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Employment Skills in Tertiary Work-Based Learning: A Multiple-Stakeholder Investigation into China's "3 + 1" Programs

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Abstract. Rapid economic development and globalization have reshaped the labor market, demanding a highly skilled and adaptable workforce. Tertiary education institutions worldwide have increasingly incorporated work-based learning into their curricula to close the gap between academic knowledge and practical skills. In China, the "3 + 1" programs, combining three years of academic study with one year of practical training, have emerged as a prominent work-based learning model. Despite the strategic importance of these programs, critical gap in consensus remains regarding the specific employment skills that should be imparted, leading to unemployment or underemployment of graduates and employer dissatisfaction. This qualitative study explores the employment skills expected from students in China's "3 + 1" programs and identifies factors contributing to effective program organization. Through insights gathered from in-depth interviews with multiple stakeholders, including 28 students, educators, and employers, the study highlights the importance of industry-academia collaboration, curriculum relevance and flexibility, professional development for educators, enhanced work placement quality, and effective feedback mechanisms. The findings suggest that these strategies can promote effective work-based learning, equipping graduates with the essential skills emphasized by multiple stakeholders in the study, such as technical proficiency, problem solving, effective communication, teamwork and cooperation, adaptability and agility, digital literacy and technological

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skills, innovation and creativity, and initiative and proactivity. The study offers implications for both educational institutions and policymakers aiming to improve graduate employability, particularly by enhancing the quality of the "3 + 1" programs through the effective integration of academic studies and industrial training.

Keywords: Work-based learning; employment skills; "3 + 1" program; tertiary education; China; qualitative investigation

1. Introduction

The rapid economic development and globalization of the past few decades have significantly reshaped the labor market, demanding a highly skilled and adaptable workforce. In response to these evolving needs, tertiary education institutions worldwide have increasingly incorporated work-based learning (WBL) into their curricula (Gerhardt & Annon, 2021; Phillips, 2022; Tuselim et al., 2020). WBL programs aim to close the divide between academic knowledge and practical skills, providing students with hands-on experience that enhances their employability (Suyitno et al., 2023). As such, in China, the "3 + 1" programs, which are underpinned by WBL and consist of three years of academic study followed by one year of practical training, have emerged as a prominent model of WBL in tertiary education (Wang, 2022b).

The "3 + 1" programs are designed to address the pressing need for graduates who are not only knowledgeable but also job-ready. These programs integrate classroom learning with real-world experience, allowing students to apply theoretical concepts in practical settings (Li et al., 2019; Li, 2023). This approach aligns with the broader educational reforms in China, which emphasize the development of a skilled workforce capable of driving innovation and sustaining economic growth (Feng & Chen, 2023; Zhou & Zhou, 2019). However, the effectiveness of these programs in enhancing employment skills remains an area warranting further exploration.

Despite the strategic importance of these programs, there remains a critical gap in the consensus regarding the specific employment skills that should be imparted to students (Guo & Wu, 2022). Although Chinese scholars and educators have proposed various employment skills emphasized in the "3 + 1" programs (Fang et al., 2023; Feng & Chen, 2023; Yu, 2021), their efforts have largely been grounded in existing models and frameworks of employment skills, most of which are general. This lack of agreement often leads to the unemployment or underemployment of graduates (Chen et al., 2024; Huang et al., 2024), and dissatisfaction among employers, who find that academic programs do not always align with industry needs (Pan et al., 2022; Zang, 2024). Moreover, while there is extensive research on the efficacy of "3 + 1" programs, much of it has relied on existing educational frameworks developed in Western contexts, utilizing predominantly quantitative methods (Fang et al., 2023; Su et al., 2022; Zhang et al., 2024). Such approaches may not fully capture the nuanced, socio-culturally specific expectations and challenges faced by Chinese students in these programs.

Addressing these gaps, this study, through a qualitative exploratory lens, explores the employment skills expected by students, educators, and employers involved in China's "3 + 1" programs and the critical factors that influence skill development. As such, the following research questions (RQs) were proposed:

- RQ1: What specific employment skills do students, educators, and employers collectively expect from graduates of China's "3 + 1" programs characterized by WBL?
- RQ2: What critical factors contribute to the effective alignment of WBL in the "3 + 1" curriculum with expected employment skills?
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By comparing the perspectives of different stakeholders, the research uncovers discrepancies in expectations and suggests ways to enhance the alignment of the "3 + 1" curriculum with labor market needs. This approach will provide a deeper understanding of the context-specific skills crucial for the success of students in the Chinese labor market. Also, by highlighting the critical factors that influence skill development in WBL contexts, this research will offer actionable insights for improving the design and implementation of "3 + 1" programs in China and potentially other similar educational settings, informing policymakers and educational institutions seeking to enhance the employability of their graduates.

2. Literature Review

2.1 Work-Based Learning

According to Marope et al. (2015, p. 99), WBL "refers to any form of learning or vocational training for youth and adults that occurs inside an enterprise or workplace". In the context of higher education, WBL typically represents an educational approach that integrates academic learning with practical workplace experience (Phillips, 2022). This method aims to enhance students' skills and knowledge by providing real-world context to the theoretical concepts learned in the classroom. Furthermore, WBL encompasses various forms of experiential learning, such as internships, apprenticeships, cooperative education, and project-based learning (Gerhardt & Annon, 2021), all designed to close the gap between education and the workforce.

One of the most renowned frameworks for WBL is Kolb's (2015) experiential learning theory. This theory posits that learning is a cyclical process involving four stages: concrete experience, reflective observation, abstract conceptualization, and active experimentation (Peterson & Kolb, 2017). According to Kolb (2015), effective learning occurs when an individual can execute each stage of the cycle, thereby transforming experience into knowledge. This approach has been widely adopted in higher education, particularly in disciplines that require practical skills and knowledge, such as engineering and vocational education (Mamatha, 2021). The integration of WBL in these fields has shown to significantly enhance students' learning outcomes and preparedness for professional careers.
Another important theory is Lave and Wenger's (1991) situated learning theory, which emphasizes the importance of context and social interaction in the learning process, suggesting that learning is inherently tied to the activity, context, and culture in which it occurs. This perspective aligns with the goals of WBL, as it underscores the value of authentic, real-world experiences and the development

of professional communities of practice (Lynch et al., 2006). Moreover, the reflective practice model proposed by Schön (1984) highlighted the importance of reflection in professional development and argued that practitioners learn and grow by reflecting on their experiences, both during and after the event. This reflective process is critical in WBL, where students are encouraged to think critically about their workplace experiences, identify lessons learned, and apply these insights to future situations (Cox, 2004).

The benefits of WBL are manifold. Research indicates that students engaged in WBL opportunities demonstrate higher levels of employability skills, such as problem-solving, teamwork, and communication (Suyitno et al., 2023; Tuselim et al., 2020). These skills are highly valued by employers and are often cited as essential for career success in the modern workforce. Furthermore, WBL provides students with a competitive edge in the job market, as they gain practical experience and form professional networks that can lead to employment opportunities post-graduation (Kerber & Gourdin, 2018; Phillips, 2022; Wang et al., 2022). However, despite its advantages, one significant issue is the variability in the quality of WBL experiences, which can depend heavily on the commitment and capacity of the host organization (Kerber & Gourdin, 2018). Ensuring that students receive meaningful and relevant learning experiences requires close collaboration between educational institutions and industry partners, as well as robust frameworks for monitoring and evaluating WBL programs.

