentioned that the definition of describing art and design from the perspective of exploration and creation: Art is an unrestrained exploration. It can be personalized, experimental, or even subvert tradition. Artists challenge social norms, philosophical concepts or pure formal aesthetics through media such as painting, sculpture and digital art. Design is a systematic creative process that needs to follow logic, user requirements and technical feasibility. Designers transform concepts into mass-producible or executable solutions through research, iteration and optimization. Zhang and Chen (2024, pp. 1482-1498) has mentioned that the digital age is an information age with information technology at its core, relying on digital technologies such as the Internet, big data and artificial intelligence, which profoundly changes the way of social production and life. Its characteristics are data-driven, interconnected, intelligent and efficient, promoting comprehensive digital transformation in economic, cultural, governance and other fields, and reconstructing the operational logic and value creation model of human society.

■ Objectives of Research

This study aims to answer the following questions:

1. To investigate the job-hunting issues of fourth-year students in the School of Fine Arts and Design of Shaoguan University in the digital age.
2. To develop management guidelines for enhancing the employment skills of fourth-year students in the School of Fine Arts and Design of Shaoguan University in the digital age.

■ Research Methodology

The aim of this study is to discover and investigate the job-hunting needs of fourth-year students in the Department of Fine Arts and Design in the digital age and, based on these demands, to formulate a management guideline for enhancing the job-hunting skills of these students at Shaoguan University. Taking Shaoguan University as a case example, this research adopts a quantitative design to analyze the data

systematically and generate evidence-based insights that inform the development of practical guidelines for supporting students' job-hunting readiness in the digital context.

Population and Sample Group

This study takes the School of Fine Arts and Design at Shaoguan University as the case study, with the research population comprising three groups: 1,164 students, 59 teachers, and 11 administrators. From this population, the sample groups were determined, consisting of 298 students, 59 teachers, and 11 administrators. The sample size for students was calculated using Yamane's formula (1973), ensuring statistical representativeness, while all teachers and administrators were included due to their relatively small numbers. The respondents were selected through a stratified random sampling technique to guarantee that each subgroup within the population was proportionally represented in the study.

Research Tools and Data Collection

The research employed questionnaires as the primary tool for data collection. Data were gathered by distributing questionnaires to 368 participants from the School of Fine Arts and Design at Shaoguan University, all of whom returned completed responses, within a half-month period. The data analysis process took approximately six days, followed by 12 days for report writing. The questionnaires consisted of quantitative survey questions designed to analyze respondents' needs and problems related to student employment. A five-point Likert rating scale was used to assess these aspects, and the collected data were analyzed using descriptive statistics, including frequencies, means, and standard deviations (S.D.).

■ Results

The results of this study present a comprehensive examination of the employment-searching problems faced by fourth-year students in the Faculty of Art and Design, as perceived by administrators, teachers, and students, along with insights from a focus group discussion with administrators, teachers, and enterprise managers. The quantitative findings highlight significant challenges in career planning, communication, and technical skills, with varying degrees of severity across the three respondent groups. To complement these results, the qualitative analysis from the focus group provides deeper perspectives on students' job-hunting awareness, required skills, and institutional resource needs in the digital age, offering practical recommendations for bridging the gap between academic preparation and industry demands.

Problems of Employment Searching of Fourth-Year Students of the Faculty of Art and Design

According to Table 1, the overall score is at a high level (Mean = 4.30, S.D. = 0.63). The highest

problem is the administrator thinks that the students lack communication skills (Mean = 4.34, S.D. = 0.62), the second problem is the administrator thinks that the students lack technical skills (Mean = 4.33, S.D. = 0.65), and the third problem is the administrator thinks that the students lack the ability of career planning skill (Mean = 4.23, S.D. = 0.61).

Table 1.

