

# From Classroom to Career: Quantifying the Role of Lifelong Learning in Job Market Success for Georgian University Graduates

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## Abstract

This article explores the role of lifelong learning in enhancing Georgian university graduates' employability and career development. By integrating a comprehensive literature review with quantitative data analysis, the study identifies the gaps between current educational practices and the evolving demands of the global job market. It emphasises the need for higher education institutions to adopt curricula that foster practical skills, digital literacy, and continuous professional growth. The research findings suggest that aligning academic programs with real-world requirements, through inquiry-based learning and innovative teaching methodologies, significantly improves graduates' job market success and career progression. This study not only contributes to the academic discourse on lifelong learning but also provides actionable insights for educational policymakers and institutions aiming to bridge the theory-practice gap and prepare students for a dynamic and uncertain future.

**Keywords:** lifelong learning, career development, job market alignment, curriculum reform, theory-practice gap.

## 1. Introduction

In the rapidly evolving landscape of the global economy, the significance of lifelong learning in higher education has become increasingly prominent. The concept of lifelong learning, as elucidated by Yang, Schneller, and Roche (2015), involves a continuous, self-directed, and inclusive process that spans an individual's professional and personal life. This paradigm shift from traditional education to continual learning is essential in preparing graduates not only to enter the workforce but also to remain competitive throughout their careers. As Kallen and Bengtsson (1973) noted, the transition to a lifelong learning framework began decades ago, but it is only in recent years that the integration of such an approach into higher education curricula has been recognized as critical for addressing the dynamic needs of today's job markets.

The literature suggests that current educational systems, particularly in higher education, often fail to bridge the gap between theoretical knowledge and practical application, a concern highlighted by Morley and Jamil (2021). This theory-practice gap necessitates a reevaluation of teaching methodologies to better prepare students for the uncertainties of modern employment landscapes. By fostering a curriculum that emphasizes practical skills and inquiry-based learning, institutions can enhance their responsiveness to the complexities of the current and future job markets. This approach not only facilitates the personal development of students but also aligns academic outcomes with the expectations of employers, as underscored by Alt and

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Raichel (2020) and Sung et al. (2022), who advocate for a transformation in educational practices to include critical thinking and adaptability skills in teaching.

Furthermore, the integration of digital literacy and technology in education is no longer optional but a necessity, as Anthonysamy, Koo, and Hew (2020) and Techataweewan and Prasertsin (2018) argue. The shift towards a more digitally-oriented learning environment, through methods such as blended learning, prepares students not just for their first jobs but for a career that will likely evolve in unforeseen ways. This preparation is crucial in cultivating a workforce capable of lifelong learning and continuous adaptation to new technologies and changing market demands. Therefore, the role of higher education institutions is pivotal not only in imparting knowledge but also in instilling a robust and flexible learning foundation that supports lifelong professional growth and adaptability. Thus, this research aims at identifying lifelong learning and career development practices and their impact on alumni and their careers.

## 2. Literature Review

### 2.1. Lifelong Learning: Evolution and Significance in Higher Education

Lifelong learning is a deliberate and inclusive process that encompasses formal, informal, and self-directed learning opportunities that individuals pursue throughout their lives (Yang, Schneller, & Roche, 2015). The notion of lifelong education, which encompasses continuous education in formal settings, gained traction in the 1970s, but it was not until the 1990s that the idea of lifelong learning became more widely recognized (Kallen & Bengtsson, 1973). Despite the fact that individuals engage in a multitude of learning strategies on a regular basis (Mocker & Spear, 1982), lifelong learning is a deliberate process in which individuals actively participate in the development and acquisition of new interests, skills, and capabilities, both personally and professionally (Eldridge, 2010).

Although the development of skills that allow individuals to navigate various unpredictable circumstances is a widely recognized aspect of lifelong learning, research suggests that contemporary professional education does not sufficiently equip individuals with the necessary skills to tackle the challenges in today's dynamic learning and working environments (Alt & Raichel, 2020). Thus, the establishment of lifelong learning in higher education institutions has become of paramount importance (Sung, et al., 2022). To achieve this, it is recommended to implement curriculum reforms that incorporate skills and knowledge necessary for 21st-century requirements, provide training to educators to effectively integrate these concepts into their teaching practices, and foster open discussions on multiculturalism in various education policies and reforms (Alt & Raichel, 2020).

Traditional teaching methods that focus on content and theoretical aspects do not fully contribute to the practical and contemporary demands of the job market (Morley & Jamil, 2021). The theory-practice gap refers to the disparity between theoretical concepts learned in academia and their practical application. To bridge this gap, it is suggested that students' curiosity and active questioning be encouraged. A curriculum that integrates inquiry-based and peer learning approaches, combined with assessments or public projects, can foster both individual and group learning skills. Curricula that incorporate novelty, practical application, and personal development are better suited to meet current educational and career demands. However, the main challenge is to intentionally and systematically integrate real-world learning into a research-informed framework, rather than leaving it to chance. To better align higher education with real-world demands, universities should adapt to support a process-driven curriculum with personalized support (ibid.).

Mastering digital literacy is essential in contemplating the establishment of lifelong learning in higher education institutions as a response to rapidly changing demands from employers (Anthonysamy, Koo, & Hew, 2020). Blended learning, the educational approach that integrates conventional face-to-face instruction with digital resources, has been established to cultivate a collaborative and innovative learning environment that is conducive to preparing individuals for the digital age (Techataweewan & Prasertsin, 2018). Despite the widespread agreement on the importance of promoting lifelong learning in higher education institutions in a highly interconnected and technologically advanced world, there is still ample opportunity for growth, particularly in equipping students with practical experience and competencies (Kilag, et al., 2024). Thus, it is vital for higher education institutions and educators to play a significant role in implementing modern teaching approaches that encourage students to think critically, reflect on their learning and abilities, and utilize technology effectively (Russell, Baik, Ryan, & Molloy, 2020).

