

**Exploring the Alignment Between Higher Education Specializations and Labor Market
Needs in Azerbaijan**

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Thesis Prepared for the Degree of
MASTER OF ARTS IN EDUCATIONAL MANAGEMENT



May, 2025

ADA UNIVERSITY
MASTER OF ARTS THESIS

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Exploring the Alignment Between Higher Education Specializations and Labor Market

Needs in Azerbaijan



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Abstract

Exploring the Alignment Between Higher Education Specializations and Labor Market Needs in Azerbaijan

By Elnara Nasirova

This study examines the extent to which higher education specializations in Azerbaijan correspond with the changing requirements of the labor market and how this impacts students' academic and professional development and career perspectives as well. While national regulation on specialization classification establishes admission to postgraduate programs, it restricts students from pursuing interdisciplinary or alternative academic paths, which leads to becoming a critical issue in a rapidly evolving labor market that increasingly values applied knowledge and adaptability.

By employing a mixed-methods approach, the research combines data from 51 survey participants with semi-structured interviews conducted with three experts from certain state entities, alongside a graduate and a student from specific areas of specialization. The research is grounded in Human Capital Theory, which states that investing in education enhances the employability of graduates by equipping them with relevant knowledge and competencies.

Findings disclose a partial alignment between academic specializations and labor market demands. Even though full degree programs are still highly valued in Azerbaijani society, which affects salaries and job placement, universities frequently find it difficult to meet the skill demands of the market. While specific exemptions exist, such as in MBA programs, international studies, and civil service development programs, broader flexibility remains limited.

The study offers some recommendations to address the raised issue—both for universities, for better preparing their students for the labor market, and for graduates, for improving their chances of obtaining desired jobs. It provides suggestions for future research that will investigate and enhance the understanding of this issue.

Keywords: Higher education specialization, specialization classification regulation, labor market, employability, applied knowledge, postgraduate admissions.

Acknowledgment

Firstly, I would like to express my sincere gratitude to my supervisor, Dr. Ulviyya Mikailova, for her continuous guidance and support throughout the research process. Her valuable experience and analytical research skills were essential in shaping and strengthening this study.

I also extend sincere appreciation to my committee members, Dr. Vafa Kazdal and Dr. Arzu Mammadova, for their insightful recommendations and constructive feedback, which significantly improved the quality of this research.

This achievement would not have been possible without the moral support of my family. I am especially grateful to my mother and my son Elin, who demonstrated patience and understanding during my years of study. I deeply appreciate my mother's support in helping me to take care of my son, enabling me to focus on my academic duties.

A special thank you is given to my friend Ziyadkhan, who's support and belief in my potential encouraged me to commit to lifelong learning and pursue a master qualification. His support inspired me to grow professionally to make a meaningful contribution in my chosen field.

I genuinely believe this thesis will contribute, even in a small way, to the ongoing growth of the education field and to future academic and policy-related discussions.

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CHAPTER 1

Introduction

This chapter presents a broad overview of the research topic and outlines the problem statement that emphasizes the mismatch between higher education specializations and the current national labor market needs. The research questions are also presented to guide the assessment of the study's objectives.

Background of study

Preparing a skilled workforce for the labor market is one of the primary responsibilities of higher education institutions (Məmmədova, 2021). Hence, completing full degree programs equip graduates with both professional and academic development that enable them to access better job opportunities in the labor market (Məmmədova, 2021). However, the evolving nature of the job market often results in a mismatch between the qualifications gained through higher education and the requirements of job vacancies, compelling graduates to acquire new skills (Alakbarova, 2024). The main root of the issue in the higher education system of Azerbaijan grounded in the Decision of the Cabinet Of Ministers of the Republic of Azerbaijan on approval of the "Classification of specializations (specializations) at the master's level of higher education", the "Classification of specializations for which medical-specialist training is conducted in residency" and the "List of some repealed decisions of the Cabinet of Ministers of the Republic of Azerbaijan" (hereinafter - "Specialization Classification Regulation") (Cabinet of Ministers of the Republic of Azerbaijan, 2011) requiring students to stay within narrowly defined fields to pursue their academic life hinders the capacity of learners to switch academic disciplines or acquire diverse skills; preventing their future competitiveness in the labor market.

However, such an approach in graduates' academic development might lead to skill mismatches or unemployment as global labor market trends require additional skills and competence beyond students' backgrounds (Grosemans et al., 2017; Məmmədova, 2021, Alakbarova, 2024).

Problem statement

Development of competitive human capital in higher education which meets the needs of the current labor market is one of Azerbaijan's long-term development objectives (Ilyasov et al., 2023). However, despite reforms made in higher education of Azerbaijan, the system continues to be limited by rigid classification of the specializations which hinders the employability of graduates who are increasingly required to acquire new skills and knowledge to meet the demands of the applied job vacancies. Especially now, due to globalization and technological advancements, we are entering a new era in which practical skills are increasingly valued over formal qualifications (Postiglione & Wright, 2017). As Cantrell et al (2022) state, this shift is evident in the rise of skills-based hiring, which emphasizes a trend toward prioritizing applied knowledge and adaptability over theoretical knowledge. Employers are increasingly seeking candidates who can acquire skills, grow, and thrive in a constantly evolving workforce (Coursera, 2024).

While higher education is essential, the knowledge acquired throughout degree programs might grow outdated by the time graduates go into the workforce, resulting in diploma inflation (Chevaillier & Duru-Bellat, 2017). Hence, facing gaps between gained qualifications and real work opportunities decreases the value of diplomas and degrees, forcing people to prefer short-term course certificates (Chevaillier & Duru-Bellat, 2017). Higher education systems globally are acting by providing multidisciplinary courses and micro, meso, and macro programs that better meet labor market needs (Seda et al., 2023).

According to the World Economic Forum's Future of Jobs Survey (2023), almost 23 percent of current employees will go through job movement, as certain occupations grow ineffective due to advances in technology, particularly in digital trade-related areas. Hence, adaptability among employees is necessary for ensuring there are enough qualified workers in the global labor market.

The growing discrepancy between educational requirements and job market demands is essential since employers are trending toward skills-based recruiting, where they place more importance on applied knowledge, such as communication, problem-solving, and critical thinking, than on theoretical understanding, which frequently call for a more specialized area of knowledge (Cartel et al, 2022). To remain in the labor market, individuals try to pursue different specializations by engaging in short-term training programs (Chevaillier & Duru-Bellat, 2017). As Montt (2017) highlights, approximately 40 percent of workers globally still experience subject-matter mismatches in their employment. Thus, employees who are unable to adjust to changing needs in the labor market frequently encounter limited career possibilities, creating ineffectiveness in both personal outcomes and contribution to national workforce (Montt, 2017). The current inflexibility in changing specializations at the next level of study may reduce the competitiveness of Azerbaijani graduates in both the national and global labor markets, where diverse skill sets and adaptability are increasingly valued (Piwowar-Sulej & Bąk-Grabowska, 2024). Although the Specialization Classification Regulation imposes strict limitations, there are notable exceptions that allow for more flexible academic progression. For example, some graduates are permitted to enter diverse master's programs, and professional development initiatives, such as civil service training and Master of Business Administration (MBA) programs, offer broader interdisciplinary access. The regulation also plays a role in the

recognition of foreign qualifications, requiring that the applicant's diploma specialization be listed in the specialization classification regulation. While this creates a pathway for flexibility in cases of international study, it continues to restrict transitions for applicants to local universities. Overall, the system demonstrates specific instances of flexibility but remains mainly rigid, limiting graduate mobility and adaptability in their careers.

The significance and purpose of study

This research is significant due to a gap in the existing literature; there is a lack of studies examining this issue within the Azerbaijani context, particularly regarding the role of the Specialization Classification Regulation in shaping graduate employability.

The study aims to understand the alignment between Azerbaijan's higher education specializations and the evolving needs of the labor market, and to evaluate how this affects students' academic and professional development opportunities.

Research Objectives:

- To examine the alignment between specialization regulations and labor market demands in Azerbaijan;
- To explore how rigid specialization choices affect student motivation and academic flexibility.

Research Questions:

- To what extent does Azerbaijan's higher education system provide students with wide and flexible employment opportunities in the modern labor market?

- How does specialization classification in higher education affect students' motivation to pursue diverse qualifications in their academic careers?

CHAPTER 2

Literature review

This part of the research study presents a literature review on the alignment of higher education specializations with labor market needs from both national and global perspectives. The objective of the study is to figure out how specialization classification impacts on students' willingness to pursue their academic career in the diverse educational programs and the extent to which Azerbaijan's higher education specializations meet the requirements of the labor market. According to "Specialization Classification Regulation" (Cabinet of the Ministers, 2011), graduates who are willing to pursue their academic life in master programs must choose the same, close specialization, or the Master of Business Administration. According to Rules on the final attestation of students in general education (Cabinet of the Ministers, 2016) the admission to local universities is administrated by the State Examination Center, that designs the exams and provides the applicants with relevant information on applicable specializations aligned with their background qualifications. For instance, as it is illustrated in the Table 1 the applicants with background in translation might pursue master's programs in fields like simultaneous or consecutive interpretation, philology, English language and literature teaching, or English language teaching. Hence, these rigid classification policies might limit opportunities for majority of university students to diversify their academic paths, that may impact their employability and academic progression.

Table 1

Abiturient Journal 2024 <https://www.abiturient.az/home>

Bakalavriat səviyyəsində ixtisasın şifri və adı	Magistratura səviyyəsində uyğun ixtisasların (ixtisaslaşmaların) şifri və adı	Proqram №-si	Tələb olunan minimal bal
	060203 Tərcümə - Tərcümə (ingilis dili) - Sinxron tərcümə (ingilis dili) - Ardıcıl tərcümə (Azərbaycan dili-ingilis dili üzrə)	43	50
**050215 Tərcümə (ingilis dili) *050203 Tərcümə (ingilis dili) HS 040100 Linqvistika HS 040200 Sinxron tərcümə (ingilis dili) HS 040300 Tərcümə (ingilis dili)	060201 Filologiya - Ədəbiyyatşünaslıq (ingilis ədəbiyyatı) - Ədəbiyyatşünaslıq (Amerika və Böyük Britaniya ədəbiyyatı) - Ədəbiyyatşünaslıq (xarici ölkə xalqlarının ədəbiyyatı, Amerika ədəbiyyatı) - Dilşünaslıq (ingilis dili) - Dilşünaslıq (latın dili)	40	50
	060102 Dil və ədəbiyyat müəllimliyi - Dil və ədəbiyyatın tədrisi metodikası və metodologiyası (ingilis dili və ədəbiyyatı) 060103 Xarici dil müəllimliyi - Xarici dilin tədrisi metodikası və metodologiyası (ingilis dili)		40

Current demands in the rapidly changing labor market, impacted by technological advancement require career changes, as people adjust to new capacities or fields (Uy, 2021). The U.S. Department of Labor (n.d.) notes that the average person will change careers 5-7 times during their working life. These trends highlight the need for adaptability and transferable skills in educational and career preparation to sustain in the labor market.

There are **terms of definition** that are significant in this thesis:

Higher Education: This is related to education beyond high school, generally at colleges and universities, providing professional and academic degrees. Higher education impacts both social and personal growth because it equips people with the skills, they need to enter the workforce and promote growth in the economy (Zhu et al., 2017).

Labor Market: The labor market is the marketplace in which the number of employees meets requirements from employers, affected by economic, social, and policy variables that impact opportunities for employment and wage levels (Miciuła et al, 2021)

Specialization classification. According to the International Standard Classification of Education (ISCED, 2011) established by UNESCO identifies "specialization classification" as a system that groups educational programs in their particular field of study, structure, and topic of study. It eased to comprehend how the labor market aligns with particular skill sets through the consistent identification and contrast of educational pathways across countries.

Career change: A significant change in one's professional path, usually including shift between various industries, positions or areas of experience (Uy, 2021).

Theoretical framework

The section provides an overview of the theoretical framework utilized for explaining the field-of-study mismatch with labor market, then proceeds to a review of empirical studies. Similarly, it analyzes how the higher education system corresponds to labor market needs and how rigid specialization classifications lead to a mismatch between acquired qualifications and abilities demanded in workforce, focusing on both local and global contexts.

A mismatch between higher education and the job market arises when an individual's specialized field of study is inconsistent with their eventual employment (Alakbarova, 2024). The theoretical framework known as human capital theory is applied in literature to explain this discrepancy. According to Becker's human capital theory, higher education improves a person's productivity by strengthening their knowledge and abilities, which in turn increases their income (Grip, 2020). Human Capital Theory highlights how higher education contributes to workforce readiness by emphasizing that investments in education through the provision of relevant skills and knowledge increase employability, productivity, and competence (Grip, 2020). Higher education is therefore in charge of ensuring that students are prepared to enter the workforce.

Traditionally, higher education has been considered an essential component in developing students' employability skills, preparing students for career success (Gilyazova & Zamoshchansky, 2022, Alakbarova, 2024), easing their transition into the workforce (Cornalli, 2018, Durazzi, 2019). Higher education's role in forming the future employees is essential, specifically in an era of rapid advances in technology and era of transforming market demands (Jiang & Zhao, 2024). Higher education institutions are responsible for students' acquisition of the abilities and knowledge required to thrive in the competitive job market (Gilyazova & Zamoshchansky, 2022). Despite shifts in the labor market, it is still widely believed that education plays a critical role in a person's ability to find and remain employed (Buchanan et al, 2020). Yet as the authors claim, higher education systems often struggle to adjust to the swift changes in global demands immediately.