The Problems of Employment Searching of Fourth-Year Students of the Faculty of Art and Design Perceived by Administrators

| Items | N = 11 | | Level of problems |
|--------------------|--------|------|-------------------|
| | Mean | S.D. | |
| Career planning | 4.23 | 0.61 | High |
| Communication | 4.34 | 0.62 | High |
| Technology | 4.33 | 0.65 | High |
| Overall statistics | 4.30 | 0.63 | High |

According to Table 2, the overall score is at the highest level (Mean = 4.58, S.D. = 0.56), the highest problem is the teacher thinks that the students lack communication skills (Mean = 4.59, S.D. = 0.57), the second problem is the teacher thinks that the students lack technical skills (Mean = 4.58, S.D. = 0.54), and the third problem is the teacher believes that students lack the ability of career planning skill (Mean = 4.57, S.D. = 0.56).

Table 2.

The Problems of Employment Searching of Fourth-Year Students of the Faculty of Art and Design Perceived by Teachers

| Items | N = 59 | | Level of problems |
|--------------------|--------|------|-------------------|
| | Mean | S.D. | |
| Career planning | 4.57 | 0.56 | Highest |
| Communication | 4.59 | 0.57 | Highest |
| Technology | 4.58 | 0.54 | Highest |
| Overall statistics | 4.58 | 0.56 | Highest |

According to Table 3, the overall score is at the highest level (Mean = 4.60, S.D. = 0.57), the highest problem is students' lack of career planning ability (Mean = 4.61, S.D. = 0.56), the second problem is students' lack of communication ability (Mean = 4.60, S.D. = 0.57), and the third problem is students' lack of technical skills (Mean = 4.59, S.D. = 0.57).

Table 3.

The Problems of Employment Searching of Fourth-Year Students of the Faculty of Art and Design Perceived By Students

| Items | N = 298 | | Level of problems |
|--------------------|---------|------|-------------------|
| | Mean | S.D. | |
| Career planning | 4.61 | 0.56 | Highest |
| Communication | 4.60 | 0.57 | Highest |
| Technology | 4.59 | 0.57 | Highest |
| Overall statistics | 4.60 | 0.57 | Highest |

The Results of the Focus Group

The members of the focus group are three college administrators, three college teachers, and three enterprise managers engaged in the design industry.

Issues related to job-hunting awareness in the digital age:

Question 1: How well do students understand the current employment situation in the art and design industry in the digital age?

Summary (teacher): Students' cognition is still stuck in traditional positions, and education on industry trends needs to be strengthened.

Summary (for managers): Enterprise case teaching should be introduced to broaden the employment perspective.

Summary (Enterprise): It is hoped that students will pay attention to emerging fields such as UI/UX, digital marketing, etc.

Question 2: Through which channels do students obtain employment information in various industries in the digital age?

Summary (teacher): Relying on on-campus resources, it is necessary to guide the use of professional job-hunting platforms.

Summary (for managers): A platform for information sharing between schools and enterprises can be established to optimize employment services.

Summary (for enterprises): It is recommended that students pay more attention to the dynamics of industry websites and recruitment software.

Question 3: How well do students understand different types of art and design positions in the digital age?

Summary (Teacher): The understanding of basic positions is acceptable, but the knowledge in specific fields is insufficient.

Summary (for managers): Career analysis courses can be added, and practitioners can be invited to share their experiences.

Summary (Enterprise): We expect students to have cross-industry adaptability, such as the development of cultural and creative products.

Issues related to job-hunting skills requirements in the digital age:

Question 1: Do students possess the digital tool skills required by the industry (such as AI drawing, 3D modeling, etc.)?

Summary (teacher): Some students have limited skills and need to enhance software practical training.

Summary (Manager): Hardware facilities should be updated and industry-standard software should be introduced.

Summary (for enterprises): Proficiency in using design tools is a basic requirement and should be mastered in advance.

Question 2: How can students respond to the demand for compound skills (such as design + marketing) in the digital age?

Summary (Teacher): The course should incorporate interdisciplinary content, such as the basics of digital marketing.

Summary (for managers): Micro-specialties or workshops can be established to enhance comprehensive capabilities.