## **2.2. Lifelong Learning and Career Development: Educational Programs and Employability**

The ascendance of neoliberalism has engendered substantial transformations and novel requirements across the globe (Halliday, 2010). The educational domain was not exempt from these alterations, as it confronted fresh reforms and initiatives, especially following the advent of neoliberalism and the proliferation of privatization. Lifelong learning has emerged as a focal point for research, as it serves as a means of cultivating self-aware and competent individuals who continue to develop themselves beyond graduation to stay abreast of current trends (Brooks & Everett, 2008). This approach has gained prominence due to the rapidly changing nature of the modern world, which necessitates ongoing learning and development throughout one's life. The concept of lifelong learning is closely linked to the notion of continuous skills development, as it is evident that individuals must possess such skills to engage in career advancement and adapt to a rapidly changing world (Comyn, 2018). This connection is also apparent in the idea that career development requires ongoing learning and skill acquisition, making it necessary to engage in lifelong learning to remain competitive in the job market.

Engaging in lifelong learning courses and activities also facilitates increased self-awareness, as well as an understanding of the challenges and opportunities in society that facilitate career development processes (Hall, 1996). By being more flexible and proactive, individuals can enhance their employability and professional growth, leading to competitiveness in the job market and fulfilling its needs (Saridaki & Papavassiliou-Alexiou, 2022). Furthermore, the combination of lifelong learning and career development allows individuals to not only improve their employability skills but also to maintain a high-quality culture while remaining competitive, enabling continuous advancements in their personal and professional paths. Thus, by emphasizing continuous growth, adaptability, and both personal and professional advancement, lifelong learning and career development collaboratively contribute to meeting the demands of the global environment (Comyn, 2018).

Considering the need for lifelong learning and career development progression, higher education institutions are expected to integrate the concepts into the curriculum and practices (Bridgstock, Grant-Iramu, & McAlpine, 2019). To offer effective career development strategies and enable higher employability for graduates, collaboration with the academic staff, career services, and curriculum designers is needed (Farenga & Quinlan, 2015). The provision of decision-making and planning skills to students is crucial for fostering lifelong growth and continuation, and universities must integrate career development learning into their curricula to ensure that students are adequately equipped for the future (Bridgstock, 2009). While employment alone may not be sufficient, universities must take a comprehensive approach to education that prepares students for success beyond the confines of the classroom.

In addition to the alterations made globally in the realm of educational reforms, expectations for higher educational institutions (HEIs), requirements of the labour market, and the alignment of educational programs, there is also the function of advanced technology in the newly assumed responsibilities (Baneres & Conesa, 2017). In addressing the issue of the labour market and education programs gap, a system entailing the awareness of labour market needs and gaps (Taylor, 2012), building educational programs or pieces of training considering those needs, and enhancing individual qualifications as well as job listing connections would contribute to the higher education and labour market alignment (Baneres & Conesa, 2017).

### **2.3. Career Development and Lifelong Learning: Impacts on Georgian Student and Alumni**

The connection between fostering lifelong learning in higher education and addressing labour market gaps and needs is evident (Edokpolor & Omiunu, 2018). This highlights the relationship between lifelong learning and career development, as well as the importance of integrating these elements to better prepare individuals for the job market and effective employment practices. Joining the Bologna Process in 2005 (Georgia, n.d.), Georgian higher education institutions started to receive reforms and requirements of lifelong learning and career development implementations (Amashukeli, Lezhava, & Chitashvili, 2022). Although universities have frameworks and incorporate various strategies, there are still gaps between educational programs and labour market requirements (Makasarashvili, Giguashvili, & Orjonikidze, 2022). Consequently, educators must consider this issue to enhance the quality of education and recognize the true purpose of education.

Considering the alumni and their later studies and employability processes, it is significant that they have connections to higher education institutions or alumni networks to be better involved in the job market and future opportunities (Campbell, 2016). The Bologna Process incorporated the necessity of lifelong learning and career development within its requirements for higher education. This would equip students with the necessary skills, awareness, and development to pursue their personal and professional growth, thereby addressing the concerns of employability and a self-growing society (Lezhava, 2016). Although the current requirements and standards have been put in place, there is still room for improvement in the area of aligning labour market needs with educational programs, conducting studies on lifelong learning practices and implementation, and providing students with internship and work experience opportunities while they are studying. By doing so, practical skills can be developed, leading to higher levels of employability and better preparation for the labour market after graduation (ibid.).

Moreover, there are various social problems in Georgia, including corruption, nepotism, and collusion in the education and job sectors, as well as the banking system, which collectively contribute to unequal opportunities in education and the labour market (Orkodashvili, 2011). Identifying and resolving the challenges related to access to education and employability through the implementation of funding mechanisms and transparent labor market demands and requirements can significantly contribute to the development of a country's economy, as well as the quality of education provided. In Georgia, the collaboration between higher education institutions (HEIs) and employers is still developing, with significant gaps in effectively preparing graduates for the labor market. These problems could be resolved by implementing ongoing education and support systems, developing educational programs that equip students with the necessary skills for the job market, as well as providing practical employment opportunities while they are studying (Narmania, Keshelashvili, Chokheli, & Kikutadze, 2022).

Approximately one-third of employers do not engage with HEIs, which restricts students' exposure to practical skills and real-world applications that are essential for employment (Kikutadze, Kvirkaia, Daghelishvili, Gujaraidze, & Tavkheldze, 2022). Common initiatives are limited to internships and minimal curriculum input, failing to address the deeper needs of the labor market. To address these inadequacies, it is crucial to establish platforms for cooperation that involve a wide range of stakeholders,

such as employers' associations and NGOs, to foster awareness and development of joint activities. HEIs must align their educational programs more closely with labor market demands by incorporating a balanced mix of theoretical knowledge and practical skills and promoting the commercialization of research. Additionally, there is a pressing need to improve continuing education and develop dual teaching models that ensure graduates are not only employable but also competitive in their fields. By enhancing these collaborations, Georgia can bridge the gap between education and employment, ultimately supporting the socio-economic development of the country (ibid.).

### 3. Methodology

This study is descriptive. It aims to assess the lifelong learning situation in Georgia and to see whether Georgian university graduates can be easily employed after graduation. It seeks to measure the extent of engagement in various lifelong learning activities during and after university education, and subsequent job market success, including employment rates, time to employment, career advancement, and the relevance of acquired skills to current job sectors. To determine the connections between lifelong learning and career development and to ensure objectivity in data collection, a quantitative approach was selected. This approach provides the means to identify patterns while maintaining an unbiased perspective (Mehrad & Zangeneh, 2019).

