

Perceived Employability Variations Across Specializations Subjects in the Faculty of Education at Tribhuvan University

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<p>Article info: Received: February 13, 2024 Revised: March 14, 2024 Accepted: April 2, 2024</p> <p>Keywords: <i>Perceived employability, level, education, specialisation subject.</i></p>	<p>Abstract: This study explores the level of perceived employability among education students, examining the multifaceted dimensions of skills and competencies crucial for success in the professional realm. Employability extends beyond technical proficiency, encompassing a range of attributes contributing to adaptability and effectiveness. Perceived employability, a subjective assessment of one's ability to secure and maintain employment, plays a pivotal role in shaping individuals' career approaches. A quantitative and exploratory approach was employed, utilising a cross-sectional survey and questionnaire within the context of Nepal's Faculty of Education at Tribhuvan University. The study involved 271 final-year students, employing proportional random sampling and statistical analyses. While education students express high confidence in various employability dimensions, a nuanced categorisation reveals a dual nature of 'presence' and 'consolidation' levels across competencies. Furthermore, specialisation subjects significantly influence perceived employability, with science majors showing higher levels. The study underscores the imperative for a comprehensive understanding of employability factors, emphasising the substantial impact of major subject choice on education students' confidence and readiness for future careers. The findings provide insights for academic institutions, policymakers, and students to enhance strategies for bridging the gap between education and employability in the Nepalese context.</p>
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Introduction

Employability refers to the set of skills, knowledge, attributes, and personal qualities that make an individual suitable for employment and contribute to their achievement in the workplace (McQuaid & Lindsay, 2013). It goes beyond having a specific set of technical skills related to a particular job. It encompasses a wider range of qualities that make a person effective and adaptable in various work settings (Williams et al., 2016). Employability is a multifaceted concept that extends beyond mere technical proficiency in a specific job. It encapsulates a diverse set of skills, knowledge, attributes, and personal qualities that collectively shape an individual's suitability for employment and success in the workplace (Arévalo & Contreras, 2020). The significance of employability lies in its capacity to foster adaptability, effectiveness, and versatility across different work settings. Recognising and cultivating these qualities is crucial for individuals seeking to navigate the dynamic and ever-changing landscape of the professional world. Ultimately, a holistic approach to employability not only enhances an individual's chances of securing employment but also positions them for long-term success and fulfilment in their chosen career path.

The intricate nature of employability, as articulated by scholars, emphasises its complexity, embracing accomplishments, skills, personal traits, and the capability for enduring employment. Positioned as an essential factor for achieving success in one's career, employability entails a fusion of proficiency, efficacy, and the aptitude to address life challenges effectively. This mirrors the dynamic interaction of individual attributes within the continually changing terrain of the job market.

Perceived employability is an individual's subjective assessment or belief in their own ability to secure and maintain employment, as well as to navigate and succeed in the job market (Duggal et al., 2023). It involves the person's confidence in their skills, qualifications, personal attributes, and overall readiness to meet the demands of the professional world (Bargsted et al., 2021). This perception is often influenced by a combination of self-awareness, education, training, experience, and the individual's understanding of the current job market dynamics.

Perceived employability is subjective and may vary from person to person based on their self-confidence, awareness of their strengths and weaknesses, and their assessment of how well they align with the expectations of employers. It plays a significant role in an individual's approach to job-seeking, career planning, and professional development.

In the context of Nepal, employability is understood as the ability to secure employment and effectively apply the skills and competencies valued by employers (Sharma, 2023). The success of students in shaping their careers is intricately linked to factors contributing to employability, with a particular emphasis on perceived employability. This perception involves students' beliefs regarding their own capabilities and evolves based on changing circumstances (González & Wagenaar, 2003), connecting competence with the requirements of the labour market (Vazirani, 2010). Graduates who perceive themselves as highly employable tend to exhibit confidence and optimism, utilising this perception as a self-assessment tool to identify areas of improvement and enhance employability factors (Cuyper & Witte, 2006). Despite the global emphasis on researching perceived employability, there is a noticeable gap in the literature when it comes to exploring this aspect within the specific context of Nepal.