Summary (for enterprises): Versatile talents are more favored. It is recommended to cultivate skills in multiple fields in advance.

Issues related to college support and resource demands in the digital age:

Question 1: Do the current resources of the college (such as software and equipment) meet the learning needs of digital skills?

Summary (Teacher): Some software versions are lagging behind and need to be upgraded regularly.

Summary (Manager): Greater investment in digital teaching resources should be made and laboratory configuration should be optimized.

Summary (for enterprises): It is recommended to align with industry standards and use enterprise-level tools for teaching.

Question 2: What digital employment support (such as enterprise internships and skills certifications) do students hope the college will provide?

Summary (for teachers): It is necessary to enhance school-enterprise cooperation and provide more practical opportunities.

Summary (for managers): Certification courses can be jointly offered with enterprises to enhance employment competitiveness.

Summary (Enterprise): Internship experience is of vital importance. It is recommended to get in touch with real projects as early as possible.

■ Discussions

The findings of this study reveal that fourth-year students in the School of Fine Arts and Design at Shaoguan University face pressing challenges in adapting their job-seeking skills to the demands of the digital age. While students demonstrate foundational proficiency in design, gaps remain in aligning their capabilities with emerging industry requirements, particularly in areas such as AI-assisted design, interactive technologies, and digital portfolio development. These limitations highlight the urgent need for innovative strategies that go beyond traditional job-hunting practices, fostering not only technical skills but also creative self-presentation and personal branding. In this section, the discussion will analyze the current situation of students' job-seeking skills, explore key areas for improvement, and propose comprehensive guidelines to enhance employability through a combination of advanced training, digital resource integration, and school-enterprise collaboration.

Analysis on the Current Situation of Job-Seeking Skills of the Fourth-Year Students in the School of Fine Arts and Design of Shaoguan University

The fourth-year students of the School of Fine Arts and Design at Shaoguan University are confronted with three core challenges in the job-hunting process: the disconnection between skills and industry demands, the monotonous presentation of portfolios, and the lack of personal brand awareness. Research shows that although students master basic design software, they have insufficient application of cutting-edge tools such as AI-assisted design and interaction technology. The portfolio is still mainly presented in a static way, making it difficult to reflect the design thinking process. Meanwhile, traditional job-hunting strategies cannot adapt to the trend of digital recruitment. To this end, it is suggested that breakthroughs be made in three aspects: First, offer cutting-edge courses such as AI design and dynamic interaction, and jointly build practical platforms with enterprises; Second, guide students to create interactive digital portfolios and apply innovative forms such as virtual exhibition halls; Third, cultivate social media operation capabilities and build personal brands through micro-project displays. The school needs to integrate resources from both the school and enterprises, and build a cross-border training model of "technology + art + business" to help students transform from passive job seekers into creative talents with sustainable competitiveness.

Guidelines for Improving the Job Search Skills of Fourth-Year Students in the School of Fine Arts and

Design at Shaoguan University

(1) Build a “Metaverse Job Search Laboratory” as follows:

- Develop a VR simulation interview system to recreate diverse interview scenarios such as those of game companies and major Internet companies.
- Build an NFT work display platform to allow students to experience the entire process of digital art creation and value transformation.
- Launch an "AI Design Assistant "workshop to train students to use tools such as Midjourney for rapid concept iteration.

(2) Create a “dynamic competency passport” to replace traditional resumes as follows:

Design blockchain-certified electronic archives to record in real time: the growth trajectory of the software skill tree, social evaluations of project collaborations, and user interaction data of portfolios.

(3) Implement the “Slash Mentor Program” as follows:

- Hire cross-disciplinary practitioners (such as illustrators + programmers/curators + data analysts) to form a mentor team.
- Offer “1+N” micro-majors: 1 core design skill +N cross-border application scenarios (e.g., graphic design + Metaverse space construction).

(4) Establish a “Talent Crowdfunding platform” as follows:

- Transform the graduation project into a crowdfunding project and connect with market demands in advance.
- Set up a “Skills Exchange Market” to facilitate cross-disciplinary team participation.

