



## The Employability of Graduates from the Chinese Language and Culture Program at Hasanuddin University in the Workforce: A Tracer Study Analysis and Its Relevance to 21st-Century Skills

Sukma Sukma<sup>1✉</sup>, Andi Filsah Muslimat<sup>2</sup>, Ria Riski Marsuki<sup>3</sup>

<sup>1</sup> Universitas Hasanuddin, Indonesia

<sup>2</sup> Universitas Hasanuddin, Indonesia

<sup>3</sup> Universitas Negeri Semarang, Indonesia

### Keywords

*Employability, Chinese Language Graduates, 21st-Century Skills, Tracer Study, Workforce Alignment*

### Abstract

This study examines the employability of graduates from the Chinese Language and Culture Program at Hasanuddin University, focusing on their career outcomes and the relevance of 21st-century skills in the workforce. Using a tracer study methodology, data was collected from 44 graduates (64.7% response rate) through surveys and interviews. The findings reveal a 72.73% employment rate, with most graduates securing roles as translators/interpreters or Chinese teachers, primarily in the private sector. Key factors influencing employability include communication skills, industry demand for Mandarin proficiency, and practical training. However, 27.27% of graduates remain unemployed, citing further education or difficulty finding suitable jobs as the primary reasons. The study highlights the need for curriculum enhancements and stronger university-industry partnerships to better align graduates' skills with labor market demands.

✉ Corresponding Author:  
E-mail: [sukma@unhas.ac.id](mailto:sukma@unhas.ac.id)

## INTRODUCTION

The employability of graduates from the Chinese Language and Culture Program at Hasanuddin University is increasingly relevant in a global job market that demands 21st-century skills. Employability is typically influenced by how well educational programs align with the competencies required by employers. This is particularly essential for graduates from cultural and language studies, such as those in the Chinese program.

Employability is linked to specific skills vital for success in the 21st century, often called "the 4Cs": critical thinking, creativity, collaboration, and communication (Prastyaningrum et al., 2023) (Afandi et al., 2019)

Studies indicate that graduates need knowledge in their field and practical application of various 21st-century skills to navigate complex professional environments effectively (Weeks et al., 2020). For graduates of the Mandarin Language program, proficiency in both the language and the nuances of Chinese culture can differentiate them in a competitive job market, especially as China's global influence continues to rise (Pontillas & Fajardo, 2023).

Furthermore, educational institutions like Hasanuddin University are evaluating how their programs prepare students for the workforce. Incorporating pedagogical strategies that enhance student engagement and critical thinking is essential in nurturing these skills (Hämäläinen et al., 2017)(Valtonen et al., 2017). Programs emphasizing active learning can improve student readiness for employment (Wu & Lewis, 2019). This prepares graduates to face workplace challenges more adeptly, boosting their confidence and employability prospects.

A comprehensive approach that integrates pedagogical frameworks with real-world applications has also been underscored. Institutions are encouraged to conduct tracer studies assessing graduates' employment status and the relevance of their educational background to their careers (Damdinsuren et al., 2023). Such studies reveal important insights into job alignment with academic training and help identify areas for curriculum enhancement to ensure they meet industry demands.

In summary, graduates from the Chinese Language and Culture Program at Hasanuddin University must cultivate 21st-century skills to enhance their employability. Aligning educational objectives with industry requirements through innovative teaching and targeted coursework will ultimately empower these graduates in the increasingly competitive global workforce.

This study addresses two key questions:

1. What are the employment patterns of Chinese language and Culture program graduates? What are the employment patterns of Mandarin program graduates?

## 2. How are the Employment Status and Career Outcomes of Chinese Language Graduates? How valuable are the program's skills in graduates' current jobs?

Using surveys and interviews, we collected data from 44 graduates (64.7% response rate). The analysis focuses on employment rates, job types, income levels, and skill application. This approach follows established tracer study methods (Schomburg, 2003).

The findings show that some skills are underutilized while most graduates find jobs. These results help universities align programs with market needs. The study also provides insights for other language programs in similar contexts.

To provide actionable insights for educators and policymakers to refine the program's structure and services.