Specializations that we learn at higher education shape essential skills necessary for the specific field of job market; however, to address current labor market demands, universities should integrate *soft skills* such as communication, teamwork, problem-solving and creative thinking into their curricula (Cornalli, 2018, Alakbarova, 2024). Therefore, the ILO report (2024) emphasizes skill mismatches and insufficient education alongside training systems that contribute significantly to the rate of unemployment. According to the report, educational institutions are frequently ill-equipped for the present and changing needs of the labor market, lacking a focus on essential soft, digital, and green skills. High unemployment, especially among youths, is one of the outcomes of this disparity (ILO report, 2024). Employers frequently experience labor shortages when they are unable to find qualified applicants, either because of a shortage of skilled workers or because the skills of applicants do not match the job requirements. These shortages are a sign of imbalances in the labor market, which can be affected by both short-term causes like rapid changes in labor demand and permanent ones like inadequate education (ILO, 2024). To solve these issues, the ILO

report (2024) suggests that targeted investment and skills policies are vital. By matching workforce capabilities with market demands, increasing productivity and assisting workers in moving to high-productivity industries can help reduce these labor shortages and promote sustainable growth. Therefore, universities should enhance the quality of their instruction to ensure that their graduates are highly qualified and capable of meeting the ever-changing and complex requirements of the modern job market (Cornalli, 2018).

By 2027 60% of the global workforce will need to be retrained to meet new requirements of labor market (Coursera, 2024.). According to a World Bank report (2018), due to global trends, the employees are usually required to gain fundamental IT skills alongside socio-emotional skills that thrive in a lifelong learning environment in a shifting career landscape. Digital technologies are altering labor markets by means of *automation, connectivity, and innovation*, affecting labor demand and specialization (World Bank, 2018). Automation minimizes dependence on human labor, resulting in market polarization as low-skill jobs are replaced by machines. Although this shift is noticeable in high-income countries, similar patterns impact developing countries since they gradually adopt these technologies (World Bank, 2018). Improved digital connectivity decreases the cost of transactions and gives emerging market firms access to more opportunities, which could introduce competition to the current marketplace (World Bank, 2018). In addition, when traditional professions are replaced by new industries due to increased innovation, the necessity for flexible curriculum that prepares students for a variety of changing career paths in the digital age becomes evident (World Bank, 2018). Nevertheless, as Buchanan et al. (2020) highlights, the flexibility of higher education systems is significantly affected by national labor market contexts as well. For example, in the United States, globalization has led to the outsourcing and automation of skilled jobs like machining, while Germany has modernized and maintained

these roles through targeted educational investments and upgrading policies, creating opportunity for the employees to learn new skills for the new job position rather than replace them by machine. This disparity emphasizes the importance of modifying higher education regulations to accommodate national and global job demands.

Higher education institutions supply students with various specializations, which shape not only a student's skill set and knowledge but also their career prospects, potential earnings, and likelihood of experiencing a field-of-study mismatch with labor market (Düzçay, 2024). According to the Decision of the Cabinet of Ministers of the Republic of Azerbaijan on approval “State Standard and Program of Higher Education” bachelor's degree gives their holders the right to engage in work in the corresponding specialty and to continue their studies at the master's level (Ministry of Science & Education, 2010). However, the specialization classification regulation requires students to stay within narrowly defined fields to pursue a program similar to undergraduate. The majority of Azerbaijani students choose their specializations based on entrance exam scores or external influence such as parents and teachers’ advice rather than career interests, only realizing a misalignment between their education and career goals later (Akinchi, 2024). As a result, the majority of alumni work in a field different from their acquired knowledge or change their career pathways to meet the requirements of global market needs (Uy, 2021). Moreover, as Uy states (2021), labor market is becoming unpredictable and less stable, that also force individuals for the career change, and recent studies found that 49% of employees had change careers from a wide range of industries. In the Republic of Türkiye, where graduates experience mismatches, working in unrelated fields to their specializations and employers increasingly favor short-term credentials and practical skills over traditional degrees (Düzçay, 2024). For instance,

Google now recognizes six-month certification courses as equivalent to full degrees, illustrating a shift towards valuing specific competencies over formal qualifications (Buchanan et al, 2020).

Preparing students to meet the requirements of working life is very important and according to Global research report, 76% of students from 11 countries (such as Australia, Türkiye, France, Germany) applied for educational degree programs that offer micro-credentials such as Professional Certificates provided by Coursera (Coursera, n.d.). These certificates complement educational degree programs for students to obtain skills and knowledge appropriate for the workforce (Coursera, n.d.).

As mentioned above, the type of competences students acquire during their studies significantly influences their employability. Piróg (2016) emphasizes that curriculum design plays a key role in graduates' transition to the workforce. His study illustrates that students with a strong base of the most applicable knowledge, practical skills, and networking opportunities are more likely to find jobs in their field and experience easier transitions. Although Piróg (2016) does not advocate for less specialization programs, he highlights that generalist programs are advantageous for various career paths, as they offer a broader range of skills. Employability might be enhanced, and graduates' transitions eased, with diverse curricula that address shifting labor market demands.

Exploring this idea, Kovačević (2022) examines the impact of curriculum structure on graduate specialization, contrasting two types of undergraduate programs with broader and narrower curricula. His findings illustrate no significant differences in the academic performance of master's students from broader undergraduate backgrounds compared to those from specialized programs. This issue exists in Azerbaijan as well, where citizens often pursue graduate degrees abroad within frameworks of state programs, self-funded or other scholarship programs despite coming from diverse undergraduate fields and they successfully complete the foreign degree

programs as despite the significant difference in the curricula and teaching, learning methods. Thus, among the required list for the approval to study within state program there is no mention about the insecurity of match of undergraduate and graduate degrees. According to the Decree No. 479 of the President of the Republic of Azerbaijan (amended in 2019), the Agency for Quality Assurance in Education (AQAE) as a public legal entity operates in the field of accreditation of educational institutions operating in the Republic of Azerbaijan and recognizes the higher education qualifications of foreign countries, as well as conducting examinations and issuing documents confirming professional qualifications for the purpose of assessing and recognizing knowledge, skills, competences and experience acquired through non-formal and informal forms of education in vocational education. The AQAE recognizes the diplomas of those who studied abroad with a specialization that differed from the undergraduate one, even if their bachelor's and master's specializations differ due to regulations of Lisbon Recognition Convention (Council of Europe, 1997). According to anecdotal evidence, the Academy of Public Administration under the President of the Republic of Azerbaijan offers the master's degree program "Public Administration" for civil servants, where the bachelor's specialization is not considered (Academy of Public Administration, 2018). This program exists from 2018 and annually the Academy sends requests to state organizations to give the list of the candidates that are applicable to study within this professional development program for civil servants. Hence, the practice demonstrates that there are exceptional cases like study abroad, MBA and civil servant development programs where applicants are allowed to shift their specializations to be more qualified in the labor market.

Additionally, according to the Rules for Engaging in Pedagogical Activities (Ministry of Science & Education, 2020), only graduates of pedagogical specializations who successfully complete the competition process are eligible to teach in public schools. Nonetheless, as stated in

Articles 4.1. and 4.2. of these rules, in cases of staff shortages in state general education institutions located in rural districts, graduates of relevant specializations, such as IT engineering or computer science, may, for instance, be permitted to teach mathematics in public schools.

In conclusion, preparing students for a competitive global economy calls for incorporating applied knowledge into higher education curricula and matching them with labor market demands. Addressing rigid specialization pathways in the higher education system could more effectively enable institutions to adapt to both local and global labor requests, setting the foundation for a more adaptable and market-relevant educational environment.

CHAPTER 3

Research Design and Methodology

As mentioned in previous chapters, the Specialization Classification Regulation requires undergraduate alumni to continue their academic path within the same or a closely related specialization (Cabinet of Ministers of the Republic of Azerbaijan, 2011). However, since this regulation also governs the recognition of foreign qualifications, it allows flexibility in recognizing the diplomas of those who studied abroad in a specialization different from their undergraduate degree. Additionally, the Academy of Public Administration under the President of the Republic of Azerbaijan offers the master's degree program "Public Administration" for civil servants, where the bachelor's specialization is not taken into account (Academy of Public Administration under the President of the Republic of Azerbaijan, 2018). Since there are contradictions and gaps in the policy of the admission to postgraduate programs, this research also includes policy overview which compared national education policy with other countries. The study also comprehensively explores the alignment between Azerbaijan's higher education system and national labor market demands. The research adopts a mixed-methods approach combining qualitative and quantitative methods to gain a better understanding of the research problem raised in this thesis (Creswell, 2012).

Research paradigm

The pragmatic paradigm better aligns with this research since it might include mixed methods research (Elgeddawy & Abouraia, 2024). Hence, a pragmatic paradigm guided this research as it emphasizes flexibility and practicality in finding possible solutions to the issue

under inquiry. The paradigm acknowledges the significance of having a diversity of perspectives and worldviews in solving issues related to this research.

Research Design

The study employed a mixed methods approach by combining both qualitative and quantitative methods through semi-structured interviews and a survey to gain a comprehensive understanding of the research problem (Creswell, 2012). Within the qualitative component, three interviews were held with experts from relevant state entities, namely the State Examination Center, the Central Career Branch, and the Agency for Quality Assurance in Education, who contributed meaningful insights to the study, and two interviews were conducted with a graduate from the Faculty of Translation and a student from the Faculty of Mathematics with teaching experience. For the quantitative part, a survey was conducted among alumni who had completed only a bachelor's degree, as well as those who pursued further education in different specializations, in order to capture diverse perspectives.

Participants

One of the interviews was conducted with a graduate of the Translation Faculty, as this specialization is about to vanish due to technological advancements in the labor market. The aim was to explore the strategies and approaches the graduate employed to remain in the workforce, including any attempts to change specialization, apply for international programs, or enroll in short-term professional courses. Another interview I intended to conduct with alumnus of the specialization as "Mathematics" without the indicating title "Math teacher" in their university diploma, but I could not find the relevant person so I interviewed a student of the specialization

as “Mathematics” with the teaching experience. The purpose was to examine an individual who is not permitted to work in public schools as a teacher, with the aim of uncovering the obstacles to employability that hinder their professional development within the field of teaching.

One semi-structured interview was conducted with the expert from the Agency for Quality Assurance in Education (AQAE), which operates under the Ministry of Science and Education of the Republic of Azerbaijan. One of the primary duties of the AQAE is the recognition process of the qualification of the graduates of foreign programs. One of the parts of the procedure is ensuring that the applicant’s qualifications align with the relevant specialization listed in the Specialization Classification Regulation.

The admission procedure for higher education is held by the State Examination Center (SEC), which designs the exams for the university applicants (abiturients). For those who apply for master's programs, the SEC monitors the admission procedure ensuring that the applicant background knowledge aligns with the requirements of the specialization classification regulation at the master's level of higher education. The interview with the expert from the SEC revealed the reasons behind the strict admission requirements for master’s programs and the organization’s perspective on the existence of exceptions in specialization choices within higher education.

The Career Central Branch of the State Employment Agency is the first state entity that delivers career counseling services, to raise public awareness, as well as to help in choosing a future occupation considering the labor market’s demands. The semi-structured interview results with the expert from this institution were expected to reveal whether the national higher education specializations align with current workforce requirements and what kinds of

challenges graduates and workers face in the transition to work life and the type of guidance they receive from career counselors.

Within the quantitative method a survey was conducted to address two important issues. The survey was designed to explore what hinders the academic developments of those who completed the undergraduate degree only, and to identify the opportunities that are available for local students with a master's degree programs in different specializations to switch their field after completing their initial degrees and career paths.

Sampling

Purposeful sampling was utilized in this research by selecting interview participants intentionally, particularly for their potential to deliver information-rich cases that can be examined in depth (Schutt, 2012; Mertens & Wilson, 2018). This approach guarantees that the individuals selected are knowledgeable about the issues discussed in the study and may provide valuable insights. Participants were identified based on their knowledge or expertise related to the research problem, enabling a meaningful examination of the topic (Schutt, 2012). All three participants (AQAE, SEC and CCB experts) are chosen for their background in the field confirming their expertise and ability to put into the study insightful contributions.

Convenience sampling was used to attract respondents for the survey. I approached 2-3 local universities by sending official letters to ask their alumni to participate to increase the sample size and gain more comprehensive insights (Creswell, 2012). The survey was completed only by those who voluntarily agree to participate. The survey focused on alumni who completed a bachelor's degree to learn about their reasons for not continuing their academic journey, and

those with a master's degree in a different specialization to discover their experiences in switching fields of study and career opportunities.

Ethical Principles

To adhere to ethical considerations, all research participants were provided with a consent form outlining the purpose and the benefits of their contribution to this research. Participants were guaranteed confidentiality and anonymity, as well as the right to withdraw their participation in the study at any time. They had the right to demand the removal of their contributions. Moreover, the consent form emphasizes that participation is completely voluntary (Schutt, 2012).

The research complies to ethical principles, protect participant privacy by properly processing their data, and foster equity by treating all participants with dignity and respecting their varied perspectives in accordance with the British Council's Research Ethics Policy (British Council, 2024). Any possible threats to participants' well-being were carefully assessed and prevented to ensure a safe and inclusive research process. These protocols protect the rights and dignity of research participants by adhering to the highest ethical standards.