2.2 Work-Based Learning in China's "3 + 1" Programs

Globally, WBL has gained prominence as a vital approach to closing the gap between academic education and the practical skills required in the workforce. In China, the implementation of WBL is in the form of the "3 + 1" programs, which integrate three years of academic study with one year of work placement, represent a significant effort to enhance student employability and align educational outcomes with labor market demands (Li et al., 2019; Li, 2023). Different from regular higher education, the "3 + 1" mode has the distinct advantage of immersing students in a professional environment for an extended period, allowing them to apply theoretical knowledge in practical settings. This approach not only facilitates the development of technical skills but also fosters essential soft skills, such as communication, teamwork and problem-solving, which are highly valued by employers (Fang et al., 2023; Su et al., 2022; Zhang et al., 2024).

The integration of WBL into higher education in China aims to address the growing concerns about the employability of graduates. With the rapid expansion of higher education and the competitive job market, there is an increasing need for students to acquire practical skills that complement their academic knowledge (Wang, 2023). The "3 + 1" programs are designed to provide students with hands-on experience in real-world settings, thereby enhancing their employment prospects. Previous research has shown that such programs can significantly improve students' job readiness by exposing them to industry-specific skills and professional environments (Cai, 2020; L. Chen, 2020; Li, 2023; Wang, 2022b).

However, the implementation of WBL in China's "3 + 1" programs has not been without challenges. One of the primary issues is the lack of consensus on the specific employment skills expected from students participating in these programs (Wang & Xia, 2020). This ambiguity has led to varying levels of preparedness among graduates and dissatisfaction among employers (Qin & Lei, 2024). Studies have indicated that employers often find that students lack certain critical skills, such as problem-solving, communication, and teamwork, which are essential for their professional success (S. Chen, 2020; Dong & Liang, 2021). This discrepancy points to the need for a more standardized and well-defined framework for the skills and competencies that students should develop during their work placements.

However, the benefits of WBL in the "3 + 1" programs are evident. Students who participate in these programs often report higher levels of confidence, improved practical skills, and a clearer understanding of their career goals (L. Chen, 2020; Luo & Cai, 2020). Moreover, the close collaboration between educational institutions and industry partners can lead to enhanced curriculum development that better aligns with current industry standards and practices (Wang, 2022b; Yu, 2021). This collaboration also offers employers the opportunity to shape the training of future employees, ensuring that graduates are better equipped to meet the demands of the job market.

Therefore, the "3 + 1" programs have become popular in China, supported by government policies, such as the Ministry of Education's (2020, 2023) initiatives to promote university-industry collaboration and the integration of vocational education with higher education. These policies emphasize the importance of WBL as part of students' academic journey and aim to enhance the quality and relevance of higher education by encouraging institutions to develop programs that meet the evolving needs of the economy.

2.3 Employment Skills

Employment skills, also referred to as employability skills, encompass a range of competencies and attributes that are essential for successful entry and progression in the workforce (Yunesman, 2023). The foundation of employment skills lies in a combination of technical abilities and soft skills. Technical skills are specific to particular industries or job roles, encompassing knowledge and abilities related to performing particular tasks or using certain tools and technologies (Sandra et al., 2023). In contrast, soft skills, often termed as transferable skills, include communication, teamwork, problem-solving, and adaptability (Hu, 2022; Jerome & Antony, 2018). These skills are not tied to any specific job but are crucial for effective performance in various professional contexts.

Several well-established frameworks highlight the critical components of employment skills. The World Economic Forum's (2020) *Future of Jobs Report* emphasizes a mix of "core" and "specialized" skills, including complex problem-solving, critical thinking, creativity, and emotional intelligence. This framework underscores the necessity of both technical and cognitive skills, suggesting that

the most valuable employees are those who can navigate complex environments, innovate, and manage interpersonal relationships effectively.

Another influential framework is the "Skills for Jobs" framework proposed by the Organization for Economic Co-operation and Development (2017), which categorizes skills into four broad areas: foundational skills (literacy, numeracy, and digital literacy), cognitive skills (critical thinking and problem-solving), social and emotional skills (communication, collaboration, and adaptability), and job-specific skills (technical and vocational competencies). This comprehensive approach highlights the interplay between various skill sets, emphasizing the need for a well-rounded skill profile to thrive in the modern workforce.

Research consistently highlights the increasing importance of soft skills in the modern workplace. While technical skills are indispensable for job-specific tasks, soft skills facilitate effective collaboration, innovation, and leadership (Jerome & Antony, 2018). For example, the World Economic Forum (2020) identified complex problem-solving, critical thinking, and creativity as the top skills needed in the workforce. These findings align with employer surveys in China, indicating a preference for candidates who exhibit strong interpersonal and cognitive skills (Yong & Ling, 2023; Zang, 2024), suggesting that the balance between technical and soft skills is vital for career success.

Moreover, the concept of lifelong learning has gained traction as a crucial strategy for maintaining employability in a rapidly changing job market (Soproni, 2023). As industries evolve and new technologies emerge, workers must continuously update their skills to remain competitive. Lifelong learning involves ongoing education and training throughout one's career, encompassing formal education, professional development courses, and self-directed learning (Lim et al., 2024). The literature suggests that fostering a culture of lifelong learning within organizations can enhance workforce adaptability and resilience (Chen et al., 2024).

Another critical aspect of employment skills is the role of digital literacy. The digital revolution has transformed the nature of work, making digital skills indispensable across virtually all sectors. Digital literacy goes beyond basic computer skills, encompassing the ability to use digital tools effectively, analyze and interpret data, and engage in digital communication (Lim et al., 2024; Sartika et al., 2023). The COVID-19 pandemic further accelerated the digitalization of work, underscoring the importance of digital skills for remote work, online collaboration, and digital problem-solving (Tee et al., 2024).

Additionally, the literature highlights the importance of cultural and emotional intelligence in the globalized workplace. Cultural intelligence refers to the ability to understand, appreciate, and interact effectively with people from diverse cultural backgrounds (Scott & Byrd, 2024). Emotional intelligence involves the ability to recognize and manage one's own emotions and those of others (Scott & Byrd, 2024). These skills are particularly relevant in multicultural and

multinational organizations, in which effective communication and collaboration across cultural boundaries are essential (Brough, 2024).

Overall, the literature on employment skills underscores their multifaceted nature and the importance of a balanced skill set that includes both technical and soft skills (Jerome & Antony, 2018). For university students, education systems, training programs, and employers all have critical roles to play in developing these skills, ensuring that individuals are well-equipped to navigate the complexities of the modern workforce (Cao, 2018; Wang, 2023). The continuous adaptation and enhancement of employment skills are essential for both individual career success and organizational competitiveness in an ever-changing global economy.

3. Methodology

A qualitative exploratory design was adopted in the study, which was appropriate for understanding the nuanced perspectives and experiences of the participants. Compared with other qualitative designs, this design offered greater flexibility and openness, allowing the researchers to delve deeply into participants' thoughts and feelings without being constrained by rigid frameworks (Swaminathan & Mulvihill, 2018). This adaptability is particularly valuable when exploring new or under-researched areas, such as the specific employment skills developed through China's "3 + 1" WBL programs.