Perceived Employability of Teacher Education Graduates

A high proportion of teacher education graduates have successfully secured employment, with the majority currently employed, as per the study's findings. In terms of acquiring employability skills, a significant number of graduates attribute their skills to the education provided by the University (Pacleb-Ulanday, 2021). This underscores the institution's commitment to equipping educators with the necessary skills for a successful and impactful career in the field of education.

Teacher education research highlights essential qualities crucial for effective teaching (Brookhart, 2011; Stronge, 2011). These encompass a range of skills, such as classroom management, supervision, continuous professional development, and assessment. The success of a teacher is influenced by various factors, including background, personal attributes, and job responsibilities. Moreover, qualities such as verbal ability, content knowledge, teaching experience, caring demeanour, fairness, and reflective practice are emphasised. Snell and Swanson (2000) stress the teacher's role as a facilitator and leader, necessitating qualities like knowledge, empowerment, expertise, reflection, collaboration, and flexibility. It is imperative for teacher education programs, particularly in education faculties, to focus on cultivating these qualities to enhance graduates' employability within the educational sector.

Specialisation Subjects and Perceived Employability

The specialisation subjects significantly affect the employability of graduates (Ghauri & Ayub, 2021). Graduates with a Bachelor's in education, specialising in Science, Mathematics, and English, are highly competitive and sought after in public and private educational roles. The research underscores

their effectiveness, particularly in Science and Mathematics, signalling high demand for their expertise in the job market (Bihag-boholano, 2012). Similarly, the education students demonstrated a higher level of perceived employability among various fields of study (Pitan & Muller, 2020). It highlights that graduates specialising in Science, Mathematics, and English within a Bachelor's in education program are highly competitive and sought after in both public and private educational sectors, emphasising the increasing demand for their expertise while also indicating that education students, in general, exhibit a higher level of perceived employability across diverse fields of study.

Furthermore, it is noteworthy to emphasise that the specialisation area chosen by engineering students has a substantial impact on their perceived employability. The study underscores the significance of this factor, suggesting that the specific focus or discipline within the broader field of engineering can significantly influence how students perceive their readiness and attractiveness to potential employers (Sharma, 2019). This finding highlights the nuanced nature of employability within the engineering domain, indicating that not only the overall engineering education but also the specialised knowledge and skills acquired in a particular area play a crucial role in shaping students' confidence in their employability prospects. Consequently, understanding and addressing the unique dynamics associated with each specialisation can contribute to more targeted and effective strategies for enhancing the employability outcomes of graduates.

The cumulative findings challenge existing stereotypes regarding the impact of specialisation areas on graduates' employability skills, suggesting a nuanced and debatable connection between the chosen major subject and perceived employability. Consequently, investigating the unique circumstances of graduates within the Faculty of Education at Tribhuvan University emerges as a worthwhile research pursuit to unravel the underlying dynamics in this context.

Employability of Education Graduates in Nepal

Nepal currently lacks specific policies targeting employability; nonetheless, the 2015 Constitution of Nepal guarantees the right to employment, emphasising the establishment of terms, conditions, and unemployment benefits. Article 9 underscores the importance of labour and employment policies in fostering a skilled workforce, mobilising capital and expertise, and fortifying the socio-economic structure. The National Employment Policy prioritises income-generating employment, incorporating initiatives such as vocational guidance (Ministry of Labour and Employment, 2015). The 15th development plan is oriented towards employment, capacity development, and skill programs geared at fostering job creation (NPC, 2020). Despite these efforts, there exists a discernible gap between these initiatives and current needs, raising concerns about the collaboration between state agencies, employers, and academic institutions. This inadequacy poses a significant challenge to employability and underscores the necessity for substantial funding in quality education and policy reform.

The employment scenario for education graduates in Nepal paints a disheartening picture, with a considerable portion grappling with issues of unemployment (Gautam, 2016). The fundamental issue stems from a lack of necessary skills, knowledge, and proficiency within the pedagogical and leadership domains of the Nepalese education system (Sharma, 2014). This inadequacy prompts significant inquiries regarding the broader employability landscape for education graduates in Nepal.