Trustworthiness

Trustworthiness plays a key role in ensuring reliability and credibility in research (Mertens & Wilson, 2019). The significance of fostering trustworthiness is that the readers of the study should be provided with data and findings that should be transparent and valid. The main point of the research is that it should utilize data gathering methods that may be applied to find reliable answers to proposed research questions as well as evaluate the data in a way that the

outcomes become valid. Therefore, to ensure trustworthiness, the research employed *credibility, triangulation, member checks, transferability, validity, and reliability* as well (Creswell, 2012).

Credibility is a fundamental component to assure readers that the findings are trusted and reliable. It relates to the concept that how findings of the research align with reality (Stahl & King, 2020). The research delivers accurate findings which allow the whole study to be trusted by readers and employed in the relevant field of research.

Triangulation was ensured in this research by collecting data from multiple sources, including survey, policy documents, and semi-structured interviews (Merriam & Tisdell, 2016). By comparing perspectives from various participants, such as alumni and experts from relevant governmental entities, the study achieved a comprehensive understanding of the issue. Furthermore, a policy overview was undertaken by comparing Azerbaijan's national higher education policy with those of other countries that have both similar and different regulations. This comparison technique assisted to identify the challenges, advantages, and potential areas for improvement of the policy framework of Azerbaijan.

Member checks were conducted by sharing interview transcripts with the participants. This method enables participants to confirm the accuracy of the descriptions of their responses, avoid misinterpretations, thereby guaranteeing the findings are accurate, realistic, and corresponding to their original perspectives (Creswell, 2012).

Transferability refers to the extent to which the findings of this study can be applied to other contexts (Stalmeijer & Brown, 2024). Therefore, the implications of this research may be transferable to countries with similar or relevant higher education policies.

Validity defines the extent to which an approach accurately measures what it is designed to measure. High validity demonstrates that the research outcomes relate closely to

actual features, and variations (Middleton, 2019). Thus, collecting more accurate data made the study more valid regarding the quantitative context while qualitative validity was ensured by the discussion of data collected by interviews and survey (Pine, 2009).

Reliability implies the consistency of the research outcomes when the study is repeated within identical circumstances. In order to ensure reliability, all data collection methods adhered to standardized protocols, such as utilizing the same survey structure and interview protocol for all participants (Creswell & Plano Clark, 2017). Furthermore, comprehensive records of the research process were upheld to guarantee that the method can be repeated and develop reliable results.

CHAPTER 4

Policy Overview

Policies serve as strategies or regulations established by governments to guide actions and inform decision-making processes in the field of education (Fowler, 2013). These policies establish the structural framework for the operation of the educational systems and are often developed in response to evolving societal needs, national development priorities and institutional reforms as well. In the context of aligning higher education with labor market demands, policy plays a critical role in shaping how academic programs respond to economic changes and the evolving requirements of the workforce.

There are three types of education policies identified by Lowi's Techniques of Control: distributive, redistributive, and regulatory (Friedel et al., 2013). Distributive policies, often seen as "gifts" from the government, offer benefits such as grants, subsidies, or licenses that encourage political stability and loyalty. Redistributive policies emphasize addressing inequalities by reallocating resources or opportunities, regularly initiating political debate due to their effect on the current systems of power. Regulatory policies, set up rules and standards that apply broadly to large groups of people. The specialization classification regulations serve as an example of a regulatory policy since they specify which bachelor's degrees are eligible for specific master's programs, guiding institutions and students in their academic journey.

The impacts of such regulations extend beyond higher education. The transition of graduates into the labor market significantly impacts capabilities of the national workforce which is beneficial for economic growth. According to Valero and Van Reenen (2019), a well-aligned higher education system that creates a skilled and adaptable workforce that is capable of

fostering productivity, innovation, and competitiveness has a direct connection to economic development, a crucial indication of national progress.

According to McDonnell and Elmore's framework, there are five main policy instruments: mandates, inducements, capacity building, system change and hortatory tools. Mandates are regulations that specify particular actions and include sanctions for noncompliance. Short-term resource transfers with instructions for a range of behavioral outcomes are called inducements. The system change transfers authority to encourage responsiveness, but capacity building concentrates on long-term investments to improve institutional skills. Lastly, hortatory policy encourages desired behaviors among target populations by using information and values (Friedel et al., 2013).

Azerbaijani specialization classification regulation also primarily illustrates the assets of mandate instruments, as it enforces strict rules requiring students to pursue master's degrees in the same or closely related fields to their bachelor's. Capacity building supports the regulation by assisting students to gain required skills through education.

However, Azerbaijan's regulatory approach requiring students to pursue master's programs in the same or a closely related field as their bachelor's degree may be rooted in contextual variables such as assurance of quality, capacity of institutions, or educational tradition. Similar practices have been noticed in other countries, particularly in fields where foundational knowledge is vital, though more flexibility may be allowed in broader areas. To better understand and evaluate this policy within a broader context, the following sections will explore the approaches of neighboring countries: Russia, Kazakhstan, and Türkiye, whose education systems share historical or cultural similarities with Azerbaijan, as well as Germany

and the United States, which represent European and American approaches of higher education policy.

The Russian Federation

The Russian Federation's education system is examined in this study because both Russia and Azerbaijan share a common Soviet educational heritage. Following the collapse of the USSR, both Russia and Azerbaijan underwent a gradual transformation to modernize their education systems and align them with international standards (Aliyev, 2011; Jiang et al., 2023).

Russia joined the Bologna Process in 2003 and implemented reforms that significantly impacted its higher education system, where the notable changes were the decentralization of higher education and the establishment of Federal Universities, which were founded to enhance research capacities and strengthen their international reputation (Jiang et al., 2023). However, the further decline in government funding for universities significantly affected the quality of education, leading to reductions in academic staff, scholarships, and research projects.

Admission to higher education in Russia is determined by passing the Unified State Examination (APNNIC, 2020). The bachelor's degree, which is more academically rather than professionally oriented, serves as a prerequisite for admission to master's degree programs. Upon graduation, alumni receive a Specialist Diploma by defending a project or thesis and completing state final examinations as part of the State Final Attestation.

Master's programs in Russia typically consist of a two-year course with a strong emphasis on research activities, analytical skills, and practical training in a specific field of study. The State Final Attestation for a master's degree includes the defense of a dissertation and state final

examinations. However, according to the Federal Law “On Education in the Russian Federation” (Russian Federation, 2012), the state educational standard does not explicitly define the content requirements for master's education and higher education institutions (HEIs) have the autonomy to determine the content of their master's programs. Universities establish their own admission procedures, which may include entrance examinations, interviews, or other selection criteria. Additionally, the Order of the Ministry of Education and Science of the Russian Federation On the Approval of the Procedure for Admission to Higher Education Programs – Bachelor's Degree Programs, Specialist Programs, and Master's Degree Programs for the 2014-2015 Academic Year states that holders of higher education degrees seeking to pursue a master's program in a different field might be required to pass additional tests aligned with the requirements of their chosen program.

Another notable approach in the Russian higher education system is regionalization: Russia is focusing on developing competitive universities that train specialists for regional labor markets, thereby promoting sustainable social and economic development (Boguslavsky et al., 2018). A priority program is being implemented to establish a system of 33 competitive universities across different regions. These universities serve as scientific and educational clusters, training essential personnel for local economies and labor markets while also becoming socio-cultural and scientific centers.

However, despite these changes and reforms, there is still a mismatch between higher education programs and the labor market and many students in Russia encounter difficulties when entering the workforce, as employers doubt the productivity of recent graduates due to low average education standards (Hénard et al., 2021). However, as Hénard et al claim work experience and soft skills have become crucial for employment in Russia, and graduates from top

universities with practical experience are typically preferred by employers. Additionally, bachelor's graduates are encouraged to obtain a master's degree if they wish to secure employment in prestigious workplaces (Maltseva & Rozenfeld, 2022).

At the beginning of the 2000s, Russia's approach to funding higher education institutions (HEIs) to develop research capabilities can be considered a capacity-building policy instrument according to McDonnell and Elmore's framework (Friedel et al., 2013). This is evidenced by the significant investment in grants, scholarships, and staff training aimed at meeting international standards (Jiang et al., 2023). However, recent reforms in the higher education system, which grant HEIs greater authority while simultaneously reducing funding (The Federal Law of the Russian Federation, 2012), align more closely with system change policy instruments. This approach also reflects a redistributive policy, as power and resources have been shifted from the state to the HEIs.

The Republic of Türkiye

The Republic of Türkiye's education system is shaped by cultural perspectives, as both Türkiye and Azerbaijan are Turkic countries with many commonalities, likely extending to their education systems as well.

Admission to higher education institutions for local citizens in Türkiye is conducted through the Higher Education Institutions Examination (YKS), which has been administered by the Measurement, Selection, and Placement Center (ÖSYM) annually since the 2017-2018 academic year. Similar to how the State Examination Center (SEC) in Azerbaijan evaluates students' knowledge and facilitates their transition to higher education, ÖSYM functions as a

public institution responsible for measuring individuals' skills and knowledge through an objective and fair evaluation process. It also oversees placement and recruitment procedures based on these assessments (Council of Higher Education of Turkey, 2021).

The bachelor's degree (Lisans Diploması) serves as a prerequisite for admission to master's degree (Yüksek lisans) programs in Türkiye, which are divided into two categories: Thesis-Based Master's Programs (Tezli Yüksek Lisans) and Non-Thesis Master's Programs (Tezsiz Yüksek Lisans) (Kampüsula, n.d.).

- Thesis-Based Master's Programs typically last two years, with coursework in the first year followed by thesis research and defense in the second year. Students are required to conduct research, submit a master's thesis, and defend it before a jury.
- Non-Thesis Master's Programs generally last 1 to 1.5 years (2 or 3 semesters). Instead of writing a thesis, students complete a final project at the end of the program.

Master's programs require a minimum score from the Academic Personnel and Graduate Education Entrance Exam (ALES) and, in some cases, proof of proficiency in Turkish or English through language exam scores. According to Türkiye's Higher Education Law (Law No. 2547, 1981), universities possess academic autonomy to determine their own admission requirements, allowing students to apply for a master's degree in a different field (Council of Higher Education of Turkey, 1981).

This flexibility is generally more common in Non-Thesis Master's Programs. However, depending on the university and program, additional requirements may apply, such as completing prerequisite courses through the scientific preparation program (bilimsel hazırlık). These courses

help students gain fundamental knowledge in a new field before beginning full master's coursework (Karadeniz Technical University, n.d.).

Despite the flexibility in selecting master's programs, Türkiye's higher education system maintains a strict approach to specialization in the field of pedagogy, as is the case in Azerbaijan. According to the Turkish Ministry of National Education (n.d.), only graduates of pedagogy-related specializations are permitted to teach in schools, or alternatively, individuals who wish to become teachers must complete an additional qualification program in pedagogy to be eligible for teaching positions.

However, while Türkiye's higher education system offers flexibility in some areas, it faces significant mismatches between education and the labor markets, as Dürçay (2024) highlights, many graduates lack digital skills, and the rise of automation and artificial intelligence (AI) has transformed job demands. As a result, students often struggle with transitioning into the workforce, with many working in jobs unrelated to their academic qualifications. This field-mismatch highlights the gap between higher education curricula and evolving labor market needs (Dürçay, 2024).

From a policy perspective, Türkiye's approach to higher education governance shares similarities with Russia. The autonomy granted to HEIs in designing their study programs and admission procedures aligns with the human capital policy instrument, which prioritizes skill development and workforce preparation. However, its strict regulations on pedagogical qualifications reflect the regulatory policy of Lowi's Techniques of Control, as it formalizes rules for a broad group of individuals and mandates specific professional behaviors (Friedel et al., 2013).

The Republic of Kazakhstan

Kazakhstan was chosen for this analysis due to its shared historical background with Azerbaijan as a post-Soviet country and its cultural similarities as a Turkic nation.

The reform of Kazakhstan's higher education system intensified significantly after 1995, with major decentralization efforts beginning in the 2000s. These reforms focused on granting higher education institutions (HEIs) with certain academic independence and autonomy in management and financing (Massyrova et al., 2015). Kazakhstan's accession to the Bologna Process in 2010 further contributed to the integration of its higher education system to meet international standards (Shukusheva, 2022).

According to the Standard Rules for Admission to Educational Organizations Implementing Higher and Postgraduate Educational Programs (Minister of Education and Science of the Republic of Kazakhstan, 2018), admission to higher education institutions in Kazakhstan is determined by the placement of a state educational order and educational grants funded by the national or local budget. Additionally, students may finance their education through private funds. Admission to bachelor's degree programs is based on the results of the Unified National Testing (UNT) exam, which evaluates students in the history of Kazakhstan, mathematical literacy, reading comprehension (in the language of instruction), and two specialized subjects.

This regulation indicates that while universities in Kazakhstan have independence, the state still defines minimum entrance score requirements for specific specializations for the admission at master's degree. Additionally, applicants for pedagogical sciences must pass a special examination conducted by the UNT admissions committees, which assesses their

suitability for the profession. For example, candidates may be given a pedagogical case study to solve. However, since universities have academic independence, they can establish additional admission requirements, such as entrance exams, interviews, or supplementary documents.