Participants of the study included students, educators, and employers involved in "3 + 1" programs. The relevance of involving these diverse groups was that students could share their personal experiences, detailing how the combination of academic learning and practical work placements helped them develop essential employment skills (Wang, 2022a); educators could provide a perspective on how the "3 + 1" programs integrate academic and practical learning (Cai, 2020); and employers could offer insights into the skills they valued most in employees and how well the "3 + 1" programs met these expectations (Zang, 2024).

Purposive sampling was utilized to recruit participants from a major Chinese city, which accommodates a number of higher education providers offering WBL-based "3 + 1" programs. The selection criteria focused on ensuring a diverse representation of participants (Swaminathan & Mulvihill, 2018) who could provide comprehensive insights into the effectiveness of the programs. This included students currently enrolled in the programs and with WBL experience, recent graduates who had completed the programs, educators involved in the design and delivery of curricula, and employers who hosted students for their work placements. They were considered as the most relevant stakeholders for the "3 + 1" programs (Hu & Wang, 2024). Consequently, 28 participants, including 11 students, 8 educators, and 9 employers, were recruited and gave their informed consent. The sample sizes were deemed sufficient to achieve qualitative saturation (Hennink & Kaiser, 2020).

As shown in Table 1, the participants represented a variety of fields of study and industries, such as computer science, information technology, and economics,

reflecting the rapidly developing areas in China and popular majors within most "3 + 1" programs (Yu, 2021). They had varying levels of experience with WBL, as indicated by their positions within institutions and organizations. This demographic diversity provided a broad spectrum of insights into the effectiveness of WBL in developing employment skills.

Table 1: Participants' demographic information

	Participant	Gender	Identity/Position	Major/Industry
Student (S)	S1	Male	Senior Student	Computer Science
	S2	Male	Senior Student	Information Technology
	S3	Female	Senior Student	Economics
	S4	Female	Senior Student	Economics
	S5	Female	Senior Student	Engineering
	S6	Male	Senior Student	Computer Science
	S7	Male	Senior Student	Business Management
	S8	Female	Graduate	Business Management
	S9	Female	Graduate	Finance
	S10	Male	Graduate	Finance
	S11	Male	Graduate	Information Technology
Educator (Edu)	Edu1	Female	Lecturer	Information Technology
	Edu2	Female	Lecturer	Economics
	Edu3	Male	Lecturer	Economics
	Edu4	Male	Lecturer	Business Management
	Edu5	Female	Associate Professor	Finance
	Edu6	Male	Associate Professor	Finance
	Edu7	Female	Professor	Information Technology
	Edu8	Male	Professor	Computer Science
Employer (Emp)	Emp1	Female	Human Resources Manager	Information Technology
	Emp2	Female	Human Resources Manager	Finance
	Emp3	Male	Human Resources Manager	Engineering
	Emp4	Male	WBL Coordinator	Engineering
	Emp5	Male	WBL Coordinator	Finance
	Emp6	Male	WBL Coordinator	Information Technology
	Emp7	Female	WBL Coordinator	Finance
	Emp8	Male	Manager	Finance
	Emp 9	Male	Manager	Information Technology

Semi-structured interviews were conducted individually and online with the participants in Chinese, allowing the researchers to delve deeper into specific topics, while also permitting a natural flow of conversation. The online format provided flexibility for both the participants and researchers, ensuring that the interviews could be conducted in a comfortable and familiar environment, which likely contributed to more candid and reflective responses. Each interview was recorded with the participants' permission, ensuring that all nuances of the conversation were captured for accuracy. The recordings were then meticulously transcribed and translated into English, with careful attention to maintaining the integrity of the original meaning and cultural context, which is crucial for thematic analysis. The analysis process followed a systematic approach, beginning with a familiarization with the data in which researchers immersed themselves in the transcripts to gain a deep understanding of the content. This was followed by coding, in which key phrases and ideas were identified and labeled. Themes were then developed from these codes, which reflected the core patterns and insights that emerged from the data. Finally, these themes were reviewed to ensure they accurately represented the data and were cohesive. To ensure the trustworthiness of the study, efforts were made to achieve triangulation by comparing findings

across different data sources, member checking by seeking feedback from participants on the accuracy of the interpretations, maintaining a detailed audit trail, as recommended by Swaminathan and Mulvihill (2018), and documenting every step of the research process to provide transparency and allow for replication.

4. Findings

4.1 Expected Employment Skills

4.1.1 Technical Proficiency

Technical proficiency, including specific hard skills relevant to each industry, was emphasized by participants as a critical component of employability. These skills were necessary and expected for graduates to perform effectively in their respective fields. For instance, students in computer science highlighted the importance of mastering programming languages and software development tools. Student (S4) mentioned "Having a solid understanding of languages like Python and Java is essential for any software development role". This sentiment was reiterated by educators who stressed the need for students to gain hands-on experience with industry-standard technologies.

Educators emphasized the importance of foundational technical skills that are directly applicable to the workplace. They noted that students must be proficient in using the tools and technologies prevalent in their industry. Educator (Edu2) commented "We ensure our curriculum includes the latest tools used in the industry so that students are ready to hit the ground running when they start their jobs". Employers also stressed the necessity of these technical skills for day-to-day operations. They expected graduates to be immediately productive and able to handle the technical demands of their roles. Employer (Emp7) stated "When we hire new graduates, we expect them to be familiar with the tools and technologies we use. This allows them to contribute to projects right away without extensive additional training".

4.1.2 Problem-Solving Skills

Problem-solving skills, which refers to the ability to identify, analyze, and solve complex issues effectively, were also deemed crucial. This ability allows individuals to navigate complex situations and find effective solutions, which is vital for success in any professional setting. Students appreciated the opportunities provided by WBL programs to tackle real-world problems. Student (S1) said "The projects I worked on during my placement helped me develop strong problem-solving skills, which I know will be useful in my career".

Educators focused on integrating problem-solving exercises into the curriculum to prepare students for the challenges they will face in the workforce. Educator (Edu8) noted "We incorporate case studies and practical projects that require students to apply their knowledge and think critically". These activities were designed to mimic real-life scenarios, providing students with a safe environment to develop and refine their problem-solving abilities. Employers, in particular, emphasized the importance of problem-solving skills for maintaining productivity and innovation. Employer (Emp 7) commented "Employees who can

quickly assess situations and come up with effective solutions help keep our operations running smoothly and allow us to stay competitive". The ability to address unexpected issues efficiently was seen as a key attribute that enhances organizational resilience and growth.

4.1.3 Effective Communication

Effective communication, encompassing both verbal and written skills, was highlighted as a fundamental requirement by all stakeholders. Students acknowledged the need to improve their communication abilities to convey ideas clearly and collaborate effectively. Student (S10) shared "Working on team projects during my internship improved my communication skills significantly. I learned how to articulate my ideas and listen to others". Educators also stressed the integration of communication training in their programs, recognizing its importance for professional success. Educator (Edu6) stated "We emphasize communication skills throughout our courses because we know that being able to express ideas clearly is just as important as technical knowledge". Employers similarly underscored the necessity of strong communication skills for team collaboration and client interactions. Employer (Emp9) noted "Good communication is key to our success. We need employees who can not only do their jobs well but also explain their work to colleagues and clients effectively".