This research employs a questionnaire comprised of 16 questions, five of which are rated on a linear scale, one is open-ended, three are Likert-scale, four are multiple-choice, and three are checked using checkboxes. The survey instrument was developed using Google Forms and sampling was conducted using snowball and convenience sampling techniques due to the constraints of the study's time frame. Data analysis was performed using Google Forms instruments and SPSS was utilized in analyzing the linear scale and Likert scale to accurately reflect the findings and provide a more detailed analysis. For multiple-choice questions, the answers are provided only in percentages.

This study aimed to explore three research questions, and the survey was designed to address these questions:

- Does participation in lifelong learning programs at Georgian universities secure the graduates' first employment and their subsequent career development?
- What are the perceptions of Georgian university graduates regarding the effectiveness of their university's lifelong learning and career support services in preparing them for the job market?

### 4. Research Results

There were 16 questions with 20 graduates (participants) from a variety of universities in Georgia.

#### Figure 1. Q1. Which sector do you currently work in?

Which sector do you currently work in?

20 responses

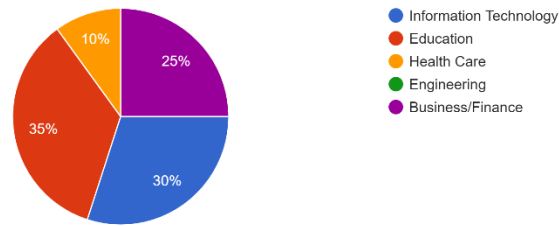


Figure 1 presents the various sectors in which participants are employed. A majority of the participants (35%) indicated that they work in the education sector, while another majority (30%) reported that they work in the information technology sector. Meanwhile, 25% of the respondents work in the business/finance sector, and only a minority (10%) of the participants work in the healthcare sector. This question was designed to gather information about the working spheres of the survey participants.

**Figure 2. Q2. What type of employment do you have?**

What type of employment do you have?

20 responses

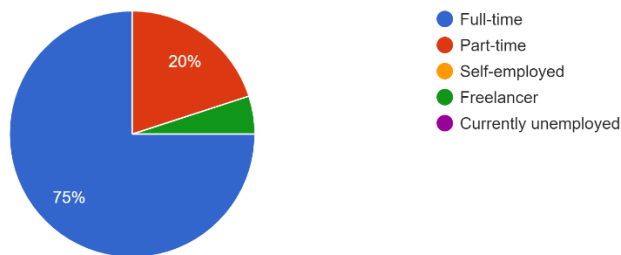
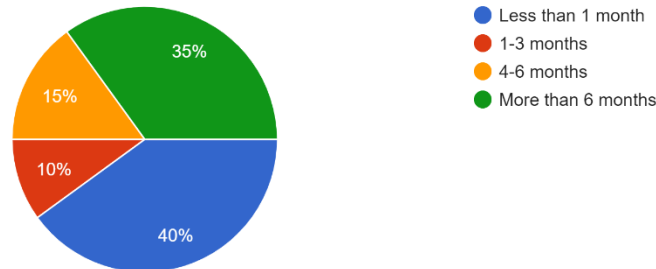


Figure 2 displays information pertaining to the employment status of the participants. This particular inquiry serves to assess the types of job opportunities and employment stability that graduates attain following their graduation, thereby contributing to an examination of the efficacy of higher education and lifelong learning in obtaining employment. The vast majority of the participants, comprising 75%, indicated a preference for full-time employment, while 20% opted for part-time work. Notably, only 5% of the participants indicated a freelance employment option, which suggests that the participants were mostly engaged in full-time employment after completing their studies.

**Figure 3. Q3. How long did it take you to find your first job after graduation?**

How long did it take you to find your first job after graduation?

20 responses



The graph in Figure 5 depicts the period of time it takes for graduates to secure employment. The objective of the third inquiry is to evaluate the typical duration it takes for graduates to transition from completing their university education to obtaining their first job. This serves as a measure of the accessibility of the job market for recent graduates and the effectiveness and relevance of their university education and training in facilitating prompt employment opportunities. While 40% of the respondents indicated that they found employment in less than a month, 35% of the respondents stated the duration as being more than 6 months. On the other hand, 15% of the respondents reported finding a job in 4-6 months, and only 10% of the participants found employment within 1-3 months. Thus, the duration of finding a job varied among the participants, with less than a month being the most common response.

**Figure 4. Q4. To what extent do you believe your university education has impacted your career progression?**

To what extent do you believe your university education has impacted your career progression?

20 responses

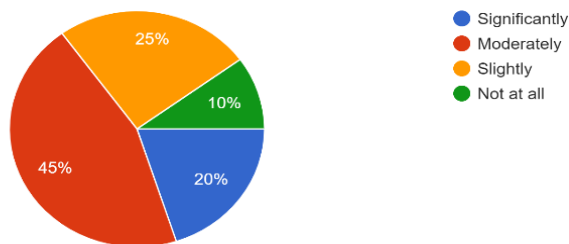


Figure 4 presents data to evaluate the perceived effectiveness of university education in influencing the career development of graduates. This question aims to comprehend the impact of academic training on career success and advancement, offering insights into how graduates view their education in relation to their professional growth and opportunities. According to the results, 45% of the participants reported that university education had a moderate effect on their career development. Conversely, 25% of the respondents found that university education's impact was slightly contributing to their career advancement, and 10% indicated that it did not contribute at all. Only 20% of the participants considered university education's influence to be significant and closely connected to their career progression.