Despite these reforms, Kazakhstani graduates still face challenges in the labor market due to a mismatch between higher education outcomes and workforce demands (Lashkareva, 2022). To address this issue, in 2022 the Ministry of Science and Higher Education of the Republic of Kazakhstan partnered with Coursera to integrate job-relevant skills into university curricula (Coursera Enterprise, n.d). The initiative initially involved 24 HEIs and later expanded to 93, offering professional certificate courses in fields such as IT, artificial intelligence, leadership, time management, and teacher professional training. These efforts aim to bridge the skills gap and improve graduate employability.

Despite granting universities academic autonomy, Kazakhstan's higher education system maintains a structured admission process that requires students to pass a national exam, reflecting a regulatory policy approach (Friedel et al., 2013). At the same time, its initiatives to equip students with in-demand workforce skills align with human capital policy instruments, demonstrating a commitment to enhancing graduates' employability and bridging the gap between education and labor market needs.

The Federal Republic of Germany

Germany was chosen for this analysis because it is internationally recognized for its structured educational system, which encompasses both academic and vocational pathways. This dual approach ensures that individuals receive a balanced mix of theoretical knowledge and

practical training, making them highly adaptable to evolving labor market demands (University of Europe for Applied Sciences, n.d.).

The legal foundation of higher education in Germany is primarily established through the Higher Education Acts (Hochschulgesetze) of the federal states (Länder) (German Rectors' Conference, n.d.). These laws define the objectives, governance, admission policies, and academic structures of higher education institutions, ensuring consistency across both public and private universities (Eurydice – European Commission, n.d.).

According to the Standing Conference of the Ministers of Education and Cultural Affairs (KMK, 2020), tertiary education in Germany consists of several key institutional types:

- Universities and equivalent institutions (Universitäten), which focus on research and theoretical knowledge across various disciplines;
- Universities of applied sciences (Fachhochschulen), which emphasize practical application and industry collaboration;
- Colleges of art and music, which prepare students for artistic professions and teaching in music and the arts;
- Professional academies (Berufsakademien), which provide a hybrid of academic training and career-oriented education as an alternative to traditional universities;
- Advanced vocational schools (Fachschulen), which focus on continuing vocational education and preparing skilled workers for management roles or specialized professions.

Since the federalism reform of 2006, state-level higher education laws (Hochschulgesetze) allow universities greater flexibility in designing their own admission policies within a structured national framework (KMK, 2020). Hence, German universities have institutional autonomy,

particularly in setting admission requirements for master's programs, while undergraduate admissions are regulated by state laws. For the undergraduate programs, students must hold an Abitur (secondary school leaving certificate) or an equivalent qualification, and some programs have numerus clausus (NC) restrictions, which limit admission based on academic achievement. Admissions to the master's programs are determined individually by universities, and requirements might vary depending on the areas of the specialization. Some universities demand a bachelor's degree in the same field, while others enable applicants to switch fields of study, sometimes requiring additional courses (KMK, 2020).

The vocational education and training (VET) system of Germany, namely the dual system (Duales Ausbildungssystem), is an important component of its education framework. This system, which is governed by the Vocational Training Act (BBiG), combines theoretical education in vocational schools with practical apprenticeships to guarantee that graduates are prepared for the workforce (Federal Ministry of Education and Research, 2020). As Shabangu and Madondo (2024) state, this approach effectively aligns the academic curriculum with demands of the job market by fostering close cooperation between educational institutions and industries. This method equips students with job-specific skills and practical expertise, resulting in high employability—87% of apprentices receive permanent job offers from their training firms upon completion, significantly reducing unemployment among youth. In addition, regarding the labor market, the Federal Agency for Continuing Education encourages employees to pursue continuing education to maintain a consistent focus on labor market policy necessities (German Confederation of Employers' Associations, n.d.).

Germany's strategy for providing universities with autonomy to innovate, conduct research, and set their own criteria for admission corresponds to McDonnell and Elmore's human capital

policy instrument (Friedel et al., 2013). Such a strategy reflects a long-term investment in higher education, as alumni are prepared to contribute to the job market. Furthermore, Germany's vocational education system also represents the human capital model by training a skilled workforce, guaranteeing students are well-equipped to meet requirements of the labor market.

The United States of America (USA)

The United States is widely recognized with its prestigious higher education system attracting students from around the world. As of the 2023–2024 academic year, the U.S. enrolled over 1.1 million international students (1,126,690), including 1,130 Azerbaijani students studying at American universities (U.S. Embassy in Azerbaijan, 2024). Given this growing interest, this study examines U.S. higher education practices to better understand their appeal and demand among students.

The U.S. higher education system is highly decentralized, with institutions operating autonomously from state and federal governments (Hillman, 2024). As Hillman (2024) highlights, approximately 60% of high school graduates in the United States enroll in college immediately after graduation, primarily due to shorter program durations (typically two years), lower tuition costs, and proximity to home. However, some students pursue higher education later in life due to factors such as military service, work, or family obligations. Unlike in many other countries, there is no single standardized university application process in the U.S. Instead, students must apply individually to each institution, with application requirements varying across universities.

According to the American Councils for International Education (2020), most master's degree programs in the U.S. require students to complete a research paper, a master's thesis, or another form of original academic work. However, professional degrees often replace traditional research components with a capstone project or practicum, which provides practical experience in the field.

The Organization for Economic Co-operation and Development (2020) reports that the United States implements various innovative strategies to strengthen the alignment between higher education and the labor market. These initiatives include digital tools that provide real-time insights into skill gaps for employers, students, and educators, as well as public-private partnerships aimed at expanding work-based learning opportunities. Such efforts enhance workforce readiness and serve as valuable models for peer learning both within the U.S. and internationally. Additionally, evolving labor market demands have contributed to skill mismatches, where workers' qualifications do not fully align with job requirements. However, compared to other OECD countries, the U.S. experiences a lower rate of skills mismatch (12% versus 15%) (OECD, 2020).

The decentralized nature of the American higher education system, which allows institutions to operate independently and foster innovation, adaptability, and research, aligns with human capital policy instruments (Friedel et al., 2013). This long-term investment in education ensures that graduates acquire the necessary skills to contribute effectively to the labor market.

Azerbaijan has made significant progress in improving its higher education system to align with international standards by joining the Bologna Process in May 2005 (Aliyev, 2011). A comparison of Azerbaijan's higher education system with those of Russia, Türkiye, Kazakhstan, Germany, and the United States reveals both commonalities and differences. For instance, Russia

(Unified State Examination), Germany (Abitur), Kazakhstan (Unified National Testing), and Türkiye (Higher Education Institutions Examination), like Azerbaijan, require students to pass a national exam upon completing high school to gain admission to bachelor's degree programs (see Table 2).

Both Azerbaijani and Turkish legislation require individuals who wish to become schoolteachers to hold a diploma in pedagogy. Similarly to Azerbaijan, Kazakhstan and Türkiye requires students to pass entrance exams at each educational level and achieve a minimum score for admission, though universities have the autonomy to regulate further admission procedures.

However, all five countries, (Kazakhstan and Türkiye -partially), grant higher education institutions the autonomy to set their own admission requirements for master's programs. In contrast, Azerbaijan has traditionally followed a more regulatory policy limiting universities' authority in this regard. While there may be justifications for this restriction, which will be explored through expert interviews, a recent policy change has marked a significant shift. Specifically, the amendment to specialization classification regulations on December 2, 2024, by the Cabinet of Ministers has granted Azerbaijani universities certain autonomy in designing master's degree programs. This policy shift is expected to significantly impact both master's program admissions and the recognition of foreign qualifications, bringing Azerbaijan closer to international best practice in higher education governance.

Table 2

*Cross-Country Comparison of Higher Education Admission Policies:**Commonalities and Differences*

Country	Admission system	Policy framework	Flexibility in field change	Alignment of HE and LM
Azerbaijan	Centralized system for both bachelor's and master's admissions	Regulatory/ Mandate, capacity building	Low- mandates to follow the same/close specialization in master programs, with exception for study abroad, BMA, mA for civil servants	Misalignment
Russia	Centralized for bachelor's (Unified State Exam); Decentralized for master's admission	Redistributive/ Capacity building, system change	High	Misalignment
Türkiye	Centralized for bachelor's (YKS); decentralized and for master's	Regulatory (regulation on pedagogy qualification)/ Capacity building	High	Misalignment
Kazakhstan	Centralized for bachelor's (Unified National Testing); Partially decentralized for master's admission	Regulatory (requires take exam before the admission)	Moderate (based on the exam results)	Misalignment
Germany	Centralized for bachelor's (Abitur); decentralized and for master's	Capacity building	High	Moderate Misalignment
USA	Decentralized	Capacity building	High	Moderate Misalignment

CHAPTER 5

Data collection

The study employs mixed methods for data collection, incorporating both qualitative and quantitative techniques (Creswell & Plano Clark, 2018). The primary goal of the qualitative method was to explore how different state entities (three interviews with experts from relevant organizations) approach the restrictions in Azerbaijani higher education regarding the selection of different specializations for continuing an academic pathway and their alignment with labor market demands in Azerbaijan. Additionally, two interviews were conducted: one with a bachelor's graduate from the Faculty of Translation, whose specialization is increasingly being replaced by AI tools, and another with an undergraduate student from the Faculty of Mathematics, whose broad specialization, not specifically related to pedagogy, does not qualify him to teach in public schools. The aim was to gain insights into how their specializations align with current labor market demands and the steps they are taking to remain in the workforce.

As Creswell (2012) highlights, to gain a better understanding of the problem being studied, it is beneficial to incorporate mixed methods. Therefore, this study also included a survey involving both bachelor and master graduates from three local universities to examine their opinions on their chosen professions and academic experiences within diverse specializations.

The semi-structured interviews were held in both Azerbaijani and English. At the request of the experts, the interviews were conducted in Azerbaijani, as it was more convenient for them to respond in their native language using terminology specific to their professional fields. The remaining interviews (with a graduate from the Translation Faculty and a student from the

Mathematics Faculty) were conducted in English. Upon completion, all interviews were transcribed and coded. Those interviews held in Azerbaijani were translated into English, and the corresponding codes were preserved. To ensure confidentiality and anonymity, all participant names were replaced with pseudonyms. The coded responses were then subsequently examined to collect relevant insights and generate appropriate responses to the research questions.

The experts interviewed represented public legal entities, such as the Agency for Quality Assurance in Education (AQAE) under the Ministry of Science and Education of the Republic of Azerbaijan, the Central Career Branch (CCB) of the State Employment Agency under the Ministry of Labor and Social Protection of the Population of the Republic of Azerbaijan, and the State Examination Center (SEC). The interview questions were structured to gain a deeper understanding of the roles and responsibilities of these organizations and to explore their perspectives on how higher education specializations align with the current requirements of the national labor market.

The AQAE expert was asked about the recognition process for foreign qualifications, the extent of flexibility in recognizing diplomas beyond the constraints of the specialization classification regulations, and the influence of recognition of foreign diplomas on the national labor market. The SEC expert was questioned about the restrictions on choosing diverse specializations at the master's programs and the structure of entrance examinations for postgraduate admissions. The CCB expert was questioned about the transition of the graduates into the labor market, the challenges they encounter, and the criteria and expectations of employers regarding new graduates. Some experts requested peer reviews (which were conducted for them) to guarantee that the viewpoints they provided were accurately interpreted in the research.

The graduate and student of the specific areas of the specializations were also interviewed to explore their motivations for choosing their future professions and evaluation of their employability. The interviews examined the challenges they encountered in transitioning to the job market and the actions they adopted to remain valuable candidates in their field.

The survey was conducted among 51 participants and included questions aimed at obtaining deeper insight into graduates' desire to pursue further academic studies, either within the same field or a different one. It also searched to explore the available opportunities to enhance their academic knowledge or their decision to stop at an undergraduate degree, along with the reasons behind this choice. In addition, the survey ensured the anonymity of all participants to protect their confidentiality.

Findings and Data Analysis

The objective of this research is to explore the view of the limitations of the current specialization classification regulation in the higher education of Azerbaijan and its impact on students' academic and career pathways. Additionally, the study aimed to analyze the alignment between higher education specializations and labor market demands, identifying gaps and proposing recommendations for a more flexible and responsive system. The research questions that this study is conducted to answer are as follows:

- To what extent does Azerbaijan's higher education system provide students with wide and flexible employment opportunities in the modern labor market?
- How does the specialization classification in higher education affect students' motivation to pursue diverse qualifications in their academic careers?

This section provides the findings based on interviews and the survey. Although the interviews were conducted with experts from different fields, and the student and graduate interviews, as well as the survey, included participants from various universities and specializations, several commonalities were identified in their responses. The analysis of their input is grouped into specific categories. To ensure alignment with the research questions, the findings are divided into two sections: those that respond to the first research question and those that address the second.

Below are the findings related to the first research question.

External influences on abiturients' specialization choices impact their academic life

High school students often enter university based on their entrance exam scores or under the influence of external advice from relatives and teachers. A graduate from the Translation Faculty explained that her decision to pursue a degree in translation was not based on a deep interest in the field, but rather on the results of the entrance exam. She stated:

“I was just considering the most available faculty, and the Translation Faculty was the one. I scored the number of points that allowed me to enter only this faculty. That’s why I chose this specialty without any specific reasons.”

The math students also expressed that he entered university on the math faculty due to his relative advice: *“I didn't know, like, any other sphere, I was good at math. My uncle said that you can choose math, and it will be too broad, then you will easily switch to something new, a different major”*.