4.1.4 Teamwork and Cooperation

Teamwork and collaboration skills were consistently highlighted as essential for success in the workplace. Students valued the collaborative projects included in their WBL experiences, noting that these activities helped them learn to work effectively with others. Student (S4) remarked "Working in teams during my placement taught me how to collaborate and manage different perspectives to achieve a common goal". Educators designed their programs to include group projects and peer interactions, understanding that these experiences were crucial for developing teamwork skills. Educator (Edu5) explained "We incorporate a lot of group work to help students build the skills they need to collaborate effectively in professional settings". Equally, employers emphasized that the ability to work well in teams was critical for organizational success. Employer (Emp4) stated "Teamwork is at the heart of what we do. We need employees who can work together harmoniously, share ideas, and support each other to meet our objectives".

4.1.5 Adaptability and Agility

Adaptability and agility were recognized as vital skills in the rapidly changing job market. Students appreciated the dynamic nature of their WBL experiences, which helped them become more flexible and responsive to change. Student (S9) said "My internship exposed me to different tasks and challenges, which made me more adaptable and ready for anything". Educators aimed to prepare students for the unpredictable nature of the workforce by encouraging adaptability. Educator (Edu1) commented "We teach students to be adaptable because we know that the job market is constantly evolving, and they need to be ready for those changes". Employers also valued employees who could quickly adjust to new circumstances and take on various roles as needed. Employer (Emp3) noted

"Adaptability is crucial. The ability to pivot and adapt to new situations is what keeps our business competitive and resilient".

4.1.6 Digital Literacy and Technological Skills

The participants consistently highlighted the importance of digital literacy and technological skills, which is the ability to effectively use digital tools, technologies, and platforms to perform tasks, solve problems, and communicate. Students recognized the need to be proficient with various digital tools and technologies relevant to their fields. Student (S8) noted "Understanding and using software like Microsoft Office and specific industry tools was critical during my internship. It made me more efficient and confident in my tasks". This proficiency was seen as a baseline requirement for most jobs, enabling graduates to integrate into the workplace.

Educators integrated digital literacy into the curriculum, ensuring students were well-versed in the latest technologies used in their industries. Educator (Edu2) explained "We ensure our courses include training on the current digital tools and platforms that students will encounter in their professional lives. This preparation is crucial for their success". This approach helped close the gap between academic learning and practical application, making students more adaptable to technological advancements. Also, employers emphasized the necessity of digital literacy and technological skills for maintaining productivity and competitiveness. Employer (Emp7) commented "Employees who are comfortable with digital tools and can quickly learn new technologies are invaluable. They help us stay ahead in a rapidly changing market". The ability to leverage technology effectively was crucial for efficiency and innovation, making it a highly valued skill set.

Incorporating digital literacy and technological skills into WBL programs ensured that students were not only familiar with but also proficient in using necessary digital tools. This proficiency prepared them to handle the technological demands of modern workplaces, enhancing their employability and performance. Participants agreed that continuous learning and adaptability in digital skills were vital, as technology evolved rapidly, and staying updated was essential for long-term career success.

4.1.7 Innovation and Creativity

Innovation and creativity referred to the ability to generate new ideas, think originally and creatively, and develop novel solutions to problems. Participants highlighted the significance of innovation and creativity in fostering a dynamic and forward-thinking work environment. Students appreciated opportunities provided by WBL programs to exercise their creativity and contribute innovative solutions to real-world problems. Student (S8) shared "During my placement, I was encouraged to think creatively and suggest new approaches to ongoing projects. This not only boosted my confidence but also helped me understand the value of innovative thinking in the workplace".

Educators stressed the need to cultivate an environment that encourages creativity and innovation among students. Educator (Edu3) explained "We design

our curriculum to include projects that require creative problem-solving and innovative thinking. This helps students develop the ability to think critically". By integrating activities that challenge students to be innovative, educators aimed to prepare them for the unpredictable and evolving demands of the modern job market. Particularly, employers valued creativity and innovation for their role in driving continuous improvement and staying competitive. Employer (Emp9) remarked "Innovation is at the heart of our business. Employees who can think creatively and propose new ideas are essential for our growth and success". The ability to bring fresh perspectives and innovative solutions was seen as a key attribute that enhances organizational performance and adaptability.

4.1.8 Initiative and Proactivity

Initiative and proactivity referred to the ability to take charge, identify opportunities, and act independently without needing prompting. These skills are essential for driving personal and organizational success and were consistently emphasized by the participants as critical attributes for graduates. The participants highlighted the importance of initiative and proactivity in ensuring tasks were completed efficiently and potential challenges were addressed promptly. Students recognized that taking initiative was a key component of their development during WBL programs. Student (S5) maintained "During my internship, I learned the importance of being proactive. Taking the initiative to start projects and solve problems on my own was highly valued by my supervisors".

Educators focused on encouraging students to develop a proactive mindset by creating learning environments that required active participation and independent problem-solving. Educator (Edu8) explained "We aim to foster a culture where students feel empowered to take responsibility for their learning and pursue opportunities actively. This involves designing projects and assignments that require them to think ahead and act independently". Specifically, employers valued initiative and proactivity for their role in enhancing productivity and driving innovation. Employer (Emp7) commented "Employees who take initiative are invaluable. They don't wait to be told what to do; they identify needs and act on them, which improves overall efficiency". This ability to anticipate needs and act decisively was seen as crucial for maintaining a competitive edge and achieving business goals.

4.2 Critical Factors Contributing to Effective Work-Based Learning

4.2.1 Industry-Academia Collaboration

Strong partnerships between educational institutions and industry stakeholders were highlighted as crucial for ensuring the curriculum meets labor market needs. This collaboration allowed for the exchange of ideas and resources, which helped in designing relevant educational programs. Educator (Edu6) noted "Closer ties should be established with industry partners to help us understand what skills are in demand and tailor our curriculum accordingly". Students also valued these partnerships, with student (S2) commenting "Having industry professionals involved in our projects will make the learning experience more practical and relevant". Employers also emphasized the importance of these collaborations for

creating a contingency of well-prepared graduates. Employer (Emp4) stated "Working closely with universities can allow us to provide input on the curriculum, ensuring that graduates have the skills we need". This partnership not only benefited the students but also helped employers in finding suitable candidates for their organizations.

4.2.2 Curriculum Relevance and Flexibility

The need for a curriculum that was both relevant to current industry standards and flexible enough to adapt to changing market demands was consistently highlighted. Educators stressed the importance of regularly updating course content to reflect new technologies and practices. Educator (Edu5) explained "We should continuously revise our curriculum to incorporate the latest industry trends and tools. This helps our students stay ahead and be more competitive". Students also appreciated the practical aspects of their education, noting that hands-on projects and real-world applications made their learning more meaningful. Student (S11) mentioned "The projects we work on should be directly related to what we'll be doing in our careers, which can make our education much more valuable". Likewise, employers also underscored the need for flexibility in the curriculum. Employer (Emp1) remarked "The job market is always evolving, and educational programs need to be able to adapt quickly to these changes to remain relevant".