## METHOD

This study adopted a descriptive research design with a survey-based approach to investigate the employability of graduates from the Chinese Language and Culture program at Hasanuddin University. The target respondents consisted of bachelor's degree holders from the program above. A census sampling technique was initially employed to include all eligible graduates; however, only 44 out of 68 potential respondents participated, yielding a response rate of 64.71%. Data was collected through an online questionnaire distributed via Google Forms for efficiency and accessibility. To enhance data reliability, follow-up interviews were conducted to cross-validate responses obtained through WhatsApp, WeChat, and email. These interviews provided more profound insights into graduates' career trajectories and skill applicability in the workforce.

The primary research instrument was a researcher-developed questionnaire meticulously designed to assess graduates' employment status, career relevance, and mastery of 21st-century skills. To ensure its validity, the questionnaire underwent content and face validation by five experts in Chinese language studies, education, and labor market analysis. The validation process confirmed the tool's appropriateness, with a computed validity score of 4.16 (on a 5-point scale), indicating strong instrument reliability.

Data analysis involved quantitative and qualitative methods. Descriptive statistics were used to interpret survey responses, while interview data were thematically analyzed to identify patterns in graduates' career adaptability and skill utilization. The integration of both datasets strengthened the study's findings, offering a comprehensive view of the program's alignment with modern workforce demands.

## RESULT AND DISCUSSION

### Profile of Respondents

The research was conducted from February to April 2025 with a total population of 68 graduates from three program batches (2018, 2019, and 2020). Data was collected by contacting all graduates through official university channels, requesting them to provide their complete name, student identification number, and active email address for verification purposes.

From the total population, we successfully obtained responses from 44 graduates (64.7% response rate), while 24 graduates (35.3%) did not complete the questionnaire. Table 1 details the response rates by graduation cohort:

**Table 1.** Respondents who filled out the questionnaires

No.	Batch Year	Filled out the questionnaire	Do not fill out the questionnaire	Total graduates
1	2018	2	1	3
2	2019	20	9	29
3	2020	22	14	36
<b>Total</b>		<b>44</b>	<b>24</b>	<b>68</b>

The study analyzed the demographic and socioeconomic profiles of 44 Chinese Language and Culture program graduates, focusing on gender, marital status, income range, and work placement. Below is a detailed breakdown of the findings and their implications:

**Table 2.** Profile of graduates

Profile	F	%
Gender		
Female	38	85
Male	6	15
Total	44	100
Marital Status		
Single	38	95
Married	2	5
Total	44	100
Income Range (N=32)		
1 million – below	2	6.25
1 million - above	2	6.25
2 million	3	9.38
3- 4 million	5	15.63
5- 6 million	1	3.13
7-8 million	2	6.26
9-10 million	10	31.25
10 million - above	7	21.88
Total	32	100

Work placement		
Urban	17	53.13
Suburban	15	46.88
Total	32	100

Table 2 shows that 85% of the respondents are female, while 15% are male. This result indicates a significantly higher representation of female graduates in the Chinese Language and Culture program than their male counterparts. The data suggests that female students continue to dominate language and culture-related academic programs, possibly due to more significant interest or societal perceptions of language studies as a preferred field for women. This finding aligns with the study by (Thien et al., 2025) which observed a similar gender disparity in East Asian language programs across Southeast Asian universities. Female graduates often excel in language-related careers due to their strong communication and intercultural skills (Kheder & Rouabhia, 2023).

Regarding marital status, most respondents (95%) are single, while only 5% are married. This trend reflects the younger age profile of recent graduates, who are likely to prioritize career development before settling into family life.

Regarding income distribution, the most significant proportion of graduates (31.25%) earn between IDR 9-10 million per month, followed by those earning above IDR 10 million (21.88%). Meanwhile, a smaller percentage (6.25%) fall into the lowest income bracket (below IDR 2 million). This disparity suggests that while many graduates secure well-paying jobs, some may face underemployment or entry-level positions requiring further advancement. Income variability among graduates of language programs is profoundly influenced by factors such as industry demand and specific skill specialization.

Income variability among graduates of language programs is profoundly influenced by factors such as industry demand and specific skill specialization. A detailed analysis reveals that graduates with specialized skills tend to experience considerable income disparities, depending on the nature of the demand in the labor market.