Given that high school students are frequently too young to completely understand the nature of the specialization they are applying to, this type of influence during the university

admissions process makes sense. As a result, they tend to rely on their entrance scores or follow advice from adults, parents or teachers, who guide them toward a field they believe will lead to a stable qualification. However, during their studies, many students come to understand what their specialization actually means and often complete the program simply for the sake of earning a diploma. Hence, both interview participants mentioned above expressed that they are not willing to continue their academic paths in their current fields of study.

The expert from the CCB also confirmed this tendency among local students, since many seek support from career counselors when attempting to change their specialization or choose a new career path. To address this issue, the CCB has implemented various initiatives aimed at reaching even the most remote regions of the country. These efforts focus on raising awareness about career choices among high school students and their parents, who significantly influence university admission decisions.

Among the initiatives are projects such as "Alo Karyera", which provides online career guidance (State Employment Agency, n.d.) ; seminars featuring experts from various industries, which come to inform students about specific qualifications and career paths; and the "Festival of Professions," an annual event held across 10 regions that showcases different professions to the public and stimulates students' interests (Festival of Professions, n.d.). These activities are usually conducted before the university entrance examination period, as the expert noted:

“Students often enter university not based on their skills or interests, but on the points, they score, which is not always a successful match. That’s why it is important to provide them with clear information about what each major accordingly.”

Mature Student Desire to Switch Specializations

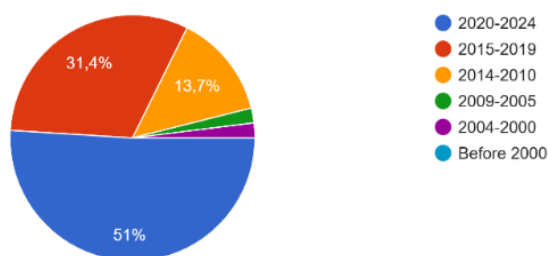
Upon completing their undergraduate programs, students become more mature and develop a clearer vision of various specializations. Through their experiences, they gain a better understanding of their interests, allowing them to make more informed career choices and decisions about continuing their professional or academic development.

The survey includes 51 participants, 26 of whom are graduates from the years 2020 to 2024 (see Figure 1).

Figure 1

When did you graduate with your bachelor's degree?

51 ответ

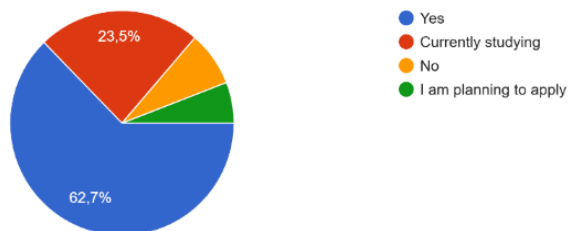


Among all respondents, 32 hold a master's degree, and 12 are currently enrolled in master's programs (see Figure 2).

Figure 2

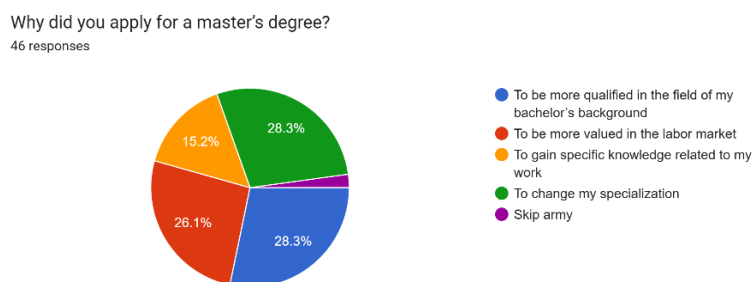
Do you have a master's degree?

51 ответ



Of the remaining participants, 7 do not hold a master's degree, though 3 of them plan to apply in the near future. Participants reported various motivations for pursuing a master's degree, some aim to be qualified further in their bachelor field of study, others seek to enhance their competitiveness in the labor market, or to switch to a different specialization, etc. (see Figure 3).

Figure 3

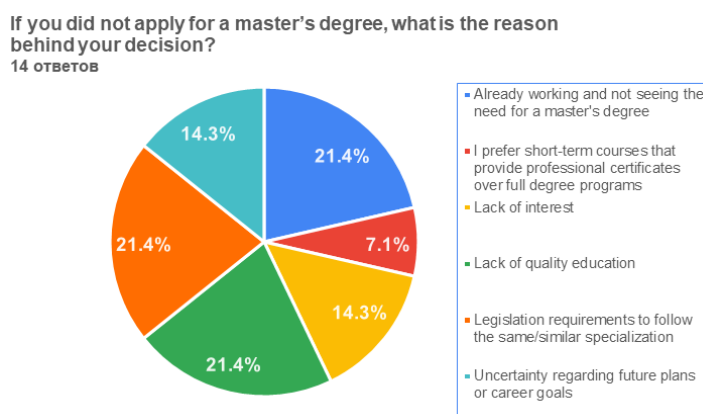


A graduate from the Translation Faculty expressed a desire to change her specialization. However, due to the rigid specialization system, the new field she wishes to pursue is not aligned with her bachelor's background, and she would be required to obtain an additional bachelor's degree to qualify. She considers this path too time-consuming and expensive, so prefers to enroll in short-term courses that provide targeted, specialization-specific knowledge. According to her, these courses offer more comprehensive and relevant content compared to full-degree programs. Moreover, she emphasized that short-term courses are not only more efficient in terms of time but also more affordable from a financial perspective. She noted:

“They are more flexible. If you choose one course and you see that it's not as good as you thought it was, you can change it.”

However, survey results revealed that only 7.1% of participants (1 respondent out of 14) preferred short-term courses to acquire new skills and knowledge rather than enrolling in full master's degree programs (see Figure 4).

Figure 4



The findings revealed that a full-degree education is more valuable among survey participants. This insight is supported by the expert from the CCB, according to her our graduate's express interest in studying full degree programs rather than short-term courses.

“Bizim gəcnlərin arasında tam təhsil proqramları üzrə təhsil almaqda maraq müşahidə edilir nəyinki qısa müddərli proqramlara”. (Translation: “Our youth prefers pursuing full-time education programs, rather than short-term programs.”) However, she also highlighted that although employers generally require candidates to have completed full degree programs, they also recognize and value certificates, particularly in specific fields. The expert shared the following:

“Əmək bazarında müəyyən sahələrdə sertifikatlara üstünlük verilir. Məsəl üçün, Computer Science sahəsində hər hansı dərəcənin olmasa belə, əgər bir az akkreditə olunmuş bir sertifikatınız varsa, beynəlxalq sertifikatla developer kimi işləyə bilərsiniz. Çünki sertifikatların

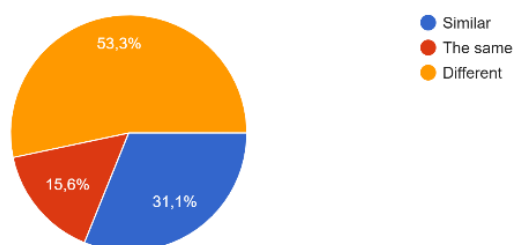
akkreditə olunması sübut edir ki, insan imtahan verib və bilik qazanıb. Bəzi ixtisaslar bakalavr dərəcəsinə yoxdur – məsələn, Customer Journey Experience ixtisası yoxdur ki, amma işəgötürənə maraqlı gəlir. Əmək bazarı üzünü müəyyən ixtisaslara tutub ki, onlar təhsildə yoxdur.” (Translation “In certain sectors of the labor market, certificates are prioritized. For example, in computer science, even without a formal degree, if you have an accredited international certificate, you can work as a developer. The accreditation of certificates proves that the individual has passed an exam and gained knowledge. Some specializations, such as Customer Journey Experience, do not exist at the bachelor's level, yet employers are still interested in hiring candidates in these roles. The labor market demands some qualifications that are not currently available in formal education.”)

Are Graduates Motivated to Pursue Academic Life?

Despite the Specialization Classification Regulation requiring applicants to pursue the same or closely related specializations at the master's level, some exceptions exist in local university admissions. Notably, 24 individuals (53,3%) with a master's degree indicated that their undergraduate and graduate specializations are different (see Figure 5).

Figure 5

Are your bachelor's and master's specializations similar, the same, or different?
45 ответов



However, the findings revealed that graduates whose master's and bachelor's qualifications differ often applied to Master of Business Administration (MBA) programs at institutions such as UNEC, Odlar Yurdu University, Baku Higher Oil School, or to other programs at ADA University, which has the authority to conduct its own admission policy and allows flexibility in shifting specializations at the graduate level.

In addition, students who studied abroad through state-funded programs (e.g., bilateral scholarships, dual-degree arrangements), self-funded pathways, or international scholarships such as DAAD (Germany), Chevening (UK), Visby (Sweden), Türkiye Bursları (Turkey Scholarships), Fulbright (USA), the Korean Government Scholarship, and Erasmus+ may also pursue different specializations. Their foreign qualifications are recognized if they meet the criteria outlined in the *Rules for the Recognition of Foreign Qualifications in Higher Education* (Cabinet of Ministers of the Republic of Azerbaijan, 2023). These programs offer flexibility, as they assess students' competencies in relation to the specialization they apply for. Admission committees typically conduct interviews, request relevant documentation, or require applicants to take additional exams to determine their eligibility. Hence, the results illustrate that graduates are allowed to shift their specializations at the undergraduate level, but only within the flexibility permitted by the regulatory framework.

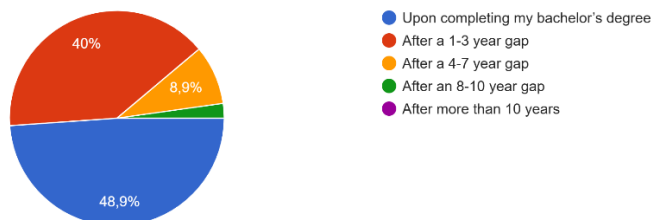
Alumni prefer to apply for the master's programs upon graduating from the bachelor's degrees

The survey results reveal that among the participants there is a tendency to apply for the master's degree programs upon completing the bachelor's degree (48,9%) or with a 1–3-year gap (40%) (see Figure 6).

Figure 6

If you have a master's degree, when did you apply for master's programs?

45 ответов



As noted by the expert from the State Examination Center (SEC), many young people—particularly boys—apply for master's programs to delay or avoid military service, while girls often pursue further studies because they have not been able to find employment, using it as a way to fill the gap in their professional life. He also mentioned that some students continue their academic education to receive social assistance since according to Article 1.2.3 of the *Rules for Applying for, Assigning, Granting, and Refusing to Grant Targeted State Social Assistance*, youth from low-income families are eligible for social support until the age of 23 if they are enrolled in full-time education. This decision to apply for a master's degree reveals that graduates do that without engaging in the labor market, since full degree valued highly in the opinion of society many choose to complete the master's degree then get employed.

However, as the expert from the CCB highlights that those master graduates without work experience face more challenges in their transition to labor market since they don't have any work experience and are less valued by employers while some students work at part-time job being 3-4 course students and employers are waiting those students' graduations to hire them for full-time work *"Bəzi tələbələr bakalavri bitirən kimi magistraturaya müraciət edirlər. Onlar universiteti bitirərkən kvalifikasiyalarını artırmış ola bilsələr də, işəgötürən üçün hələ də dəyərli namizəd olmaya bilərlər. Lakin, elə tələbələr də var ki, onlar artıq 3-cü və ya 4-cü kurs tələbəsi*

olaraq paralel şəkildə part-time işləyirlər və işəgötürən onları bəyəndiyi üçün məzun olduqdan sonra full-time işə götürməyi planlaşdırır." (Translation: "Some students apply for a master's program as soon as they finish their bachelor's degree. While they may have improved their qualifications by the time they graduate, they may not yet be valuable candidates for employers. However, there are also students who, as 3rd or 4th-year students, are already working part-time in parallel, and because the employers like them, they expect to hire them full-time once they graduate.")

Flexibility in a Specialization Choice

While the regulation generally mandates alignment between bachelor's and master's specializations, certain programs offer greater flexibility. Alongside MBA programs, fields such as journalism and social sciences allow for more diverse academic backgrounds. As noted by the expert from the SEC, a graduate of a sports-related bachelor's program may pursue a master's in sports journalism, as their background enables them to better understand the field and report on it effectively. Similarly, a translation graduate may apply for a master's in tourism, where language proficiency is a significant asset.

According to the SEC expert there are also pathways for those working in fields unrelated to their undergraduate specialization. For example, a graduate with a background in translation who is employed in an international department and wishes to enhance their professional qualifications may apply for a master's program in international relations. To do so, they must provide documentation proving at least five years of relevant work experience in the field, because, in accordance with the provision in the Labor Code, their employment contract becomes permanent. Hence, this reveals that those applicants' knowledge is sufficient and allows

for the recognition of specialization shifts based on their work experience in the same organization.

Below are the findings that respond to the second research question.

Rigid specialization regulations lead to a misalignment between higher education and labor market needs

All three experts highlighted the disparities between higher education specializations and the labor market requirements in Azerbaijan. The expert from the CCB emphasized that graduates face challenges in transitioning to the labor market due to a lack of essential skills such as soft skills and adaptability. As a result, employers are often unwilling to hire graduates because of these capacity gaps and their lack of work experience, particularly in terms of understanding job requirements and adapting to the realities of work life, which differ significantly from the academic environment.