4.2.3 Continuous Professional Development for Educators

Ongoing professional development for educators was identified as a key factor in ensuring the effectiveness of WBL programs. Educators needed to stay updated with the latest industry advancements to teach relevant skills. Educator (Edu3) noted "Participating in industry conferences and workshops helps us bring new knowledge and practices back to the classroom". Students recognized the value of having instructors who were knowledgeable about current industry standards. Student (S10) commented "Our teachers are always learning and bringing new insights into our classes, which makes our education more dynamic and up-to-date". Employers supported this need, with employer (Emp7) stating "Educators who are well-versed in current industry trends can better prepare students for the realities of the workplace".

4.2.4 Work Placement Quality

The quality of work placements was emphasized as crucial for providing meaningful and relevant experiences to students. High-quality placements ensured that students could apply their academic knowledge in real-world settings, enhancing their skills and employability. Student (S9) shared "My last work placement was not related to my major. I should have worked on real projects and learned directly from professionals in my field". Educators highlighted the importance of securing good placements for their students. Educator (Edu7) explained "We work hard to build relationships with reputable companies to ensure our students have valuable work experiences". Employers also noted the benefits of providing high-quality placements, both for the students and for their own organizations. Employer (Emp4) remarked "Hosting students allows us to mentor future professionals and potentially identify future hires who are already familiar with our company culture and practices".

4.2.5 Feedback Mechanisms

Effective feedback mechanisms were identified as essential for continuous improvement of the WBL programs. Regular feedback from employers, students, and educators helped to assess the effectiveness of the curriculum and make necessary adjustments. Educator (Edu2) noted "Teachers should regularly collect feedback from students and industry partners to understand what is working well and what needs improvement". Students valued the feedback they could receive during their work placements, as it helped them identify areas for growth. Student (S10) mentioned "The feedback from teachers and mentors can be invaluable. It will help me improve my skills and better understand my strengths and weaknesses". Employers appreciated the opportunity to provide feedback on the students they hosted, as it allowed them to influence the quality of future graduates. Employer (Emp8) stated "Providing feedback to the university helps us ensure that the curriculum is aligned with our needs and that students are well-prepared for their careers".

5. Discussion

The findings of the study disclosed the expected employment skills for students involved in WBL-oriented "3 + 1" programs from the perspectives of multiple stakeholders. These skills included technical proficiency, problem-solving skills, effective communication, teamwork and cooperation, adaptability and agility, digital literacy and technological skills, innovation and creativity, and initiative and proactivity. The alignment of these identified skills with industry demands underscores the relevance and effectiveness of WBL-oriented "3 + 1" programs in preparing students for the workforce. By focusing on technical proficiency, these programs ensure that students possess the foundational knowledge necessary to perform job-specific tasks competently (Sandra et al., 2023). Additionally, the emphasis on problem-solving skills prepares students to tackle real-world challenges, an ability highly valued by employers across various sectors (Jerome & Antony, 2018). Effective communication emerges as a critical skill, reflecting its importance in facilitating teamwork and ensuring clear and efficient interactions within diverse workplace environments (Parveen & Sharma, 2023). Furthermore, teamwork and cooperation are indispensable in today's collaborative work settings, where projects often require interdisciplinary efforts and coordinated action among team members (Yong & Ling, 2023).

While these skills have been well established in existing frameworks of employment skills in various socio-cultural contexts (Organization for Economic Co-operation and Development, 2017; Sandra et al., 2023; World Economic Forum, 2020; Yunesman, 2023), the study also identified certain skills that are specific to the context of the study and are less mentioned in literature. For instance, the importance of adaptability and agility was particularly emphasized by stakeholders. Adaptability and agility, as highlighted in the study and relevant literature, encompass the ability to quickly learn and apply new skills, adjust to changing work environments, and manage unexpected challenges effectively (Savickas, 2021). In the fast-paced and ever-evolving job market in China, these traits are crucial for students transitioning from academic settings to professional environments (Chen et al., 2024; Hu & Wang, 2024). Stakeholders noted that while

technical skills and theoretical knowledge form the foundation of a student's capabilities, the ability to adapt and respond to dynamic work conditions often determines long-term career success. This finding aligns with the increasing emphasis on "soft skills" in global employment trends, where adaptability and agility are seen as key components of an employee's overall competence (Janson, 2024; Savickas, 2021).

Moreover, digital literacy and technological skills are highlighted as another employment skill necessary for students enrolled in the "3 + 1" program. In today's technology-driven world, proficiency in digital tools and platforms is not just an added advantage but a fundamental requirement for most job roles (Tuselim et al., 2020; Yunesman, 2023). The stakeholders emphasized that students need to be adept at using a variety of digital technologies, from basic office software to advanced data analytics and industry-specific tools. This includes not only technical know-how but also the ability to learn and adapt to new technologies as they emerge. The study also found that digital literacy extends beyond the use of software; it encompasses a broad understanding of how technology can be leveraged to improve productivity, streamline processes, and drive innovation (Habibija-Ražanica & Mekić, 2021). The ability to navigate and utilize digital tools effectively can significantly enhance a student's employability and readiness to meet the demands of modern workplaces.

Moreover, innovation and creativity were pinpointed as critical employment skills for students because they can significantly enhance problem-solving abilities and drive organizational success. These skills allow students to approach challenges from unique perspectives, develop original solutions, and adapt to rapidly changing environments (Oumansour & M'ssiyah, 2023). This study underscores that students who exhibit strong innovative and creative abilities are often better equipped to contribute meaningfully to their workplaces and to initiate positive changes. The ability to innovate and think creatively empowers students to address complex problems that do not have straightforward solutions, which is particularly important in industries that face constant technological advancements and evolving market demands (Hou, 2020; Yunesman, 2023). Students who can apply creative thinking to problem-solving can help organizations stay ahead of trends and respond proactively to emerging challenges. This adaptability and forward-thinking approach is highly valued by employers seeking to maintain a competitive edge (Dixit, 2021).

Last, but not least, initiative and proactivity are also important employment skills because they enable graduates to take charge of their responsibilities, anticipate future challenges, and act independently without constant supervision. These skills empower students to identify opportunities for improvement, propose new ideas, and take the necessary steps to implement those ideas effectively (Baker, 2021; Hu & Mi, 2024). These skills are particularly valuable in dynamic work environments where conditions and priorities can change rapidly; employers value graduates who do not wait for instructions but instead take the lead in addressing issues and driving projects forward (Esaulova, 2023; Yunesman, 2023). This independent and forward-thinking approach ensures that work progresses

smoothly and efficiently, even in the face of unexpected challenges. Stakeholders noted that initiative and proactivity often distinguish high-performing employees from their peers. Graduates who demonstrate these qualities are seen as self-starters who can contribute to an organization's goals from day one and are more likely to seek out additional responsibilities, engage in continuous learning, and pursue opportunities for professional growth (Hou, 2020).

To ensure students can develop these skills, the study identified several critical factors to align the WBL-based "3 + 1" program with industry needs. For instance, there should be a continuous industry-academia collaboration to ensure the relevance and flexibility of curriculums. This collaboration involves regular consultations with industry professionals to keep the curriculum updated with the latest industry trends, technologies, and skill requirements (Cai, 2020; L. Chen, 2020). By incorporating real-world insights into the academic framework, educational institutions can ensure that their programs remain aligned with the evolving needs of the job market (Li, 2023).