**Figure 5. Q5. Which of the following lifelong learning opportunities did you engage in at university?**

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20 responses

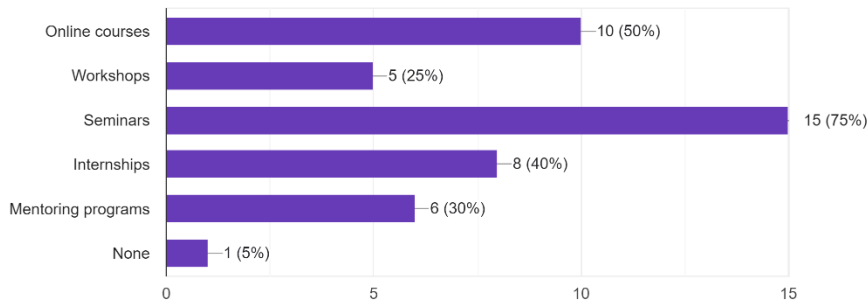


Figure 5 portrays the lifelong learning opportunities that the participants availed themselves of during their academic pursuits. This question aims to gauge the correlation between these opportunities and the acquisition of skills pertinent to their professions, as well as to provide insights into the prevalence and perceived worth of various types of lifelong learning activities among graduates. The question was presented in the form of checkboxes, allowing participants to select multiple options. A significant majority of the respondents (75%) opted for seminars, making it the most popular choice. While 10 participants (50%) selected online courses, 8 respondents (40%) chose internships. Workshops (25%) and mentoring programs (30%) were less frequently chosen, with one respondent (5%) selecting the 'none' option, suggesting that they did not engage in any of the lifelong learning activities. Therefore, the data suggests that seminars, online courses, and internships were the most popular lifelong learning activities that the respondents engaged in during their studies, with seminars being the most favoured.

**Figure 6. Q6. How often have you participated in additional training or education programs after graduation?**

How often have you participated in additional training or education programs after graduation?

20 responses

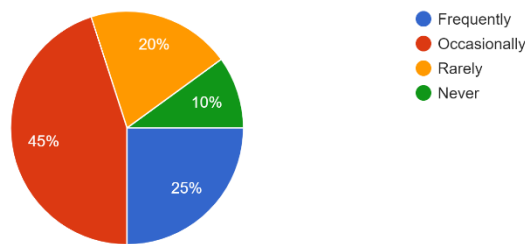


Figure 6 depicts the frequency with which respondents engage in further education and training beyond their university studies. The majority (45%) of the respondents engage in additional training occasionally, while 20% of the respondents engage in further education rarely. Only 25% of the participants frequently participate in further education, and 10% of the respondents state no involvement in additional studies by selecting the 'never' option. These results suggest that the ongoing commitment to lifelong learning among graduates is mostly occasional.

**Figure 7 Q7. What skills acquired through lifelong learning programs do you find most valuable in your job?**



What skills acquired through lifelong learning programs do you find most valuable in your job?

20 responses

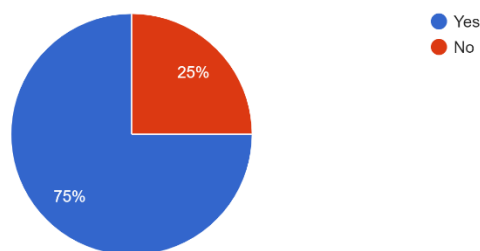


Figure 7 depicts the seventh inquiry, which is designed to determine the skills that are most valued by graduates in their present job roles. This question serves to evaluate the pertinence and efficacy of the skills imparted through lifelong learning programs in fulfilling the practical demands of the workforce and enhancing career performance. Upon analyzing the results, it was discovered that problem-solving and critical thinking skills were the most sought-after skills, with 65% of the respondents selecting them. Equal percentages of respondents, amounting to 60%, chose technical skills (e.g., programming, machinery operation) and soft skills (e.g., communication, teamwork) as well. Notably, only 10% of the respondents identified leadership and management skills as the most important skills in their current job roles. Therefore, based on the responses of the respondents, problem-solving and critical thinking skills, soft skills, and technical skills were discovered to be prominent aspects in the job market.

**Figure 8 Q8. Have you experienced career advancement (e.g., promotions, salary increases) since graduating?**

Have you experienced career advancement (e.g., promotions, salary increases) since graduating?

20 responses



The information presented in Figure 8 pertains to the data collected on the subject of career advancement experienced by participants after completing their higher education. This data was collected to assess the influence that higher education and ongoing learning have on the career paths of graduates, while also shedding light on the practical advantages of academic and continuous learning experiences in the context of career progression. While a majority of the participants (75%) reported that they had received salary increases or promotions at work, the remaining 25% indicated that they had not received any such benefits.

**Figure 9 Q9. If yes to the previous question, to what extent do you attribute this advancement to your university education and lifelong learning experiences?**

If yes to the previous question, to what extent do you attribute this advancement to your university education and lifelong learning experiences?  
19 responses

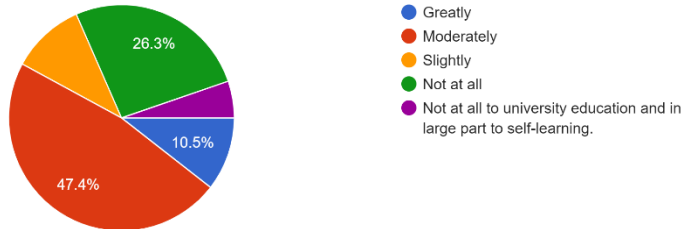


Figure 9 depicts the responses to the ninth question, which pertained to identifying the connections between career advancements or benefits at work and lifelong learning experiences and/or university education. This question followed the previous one, which explored the same topic. This question was responded to by 19 out of 20 participants, with 47.4% of the respondents indicating that they view the connections between the benefits they receive at their workplace and their university education or lifelong learning courses as moderate. Additionally, 10% of the participants selected the 'slightly' and 'greatly' options equally. Conversely, 26% of the respondents did not find any association between the education they acquired and the benefits they received at the workplace. Only 1 participant (5.3%) indicated that the university education was not at all linked to the labour market requirements and was largely attributed to self-learning. The data suggests that while there has been progress in linking education to labour market requirements, there is still room for improvement in connecting education programs to these requirements.