(5) Implement the “Reverse learning path” as follows:

- Reverse-engineer teaching modules from real enterprise projects (e.g., design course units based on UI design work orders.
- Set up a “Future Skills Reconnaissance Course” to regularly scan for new technological trends in the industry.

■ Research Suggestions

Building on the findings and discussions, this study proposes a set of forward-looking research suggestions aimed at addressing the job-hunting challenges of fourth-year students in the School of Fine Arts and Design at Shaoguan University. These suggestions emphasize not only strengthening students’ technical competencies but also reconstructing the entire ecosystem of teaching, practice, and career

support in the digital age. The recommendations are structured around five key dimensions: revolutionary reconstruction of the curriculum system, ecological innovation in practical teaching, upgrading of the employment service system, establishing a long-term career development mechanism, and advancing the digital transformation of the evaluation system. Together, these measures are intended to bridge the gap between academic training and the rapidly evolving labor market, equipping students with future-oriented skills, innovative practices, and sustainable competitiveness.

Revolutionary Reconstruction of the Curriculum System

- Offer a forward-looking course module on “Future Design Trends”, updating the teaching content every quarter, covering cutting-edge fields such as the application of AIGC tools and the design of metaverse scenarios.
- Implement the “micro-certificate + project-based” learning model, where students obtain skill certifications by completing real enterprise projects.
- Establish a “Digital Skills Cloud Laboratory” to provide 24-hour online industry-standard software and hardware resources.

Ecological Innovation in Practical Teaching

- Establish an “Inter-school Creative Industry Alliance” and jointly set up an “Innovation Design Challenge Competition” with leading enterprises.
- Develop a “Virtual internship platform” to participate in international design projects through remote collaboration.
- Implement the “Work IPization Plan” to assist students in completing the copyright registration and commercial transformation of their creative works.

Upgrading of the Employment Service System

- Build an “Intelligent Employment Navigation System” to recommend personalized career paths based on big data analysis.
- Establish a “Digital Portfolio Diagnosis and Treatment Center”, where industry experts provide suggestions for optimizing works.
- Launch a new type of job fair called “live-streaming job promotion”, where enterprises directly connect with graduates through virtual exhibition halls.

Long-term Mechanism for Career Development

- Launch the “Alumni Growth Tracking Program” and establish a database for the career

development of graduates.

- Establish a “Creative Talent Sharing Pool”, where outstanding current students can take on enterprise projects in advance.
- Establish an “Innovation and Entrepreneurship Accelerator” to provide seed funds for promising student teams.

Digital Transformation of the Evaluation System

- Develop a “Growth Trajectory Analysis Platform” to dynamically assess students’ employment competitiveness.
- Establish a “Market Demand Early warning System” to adjust the training program in real time.

■ References

- Lee, J., Jeong, H. J., and Kim, S. (2021). Stress, anxiety, and depression among undergraduate students during the COVID-19 pandemic and their use of mental health services. *Innovative higher education*, 46, 519-538.
- Liu, R. (2020). Research on the Application of “Simple Aesthetics” Design Concept in Contemporary Interior Design under the Background of Eastern and Western Culture. *Journal of Building Technology*, 2(1), 12-19.
- Sosa, R., Rajusha, R., & Hunting, A. (2022). Landing your first job in Creative Technologies: Soft skills as Core skills. *Design and Technology Education: an International Journal*, 27(1), 65-81.
- Haleem, A., Javaid, M., Singh, R. P., Suman, R., & Khan, S. (2023). Management 4.0: Concept, applications and advancements. *Sustainable Operations and Computers*, 4, 10-21.
- Yamane, T. (1973). *Statistics: An Introductory Analysis*. London: John Weather Hill, Inc.
- Zhang, J., & Chen, Z. (2024). Exploring human resource management digital transformation in the digital age. *Journal of the knowledge economy*, 15(1), 1482-1498.