To achieve this relevance, educators involved in the "3 + 1" program should engage in continuous professional development. This professional growth is essential for educators to stay current with industry advancements, pedagogical strategies, and the evolving skill demands of the job market (Wang, 2022b). By collaborating with industry partners and participating in professional learning activities, educators can enrich their teaching practices with fresh insights and real-world applications. This, in turn, enhances the learning experience for students by ensuring that the curriculum remains dynamic and aligned with contemporary industry needs (Yu, 2021).

Additionally, there should be an ongoing effort to improve the quality of work placements so that meaningful and relevant WBL experiences can be provided to students. High-quality placements are essential for ensuring that students gain valuable insights, develop practical skills, and apply their academic knowledge in real-world contexts. To achieve this, educational institutions and industry partners must collaborate closely to design and implement structured and impactful work placements (Yu, 2021). One key aspect is ensuring that students are matched with roles that align with their academic background and career aspirations. This alignment helps students see the direct relevance of their studies to their future careers and motivates them to engage deeply with their work (Guo & Wu, 2022). Moreover, it is crucial to establish clear learning objectives and outcomes for each placement. These objectives should be collaboratively developed by educators, industry partners, and students to ensure that they are realistic, measurable, and aligned with industry standards (Chen, 2022).

More importantly, effective feedback mechanisms should be established for continuous improvement of the WBL programs. These mechanisms are essential for ensuring that the programs remain responsive to the needs of both students and industry partners, facilitating ongoing refinement and enhancement of the learning experience (Jin, 2021). A crucial element of an effective feedback mechanism is the systematic collection of feedback from all stakeholders involved

in the WBL program, including students, industry mentors, educators, placement coordinators, among others (Li et al., 2019). To ensure that the feedback collected is actionable, it should be analyzed systematically and used to inform program adjustments (Luo & Cai, 2020). Educational institutions, therefore, should establish dedicated teams or committees responsible for reviewing feedback, identifying trends, and making recommendations for improvements.

Combining the findings, a framework for achieving effective WBL-based "3 + 1" programs in China towards enhancing graduates' employment skills is proposed, as shown in Figure 1. This framework suggests that there should be ongoing industry-academia collaboration, updated curriculum relevance and flexibility, continuous professional development for educators, enhanced work placement quality, and effective feedback mechanisms. These strategies, at least in the context of the study, are expected to promote effective WBL. Multiple stakeholders should be involved in the improvement of WBL, including students, educators, and employers (Chen, 2022; Jin, 2021). The ultimate result is anticipated to be improved employment skills for graduates (Yu, 2021), which include technical proficiency, problem-solving skills, effective communication, teamwork and cooperation, adaptability and agility, digital literacy and technological skills, innovation and creativity, and initiative and proactivity. These skills are essential for graduates to thrive in the modern job market and contribute effectively to their organizations.

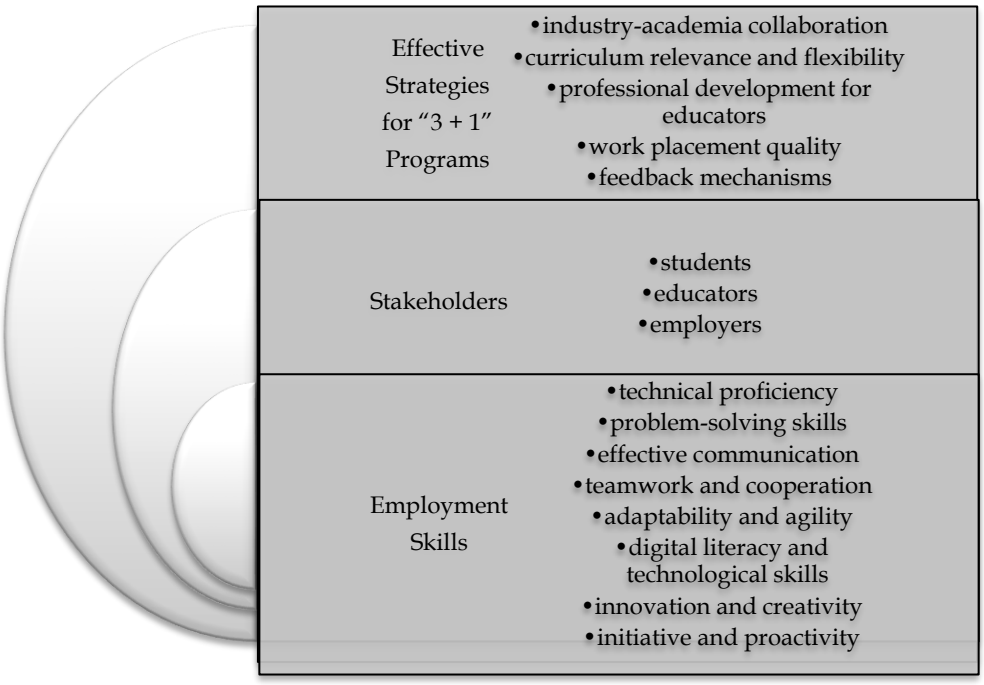

Figure 1: Framework of effective WBL in "3 + 1" programs towards employment skills

6. Conclusion

The present study, from a multiple-stakeholder and qualitative perspective, explored the employment skills expected from students involved in China's WBL-based "3 + 1" programs and the potential factors that contribute to effective program organization. The findings underscore the importance of ongoing industry-academia collaboration, curriculum relevance and flexibility, continuous professional development for educators, enhanced work placement quality, and robust feedback mechanisms in cultivating a comprehensive skill set for graduates. By addressing these critical areas, the study suggests that WBL programs can better prepare students for the demands of the modern job market, equipping them with technical proficiency, problem-solving abilities, effective communication, teamwork, adaptability, digital literacy, innovation, and proactive initiative.

These insights offer valuable guidance for educational institutions and policymakers aiming to refine WBL programs and enhance graduate employability in China. For example, educational institutions can establish formal partnerships with industry leaders to ensure curriculum content remains current and aligned with real-world demands. Regularly updating course materials and integrating industry-relevant projects can help students develop practical skills and knowledge directly applicable to their future careers. Additionally, policymakers can facilitate these collaborations by providing incentives for businesses to participate in WBL programs. Also, creating standardized guidelines and best practices for WBL implementation can ensure consistency and quality across different institutions and programs. Enhancing the quality of work placements is another critical implication. Institutions should work closely with industry partners to design placements that offer meaningful, hands-on experiences and align with students' academic backgrounds and career aspirations. This could involve developing detailed placement plans with clear objectives, regular evaluations, and structured feedback mechanisms to ensure that students gain valuable insights and skills.

For future research, the limitations of the qualitative study in lacking generalizability suggest that there is a need for further investigations that incorporate quantitative methodologies. Future studies could utilize larger sample sizes and diverse geographical locations to ensure that the findings are representative of a broader population. Longitudinal studies would also be beneficial in assessing the long-term impact of WBL programs on graduates' employment skills and career progression. Additionally, comparative studies between different models of WBL programs, both within China and internationally, could provide deeper insights into best practices and effective strategies for skill development.