**Figure 10. Q10. What areas do you think Georgian universities should focus on to improve lifelong learning and its impact on career development?**

What areas do you think Georgian universities should focus on to improve lifelong learning and its impact on career development?  
20 responses

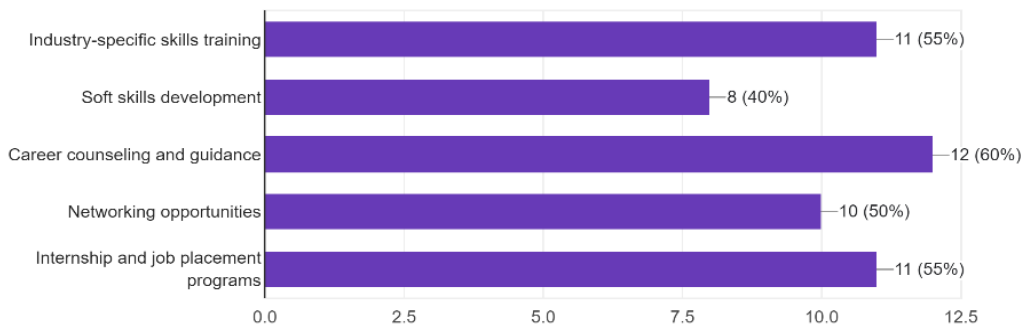


Figure 10 presents data from the 10th question, which aimed to gather feedback and insights from graduates on how Georgian universities can enhance lifelong learning initiatives. This question was presented as a checkbox, allowing each participant to select multiple options. The most commonly selected option was career counselling and guidance, which was chosen by 12

respondents (60%), followed by industry-specific skills training, internship and job placement programs, which were equally selected by 11 respondents (55%). Networking opportunities were selected by 10 respondents (50%), while soft skills development was chosen by 8 participants (40%). Based on the participants' answers, it appears that career counselling and guidance, internship and job placement programs, and industry-specific skills are the areas that higher education institutions should focus on to improve the gaps between the labour market and education institutions, as well as to address the lack of practical skills.

There are 5 linear scale questions indicated in the survey. The aim of using linear scale questions in this survey is to quantitatively assess graduates' perceptions of the effectiveness of their university's support structures, such as career guidance, networking opportunities, and the relevance of lifelong learning programs, in enhancing their job market readiness and career development. For the questions 4, 6, and 9, descriptive statistics were calculated through SPSS. Table 1 below demonstrates the frequencies for Q4, Q6, and Q9.

**Table 1. Descriptive Statistics for Likert Scale Questions (Q4, Q6, Q9)**

		Q4	Q6	Q9
N	Valid	20	20	18
	Missing	0	0	2
Mean		2.7500	2.8500	2.4444
Median		3.0000	3.0000	3.0000
Mode		3.00	3.00	3.00
Std. Deviation		.91047	.93330	1.04162
Skewness		-.378	-.538	-.361
Std. Error of Skewness		.512	.512	.536
Kurtosis		-.371	-.277	-1.162
Std. Error of Kurtosis		.992	.992	1.038

The analysis of survey data for three questions (Q4, Q6, and Q9) included responses from 20 participants for Q4 and Q6, while Q9 had responses from 18 participants, indicating two missing entries. The mean scores for Q4, Q6, and Q9 are 2.75, 2.85, and 2.44, respectively, suggesting a moderate level of agreement or frequency on the items measured. The median and mode for all three questions are consistently 3.00, which points to a central tendency where most responses cluster around the 'Occasionally' frequency. The standard deviation values (Q4: 0.91, Q6: 0.93, Q9: 1.04) show a moderate dispersion of responses around the mean, indicating variability in how participants rated these items.

Regarding the distribution shape, the skewness values for Q4 (-0.378), Q6 (-0.538), and Q9 (-0.361) suggest a slight negative skew, indicating a tail with more frequent lower scores. However, these values are within the standard error of skewness, indicating no significant deviation from a normal distribution. Kurtosis values for Q4 (-0.371), Q6 (-0.277), and Q9 (-1.162) show that the distribution of responses is relatively flat, especially for Q9, which is more markedly platykurtic. The standard errors for skewness and kurtosis suggest these estimations are robust. Overall, the distribution characteristics and central tendencies provide valuable insights into participants' responses across these questions.

**Table 2. Q4. To what extent do you believe your university education has impacted your career progression?****Q4**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	2	10.0	10.0	10.0
	Rarely	5	25.0	25.0	35.0
	Occasionally	9	45.0	45.0	80.0
	Frequently	4	20.0	20.0	100.0
	Total	20	100.0	100.0	

Table 2 presents the initial Likert scale inquiry, which queried the respondents about the extent to which they believed their university education impacted their career advancement. The majority (45%) of participants classified university education's impact on career progressions as "occasional." In contrast, only a minority (10%) of respondents reported no connection between higher education and career development. 25% of participants found the relationship between university education and career development to be rare, while 20% of graduates indicated that university education has a moderate impact on career advancement.

**Table 3. Q6. How often have you participated in additional training or education programs after graduation?****Q6**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	2	10.0	10.0	10.0
	Rarely	4	20.0	20.0	30.0
	Occasionally	9	45.0	45.0	75.0
	Frequently	5	25.0	25.0	100.0
	Total	20	100.0	100.0	

Table 3 presents data on the frequency of participants' engagement in additional training or education programs after graduation, as indicated by the second Likert scale question (Q6). The majority of graduates (45%) reported engaging in such programs occasionally, while a smaller percentage (10%) indicated that they never engage in these programs. Additionally, 25% of the participants reported frequent engagement in such programs, while the remaining 20% reported rare participation.

**Table 4. Q9. If yes to the previous question, to what extent do you attribute this advancement to your university education and lifelong learning experiences?****Q9**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	5	25.0	27.8	27.8
	Rarely	2	10.0	11.1	38.9

	Occasionally	9	45.0	50.0	88.9
	Frequently	2	10.0	11.1	100.0
	Total	18	90.0	100.0	
Missing	System	2	10.0		
Total		20	100.0		

Table 4 presents data for the third Likert scale question (Q9), which served as a follow-up question to Q8, "Have you experienced career advancement (e.g., promotions, salary increases) since graduating?" and aimed to discover the extent to which participants attributed their advancement to their university education and lifelong learning experiences. As only 18 out of 20 participants selected the "yes" option, Q9 received 18 responses. While the majority (45%) of the respondents found the links to be occasional (moderate), the minority (10%) of the graduates selected the "rarely" option, which demonstrates slight links between university education lifelong learning experiences and career progression of the graduates. While only 10% of the graduates selected the "frequently" (greatly) option, the others (25%) found no links between university education and lifelong learning in connection with career development by selecting the "never" (not at all) option.