First, it is essential to recognize that industry demand plays a crucial role in shaping job opportunities available to graduates. For instance, research indicates that graduates entering fields with high demand for language skills, such as translation roles, often face a volatile job market characterized by inconsistent availability of positions. Mabruk et al. emphasized that many translation graduates primarily resort to teaching positions due to limited job openings as translators, adversely affecting their income levels (Kadwa & Alshenqeeti, 2020). This reflects a broader trend where graduates may not adequately match job openings, leading to significant job mismatches that can cause income penalties. This is corroborated by Zhu's findings on significant job mismatches affecting early career earnings (R. Zhu, 2014).

Moreover, the significance of skill specialization cannot be understated. Graduates with technical abilities relevant to specific sectors, such as technology or healthcare, often secure higher income levels than their counterparts in more generalized roles. For instance, Tee et al. underscored the demand for digital skills in Malaysia, where employers frequently highlight a gap in communication and problem-solving skills among graduates, directly affecting employability and income potential (Tee et al., 2024). Additionally, social skills have been documented as a vital factor influencing long-term employment and earnings, reflecting the nuanced demand for skills that extend beyond mere technical competencies.

The capacity for adaptability and the alignment of curriculum with market requirements are also paramount in contributing to income variability post-graduation. A mismatch between what graduates learn and what employers require can severely hinder their employment opportunities (Bindawas, 2024; Tria & Bocacao, 2022). For example, graduates from vocational training programs generally have greater employability and higher potential earnings than those from traditional academic backgrounds, emphasizing the importance of targeted education aligned with labor market needs (X. Zhu & Cao, 2017). Institutions are therefore encouraged to refine curricula to ensure they equip students with technical and soft skills requisite in today's job market (Anastasiu et al., 2017; Mary, 2022).

Lastly, evidence suggests that experiential learning, through internships or job training, significantly enhances employability and wage prospects. Graduates in practical training are more likely to secure employment and negotiate better salaries within their respective (Aljumah, 2023). This ties back to the earlier theme of industry readiness and the correspondence between educational outcomes and job market expectations.

In summary, income variability among language program graduates is influenced by a confluence of factors, including industry demand, skill specialization, adaptability of the educational curriculum, and the importance of practical, hands-on learning experiences. This multi-faceted approach highlights the need for continuous feedback between educational institutions and the labor market to improve employment outcomes for language graduates.

Additionally, Table 2 reveals that 53.13% of employed graduates work in urban areas, while 46.88% are in suburban regions. This near-equal distribution implies that career opportunities for Mandarin-speaking professionals exist across different geographic settings, though urban areas may offer higher-paying roles in multinational companies. According (Martinaj, 2020), language graduates in urban centers often benefit from greater exposure to international business environments.

These findings underscore the need for targeted career support, particularly for male students and lower-income earners, to ensure equitable opportunities. Furthermore, curriculum enhancements focusing on industry-specific language skills could better prepare graduates for high-demand roles.

### Employment Status and Career Outcomes of Chinese Language Graduates

Table 3 reveals that 72.73% (n=32) of graduates secured employment, while 27.27% (n=12) remained unemployed. This suggests strong employability for most graduates, though a quarter face job-seeking challenges. The high employment rate aligns with studies emphasizing the demand for Mandarin speakers in global markets (Phanata, 2024). However, the unemployed cohort warrants attention, possibly reflecting mismatches between skills and local job opportunities. The high employment rates can be closely tied to the global demand for Mandarin speakers, as outlined by substantial research findings. Recognizing Mandarin's increasing significance in international communication is essential for educational strategies to prepare the workforce for future challenges in a rapidly globalizing economy.

**Table 3.** Graduates with their current status (N=44)

Program	F	%
Have job	32	18.75
Do not have a job yet	12	78.13
Total	44	100

**Table 4.** Reasons do not have a job yet (N=12)

Reasons	F	%
Continuing Masters education	5	41.67
Haven't found a suitable job yet	3	25.00
Health reasons	1	8.33
Family commitments	1	8.33
Improving Mandarin proficiency	1	8.33
Preparation for further studies	1	8.33
Total	12	100

**Table 5.** Graduates' waiting time (N=32)

Waiting time	F	%
Before Graduate	18	56.25
Less than a month	6	18.75
2 months - 5 months	5	15.63
6 months - 12 months	2	6.25
More than 1 year	1	3.13
Total	32	100

**Table 6.** Type of Organizations (N=32)

Work Status	F	%
Freelancer	6	18.75
Private	25	78.13
Public	1	3.13
Total	32	100

**Table 7.** Occupational classification (N=32)

Classification	F	%
Chinese Teacher	8	25
Translator/Interpreting	17	53.13
Employee staff	3	9.38
Sales admin	1	3.13
HRGA	1	3.13
Marketing	2	6.25
Total	32	100