The synthesis of existing literature underscores the imperative for a comprehensive exploration of employability factors contributing to graduates' success in Nepal. While current studies delve into employment issues concerning gender, ethnicity, and migration, noteworthy gaps persist. Research on competencies for education graduates, as highlighted by Gautam (2016), exists but tends to have a limited focus on the essential skills demanded by the labour market. Entrepreneurship studies, as explored by Pathak and Gyawali (2010), Pant (2015) and Subedi (2017), predominantly concentrate on sociocultural aspects, leaving a notable void in research pertaining to students' self-assessment for future

employability and the potential impact of specialisation subject-a global gap within the realm of employability and education studies. In this context, limited studies, such as those by Seng (2018), examine personal characteristics and background, stressing the critical need to address these research gaps specific to Nepal's unique context of education faculty of Tribhuvan University.

Expanding on the contextual foundation presented earlier, this research endeavours to investigate the extent of perceived employability among graduates in the field of education and its connection with specialisation subject. The central research inquiries guiding this study are twofold: First, what is the prevailing level of perceived employability among students pursuing education? Additionally, to what extent does the perceived employability of these students vary based on their specialisation subject?

Methodology of the Study

This study, utilising a quantitative and exploratory approach (Panhwar et al., 2017), investigated the perceived employability of graduates in the faculty of education and explored the influence of specialisation subjects on this aspect. Employing a descriptive approach through a cross-sectional survey and questionnaire (Creswell, 2012), the research analysed educational background variables, specifically specialisation subjects. The findings of the analytical phase included a comparison of national and international trends in graduate employability (Tang et al., 2005), providing a comprehensive insight into the subject.

Conducted within the Kathmandu Valley, this study zeroed in on the Mahendra Ratna and Sanothimi Campuses of Tribhuvan University, concentrating on final-year (fourth-year) students of the faculty of education. Navigating the challenges of impracticality for a complete census, a meticulously supervised three-stage sampling process unfolded. This method encompassed defining the population, establishing the sampling frame, and selecting samples proportionately (Roy & Chakraborty, 2022). Employing proportional random sampling, 184 students from Mahendra Ratna and 87 from Sanothimi were chosen, resulting in a total of 271 respondents. The systematic selection method, incorporating the lottery approach, upheld proportional representation. As a precaution for potentially missing data, 10 per cent of extra questionnaires were distributed. This rigorous sampling strategy ensures the robustness and representativeness essential for a comprehensive analysis of employability factors among education graduates.

In examining the employability of education students, this study embraced an innovative approach by adapting a tool initially designed by (Sharma, 2019) for evaluating the employability of engineering graduates. A paramount focus on ethical considerations guided the research, with explicit consent obtained for repurposing Sharma's questionnaire. Through collaboration with experts, the tool underwent thoughtful customisation to suit the context of education and incorporate localised nuances, resulting in the identification of ten pivotal dimensions. The questionnaire was then subjected to a meticulous restructuring process, yielding 50 specialised scales aimed at providing a comprehensive assessment of the perceived employability of education students. To ensure the reliability of the tool, a pilot study was conducted, leading to further optimisation for the main survey (Kennedy, 2022). The final version, born out of rigorous testing and refinement, stands as a robust instrument poised to unveil nuanced insights into the dynamic landscape of perceived employability among education students.

The orchestration of data collection unfolded with a meticulous plan geared towards precision and reliability. Commencing the process, I engaged in discussions with campus chiefs to articulate the study's objectives and secure their essential consent. Gaining the approval of these campus leaders was key in garnering active cooperation from the students involved. Upon entering classrooms, I presented a comprehensive overview of the study, fielding questions and underscoring the significance of each student's participation. The subsequent phase involved the administration of the questionnaire, with a particular emphasis on careful reading and a steadfast commitment to confidentiality. As students

diligently filled out the questionnaires, my role extended to vigilant observation, ensuring the quality of the collected data. Expressing gratitude to the participants, I gathered integral data that would fuel subsequent SPSS analysis, focusing on finding insightful findings tailored to each research question and ultimately contributing to the overarching objectives of the study.