Conflicts of Interest

The authors declared no conflicts of interest.

Ethical Considerations

Informed consent was obtained from all participants of the study.

7. References

Baker, T. (2021). *Breaking the Proactive Paradox: Maximizing Performance Through Empowerment*. Business Expert Press.

Brough, S. (2024). *GRASPED Employee Attitudes and Company Culture in Marketing: Cultivating a Culture That Markets Itself* (Vol. 5). GRASPED Digital.

Cai, Y. (2020). School-enterprise cooperation in tourism education of "dual system". In *Proceedings of 2020 Conference on Educational Science and Educational Skills* (pp. 19–24). Scholar Publishing. https://doi.org/10.38007/Proceedings.0000552

Cao, Y. (2018). Research on the causes and countermeasures of college students' employment difficulty. *Advances in Social Sciences*, *7*(1), 81–86. https://doi.org/10.12677/ass.2018.71014

Chen, K. (2022). Exploration on model of funded education of school-enterprise cooperation in colleges and universities. *Advances in Education*, *12*(8), 3124–3127. https://doi.org/10.12677/ae.2022.128478

Chen, L. (2020). School-enterprise cooperation in higher vocational colleges promotes talent cultivation. *Education Research*, *3*(3), 47. https://doi.org/10.32629/er.v3i3.2565

Chen, S. (2020). Dilemmas of school-enterprise cooperation in higher vocational colleges. *Scientific Development of Education*, *2*(11), Article 2419. https://doi.org/10.36012/sde.v2i11.2419

Chen, Y., Zhou, W., & Li, J. (2024). Flexible Employment for Chinese College Students: From "What" to "How to Do". *China University Students Career Guide*, (1), 34–41. https://doi.org/10.20017/j.cnki.1009-0576.2024.01.007

Cox, E. (2004). Adult learners learning from experience: using a reflective practice model to support work-based learning. *Reflective Practice*, *6*(4), 459–472. https://doi.org/10.1080/14623940500300517

Dixit, S. (2021). *Employment Skills*. BFC Publications.

Dong, D., & Liang, J. (2021). Exploration on training mode of school-enterprise cooperation talents in pharmaceutical molecular biology. *Creative Education Studies*, *9*(6), 1580–1583. https://doi.org/10.12677/ces.2021.96262

Esaulova, I. (2023). Motivational Mechanism of Employee's Initiative Behavior. *Management of the Personnel and Intellectual Resources in Russia*, *12*(4), 48–53. https://doi.org/10.12737/2305-7807-2023-12-4-48-53

Fang, D., Xie, B., Zhan, Y., & Han, X. (2023). Research on the Factors Influencing College Students' Career Choices Based on Data Analysis. *The Chinese Journal of ICT in Education*, *29*(11), 64–75. https://doi.org/10.3969/j.issn.1673-8454.2023.11.008

Feng, X., & Chen, L. (2023). Exploration of Internship Practice Methods for College Students School—Enterprise Cooperation as an Example. *International Journal of Business and Management Invention*, *12*(12), 8–14. https://doi.org/10.35629/8028-12120814

Gerhardt, T., & Annon, P. J. (Eds.). (2021). *Applications of Work Integrated Learning Among Gen Z and Y Students*. IGI Global. https://doi.org/10.4018/978-1-7998-6440-0

Guo, R., & Wu, T. (2022). Reform and Practice of Practical Teaching System in School Enterprise Cooperation. *International Journal of Education and Humanities*, *5*(1), 17-18. https://doi.org/10.54097/ijeh.v5i1.1928

Habibija-Ražanica, A., & Mekić, E. (2021). Digital Literacy, Education and Employment Status: Evidence from Bosnia and Herzegovina. *Open Journal for Sociological Studies*, *5*(2), 71–80. https://doi.org/10.32591/coas.ojss.0502.03071h

Hennink, M. M., & Kaiser, B. N. (2020). *Saturation in qualitative research*. Sage.

Hou, W. (2020). Analysis of the employment dilemma and countermeasures of college students under the influence of the new coronavirus epidemic. *China Journal of Commerce*, *2020*(22), 22–24. https://doi.org/10.19699/j.cnki.issn2096-0298.2020.22.022

Hu, H. (2022). Examining teacher competencies in content and language integrated learning: Professional profiles and ways forward. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, *14*(2), 1–22. https://doi.org/10.21659/rupkatha.v14n2.26

Hu, H., & Mi, A. (2024). Localisation of content and language integrated learning in China: Tensions in teacher professional development. *Journal of Multilingual and Multicultural Development*, Advanced online publication. https://doi.org/10.1080/01434632.2024.2380099

Hu, H., & Wang, W. (2024). Unveiling the employability landscape: Chinese international doctoral students in Malaysian universities. *Education as Change*, *28*, Article 15285. https://doi.org/10.25159/1947-9417/15285

Huang, H., Karim, A. M., Adaikalam, J., & Chen, Z. (2024). Study on the Factors Affecting University Graduates Unemployment Problem in China: Literature Review Approach. *International Journal of Academic Research in Business and Social Sciences*, *14*(1), 553–567. https://doi.org/10.6007/IJARBSS/v14-i1/20474

Janson, S. (2024). *The Agility Guides – Flexibility & Adaptability in Leadership*. Best of HR – Berufebilder.de®.

Jerome, V. B., & Antony, A. (2018). *Soft skills for career success*. Educreation Publishing.

Jin, W. (2021). *China's vocational education industry-education integration school-enterprise cooperation model*. Economic Science Press.

Kerber, L., & Gourdin, A. (2018). *Quality Assurance and work-based learning: A report for the WEXHE alliance*. WEXHE. https://www.enqa.eu/wp-content/uploads/2019/09/WEXHE-report_ENQA.pdf

Kolb, D. A. (2015). *Experiential Learning: Experience as the Source of Learning and Development* (2 ed.). Pearson Education.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press. https://doi.org/10.1017/CBO9780511815355

Li, C., Li, G., & Shi, Y. (2019). Analysis of the Construction and Implementation of the New Mode of School-Enterprise Cooperation in Higher Vocational Colleges from the Perspective of Educational Reform. *Open Journal of Social Sciences*, *7*(11), 246–253. https://doi.org/10.4236/jss.2019.711017

Li, Z. (2023). Research on school enterprise cooperation mode under the mechanism of "craftsman leading and collaborative education". *SHS Web of Conferences*, *157*, Article 02019. https://doi.org/10.1051/shsconf/202315702019

Lim, Z. Y., Yap, J. H., Lai, J. W., Mokhtar, I. A., Yeo, D. J., & Cheong, K. H. (2024). Advancing Lifelong Learning in the Digital Age: A Narrative Review of Singapore's Skills Future Programme. *Social Sciences*, *13*(2), Article 73. https://doi.org/10.3390/socsci13020073

Luo, S., & Cai, C. (2020). Research on construction and application of school-enterprise cooperative talent training mechanism. *Modern Education Forum*, *3*(1), 34–36. https://doi.org/0.32629/mef.v3i1.515

Lynch, R., Leo, S., & Downing, K. (2006). Context dependent learning: Its value and impact for workplace education. *Education + Training*, *48*(1), 15–24. https://doi.org/10.1108/00400910610645707

Mamatha, S. M. (2021). Experiential Learning in Higher Education. *International Journal of Advance Research and Innovation*, *9*(3), 214–218. https://ijari.org/assets/papers/9/3/IJARI-AS-21-09-113.pdf

Marope, P. T. M., Holmes, K. P., & Chakroun, B. (2015). *Unleashing the Potential: Transforming Technical and Vocational Education and Training*. UNESCO Publishing.