**Table 8.** Language skill relevance with jobs (N=32)

Classification	F	%
Yes	29	90.63
No	9	9.37
Total	32	100

**Table 9.** Working Experience (N=32)

Classification	F	%
More than one month	1	3.13
Less than one year	21	65.63
1 year	2	6.25
More than one year	4	12.5
3 years	3	9.38
4 years	1	3.13
Total	32	100

Table 4 show analysis of the reasons why graduates from the Chinese Language and Culture Program at Hasanuddin University remain unemployed provides valuable insights. Among 44 respondents, 41.67% cited pursuing further education as their primary reason for not working, indicating a strong emphasis on academic advancement. Additionally, 25% reported difficulties in finding suitable employment, reflecting the competitive job market. Other factors include health issues, family commitments, and a focus on improving Mandarin proficiency, each representing 8.33%. These findings highlight the need for targeted support to enhance employability and address barriers that graduates face in the workforce.



Table 5 highlights that 56.25% (n=18) secured jobs before graduation, indicating effective university-industry linkages. Another 18.75% (n=6) found work within a month, showcasing rapid transition. However, 15.63% (n=5) waited 2–5 months, suggesting competitive entry-level phases. These findings mirror (Baert et al., 2021) study on language graduates' job-search timelines, where pre-graduation recruitment correlated with internship experiences.

As shown in Table 6, the highest proportion of graduates work in the private sector, representing 78.13% (n=25) of respondents. A significant minority of 18.75% (n=6) are freelancers, while only 3.13% (n=1) work in public sector positions. The data indicates that Most graduates secure corporate roles requiring Mandarin language skills, nearly 1 in 5 graduates choose independent freelance work, and Government/institutional employment remains minimal.

Thus, most graduates find employment in private companies or as self-employed language professionals, reflecting strong market demand for Chinese language competencies in business environments. The limited public sector representation suggests potential for expanding career opportunities in government and institutional settings.

Table 7 illustrates the occupational classification of 32 participants. The data reveals that 53.13% (17 individuals) are employed as translators/interpreters, indicating a dominant presence of language-related professions within the sample. Furthermore, 25% (8 individuals) work as Chinese teachers, highlighting another key occupational group. Among the remaining participants, 9.38% (3 individuals) are employee staff, 6.25% (2 individuals) work in marketing, and 3.13% (1 individual) are engaged in sales administration and HRGA, respectively. This distribution indicates that while language-related roles are prominent, there is also a diversity of other occupations represented. The high percentage of translators/interpreters and Chinese teachers suggests a potential emphasis on language proficiency within this group. This occupational distribution may reflect a specific industry or sector where language skills are highly valued.

Table 8 demonstrates the relevance of language skills to the jobs of 32 participants. A significant 90.63% (29) reported that their language skills were relevant. In contrast, only 9.37% (3 individuals) found them irrelevant. This data underscores the strong connection between language proficiency and employment within this group. The overwhelming majority confirming relevance highlights the practical value of language skills in their professional roles, indicating a high demand for these abilities in their workplaces

Table 9 details the working experience of 32 participants. A significant 65.63% (21 individuals) possess less than one year of experience, indicating a relatively new workforce. Following this, 12.5% (4 individuals) have more than one year of experience, and 9.38% (3 individuals) have three years. Two individuals, representing 6.25%, have one year of experience. Both 'more than one month' and 'four

years' categories account for 3.13% (1 individual) each. This distribution highlights a concentration of participants with limited working experience, with a smaller proportion having more extended tenure. The data reveals a diverse range of experience, though skewed towards those with less than a year.