Findings and Discussion

The Respondents

The study respondents have been categorised according to the specialisation subjects they were pursuing within the Faculty of Education at Tribhuvan University, specifically in the Bachelor of Education program aimed at preparing individuals for careers as trained teachers. A comprehensive breakdown of the students based on their specialised subjects is provided in Table 1. This table presents detailed information regarding the distribution of participants according to their chosen areas of specialisation within the field of education

Table 1: *Specialisation subjects of education students*

Specialisation Subject	Number of Students	Frequency
English	87	32.1
Nepali	48	17.7
Mathematics	22	8.1
Science	53	19.6
ICT	18	6.6
Social Science (Population, Health, Physical Education)	27	10.0
Economics	16	5.9
Total	271	100.0

The data presented in Table 1 reflects English emerges as the most popular specialisation subject, constituting 32.1 per cent of the respondents. Following closely is the Science specialisation with a representation of 19.6 per cent. This indicates a substantial focus on science education, highlighting the recognition of the crucial role of scientific knowledge in the broader educational landscape. Similarly, Nepali, with a share of 17.7 per cent, holds a substantial presence, underlining the importance placed on the Nepali language within the curriculum or signalling a commitment to preserving and promoting the cultural and linguistic heritage of the region.

The Social Science specialisation, covering Population Studies, Health Education, and Physical Education, accounts for 10.0 per cent of the students. This suggests a holistic approach to education, incorporating subjects that address societal, health, and physical well-being aspects, aligning with a comprehensive perspective on teacher preparation. Additionally, Mathematics, ICT (Information and Communication Technology), and Economics constitute 8.1 percent, 6.6 percent, and 5.9 percent, respectively. While these specialisations represent a smaller percentage individually, they highlight a diverse range of academic interests among education students, reflecting a well-rounded and multifaceted approach to teacher preparation.

The distribution of specialisation subjects among students in the Bachelor of Education program at Tribhuvan University reflects a balanced and comprehensive approach to education study alignment with the evolving needs of the education sector.

Level of Perceived Employability of Education Students

In this segment, I analysed and evaluated the perceived employability levels among education students. The assessment involved calculating the mean and standard deviation of the data. Subsequently, I interpreted the levels of perceived employability using Langlois and Lapointe (2010)

typology. According to this framework, scores ranging from 1.00 to 2.90 are classified as "traces," while scores between 3.00 and 3.18 fall into the "emergence" category. A score between 3.19 and 3.58 is termed "presence," and scores from 3.59 to 4.28 signify "consolidation," with scores between 4.29 and 5.00 indicating the "optimisation level." The detailed outcomes of this analysis can be found in Table 2.

Table 2: *Level of perceived employability of education students*

Employability Constructs	High N(%)	Medium N(%)	Low N(%)	Mean	SD
Content Knowledge	218(80.4)	53(19.6)	0(0)	3.91	0.66
Pedagogical Knowledge and Skills	151(55.7)	107(39.5)	13(4.8)	3.41	0.88
Community and School Relations	180(66.4)	77(28.4)	14(5.2)	3.49	0.91
Curriculum Implementation and Evaluation	184(67.9)	80(29.5)	7(2.6)	3.56	0.87
Motivation and Incentives	181(66.8)	84(31.0)	6(2.2)	3.61	0.87
Communication and Interpersonal Skills	194(71.6)	74(27.3)	3(1.1)	3.67	0.78
Adaptability and Flexibility	177(65.3)	86(31.7)	8(3.0)	3.57	0.83
ICT Competence	177(65.3)	83(30.6)	11(4.1)	3.48	0.91
Collaboration and Teamwork	201(74.2)	65(24.6)	5(1.8)	3.67	0.80
Research and Innovation	143(71.2)	75(27.7)	3(1.1)	3.67	0.72

Table 2 illuminates that a significant majority of education students perceive their employability levels as 'high' across diverse facets. Noteworthy dimensions include content knowledge (80.4%), curriculum implementation and evaluation (66.4%), motivation and incentives (66.8%), communication and interpersonal skills (71.6%), adaptability and flexibility (65.3%), ICT competence (65.3%), collaboration and teamwork (74.2%), and research innovation (71.2%). However, it is pertinent to observe that pedagogical knowledge and skills are rated slightly lower at 55.7%, with 39.5% of students positioning themselves as 'medium' in this aspect. This implies a potential variance in the perceived importance of pedagogical skills within the Faculty of Education, signalling an area for further exploration in the context of employability.