Another interview participant (a graduate from the Translation Faculty) repeated this perspective, highlighting employers' unwillingness to retrain graduates who lack work experience, even when they are hired. She shared her own experience of struggling to adapt to the workforce:

“Unfortunately, nobody provided me with enough information or guidance to enter the field and start working. Due to my lack of experience, I felt unprepared and had gaps in both knowledge and skills. I had to learn everything on my own.”

From the CCB expert's perspective and based on her observations of applicants' challenges, there may only be a 50% alignment between higher education specializations and the labor market. According to her this is because universities tend to be knowledge-oriented,

whereas the labor market is more skill-oriented. Consequently, career counselors often guide graduates to participate in job clubs and various programs to develop the competencies needed for the specific roles they wish to pursue. This support is crucial, as universities are currently unable to incorporate all labor market expectations and requirements into their curricula.

However, the interviewed math student argued that it is not the primary responsibility of the university to fully equip students with all the up-to-date standards required by the labor market. According to him, students themselves should take the initiative to gain new skills and competencies to meet the requirements of the job vacancies they apply for: “I don't think that it's the responsibility of the university. The university usually can provide one internship or two internships, but the skills, the rest of them, I guess, should come from the student, not from the university”

The expert from the SEC noted that the specialization classification regulations for postgraduate degree programs are periodically updated in response to labor market demands. However, the rigidity of the system restricts graduates from acquiring new skills and knowledge in different fields, limiting their ability to change specializations and apply for better job opportunities that require new competencies. According to the SEC expert, universities are often reluctant to admit graduates from different academic backgrounds due to their limited capacity to develop and deliver new applied knowledge at the master's level within a short timeframe. As the expert explained:

“Burada əsas, deməli, həmin o professor-müəllim heyyyəti tərəfindən gətirilən argument ondan ibarətdir ki, çox uzaq ixtisasları, yəni bakalavr proqramı ilə ciddi fərqlənən ixtisaslar üzrə bitirən magistrlərin bunların sahəsi üzrə, yəni həmin kafedrada olan ixtisaslar üzrə iki il ərzində magistrin hazırlanması vaxt nöqtəyi-nəzərindən müəyyən çətinliklər yaradır. Ona görə də onlar

çox uzaq ixtisaslar üzrə bakalavr bitirənlərin onların magistr ixtisasını seçməsinə razı olurlar.”

(Translation: *"The main argument brought by university faculty is that educating master's students in just two years becomes challenging when their undergraduate background differs significantly from the specialization offered by the university. From a time perspective, this creates difficulties in properly preparing such students. Therefore, they are generally unwilling to accept applicants whose bachelor's degrees are in very diverse specializations."*)

The expert from the AQAE also highlighted how the rigidity of specialization classifications affects the recognition of foreign qualifications. In some cases, the agency is forced to reject the recognition of certain qualifications simply because they are not listed in the Specialization Classification Regulation, even though those qualifications are currently in demand in the labor market. She explained:

"Elə ixtisaslar var ki, məsələn, hal-hazırda həmin ixtisaslar hələ ki Azərbaycanda mövcud deyil, hələ ki təsnifatda onlar yoxdur... Acil yardım ixtisası var. Təbii ki, bizdə ehtiyac var belə bir ixtisasa. Amma bu ixtisas bizim təsnifatda yoxdur. Biz onu heçnəyə oxşada bilmirik. Tıp bacısı deyil, mamalıq deyil. Ona görə biz onlara imtina veririk çox təəssüf ki". (Translation: *"There are certain specializations that do not yet exist in Azerbaijan. For example, the specialty of emergency care is essential, but it is not included in our specialization classification. This specialty does not correspond to nursing or midwifery, so we are unfortunately unable to approve it."*)

Universities usually deliver fewer practical skills to their students in their study fields

Since universities predominantly focus on providing academic knowledge and theoretical understanding of specializations—allocating only one or two months for practical experience

(internships)—they should aim to better balance academic and practical skill development related to students’ qualifications. As the expert from the SEC emphasized, universities must strengthen their collaboration with employers, as employers have a clearer understanding of current labor market needs.

In this regard, closer cooperation between universities and stakeholders would be mutually beneficial. Higher education institution graduates could enhance their practical knowledge, align their research with real-world demands, and develop professional competencies. Simultaneously, employers would gain access to qualified specialists by observing students' capabilities and adaptability within actual work environments.

“Bizim universitetlər işəgötürənlərlə əlaqələri daha gücləndirməlidir. Yəni, yaxşı olar ki, bu tələbələr o təcrübələrini, tədqiqat işlərini həmin işəgötürənin bazasında eləsinlər. Bu, bir tərəfdən tələbələr üçün daha lazımlı işlərlə, tədqiqatla məşğul olmağa imkan yaradır. Həm də ki, o təcrübə üçün gedən tələbələrə işəgötürən baxır. Məsələn, ola bilər ki, artıq orada iş şəraitində onu qiymətləndirir. Və görəndə ki, bu müəyyən o kriteriyaları ödəyir, çox vaxt elə görürsən ki, təcrübəyə gələnləri işə də götürürlər sonra.” (Translation: “Our universities must strengthen their relationships with employers. It would be better if students conduct their internships and research projects within the employer’s environment. On the one hand, this allows students to work on more relevant and useful topics; on the other, it gives employers the chance to evaluate the students in real work settings. If they meet the criteria, often these interns are later hired.”)

A similar viewpoint was expressed by the expert from the CCB, who stated that universities are responsible for developing a qualified workforce by the time students graduate. According to her, although labor market demands are evolving rapidly, implementing new standards and updates into university programs may take time and is not always immediately

rational or feasible. As a result, expecting universities to fully align with every labor market shift within a short timeframe is unrealistic.

Culturally, Azerbaijani society continues to place greater value on full degree programs than on short-term courses or certificates, which directly influences graduates' employability. For this reason, the CCB regularly evaluates university career centers, setting a benchmark score of at least 70 out of 100 for a center to be considered effective. The CCB also works closely with universities to strengthen their career services, aiming to support students' employability from early stages and to help them develop the skills needed for successful entry into the labor market.

Employers value graduates of full degree programs with additional competence

As previously mentioned by the CCB expert and supported by the survey results, graduates place high value on full degree qualifications. According to CCB expert this is because a diploma can influence salaries, job positions, and opportunities for career advancement. In some cases, the prestige of the university itself also impacts graduates' employability, as employers may perceive them as stronger candidates compared to others.

She also emphasized that employers generally prefer candidates who hold full degree diplomas. However, they also place high value on applicants who, in addition to their degrees, possess certificates in specific fields. Such credentials demonstrate that the individual is actively engaged in ongoing professional development.

Furthermore, the CCB expert noted that HR specialists of certain companies often search for potential candidates on professional platforms such as LinkedIn by using the names of specific accredited courses. Users who complete and publicly share these certifications on their profiles become more visible to recruiters, even when the skills they possess are not formally

covered by traditional academic programs. This practice helps employers identify qualified individuals who meet the specific skill requirements of job vacancies.

Discussion

Graduates face difficulties in their transition to the labor market

Higher education's primary responsibility is to prepare a competitive workforce that contributes to a nation's socio-economic development (Amirova & Valiyev, 2021). However, the rapid transformation of the labor market has made it increasingly difficult for universities to keep pace with emerging demands. As an expert from the CCB emphasized, higher education institutions tend to be knowledge-oriented, whereas the labor market is predominantly skills-oriented. This disconnection results in university graduates facing challenges in securing employment, as their academic qualifications often do not align with current job requirements (Grosemans et al., 2017). Employers frequently express dissatisfaction with graduates' lack of practical competence, arguing that universities do not provide up-to-date, job-relevant knowledge (Məmmədova, 2021).

When graduates transit from education to the workforce, they see what their universities deliver and what the labor market demands (Alakbarova, 2024). This mismatch, driven by globalization and technological advancement, require graduates to possess a new set of skills and competencies (Grosemans et al., 2017). Labor market demands have shifted rapidly and are increasingly shaped by globalization. While academic learning offers in-depth knowledge and fosters critical thinking, practical experience often equips individuals with the surface-level skills needed to adapt quickly. In today's job market, however, these practical skills are frequently valued more highly than theoretical expertise.

The challenge lies in the fact that the education system evolves much slower than the labor market. As a result, universities struggle to produce graduates who fully meet the dynamic needs of modern employers.

Since the mismatch between higher education and the labor market is evident, many students struggle with the transition into employment due to a lack of practical experience, soft skills, teamwork and adaptability—qualities that are highly valued by today's employers (Grosemans et al., 2017; Məmmədova, 2021, Alakbarova, 2024). To address this gap, an expert from the SEC emphasized the importance of universities strengthening collaboration with stakeholders, particularly employers, through structured internship programs. Such internships allow students to gain exposure to real work environments, develop relevant skills, and demonstrate their capabilities, often increasing their chances of employment.

Amirova and Valiyev (2021) observe that students are increasingly selecting universities based on their employability rankings. This is a reasonable, especially in Azerbaijan, where institutions like ADA University, Baku Higher Oil School, and Baku State University are among the most popular due to their strong reputations and career support services. An expert from the CCB noted that university career centers play a key role in enhancing employability by organizing regular alumni meetings, hosting job fairs, and maintaining active partnerships with various organizations.

Furthermore, in Azerbaijani society, academic degree and the number of degrees still significantly impact access to better jobs, higher positions, and increased salaries (Məmmədova, 2021). As a result, many young people choose to continue their academic journey to enhance their professional prospects. According to the CCB expert, graduates often prefer full degree

programs over short-term courses to gain in-depth, recognized knowledge that can better support their long-term career goals.

Students desire to shift their specialization but are only able to do so within the framework of flexible regulations

Despite existing requirements for bachelor's graduates to continue with the same or a closely related specialization, certain flexibilities allow students to shift their fields at the master's level—especially when applying to study abroad or for specific local master's programs. Many students enter university based on their admission exam scores or under the influence of parents, friends, or teachers, without fully understanding what specialization entails. As they progress through their bachelor's studies, they often realize the field does not match their interests or expectations (Akinici, 2024). Both math student and translation faculty graduate confirmed this phenomenon, that they chose their bachelor specialization not out of genuine interest but because it was what their exam score permitted or what they were advised to pursue. This mismatch—often caused by poor career guidance—leads to inappropriate qualification choices that do not align with labor market demands (Lashkareva et al., 2022).

Given this reality, providing more flexibility for master's degree admission appears both logical and necessary. Work experience or the discovery of new interests may prompt graduates to pursue different areas of study at the master's level. As an expert from the SEC noted, a change in specialization at the master's level can be considered when an applicant has at least five years of relevant work experience in the desired field. This practice is consistent with Article 45.4 of the Labor Code of the Republic of Azerbaijan, which states that “If a fixed-term employment contract continues for more than five years without interruption, it is considered an indefinite-term contract.” In this context, five years of continuous work in a specific field can be

seen as proof of the individual's competence, skills, and knowledge, making them a suitable candidate for the next level of study.

According to the SEC expert, universities are against admitting students into master's programs with no fundamental understanding of the specialization, as it makes it challenging to train students within a short period of time. That's why this experience-based approach benefits both students and higher education institutions. It ensures that students are not starting from zero and helps universities avoid unnecessary repetition in teaching foundational knowledge during master's programs. In many cases, practical experience can be considered equivalent to academic learning, facilitating a smoother transition to a new specialization.

Value of full degree knowledge with the demands of additional competences

We live in a society where a full degree continues to have significant value, particularly for graduates of prestigious universities, who are usually employed in higher positions with higher salaries due to the credibility of their qualifications (Chevaillier & Duru-Bellat, 2017; Məmmədova, 2023). However, the rapid growth of the labor market now requires additional skills and knowledge that are often not addressed during university studies.

As an expert from the CCB noted, there is a contradiction in employers' expectations: while they continue to value candidates with full-degree qualifications, they also increasingly prioritize those who hold well-known international or local certifications alongside their academic degrees. For example, in Azerbaijan, only graduates from English teaching faculties are officially eligible to teach in public schools, as their diplomas certify their qualifications. However, obtaining additional certifications such as IELTS (International English Language Testing System) or CELTA (Certificate in English Language Teaching of Adults) from

Cambridge can significantly enhance a candidate's competitiveness, especially when applying for positions in private institutions or universities. Similarly, a graduate in project management becomes more distinguished and valuable if they also hold a Project Management Professional (PMP) certification. Likewise, a graduate in finance may gain a competitive edge with an Association of Chartered Certified Accountants (ACCA) certificate. These certifications are regularly updated and serve as proof that the holder possesses high-level, up-to-date skills and is capable of working productively in their respective field.

Moreover, changes in the labor market have led to the emergence of professions that do not necessarily require a university degree (Indeed Editorial Team, 2025). Due to technological advancements, roles related to artificial intelligence, such as prompt engineering, are increasingly in demand. Employers often hire individuals for these positions without requiring a formal degree in computer science (Hansen, 2021). According to the CCB expert, some occupations don't yet have corresponding specializations in higher education. In such cases, individuals complete specialized training courses to be qualified for these roles and successfully enter the workforce.

Globalization and technological development continue to generate new fields and specializations, many of which have not yet been integrated into the national higher education systems. Developing and implementing curricula for such new areas takes time, making it difficult for universities to keep pace with the labor market. As a result, employers increasingly favor applicants who already possess the specific competencies needed for these new occupations.