**For the following linear scale questions, SPSS was utilized to calculate the statistical data.**

**Table 5. Descriptive Statistics for Linear Scale Questions (Q11-Q15)**

Statistics		Q11	Q12	Q13	Q14	Q15
N	Valid	20	20	20	20	20
	Missing	0	0	0	0	0
Mean		3.2000	3.5500	2.9500	2.8000	3.2000
Median		3.0000	3.5000	3.0000	3.0000	3.0000
Mode		4.00	3.00	4.00	3.00	3.00
Std. Deviation		1.23969	1.09904	1.19097	1.10501	1.19649
Skewness		-.236	-.009	-.310	.177	-.221
Std. Error of Skewness		.512	.512	.512	.512	.512
Kurtosis		-.814	-1.264	-.925	.418	-.486
Std. Error of Kurtosis		.992	.992	.992	.992	.992

Table 5 presents the descriptive statistics for responses related to the impact of lifelong learning and university education on career development and work practices. With all standard deviations close to 1, there is a moderate spread of responses, reflecting some diversity in the participants' experiences and views. The mean scores for the questions range between 2.8 and 3.55, and the median and mode values are closely aligned with the means, indicating a symmetrical distribution of data around a central point. This symmetry is supported by the skewness values, which are all within  $\pm 0.3$ , suggesting that the distributions of responses are relatively balanced, with no significant leaning towards higher or lower values. The kurtosis values, although varied, do not indicate any extreme peakedness or flatness in the distributions, implying that there are no pronounced tails with extreme outliers. Overall, the responses show a certain level of agreement among participants, with no evidence of significant contradiction or extreme variance in individual opinions regarding the effect of lifelong learning and university education on career prospects and professional practices. Tables 2-6 present detailed descriptive statistics for each of these questions.

**Table 6. Q11. The lifelong learning programs at my university equipped me with skills relevant to my current job****Q11**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	10.0	10.0	10.0
	Disagree	4	20.0	20.0	30.0
	Neutral	5	25.0	25.0	55.0
	Agree	6	30.0	30.0	85.0
	Strongly Agree	3	15.0	15.0	100.0
	Total		20	100.0	100.0

Table 6 showcases the initial linear scale inquiry in which respondents were questioned about their perceptions of lifelong learning programs at their universities and whether they supplied them with the necessary skills for their present employment. While 30% of the participants concurred that lifelong learning programs equipped them with relevant skills for the job market and 15% strongly agreed, others had differing opinions. Specifically, 25% of the participants remained neutral, while 20% of the respondents disagreed. Furthermore, 10% of the participants selected the strongly disagree option, which suggests that there was no discernible impact of the lifelong learning programs acquired at the university on their career development and work experience.

**Table 7. Q12. Education programs at my university facilitated my employment process****Q12**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	4	20.0	20.0	20.0
	Neutral	6	30.0	30.0	50.0
	Agree	5	25.0	25.0	75.0
	Strongly Agree	5	25.0	25.0	100.0
	Total		20	100.0	100.0

Table 7 presents the second linear scale question (Q12) intended to assess whether university education programs facilitated the employment processes of the participants. The results presented in Table 3 indicate that 25% of the respondents selected the strongly agree and agree options equally. Conversely, 20% of the participants disagreed, while the remaining 30% were neutral. Therefore, the findings suggest that the majority of the respondents recognized the connections between their education programs and work-life practices, while the other half remained neutral.

**Table 8. Q13. My university offered sufficient networking opportunities that have benefitted my career**

**Q13**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	15.0	15.0	15.0
	Disagree	4	20.0	20.0	35.0
	Neutral	5	25.0	25.0	60.0
	Agree	7	35.0	35.0	95.0
	Strongly Agree	1	5.0	5.0	100.0
	Total		20	100.0	100.0

The objective of the third linear scale question (Q13) was to determine whether universities provided networking opportunities to the participants that could enhance their professional growth. As shown in Table 8, a substantial portion of the respondents, comprising 5% who strongly agreed and 35% who agreed, indicated that they viewed universities' role in providing networking opportunities as beneficial. However, 25% remained neutral, and another substantial portion, comprising 35%, disagreed with the statement, implying that insufficient networking opportunities were offered during their studies to contribute to their career advancements.

**Table 9. Q14. The career guidance and support services at my university were effective in preparing me for the job market**

**Q14**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	3	15.0	15.0	15.0
	Disagree	3	15.0	15.0	30.0
	Neutral	11	55.0	55.0	85.0
	Agree	1	5.0	5.0	90.0
	Strongly Agree	2	10.0	10.0	100.0
	Total		20	100.0	100.0

The objective of the fourth linear scale question (Q14) was to assess the career guidance and support services provided by universities in preparing students for the job market. According to the data presented in Table 9, the majority of respondents (55%) remained neutral. Approximately 30% of respondents, with 15% strongly disagreeing and the remaining 15% disagreeing, disagreed with the statement suggesting the inadequacy of university support in preparing students for the job market. Conversely, 15% of respondents agreed with the statement and reported positive experiences with university career guidance services. However, given that the majority of respondents were neutral, it is challenging to determine whether the surveyed graduates found the career guidance services to be effective.

**Table 10. Q15. Continuous education and training opportunities contributed to my career development**

**Q15**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	10.0	10.0	10.0
	Disagree	3	15.0	15.0	25.0
	Neutral	7	35.0	35.0	60.0
	Agree	5	25.0	25.0	85.0
	Strongly Agree	3	15.0	15.0	100.0
	Total		20	100.0	100.0

Table 10 displays the final linear scale question (Q15), which examines whether continuous education and training opportunities of respondents contributed to their career development. While the majority of respondents (40%) agreed (15% strongly agreeing) with the statement, indicating that they discovered connections between continuous education and their career development, the minority of respondents (25%) disagreed with the statement, suggesting that the connection with continuous education and training opportunities was fair. The remaining majority (35%) of participants remained neutral, which makes it challenging to determine whether their experience was positive or negative concerning the lifelong learning courses offered in their institution and their career development practices.