**Table 10.** Essential Workplace Skills(N=32)

Skills/ competencies	F	%
Critical Thinking	16	8.33
Creativity	18	9.38
Collaboration	18	9.38
Communication	31	16.15
Information Literacy	9	4.69
Media Literacy	11	5.73
Technology literacy	15	7.81
Flexibility	12	6.25
Leadership	16	8.33
Initiative	13	6.77
Productivity	15	7.81
Social skills	18	9.38
Total	192	100

Table 10 delineates the essential workplace skills identified by 32 participants, reflecting the multifaceted demands of 21st-century language professionals. Communication, vital for conveying nuanced meanings across linguistic and cultural barriers, tops the list at 16.15% (31 individuals). This strong correlation underscores its pivotal role in their field. Collaboration and social skills, at 9.38% (18 individuals), highlight the need for effective teamwork and interpersonal interactions, which are crucial for navigating diverse work environments. Creativity, also at 9.38% (18 individuals), reflects the dynamic nature of language work, requiring innovative solutions in translation and interpretation. At 8.33% (16 individuals), critical thinking and leadership are essential for complex problem-solving and guiding teams. Technology literacy and productivity, at 7.81% (15 individuals), reflect the increasing integration of digital tools in language-related tasks. Initiative and flexibility, at 6.77% (13 individuals) and 6.25% (12 individuals), respectively, are vital for adapting to evolving industry demands. Media and information literacy, at 5.73% (11 individuals) and 4.69% (9 individuals), respectively, are crucial for accurate and reliable information processing in a globalized context. This distribution confirms that language professionals must blend traditional linguistic expertise and contemporary skills to thrive in the modern workplace.

## CONCLUSION

This study underscores the critical importance of aligning the Chinese Language and Culture Program at Hasanuddin University with the demands of the modern workforce. The tracer study findings indicate a commendable employment rate of 72.73%, reflecting the growing demand for Mandarin proficiency in various sectors. However, the 27.27% unemployment rate among graduates signals a

need for intervention, particularly in enhancing job readiness and matching graduates' skills with market opportunities.

Key reasons for unemployment include the pursuit of further education and challenges in finding suitable employment, highlighting a potential disconnect between educational outcomes and labor market requirements. The findings suggest that while many graduates prioritize academic advancement, this may inadvertently delay their entry into the workforce.

To address these challenges, it is imperative for educational institutions to integrate targeted career support and practical training opportunities within their curricula. Emphasizing essential 21st-century skills such as critical thinking, communication, collaboration, and adaptability can significantly enhance graduates' employability.

Furthermore, fostering partnerships with industry stakeholders can provide graduates with valuable insights and networking opportunities, ensuring they are better equipped to navigate the competitive job landscape. Ultimately, a holistic approach that combines academic rigor with practical experience will empower graduates to thrive in an increasingly globalized economy, thereby fulfilling the aspirations of both students and employers alike.

## REFERENCES

- Afandi, Sajidan, Akhyar, M., & Suryani, N. (2019). Development frameworks of the Indonesian partnership 21 st -century skills standards for prospective science teachers: A Delphi study. *Jurnal Pendidikan IPA Indonesia*, 8(1), 89–100. <https://doi.org/10.15294/jpii.v8i1.11647>
- Aljumah, A. (2023). The Impact of Job Training on Recruitment and Employability Skills Among Graduates. *International Journal of Professional Business Review*, 8(10), e02806. <https://doi.org/10.26668/businessreview/2023.v8i10.2806>
- Anastasiu, L., Anastasiu, A., Dumitran, M., Crizboi, C., Holmaghi, A., & Roman, M. N. (2017). How to align the university curricula with the market demands by developing employability skills in the civil engineering sector. *Education Sciences*, 7(3). <https://doi.org/10.3390/educsci7030074>
- Baert, B. S., Neyt, B., Siedler, T., Tobback, I., & Verhaest, D. (2021). Student internships and employment opportunities after graduation: A field experiment. *Economics of Education Review*, 83, 102141. <https://doi.org/10.1016/j.econedurev.2021.102141>
- Bindawas, A. (2024). Employability skills of business graduates in Saudi Arabia: Do academia and employers speak the same language? *Journal of Management and Business Education*, 7(2), 194–206. <https://doi.org/10.35564/jmbe.2024.0011>