Ministry of Education. (2020, 23 September 2020). *Improving the quality of vocational education Action Plan (2020–2023)*. http://www.moe.gov.cn/srcsite/A07/zcs_zhgg/202009/t20200929_492299.html

Ministry of Education. (2023). *National Vocational Education Teacher Measures for the Management of Enterprise Practice Bases (Trial)*. http://www.moe.gov.cn/srcsite/A10/s7034/202312/t20231229_1096641.html

Organization for Economic Co-operation and Development. (2017). *Getting Skills Right: Skills for Jobs Indicators*. OECD Publishing.

Oumansour, N.-E., & M'ssiyah, S. (2023). Oscillation Effects of Innovation on Employment. *Virtual Economics*, *7*(1), 82–97. https://doi.org/10.34021/ve.2024.7.01(5)

Pan, B., Liu, Q., Jin, D., Wei, L., & Chang, L. (2022). Research on Strategies of Improving the Vocational Competency of Undergraduates in Applied Undergraduate Colleges. *Jiangsu Higher Education*, (4), 82–89. https://doi.org/10.18870/hlrc.v14i0.1514

Parveen, T., & Sharma, V. K. (2023). Nurturing Soft Skills: Unlocking the Key to Career Advancement and Workplace Success. *International Journal for Multidisciplinary Research*, *5*(4), 1–8. https://doi.org/10.36948/ijfmr.2023.v05i04.4525

Peterson, K., & Kolb, D. A. (2017). *How You Learn Is How You Live: Using Nine Ways of Learning to Transform Your Life*. Berrett-Koehler Publishers.

Phillips, O. (2022). Work-based learning in higher education – approaches and application to promote social justice. *Investigations in University Teaching and Learning*, *13*, 1–6. https://repository.londonmet.ac.uk/7756/1/OLAIDE_Investigations22_FINAL-Accessible.pdf

Qin, Q., & Lei, Y. (2024). Research on existing problems and countermeasures in school-enterprise cooperation in private higher vocational colleges. *Journal of Education and Educational Research*, *7*(1), 222–226. https://doi.org/10.54097/qw8h8522

Sandra, J., Suryana, A., & Indrayanti, S. (2023). The importance of balance between hard skills and soft skills to improve the quality of higher education graduates. *Jurnal Manajemen Pendidikan*, *5*(2), 464–470. https://doi.org/10.55352/mudir

Sartika, M., Astuti, S. D., Chasanah, A. N., & Riyanto, F. (2023). Digital Skills to Improve Work Performance. *International Journal of Accounting, Management, And Economics Research*, *1*(2), 33–40. https://doi.org/10.56696/ijamer.v1i2.14

Savickas, M. L. (2021). *Career Adaptability*. Mark L. Savickas.

Schön, D. A. (1984). *The Reflective Practitioner: How Professionals Think in Action*. Basic Books.

Scott, C. L., & Byrd, M. Y. (Eds.). (2024). *Diversity in the Workforce: Current Issues and Emerging Trends*. Routledge.

Soproni, Z. (2023). Employability Skills: Rethink Your Learning. *GILE Journal of Skills Development*, *3*(2), 53–65. https://doi.org/10.52398/gjsd.2023.v3.i2.pp53-65

Su, Q., Chang, Y., & Chen, P. (2022). Design of a green skills scale for Chinese University students. *Educational Research and Reviews*, *17*(12), 288–298. https://doi.org/10.5897/ERR2022.4289

Suyitno, S., Jatmoko, D., Primartadi, A., & Ab-Latif, Z. (2023). Industrial practice platform based on work-based learning: A solution to improve student competence. *Jurnal Pendidikan Vokasi*, *13*(1), 98–106. https://doi.org/10.21831/jpv.v13i1.54589

Swaminathan, R., & Mulvihill, T. M. (2018). *Teaching qualitative research: Strategies for engaging emerging scholars*. Guilford Publications.

Tee, P. K., Wong, L. C., Dada, M., Song, B. L., & Ng, C. P. (2024). Demand for digital skills, skill gaps and graduate employability: Evidence from employers in Malaysia. *F1000Research*, *13*, Article 389. https://doi.org/10.12688/f1000research.148514.1

Tuselim, Y. R. M., Muhammad, S., & Mat, M. F. (2020). Enhancing graduate employability through work-based learning (WBL) approach in civil engineering technology programme. *Jurnal Kejuruteraan, Teknologi and Sains Sosial*, *3*(1), 1–11. https://www.puo.edu.my/webportal/wp-content/uploads/2023/01/17.-ENHANCING-GRADUATE-EMPLOYABILITY.pdfx

Wang, S. (2023). Analysis on the Employment Pressure of College Students and Its Influencing Factors. *Advances in Education*, *13*(3), 1269–1275. https://doi.org/10.12677/AE.2023.133200

Wang, X., Lin, W., Xue, T., Green, A., Gu, L., He, Y., Huang, X., Jin, Z., & Wu, Y. (2022). Workplace learning in China: Transferring training into practice to improve performance. *International Journal for Research in Vocational Education and Training*, *9*(3), 294–315. https://doi.org/10.13152/IJRVET.9.3.1

Wang, Y. (2022a). The mode of school-enterprise cooperation to solve the talent dilemma of small and micro enterprises *Adult and Higher Education*, *4*(4), 36–42. https://doi.org/10.23977/aduhe.2022.041406

Wang, Y. (2022b). The Mode of School-Enterprise Cooperation to Solve the Talent Dilemma of Small and Micro Enterprises *Adult and Higher Education*, *4*(14), 36–42. https://doi.org/10.23977/aduhe.2022.041406

Wang, Y., & Xia, H. (2020). Grasp the key issues in deepening school-enterprise cooperation. *Vocational Education*, *9*(1), 79–82. https://doi.org/10.12677/ve.2020.91012

World Economic Forum. (2020). *The Future of Jobs Report 2020*. World Economic Forum. https://www3.weforum.org/docs/WEF_Future_of_Jobs_2020.pdf

Yong, B. P. P., & Ling, Y. L. (2023). Skills Gap: The Perceptions of Importance of Soft Skills in Graduate Employability Between Employers and Graduates. *Journal of Techno-Social*, *15*(1), 16–33. https://doi.org/10.30880/jts.2023.15.01.002

Yu, W. (2021). *The road to innovation through school-enterprise cooperation*. Machinery Industry Press.

Yunesman, Y. (2023). *Model employability skills learning*. PT. Mafy Media Literasi Indonesia.

Zang, Y. (2024). Research on the paths to improve the employability of college students based on the needs of corporate employers. *Science & Fortune*, (6), 113–115. https://doi.org/10.12293/j.issn.1671-2226.2024.06.038