Surprisingly, the fundamental aspect of pedagogical knowledge and skills, critical for effective teacher education, seems to have received comparatively less attention. Krauss et al. (2008) underline the importance of this dimension in employability, adding a layer of irony to the lower rating observed in this specific area.

Upon comparing these dimensions using a competency typology, a discernible pattern emerges. Approximately half of the dimensions, such as content knowledge (3.91), motivation and incentives (3.61), communication and interpersonal skills (3.67), collaboration and teamwork (3.67), and research and innovation (3.67), are positioned at a 'consolidation' level. This implies that these dimensions are in the process of taking shape among students but may not have fully matured to be entirely manifested in the professional arena.

Conversely, the other half of the dimensions, encompassing pedagogical knowledge and skills (3.41), community and school relations (3.49), curriculum implementation and evaluation (3.56), adaptability and flexibility (3.57), and ICT competence (3.48), reside at the 'presence' level. This suggests that these competencies have not yet been fully actualised and integrated into the behaviours and practices of education graduates concerning employability. Despite students expressing high confidence in their abilities across various dimensions, there exists an opportunity for further development and practical application in real-world professional scenarios.

The results concerning the perceived employability of education students reveal a dual categorisation of employability levels. Specifically, 'presence' characterises pedagogical knowledge and

skills, community and school relations, curriculum implementation and evaluation, adaptability and flexibility, and ICT competency. On the other hand, 'consolidation' is noted for content knowledge, motivation and incentives, communication and interpersonal skills, collaboration and teamwork, and research and innovation. While these attributes are discernible among students, they have not yet reached their optimal level or been effectively translated into practical applications. This suggests that graduates may not be entirely equipped to meet the immediate demands of the job market upon completing their studies.

Specialisation Subjects and Perceived Employability of Education Graduates

This study was conducted across campuses that offered various specialised subjects. Among the subjects common to the students in this study, data were evaluated and categorised into distinct specialisation subjects, namely Nepali, English, Math, Science, ICT, Economics, and other social sciences (Population, Health, and Physical Education). An ANOVA test was performed to investigate potential variations in perceived employability across these major subjects.

The results of ANOVA in Table 3 show the statistically significant result among the various specialisation subjects in perceived employability in all constructs. The results are: content knowledge (F=11.48, p=0.000), pedagogical knowledge and skill (F=13.76, p=0.000), community and school relation (F=9.28, p=0.000), curriculum implementation and evaluation (F=15.98, p=0.000), motivation and incentive (F=6.28, p=0.000), communication and interpersonal skill (F=11.57, p=0.000), adaptability and flexibility (F=16.87, p=0.000), ICT competence (F=16.46, p=0.000), collaboration and teamwork (F=9.84, p=0.000), and research and innovation (F=13.81, p=0.000). It shows that all the employability constructs are significant at less than one per cent significant level.

Table 3: *Specialisation subject and perceived employability*

Perceived Employability Construct	Major Subject	N	Mean	SD	F	Sig.
Content Knowledge	English	87	3.91	0.54	11.48	0.000**
	Nepali	48	4.21	0.56		
	Math	22	3.18	0.61		
	Science	53	4.40	0.70		
	ICT	18	3.96	0.46		
	Social Science	27	4.16	0.64		
	Economics	16	3.29	0.59		
Pedagogical Knowledge and Skills	English	87	3.43	0.85	13.76	0.000**
	Nepali	48	3.39	0.86		
	Math	22	2.20	0.48		
	Science	53	3.66	0.83		
	ICT	18	3.58	0.51		
	Social Science	27	4.00	0.59		
	Economics	16	2.91	0.75		
Community and School Relations	English	87	3.69	0.67	9.28	0.000**
	Nepali	48	3.86	0.80		
	Math	22	2.66	0.82		
	Science	53	3.13	1.02		
	ICT	18	3.29	1.04		
	Social Science	27	3.90	0.81		
	Economics	16	3.16	0.86		
English	87	3.81	0.57			
	Nepali	48	3.76	0.92		