- Damdinsuren et al. (2023). Proceedings of the Quality Assurance in Higher Education International Conference (QAHE 2022). In Proceedings of the Quality Assurance in Higher Education International Conference (QAHE 2022) (Vol. 1). Atlantis Press SARL. <https://doi.org/10.2991/978-2-494069-41-1>
- Hämäläinen, R., Kiili, C., & Smith, B. E. (2017). Orchestrating 21st century learning in higher education: A perspective on student voice. *British Journal of Educational Technology*, 48(5), 1106–1118. <https://doi.org/10.1111/bjet.12533>
- Kadwa, M. S., & Alshenqeeti, H. (2020). International Journal of Linguistics, Literature and Translation (IJLLT) The Impact of Students' Proficiency in English on Science Courses in a Foundation Year Program. *International Journal of Linguistics, Literature and Translation (IJLLT)*, 3(11), 55–67. <https://doi.org/10.32996/ijllt>
- Kheder, K., & Rouabhia, R. (2023). Gender Differences in Learning Languages. *European Journal of Applied Linguistics Studies*, 6(2), 97–111. <https://doi.org/10.46827/ejals.v6i2.456>
- Martinaj, F. (2020). Foreign Languages: The Key Factor in Employability. *Management*, 15(3), 161–178. <https://doi.org/10.26493/1854-4231.15.161-178>
- Mary, A. B. (2022). Employers' Assessment of Graduates' Utilization of Employability Skills: Influence on Organizational Growth and Sustainable Development in Nigeria. *Discourse and Communication for Sustainable Education*, 13(1), 63–76. <https://doi.org/10.2478/dcse-2022-0006>
- Phanata, S. (2024). The Demand for “ Chinese + ” Talent Training : A Case Study of Chinese Language Program at Universitas Sebelas Maret. 03(02), 165–172.
- Pontillas, M. S., & Fajardo, D. F. B. (2023). Employability Status of English Language Studies Graduates in a Polytechnic State College in the Philippines. *English Journal Literacy Utama*, 8(1), 718–727. <https://doi.org/10.33197/ej lutka.v8i1.229>
- Prastyaningrum, I., Imansari, N., & Kholifah, U. (2023). Analysis of Critical Thinking Skills and Collaboration of Electronic Engineering Education Students in Electrical Machinery Course. *IJJET (International Journal of Indonesian Education and Teaching)*, 7(1), 114–120. <https://doi.org/10.24071/ijiet.v7i1.5091>
- Schomburg, H. (2003). Handbook for Graduate Tracer Studies. University of Kassel, Germany: Centre for Research on Higher Education and Work, 1–281. [www.uni-kassel.de/incher](http://www.uni-kassel.de/incher)

- 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, 1–19. <https://doi.org/10.12688/f1000research.148514.1>
- Thien, L. M., Lim, H. L., Ahmad Shabudin, A. F., Che Aman, R., Ismail, A., Zuharah, W. F., & Muftahu, M. (2025). Women leadership in higher education: exploring enablers and challenges from middle-level academics' perspective. *Humanities and Social Sciences Communications*, 12(1), 1–12. <https://doi.org/10.1057/s41599-024-04278-6>
- Tria, L. V., & Bocacao, H. R. (2022). Tracer Study of Bachelor of Science in Fisheries Graduates of Partido State University (Psu) Sagñay Campus. *The American Journal of Humanities and Social Sciences Research*, 05, 29–39. <https://doi.org/10.56805/ajhssr.2022.5.5.104>
- Valtonen, T., Sointu, E., Kukkonen, J., Kontkanen, S., Lambert, M. C., & Mäkitalo-Siegl, K. (2017). TPACK updated to measure pre-service teachers' twenty-first century skills. *Australasian Journal of Educational Technology*, 33(3), 15–31. <https://doi.org/10.14742/ajet.3518>
- Weeks, K. J., Lawver, R. G., Sorensen, T. J., & Warnick, B. K. (2020). Do Teachers Have the Skills: 21st Century Skills in the Agricultural Education Classroom? *Journal of Agricultural Education*, 61(4), 127–142. <https://doi.org/10.5032/jae.2020.04127>
- Wu, L., & Lewis, M. W. (2019). How Well Does Undergraduate Education Prepare College Students for the Employment Outlook? A Secondary Data Analysis of Baccalaureate and Beyond Longitudinal Study (B&B). *Higher Education Studies*, 9(4), 181. <https://doi.org/10.5539/hes.v9n4p181>
- Zhu, R. (2014). The impact of major-job mismatch on college graduates' early career earnings: Evidence from China. *Education Economics*, 22(5), 511–528. <https://doi.org/10.1080/09645292.2012.659009>
- Zhu, X., & Cao, C. (2017). A Study on the Influence of Curriculum Setting on Employment in Career Technical College. 99, 1–4. <https://doi.org/10.2991/icsshe-17.2017.1>