In reaction to this change, certain businesses have developed alternative educational pathways. For example, Google established certificate programs to match job searches with

candidates' real-world experience and learning, while IBM (International Business Machines Corporation, a global tech and consulting company that also fosters education by addressing the gap between studying and employment) launched the P-TECH program to assist students develop in-demand digital skills (Hansen, 2021). According to a Bureau of Labor Statistics analysis, nearly three quarters of jobs in 2016 were in fields that normally do not require an undergraduate degree to get hired (Schwartz, 2019).

In line with these developments, many educational institutions around the world have started working with platforms for skill development like Coursera to improve their students' credentials in their specializations. However, given that universities may not always be able to provide up-to-date and industry-relevant education due to continuously evolving job market standards, students themselves must take initiative. It is in their best interest to meet the specific requirements of the vacancies they apply for by filling skill gaps that were not addressed during their formal studies.

This point was reinforced by both the interviewed math student and the expert from the CCB, who emphasized that job seekers must actively build and adapt their qualifications to remain relevant and valuable in the labor market.

Therefore, depending on the nature of the occupation and its requirements, both full degree programs and short-term professional courses can be valuable in today's labor market.

Students are committed to pursuing academic development without a gap

As the survey reveals, the majority of the participants tend to pursue academic paths rather than enter the workforce immediately. However, this approach is not considered practical in global contexts, where gaining work experience helps individuals understand which field or

sector, they want to develop their careers in (Tuononen et al, 2024). In today's dynamic job market, people often change workplaces and even career directions, which may require acquiring new skills and knowledge to remain competitive.

According to an expert from the CCB, students who complete their bachelor's degree and immediately continue to a master's program without gaining work experience are often viewed as less desirable by employers. By the age of 22–24, they may lack practical experience and adaptability skills that are increasingly important in the workplace. Given the rapid evolution of the labor market, many specializations may become outdated, leaving these graduates at risk of unemployment or forcing them to work in fields unrelated to their original qualifications (Düzçay, 2024).

Hence, the findings partially align with Human Capital Theory, which posits that education should equip individuals with the skills and knowledge necessary to participate effectively in the labor market (Grip, 2020). It implies that graduates should be prepared for employment upon completing their degrees. However, taking into account the dynamic and evolving nature of the labor market, caused by technological advancements it is not reasonable to put full responsibility on universities for ensuring that all graduates possess up-to-date occupation-specific capabilities (Buchanan et al,2020).

Despite the Specialization Classification Regulation in Azerbaijan is periodically updated to reflect market needs, a disparity stays between educational qualifications and actual needs in the job market. This gap demonstrates a disconnect between Human Capital Theory by Becker and the actual circumstances of higher education specializations. Rigid specialization limits paths for shifting the majors restrict students from adjusting to new career opportunities.

Consequently, while universities are expected to play a central role in preparing students for employment, the findings propose a need for a closer collaboration between higher education institutions and employers. Such partnerships might guarantee that academic programs remain useful and adaptable. However, it also emphasizes how graduates themselves should actively seek out ongoing training and enhancement of skills in order remain competitive in a labor market that is changing greatly.

Limitations

While the study provides valuable insights into the alignment between higher education specializations and labor market needs, it also encountered certain limitations. Due to time constraints and limited accessibility, the study was unable to fully achieve one of its initial goals, specifically, ensuring the accuracy of the English translation of interview transcripts, which were translated by me rather than a professional philologist. Consequently, the original meaning of some phrases or terms may not be fully reflected in their accurateness.

Another limitation was the inability to engage a relevant graduate for the interview. The study intended to interview a graduate of the Mathematics Faculty who had experienced challenges in becoming eligible to teach in public schools. However, since a suitable graduate could not be identified, the interview was instead conducted with a current math student who has teaching experience.

Although the survey engaged 51 participants, respondents were not required to answer every question, resulting in varying numbers of responses for different items. Furthermore, it proved challenging to involve relevant universities in facilitating the participation of students or graduates in the survey process, which further limited the scope of data collection. Consequently,

due to the small sample size and limited participant diversity, the findings and conclusions of this study cannot be fully generalized to the broader Azerbaijani context.

Recommendation

Universities, as the primary institutions responsible for preparing qualified professionals, must enhance their capacity to deliver both relevant theoretical knowledge and practical skills. Higher education institutions play a crucial role in shaping future specialists who meet the evolving demands of their chosen fields.

However, it is understandable that universities often struggle to keep pace with the rapid changes in the labor market. Job requirements evolve much faster than curricula are updated in most education systems. To help bridge this gap, the State Employment Agency has developed the “Employment Rating of Graduates” platform, which aims to enhance employment opportunities for graduates (State Employment Agency, n.d.). The platform currently includes data from graduates of 30 public and private universities from the 2018–2022 academic years. It presents correlations between the number of graduates in specific specializations and their employment rates in corresponding fields. For example, among the alumni from the 2018–2022 cohort, 4,288 individuals graduated from the Faculty of Economics, yet only 2,554 were able to secure employment in this field. These statistics can inform university decision-making and lead to better alignment of study programs with labor market needs. By observing such misalignments, HEIs can revise curricula to better meet new labor market standards. In this regard, cooperation between the State Employment Agency and the State Agency for Science and Higher Education could significantly contribute to addressing mismatches between higher education specializations and the demands of the workforce.

Yet, employability should not be a one-sided process; it might require the involvement of both employers and employees. Employers should recognize that the misalignment between higher education specializations and the labor market is a common global issue. They are encouraged to place greater trust in alternative educational pathways that equip learners with relevant skills, thereby promoting equal opportunities regardless of how knowledge is acquired (Schleicher, 2021). Simultaneously, given the dynamic nature of today's job market, it is also the responsibility of graduates to continuously update and develop their skills to remain competitive and valuable in their professional fields.

From a global perspective, the admission process for master's degree programs is often guided by universities' internal policies, and governments generally provide them with the flexibility to set their own criteria. In Azerbaijan, however, centralized control over university admissions was implemented in the past to eliminate corruption, which had occurred when local universities held extensive authority over the process (Hüseynova, 2023). As a result, the State Commission for Student Admission, later renamed the State Examination Center in 2019, was established to oversee admissions.

Nevertheless, accounting for the rapidly evolving labor market and the fact that many specializations may become outdated, a growing number of individuals are seeking to change their field of expertise by applying to different degree programs. Since certain flexibility already exists in areas like MBA programs, social sciences, journalism, international study opportunities, and degree program for the civil servants, it may be beneficial to implement a partial (hybrid) mechanism for master's degree admissions more broadly. Under this model, applicants would first take a centralized exam administered by the SEC to assess their academic competence. Those who meet the qualifying score could then move to a second stage conducted by

universities, where they would undergo an interview or complete an additional assessment, especially if they are applying to a program outside their previous academic specialization. This two-stage process would allow for greater flexibility while maintaining academic standards, thus supporting students in adapting to the changing demands of the labor market.

However, taking into account the misalignment between higher education specializations and labor market requirements, the responsibility increasingly falls on graduates to align their knowledge and skills with the demands of the positions they apply for. Graduates are encouraged to analyze labor market trends, identify the skills and competencies most valued by employers, and assess the areas where they need improvement. By addressing these shortages, they can enhance their employability and improve their chances of obtaining their desired job. In order to achieve that, they are advised to participate in job clubs, attend seminars, and enroll in relevant training courses, thereby positioning themselves as competitive candidates in a rapidly evolving labor market.

Considering the limited scope of data collection in this study, future researchers interested in exploring this issue more comprehensively are encouraged to broaden the participant range. Interviews with representatives of higher education institutions may deliver insights into their perspectives on the alignment between specializations and labor market demands, as well as the strategies they apply, or propose ways to better prepare students for the job market. Additionally, interviewing employers across various sectors would offer a clearer understanding of the qualifications and competencies they expect from recent graduates, and how they support new employees in adapting to their roles.

Furthermore, expanding the survey sample would allow for more diverse and representative insights from both graduates and current students. This would enable researchers

to better analyze the core issues raised in this study, including graduates' perspectives on the relevance of their qualifications and their overall satisfaction with their transition into the labor market.

Conclusion

This study explored the extent to which higher education specializations align with labor market demands in Azerbaijan, focusing particularly on the limitations imposed by the specialization classification regulation. The findings reveal a mismatch between the rigid structure of higher education specializations and the dynamic requirements of the labor market, both globally and locally. While universities remain primarily knowledge-oriented, the labor market increasingly values practical skills, adaptability, and interdisciplinary competencies (qualities often underdeveloped within current academic programs).

Via interviews with experts from the relevant state organizations, interviews with graduate and student of relevant qualifications, and survey results, it became evident that many students pursue master's degrees either without a clear career plan or simply to meet societal or institutional expectations, such as delaying military service or increasing chances of social assistance. This contributes to a growing number of graduates entering the labor market with theoretical knowledge but lacking essential work experience or practical skills.

Nonetheless, the study also discovers areas of flexibility, such as MBA programs, social sciences, journalism, study abroad opportunities, and certain government-supported exceptions, that allow some students to shift their academic paths and better align with emerging labor

demands. These exceptions, while promising, remain limited and are not yet systemically included in Azerbaijan's education framework.

The research recommends implementing a partial (hybrid) admission system for master's programs to address the identified issue. A hybrid approach, combining centralized entrance examinations with university-led interviews or additional assessments for applicants willing to change specializations, may improve flexibility in specialization choices while maintaining academic standards. The employability of graduates may also be enhanced by strengthening partnerships between universities and employers, expanding internship opportunities, and integrating micro-credentials or certified short-term training into formal education.

Ultimately, developing a higher education system that balances regulatory oversight with institutional autonomy and responsiveness to labor market trends is essential for Azerbaijan's sustainable socio-economic development. Reforming specialization pathways, enhancing career counseling services, and recognizing diverse forms of learning are critical steps toward generating a competitive, adaptable, and skilled workforce for the 21st century.

Lastly, given the evolving nature of the labor market and the gap between higher education and job market needs, graduates must take the initiative to acquire the additional skills and competencies needed for their desired career goals.

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APPENDIX 1

Consent Form (for the experts)

Dear participant,

You are invited to participate in a semi-structured interview as part of the research project titled “Exploring the Alignment Between Higher Education Specializations and Labor Market Needs in Azerbaijan.” Your insights, as an expert in a relevant field, are highly valuable and will contribute to a deeper understanding of how specializations impact students’ employability upon completing their academic programs. This research is being conducted as part of a master’s thesis by Elnara Nasirova, a Master of Arts in Education Management student at ADA University. The interview is expected to last approximately 45–60 minutes.

Your participation in this study is entirely voluntary. You have the right to decline to answer any question or withdraw from the study at any time without any consequences. To ensure confidentiality, all identifying information, including your name and place of employment, will be removed from the responses. All necessary precautions will be taken to protect your identity. Nonetheless, your participation may offer personal and professional benefits, such as the opportunity to reflect on your experiences and share concerns about issues related to the alignment of higher education and labor market demands.

The final research report will not contain any identifying information. The data collected will be categorized into themes and presented as part of the research findings while maintaining participant anonymity. All collected data will be securely stored in a password-protected system.

If you have any questions about this study, please contact Ulviyya Mikayilova, umikailova@ada.edu.az. If you have any additional questions or concerns regarding your rights as a study participant or are dissatisfied at any time with any aspect of this study, you may contact, anonymously if you wish, ADA University, School of Education department, email: sel@ada.edu.az, Narimanov district, Ahmed bey Aghaoglu street 61.

Thank you for participating!

I agree to participate in this study. In addition, by signing below I agree to allow my responses to be audio-recorded for research purposes of this study.

Signature

Date

Name (Printed)

Consent Form (for the graduate of Translation Faculty)

Dear participant,

You are invited to participate in a semi-structured interview as part of the research project titled “Exploring the Alignment Between Higher Education Specializations and Labor Market Needs in Azerbaijan.” Your insights as a graduate of the translation specialization, which is about to be discontinued due to technological advancements, are highly valuable and will contribute to a deeper understanding of how specialization influences students’ employability upon completing their academic programs or their decision to change specializations to meet new workforce requirements. This research is being conducted as part of a master’s thesis by Elnara Nasirova, a Master of Arts in Education Management student at ADA University. The interview is expected to last approximately 45–60 minutes.

Your participation in this study is entirely voluntary. You have the right to decline to answer any question or withdraw from the study at any time without any consequences. To ensure confidentiality, all identifying information, including your name and place of employment, will be removed from the responses. All necessary precautions will be taken to protect your identity. Nonetheless, your participation may offer personal and professional benefits, such as the opportunity to reflect on your experiences and share concerns about issues related to the alignment of higher education and labor market demands.

The final research report will not contain any identifying information. The data collected will be categorized into themes and presented as part of the research findings while maintaining participant anonymity. All collected data will be securely stored in a password-protected system.

If you have any questions about this study, please contact Ulviyya Mikayilova, umikailova@ada.edu.az. If you have any additional questions or concerns regarding your rights as a study participant or are dissatisfied at any time with any aspect of this study, you may contact, anonymously if you wish, ADA University, School of Education department, email: sel@ada.edu.az, Narimanov district, Ahmed bey Aghaoglu street 61.

Thank you for participating!

I agree to participate in this study. In addition, by signing below I agree to allow my responses to be audio-recorded for research purposes of this study.