	Math	22	2.49	0.75		
	Science	53	3.45	0.88	15.98	0.000**
Curriculum implementation and evaluation	ICT	18	3.38	0.90		
	Social Science	27	4.13	0.40		
	Economics	16	2.71	0.89		
	English	87	3.75	0.77		
	Nepali	48	3.73	0.75		
	Math	22	3.35	1.03		
Motivation and incentive	Science	53	3.39	1.02	6.28	0.000**
	ICT	18	3.42	0.85		
	Social Science	27	4.16	0.46		
	Economics	16	2.80	0.72		
	English	87	3.80	0.80		
	Nepali	48	3.79	0.76		
Communication and interpersonal skill	Math	22	3.07	0.86		
	Science	53	3.40	0.54	11.57	0.000**
	ICT	18	3.69	0.47		
	Social Science	27	4.40	0.50		
	Economics	16	3.05	0.65		
	English	87	3.81	0.60		
Adaptability and flexibility	Nepali	48	3.58	0.86		
	Math	22	2.56	0.73		
	Science	53	3.37	0.83	16.87	0.000**
	ICT	18	3.73	0.63		
	Social Science	27	4.28	0.59		
	Economics	16	2.86	0.67		
ICT Competence	English	87	3.80	0.67		
	Nepali	48	3.18	0.98		
	Math	22	2.57	0.52		
	Science	53	3.53	0.84	16.46	0.000**
	ICT	18	3.71	0.75		
	Social Science	27	4.05	0.83		
Collaboration and Teamwork	Economics	16	2.38	0.83		
	English	87	3.89	0.66		
	Nepali	48	3.58	0.67		
	Math	22	2.99	0.59		
	Science	53	3.50	0.81	9.84	0.000**
	ICT	18	3.81	0.55		
Research and Innovation	Social Science	27	4.17	0.46		
	Economics	16	3.30	0.51		
	English	87	3.99	0.65		
	Nepali	48	3.55	0.87		
	Math	22	2.64	0.68		
	Science	53	3.52	0.76	13.81	0.000**
	ICT	18	3.73	0.66		
	Social Science	27	4.13	0.51		
	Economics	16	3.34	0.68		

These findings are particularly noteworthy as the p-values for all constructs are reported as 0.000, signifying a level of significance of less than one per cent ($p < 0.01$). It shows that the choice of specialisation or major subject employed a substantial influence on how education students perceive their employability in a wide range of constructs that are fundamental to their future careers.

These outcomes emphasise the pivotal role of the major subject chosen by education students in shaping their confidence and readiness for their chosen profession. There is a significant effect of specialization area of engineering students on their perceived employability (Sharma, 2019). This influence is profound and spans numerous aspects of their perceived employability. It underscores that selecting a specific major subject strongly affects how education students perceive their competence and preparedness in critical dimensions, such as content knowledge, pedagogical skills, community and school engagement, adaptability, and more.

The results of the ANOVA test demonstrate that specialisation subjects significantly influence the perceived employability of education students in terms of their content knowledge. The analysis reveals that students majoring in Science and Social Science tend to perceive higher employability in this construct than in subjects such as Mathematics, Economics, English, Nepali, and ICT. This aligns with the findings of Bihag-boholano (2012), which highlight the employability advantage of science majors. It suggests that education students majoring in Science or related fields are more likely to be in demand in the labour market. This finding underscores the importance of major subject choice in shaping the perceived employability of education students. The trend of employability in all other constructs is almost the same. It demonstrates that the specialisation subject is the major factor in the perceived employability of education students.