Question 16 inquired about the participants' recommendations or comments regarding the lifelong learning and career development experiences at their universities, as well as any suggestions they may have to improve graduates' career paths. Respondent R5 noted that the skills emphasized in the workshops, such as leadership, communication, and teamwork, are currently theoretical rather than practical, and that practical, hands-on experience is lacking in university education. Therefore, a greater focus on tangible skills and internship opportunities should be provided to better prepare graduates for the workforce. Conversely, Respondent R7 highlighted the importance of soft skills, which can facilitate effective communication within the workplace and serve as a valuable tool for addressing various issues.

R19 recognized the importance of lifelong learning and career development at universities and believed that strengthening mentorship programs, offering skill-building workshops, and cultivating industry partnerships could contribute to alumni's career paths. By doing so, universities could address the evolving job market requirements and equip graduates with the skills of continuous learning, enabling them to adapt to the ever-changing world. While R12 states that "Self-learning is a fairly common approach to the career development in the IT industry...", R8 indicates "...educating students more about finances that evolved around the job for them to know their rights as well as providing them with better networking with the companies so that the students wouldn't feel so detached from their future potential job" as their suggestions.

## 5. Discussion

The study's results revealed a clear disparity between the requirements of the labour market and the offerings of the educational system. This was evidenced by the absence of practical skills and essential competencies that are expected in the workforce. The lack of lifelong learning and career development strategies, limited networking and internship opportunities provided by higher education institutions, disparities between education programs and labour market needs, and the absence of soft skills, technical skills, and industry-specific abilities were identified as major obstacles. The current state of affairs in which universities have



established practices but have yet to fully implement effective lifelong learning and career development initiatives (Lezhava, 2016) aligns with the findings of this research.

The survey findings indicated that the inadequate incorporation of the concepts resulted in difficulties and obstacles in the job market. Despite acknowledging the significance of continuous learning and professional development, the results showed that the tools used to promote the concepts were insufficient. This suggests that there are inadequate practices and promotions of the concepts in higher education institutions, which can lead to a lack of connection between the labour market and education programs, as well as challenges for graduates in transitioning to the workforce.

The results were consistent with the literature, which emphasized the importance of networking opportunities with industry and employers, the enhancement of lifelong learning and career development practices and tools, and the provision of mentorship and internship opportunities to enable students to gain hands-on experience (Narmania, Keshelashvili, Chokheli, & Kikutadze, 2022). By implementing these measures, economic improvement and the enhancement of education quality could be achieved, enabling graduates to engage in continuous learning practices (Kikutadze, Kvirkvaia, Daghelishvili, Gujaraidze, & Tavkheldze, 2022).

Moreover, the significance of lifelong learning was not entirely apparent, as indicated by the survey findings and recommendations section, where one participant stated that the concept was not relevant in the IT field and did not offer any work-related advantages. Additionally, when responding to the connection between continuous development courses and their relevance, the majority of the participants remained neutral, which does not signify complete disregard but rather a lack of solid connections between the terms and practices. The literature suggests that digitalization and technological advancements can not only improve engagement in continuous education by incorporating the latest trends and providing flexibility but also fulfill the skills required in the labor market (Baneres & Conesa, 2017). By doing so, the disparity between education programs and the job market can be reduced, which would benefit both alumni and university students as prospective job seekers (Anthonysamy, Koo, & Hew, 2020).

## 6. Conclusion and Recommendations

In the sphere of higher education, there has been a consistent emphasis on aligning educational offerings with labor market demands as highlighted by Bridgstock (2009), Comyn (2018), and Hall (1996). The importance of integrating lifelong learning into curricula to enhance graduate employability and promote continuous personal and professional development is strongly supported in the literature. This integration not only facilitates immediate employment after graduation but also equips individuals to adapt to a constantly evolving world. The literature demonstrates that a curriculum that fosters inquiry and practical application enhances student engagement and skill acquisition, thereby bridging the gap between theoretical knowledge and its practical application in the workplace (Morley & Jamil, 2021).

Additionally, the need for ongoing educational reform to accommodate changes in the global job market is well-documented (Baneres & Conesa, 2017; Kilag et al., 2024). The call for higher education institutions to adopt innovative teaching methods, such as blended learning, and to focus on cultivating digital literacy, is clear (Anthonysamy, Koo, & Hew, 2020; Techataweewan & Prasertsin, 2018). Such strategies are not only essential for meeting the current demands of employers but also for ensuring that graduates are equipped with the competencies needed to succeed in the digital age. By fostering a learning environment that emphasizes critical thinking, problem-solving, and technological proficiency, educational institutions can significantly enhance

their graduates' marketability and career readiness. These adaptations are crucial for maintaining relevance and competitiveness in a global economy that values adaptability and continuous learning.

The limited duration of this research constrained the sample size, necessitating additional investigation to expand the alumni population and more comprehensively represent national experiences to improve educational quality.

## References

- Alt, D., & Raichel, N. (2020). Problem-based learning, self-and peer assessment in higher education: Towards advancing lifelong learning skills. *Research Papers in Education*, 35(3), 370-394. <https://doi.org/10.1080/02671522.2020.1849371>
- Amashukeli, M., Lezhava, D., & Chitashvili, M. (2022). *Higher education in Georgia and self-assessment of competencies by the university graduates*. Tbilisi: Center for Social Sciences.
- Anthonyamy, L., Koo, A. C., & Hew, S. H. (2020). Self-regulated learning strategies in higher education: Fostering digital literacy for sustainable lifelong learning. *Education and Information Technologies*, 25, 2393–2414. <https://doi.org/10.1007/s10639-020-102018>
- Baneres, D., & Conesa, J. (2017). A life-long learning recommender system to promote employability. *International Journal of Emerging Technologies in Learning*, 12(6), 77-93. <https://doi.org/10.3991/ijet.v12i06.7166>
- Bridgstock, R. (2009). The graduate attributes we've overlooked: Enhancing graduate employability through career management skills. *Higher Education Research & Development*, 28(1), 31-44. <https://doi.org/10.1080/07294360802444347>
- Bridgstock, R., Grant-Iramu, M., & McAlpine, A. (2019). Integrating career development learning into the curriculum: Collaboration with the careers service for employability. *Journal of Teaching and Learning for Graduate Employability*, 10(1), 56-72.
- Brooks, R., & Everett, G. (2008). The impact of higher education on lifelong learning. *International Journal of Lifelong Education*, 27(3), 239-254. <https://doi.org/10.1080/02601370802047759>
- Campbell, A. C. (2016). International scholarship graduates influencing social and economic development at home: The role of alumni networks in Georgia and Moldova. *Current Issues in Comparative Education (CICE)*, 19(1), 76-91.
- Comyn, P. J. (2018). Skills, employability, and lifelong learning in the sustainable development goals and the 2030 labor market. *International Journal of Training and Research*, 16(3), 200-217. <https://doi.org/10.1080/14480220.2018.1576311>
- Edokpolor, J. E., & Omiunu, S. E. (2018). Role of career development services in developing students lifelong learning self-efficacy: Vocational and adult education lecturers' perceptions. *Baltic Journal of Career Education and Management*, 5(1), 30-45.
- Eldridge, G. (2010). Lifelong learning: Concepts and contexts, edited by P. Sutherland and J. Crowther. *A Journal of Comparative and International Education*, 38(3), 368-369. <https://doi.org/10.1080/03057920802112941>
- Farenga, S. A., & Quinlan, K. M. (2015). Classifying university employability strategies: Three case studies and implications for practice and research. *Journal of Education and Work*, 29(7), 767-787. <https://doi.org/10.1080/13639080.2015.1064517>
- Georgia. (n.d.). Retrieved April 20, 2024, from European Higher Education Area: <https://ehea.info/page-georgia>
- Hall, D. T. (1996). Protean careers of the 21<sup>st</sup> century. *Academy of Management*, 10(4), 8-16. <https://doi.org/10.5465/ame.1996.31455315>
- Halliday, J. (2010). Lifelong learning. In *International Encyclopedia of Education* (3rd ed., pp. 170-174). <https://doi.org/10.1016/B978-0-08-044894-7.00591-1>
- Kallen, D., & Bengtsson, J. (1973). *Recurrent education: A strategy for lifelong learning*. Paris: Organization for Economic Co-operation and Development (OECD).

- Kikutadze, V., Kvirkaia, M., Daghelishvili, N., Gujaraidze, G., & Tavkheldze, T. (2022). *The study of cooperation between higher education institutions and employers in Georgia*. Tbilisi: Shota Rustaveli National Science Foundation of Georgia. Retrieved from <https://www.researchgate.net/publication/370403497>
- Kilag, O. K., Malbas, M. H., Miñoza, J. R., Ledesma, M. M., Vestal, A. B., & Sasan, J. M. (2024). The views of the faculty on the effectiveness of teacher education programs in developing lifelong learning competence. *European Journal of Higher Education and Academic Advancement*, 1(2), 92-102. <https://doi.org/10.61796/ejheaa.v1i2.106>
- Lezhava, D. (2016). *Bologna Process: Europeanization of Georgia's higher education system*. Tbilisi: CSS Center for Social Sciences.
- Makasarashvili, T., Giguashvili, G., & Orjonikidze, N. (2022, June). Quality management mechanisms in Georgian higher education institutions. *InterConf*, 80-90. <https://doi.org/10.51582/interconf.19-20.06.2022.007>
- Mehrad, A., & Zangeneh, M. H. (2019). Comparison between qualitative and quantitative research approaches: Social sciences. *International Journal for Research in Educational Studies*, 5(7), 1-7.
- Mocker, D. W., & Spear, G. E. (1982). *Lifelong learning: Formal, nonformal, informal, and self-directed*. Columbus, OH: National Center Publications. Information Series No. 241.
- Morley, D. A., & Jamil, M. G. (2021). Real-world learning - Recalibrating the higher education response towards application to lifelong learning and diverse career paths. In D. A. Morley, & M. G. Jamil (Eds.). *Applied pedagogies for higher education: Real world learning and innovation across the curriculum* (pp. 1-19). Cham, Switzerland: Palgrave Macmillan.
- Narmania, D., Keshelashvili, G., Chokheli, E., & Kikutadze, V. (2022). Challenges of development of demand-oriented labor market in Georgia. *International Journal of Social Sciences*, 11(2), 86-98. <https://doi.org/10.52950/SS.2022.11.2.006>
- Orkodashvili, M. (2011). Corruption, collusion, and nepotism in higher education and the labor market in Georgia. *European Education*, 43(2), 32-53. <https://doi.org/10.2753/EUE1056-4934430202>
- Russell, J. M., Baik, C., Ryan, A. T., & Molloy, E. (2020). Fostering self-regulated learning in higher education: Making self-regulation visible. *Active Learning in Higher Education*, 23(2), 1-17. <https://doi.org/10.1177/1469787420982378>
- Saridaki, S., & Papavassiliou-Alexiou, I. (2022). University lifelong learning programs and perceived employability: The case of Aristotle University of Thessaloniki. *Adult Education Quarterly*, 72(1), 65-83. <https://doi.org/10.1177/07417136211023176>
- Sung, J., Sheng, Y. Z., Liao, A. K., Xinhui, A. C., Liu, L., & Coates, H. (2022). Augmenting the role of higher education institutions in lifelong learning: Designing an indicator framework for policy application. *International Journal of Chinese Education*, 11(1), 1-12. <https://doi.org/10.1177/22125868211072931>
- Taylor, E. (2012). Teaching data warehouses in collaboration with industry: Bridging the expectations gap. *International Conference on Information Society (i-Society 2012)*, (p. 4). London.
- Techataweewan, W., & Prasertsin, U. (2018). Development of digital literacy indicators for Thai undergraduate students using mixed method research. *Kasetsart Journal of Social Sciences*, 39(2), 215-221. <https://doi.org/10.1016/j.kjss.2017.07.001>
- Yang, J., Schneller, C., & Roche, S. (2015). The role of higher education in promoting lifelong learning. In J. Yang, C. Schneller, & S. Roche (Eds.), Hamburg, Germany: UNESCO Institute for Lifelong Learning. Retrieved from <http://hdl.handle.net/11162/118502>