Conclusion

The study delves into the perceived employability of education students, revealing distinct levels across various competencies. Notably, a 'presence' level characterises dimensions like pedagogical knowledge and skills, community and school relations, curriculum implementation and evaluation, adaptability and flexibility, and ICT competency. In contrast, a 'consolidation' level is noted for content knowledge, motivation and incentives, communication and interpersonal skills, collaboration and teamwork, and research and innovation. Despite students expressing confidence, these competencies are yet to be fully actualised in practical applications. The research further highlights the substantial influence of specialisation subjects on perceived employability, with science majors showing higher employability in content knowledge. The findings emphasize the critical role of major subject choice in shaping education students' confidence and readiness for their future careers, impacting various dimensions of perceived employability.

Educational institutions and policymakers are encouraged to prioritize curricular adjustments, customizing education programs to boost students' employability via specialized subjects. Bridging theory with practical application via internships and projects is crucial. Continuous support and professional development for educators are vital for students to stay competitive in the evolving labour market.

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References

- Arévalo, L. E. B., & Contreras, A. X. S. (2020). Approach to the concept of employability and its indicators: An Emple-AP case project. *Ingeniería Solidaria*, 16(3), 1-21. <https://doi.org/https://doi.org/10.16925/2357-6014.2020.03.10>

- Bargsted, M., Yeves, J., Merino, C., & Venegas-Muggli, J. I. (2021). Career success is not always an outcome: Its mediating role between competence employability model and perceived employability. *Career Development International*, 26(2), 119-139. <https://doi.org/https://doi.org/10.1108/CDI-06-2020-0141>
- Bihag-boholano, H. (2012). Employability of teacher education graduates of an Asian public university. *JPAIR Multidisciplinary Research Journal*, 9(1), 106-121. <https://doi.org/http://dx.doi.org/10.7719/jpair.v9i1.12>
- Brookhart, S. M. (2011). Educational assessment knowledge and skills for teachers. *Educational Measurement: issues and practice*, 30(1), 3-12. <https://doi.org/https://shorturl.at/iqsW8>
- Creswell, J. D. (2012). *Research design: Qualitative, quantitative and mixed methods approaches*. Sage Publication.
- Cuyper, D. N., & Witte, D. H. (2006). The impact of job insecurity and contract type on attitudes, well-being and behavioural reports: A psychological contract perspective. *Journal of occupational and organizational psychology*, 79(3), 395-409. <https://doi.org/https://doi.org/10.1348/096317905X53660>
- Duggal, H. K., Lim, W. M., Khatri, P., Thomas, A., & Shiva, A. (2023). The state of the art on self-perceived employability. *Global Business and Organizational Excellence*, 1-23. <https://doi.org/https://doi.org/10.1002/joe.22245>
- Gautam, G. R. (2016). Teacher training in Nepal: Issues and challenges. *Tribhuvan University Journal*, 2(3), 43-56. <https://doi.org/https://doi.org/10.3126/tuj.v30i2.25545>
- Ghauri, S., & Ayub, N. (2021). A pathway to identify employability skills of business graduates based on subject specialization. *KASBIT Business Journal*, 14(3), 13-28. <http://kbj.kasbit.edu.pk/Vol14-3/Paper2.pdf>
- González, J., & Wagenaar, R. (2003). Quality and European programme design in higher education. *European Journal of education*, 38(3), 241-251. <https://www.jstor.org/stable/1503501>
- Kennedy, I. (2022). Sample size determination in test-retest and Cronbach alpha reliability estimates. *British Journal of Contemporary Education*, 2(1), 17-29. <https://shorturl.at/mALZ3>
- Krauss, S., Brunner, M., Kunter, M., Baumert, J., Blum, W., Neubrand, M., & Jordan, A. (2008). Pedagogical content knowledge and content knowledge of secondary mathematics teachers. *Journal of educational psychology*, 100(3), 716-725. <https://doi.org/https://shorturl.at/oyBQ4>
- Langlois, L., & Lapointe, C. (2010). Can ethics be learned? Results from a three-year action-research project. *Journal of Educational Administration*, 48(2), 147-163. <https://doi.org/https://doi.org/10.1108/09578231011027824>
- McQuaid, R. W., & Lindsay, C. (2013). The concept of employability. In *Employability and Local Labour Markets* (pp. 6-28). Routledge. <https://shorturl.at/jCX28>
- Ministry of Labour and Employment. (2015). *National employment policy 2015*. <https://shorturl.at/bctCI>
- National Planning Commission (NPC). (2020). *The fifteenth plan: Fiscal year 2019/20–2023/24*. <https://shorturl.at/firRV>
- Pacleb-Ulanday, M. L. (2021). Tracer study and employability skills acquisition of teacher education graduates. *Psychology and Education Journal*, 58(4), 1678-1683. <https://www.researchgate.net/publication/351269013>
- Panhwar, A. H., Ansari, S., & Shah, A. A. (2017). Post-positivism: An effective paradigm for social and educational research. *International Research Journal of Arts and Humanities*, 45(45), 253-259. <https://sujo-old.usindh.edu.pk/index.php/IRJAH/article/view/3371>
- Pant, S. K. (2015). Role of the family in entrepreneurship development in Nepali society. *Journal of Nepalese Business Studies*, 9(1), 37-47. <https://shorturl.at/loDFK>

- Pathak, H. P., & Gyawali, M. (2010). Role of microfinance in employment generation: A case study of microfinance program of Paschimanchal Grameen Bikash Bank. *Journal of Nepalese Business Studies*, 7(1), 31-38. <https://doi.org/https://shorturl.at/rHVZ6>
- Pitan, O. S., & Muller, C. (2020). Students' self-perceived employability (SPE): Main effects and interactions of gender and field of study *Higher Education, Skills and Work-based Learning*, 10(2), 355-368. <https://doi.org/https://doi.org/10.1108/HESWBL-03-2019-0040>
- Roy, A., & Chakraborty, S. (2022). Reliability analysis of structures by a three-stage sequential sampling based adaptive support vector regression model. *Reliability Engineering & System Safety*, 219, 108260. <https://doi.org/https://doi.org/10.1016/j.res.2021.108260>
- Seng, L. C. (2018). Malaysia public universities' graduate employability policies: An analysis of first degree graduates unemployment and underemployment issues. *International Journal of Social Science and Humanities Research*, 6(4), 480-489. <http://www.researchpublish.com/>
- Sharma, A. (2019). *Factors associated with perceived employability: A survey of engineering students [Unpublished MPhil Thesis]*. Kathmandu University.
- Sharma, A. (2023). Consolidation of employability in Nepal: A reflective look. *Industry and Higher Education*, 09504222221151138. <https://shorturl.at/eDH03>
- Sharma, D. (2014). Position of JMC graduates: A tracer study. *Janapriya Journal of Interdisciplinary Studies*, 3, 23-33. <https://doi.org/https://doi.org/10.3126/jjis.v3i0.17894>
- Snell, J., & Swanson, J. (2000). *The essential knowledge and skills of teacher leaders: A search for a conceptual framework*. O. o. E. R. a. I. (ED). <https://eric.ed.gov/?id=ED444958>
- Stronge, J. H. (2011). *What makes good teachers good*. The College of William and Mary. <https://shorturl.at/kMXZ1>
- Subedi, D. (2017). Entrepreneurship in Nepali higher education: An interpretive inquiry. *The European Educational Researcher*, 2(4), 79-96. <https://shorturl.at/fvGLR>
- Tang, H., Peng, J., Wang, P., & Risch, N. J. (2005). Estimation of individual admixture: Analytical and study design considerations. *Genetic Epidemiology: The Official Publication of the International Genetic Epidemiology Society*, 28(4), 289-301. <https://doi.org/https://doi.org/10.1002/gepi.20064>
- Vazirani, N. (2010). Review paper: Competencies and competency model—A brief overview of its development and application. *SIES Journal of management*, 7(1), 121-131. <https://shorturl.at/iqrT4>
- Williams, S., Dodd, L. J., Steele, C., & Randall, R. (2016). A systematic review of current understandings of employability. *Journal of education and work*, 29(8), 877-901. <https://doi.org/https://doi.org/10.1080/13639080.2015.1102210>