Signature

Date

Name (Printed)

Consent Form (for the student of the Math faculty)

Dear participant,

You are invited to participate in a semi-structured interview as part of the research project titled “Exploring the Alignment Between Higher Education Specializations and Labor Market Needs in Azerbaijan.” Your insights, as a student of the mathematics specialization who is unable to teach in public schools due to the absence of a formal teaching qualification on your diploma, are highly valuable. Your input will contribute to a deeper understanding of how specialization impacts students' employability upon graduation and influences their decision to change fields to meet evolving workforce demands. This research is being conducted as part of a master's thesis by Elnara Nasirova, a Master of Arts in Education Management student at ADA University. The interview is expected to last approximately 45–60 minutes.

Your participation in this study is entirely voluntary. You have the right to decline to answer any question or withdraw from the study at any time without any consequences. To ensure confidentiality, all identifying information, including your name and place of employment, will be removed from the responses. All necessary precautions will be taken to protect your identity. Nonetheless, your participation may offer personal and professional benefits, such as the opportunity to reflect on your experiences and share concerns about issues related to the alignment of higher education and labor market demands.

The final research report will not contain any identifying information. The data collected will be categorized into themes and presented as part of the research findings while maintaining participant anonymity. All collected data will be securely stored in a password-protected system.

If you have any questions about this study, please contact Ulviyya Mikayilova, umikailova@ada.edu.az. If you have any additional questions or concerns regarding your rights as a study participant or are dissatisfied at any time with any aspect of this study, you may contact, anonymously if you wish, ADA University, School of Education department, email: sel@ada.edu.az, Narimanov district, Ahmed bey Aghaoglu street 61.

Thank you for participating!

I agree to participate in this study. In addition, by signing below I agree to allow my responses to be audio-recorded for research purposes of this study.

Signature

Date

Name (Printed)

APPENDIX 2

Interview questions for the expert from AQAE

1. Could you please introduce yourself? How long have you been working in this position? What is your educational background?
2. Could you please describe the process of recognizing foreign qualifications?
3. The admission process for master's degree programs at local universities is conducted through exams held by the State Examination Center, in line with the specialization classification regulation, which requires applicants to follow the same or a similar specialization. However, there are exceptions: students from any background may apply for an MBA, ADA University allows specialization changes as part of its partially university-administered selection process, and the Academy of Public Administration under the President of the Republic of Azerbaijan offers a master's program in public administration for civil servants without considering their bachelor's qualification. Additionally, studying abroad provides more flexibility in changing specializations for master's applicants. My question is: Since the Agency for Quality Assurance in Education is responsible for the recognition of foreign qualifications, why is there to some extent a flexible approach (compared to local regulations) to recognizing foreign qualifications when the master's specialization differs from the bachelor's?
4. Does the recognition of master's specializations that differ from bachelor's degrees require additional processes or documents for approval?
5. Are there any restrictions or rules that allow the recognition of diverse specializations in some cases but prohibit it in others?
6. Will the recent amendment to the specialization classification regulation made by the Cabinet of Ministers impact on the recognition of diplomas from your side?
7. From your perspective, how does recognizing foreign qualifications with different specializations benefit Azerbaijan's higher education system and labor market? For example, does it contribute to economic growth or have other significant impacts?
8. Are there any specific challenges faced by the agency in the recognition process for foreign qualifications, particularly when the specializations don't align with local standards, such as cases where certain specializations do not exist in Azerbaijan's specialization classification regulation?
9. Do you think labor market demands, and workforce shortages influence the acceptance of foreign qualifications in fields different from the applicant's original specialization?
10. Is there anything we haven't discussed that you think is important to mention?

Translation

1. Zəhmət olmasa, özünü təqdim edərdiniz. Hazırkı iş yerinizdə neçə müddətdir çalışırsınız? Təhsiliniz hansı sahədir?
2. Zəhmət olmasa, xarici kvalifikasiyaların tanınması prosesinə dair məlumat verərdiniz.

3. Bildiyiniz kimi, magistratura təhsil səviyyəsinə qəbul Dövlət İmtahan Mərkəzi təşkil etdiyi imtahanlar vasitəsilə həyata keçirilir və ixtisas təsnifatı qaydalarına uyğun olaraq tələbələrdən eyni və ya oxşar ixtisas üzrə müraciət edilməsi tələb olunur. Lakin bəzi istisnalar mövcuddur: hər hansı ixtisas üzrə bakalavriat təhsil səviyyəsi üzrə məzunlar MBA proqramına müraciət edə bilər, ADA Universitetinə qəbul qismən universitet administrasiyası tərəfindən aparıldığı üçün müraciətçilərin magistratura təhsil səviyyəsində ixtisas dəyişmə imkan yaradılır, Azərbaycan Respublikasının Prezidenti yanında Dövlət İdarəçilik Akademiyası isə bakalavr ixtisası nəzərə alınmadan dövlət qulluqçuları üçün “Dövlət İdarəçiliyi” ixtisası üzrə magistr proqramı təklif edir. Bundan əlavə, magistratura səviyyəsi üzrə xaricdə təhsil alanlar üçün ixtisas dəyişmə prosesi daha çevik həyata keçirilir. Mənim sualım belədir: Təhsildə Keyfiyyət Təminatı Agentliyinin xarici kvalifikasiyaların tanınmasında əsas məsul qurum olduğunu nəzərə alaraq, niyə bir neçə hallarda (xüsusilə magistratura ixtisasının bakalavr ixtisasından fərqləndiyi hallarda) xarici kvalifikasiyaların tanınmasına yanaşmada yerli tənzimləmələrlə müqayisədə müəyyən dərəcədə elastiklik mövcuddur?
4. Magistratura ixtisasının bakalavr ixtisasından fərqli olduğu hallarda kvalifikasiyalarının tanınması üçün əlavə prosedur və ya sənədlər tələb olunurmu?
5. Kvalifikasiyaların tanınma prosesi çərçivəsində elə məhdudiyyətlər və ya qaydalar mövcudurmu ki, bəzi hallarda müxtəlif ixtisasların tanınmasına icazə verir, lakin digər hallarda bunu qadağan edir?
6. Nazirlər Kabinetinin ixtisas təsnifatı qaydalarına etdiyi son dəyişiklik xarici kvalifikasiyalarının tanınmasına təsir göstərəcəkm?
7. Sizin fikrinizcə, fərqli ixtisaslar üzrə xarici kvalifikasiyaların tanınması Azərbaycanın ali təhsil sistemi və əmək bazarı üçün hansı faydalar verir? Məsələn, bu, ölkənin iqtisadi inkişafına töhfə verə bilərmi və ya başqa mühüm təsirləri varmı?
8. Xarici kvalifikasiyaların tanınması prosesində Agentliyin üzləşdiyi xüsusi çətinliklər varmı, məsələn, bəzi ixtisaslar ixtisas təsnifatı qaydalarında mövcud olmadığı hallarda sözügedən ixtisas tanıma bilirmi?
9. Sizcə, əmək bazarının tələbləri və kadr çatışmazlığı, ixtisası fərqli olan xarici kvalifikasiyaların tanınmasına təsir edirmi?
10. Bizim müzakirə etmədiyimiz, lakin Sizin vacib hesab etdiyiniz hər hansı bir məsələ varmı?

Interview questions for the expert from the CCB Central Career Branch

1. Could you please introduce yourself? How long have you been working in this position? What is your educational background?
2. Could you briefly explain the types of services you provide and who your target audience is?
3. Regarding your career counseling services, what are the most common complaints you receive from graduates, and what advice do you typically offer them?
4. Do the graduates who seek your assistance often express a desire to change their field of specialization? Or do you recommend that they consider changing their specialization?
5. Do the graduates you assist generally aim to continue their academic journey in the same specialization, or do they prefer to switch to a different one?
6. Do they show more interest in pursuing full degree programs, or do they prefer shorter, specialized courses?
7. Based on your observations and data, to what extent does the knowledge gained in graduates' specializations align with the current demands of the labor market?
8. What are the most common challenges graduates face when transitioning from academia to the workforce?
9. How do you support graduates in identifying their transferable skills and leveraging them for career changes?
10. How do you assist graduates in developing essential soft skills, such as leadership, communication, and problem-solving, for career success?
11. How do you help graduates who are unsure about their career goals or lack confidence in their chosen field?
12. How do career counseling services collaborate with universities to bridge the gap between education and labor market needs?
13. Is there anything we haven't discussed that you think is important to mention?

Translation

1. Zəhmət olmasa, özünü təqdim edərdiniz. Hazırkı iş yerinizdə neçə müddətdir çalışırsınız? Təhsiliniz hansı sahədir?
2. Mərkəzi Karyera Filialı tərəfindən edilən xidmətlərin növlərini və kimlər üçün olduğu barədə məlumat verə bilərsinizmi?
3. Karyera məsləhəti xidmətlərinizlə bağlı məzunlardan ən çox hansı şikayətlər daxil olur və onlara adətən hansı məsləhətləri verirsiniz?
4. Sizə müraciət edən məzunlar tez-tez ixtisaslarını dəyişmək istədiklərini bildirirlərmi? Yoxsa siz onlara ixtisas dəyişdirməklə əlaqədar tövsiyə edirsinizmi?
5. Sizinlə əlaqə saxlayan məzunlar adətən akademik təhsillərini eyni ixtisas üzrə davam etdirmək istəyirlər, yoxsa fərqli bir sahəyə keçməyə üstünlük verirlər?
6. Onlar daha çox ali təhsil proqramları oxumağa maraq göstərirlər, yoxsa müvafiq sahələr üzrə qısamüddətli kurslara üstünlük verirlər?
7. Sizin müşahidələrinizə və statistikalarınıza əsasən, məzunların ixtisasları üzrə əldə etdiyi biliklər əmək bazarının tələbləri ilə nə dərəcədə uyğunluq təşkil edir?

8. Məzunlar işləməyə başlayarkən ən çox hansı çətinliklərlə qarşılaşırlar?
9. Məzunların iş yerində əldə olunan və digər işlərə tətbiq olunan bacarıqlarının müəyyən edilməsi və onların karyera dəyişikliyinə necə kömək edirsiniz?
10. Liderlik, ünsiyyət və problemin həll olunması kimi əsas yumşaq bacarıqların inkişaf etdirilməsində məzunlara necə dəstək olursunuz?
11. Karyera gözləntilərindən əmin olmayan və ya seçdiyi sahədə inamsızlıq hissləri keçirən məzunlara necə kömək edirsiniz?
12. Əmək bazarı tələbləri arasında boşluğu aradan qaldırmaq məqsədi ilə Karyera məsləhəti xidmətləri mərkəzləri universitetlərlə necə əməkdaşlıq edir?
13. Bizim müzakirə etmədiyimiz, lakin Sizin vacib hesab etdiyiniz hər hansı bir məsələ varmı?

Interview questions for the expert from the SEC

1. Could you please introduce yourself? How long have you been working in this position? What is your educational background?
2. Could you briefly explain your work responsibilities?
3. The admission process for higher education institutions is conducted through an exam designed by the State Examination Center. As my thesis focuses on master's degree admissions, could you explain how specializations are classified? I mean, how do you determine which academic backgrounds allow graduates to apply for certain programs while restricting access to others?
4. Why is it necessary to consider specialization alignment when bachelor's graduates wish to pursue further academic studies?
5. There are exceptions in specialization choices—students from any academic background can apply for an MBA, while other fields remain restricted based on their previous degree. Why does the SEC allow this flexibility for MBA programs but not for others?
6. With the recent amendment to the specialization classification regulation by the Cabinet of Ministers, will there be more flexibility in master's program admissions? If so, what changes can applicants expect?
7. Could you please explain why the master's degree examination includes foreign language, informatics, and logic? What is the reasoning behind selecting these specific subjects? Additionally, why doesn't the master's degree admission process assess applicants' background knowledge in their chosen field of study?
8. Is there anything we haven't discussed that you think is important to mention?

Translation

1. Zəhmət olmasa, özünü təqdim edərdiniz. Hazırkı iş yerinizdə neçə müddətdir çalışırsınız? Təhsiliniz hansı sahədir?
2. Zəhmət olmasa, iş öhdəlikləriniz barədə qısa məlumat verərdiniz.
3. Ali təhsil müəssisələrinə qəbul prosesi Dövlət İmtahan Mərkəzi tərəfindən keçirilən imtahanlar vasitəsilə aparılır. Mənim dissertasiya mövzumu magistratura səviyyəsinə qəbul məsələlərinə toxunduğu üçün, sualım belədir: Siz ixtisasların necə təsnif edildiyini izah edə bilərsinizmi? Belə ki, müəyyən akademik dərəcəyə və bilik bacarığa malik bəzi məzunların sözügedən proqrama müraciət edə bildiyi halda digərlərinin müraciəti məhdudlaşdırılır. Bu hansı meyarlara əsasən müəyyənləşdirilir?
4. Bakalavr məzunları akademik təhsillərini davam etdirmək istədikdə, ixtisas uyğunluğunun nəzərə alınması niyə vacibdir?
5. İxtisas seçimi ilə bağlı istisnalar mövcuddur—istənilən akademik keçmişə malik tələbələr MBA proqramına müraciət edə bilirlər, lakin digər sahələrdə əvvəlki ixtisas hələ də məhdudiyət olaraq qalır. Niyə Dövlət İmtahan Mərkəzi MBA proqramlarına münasibətdə bu istisnanı tətbiq edir, lakin digər sahələrdə etmir?
6. Nazirlər Kabineti tərəfindən ixtisasların təsnifatı qaydalarına edilən son dəyişikliklərə əsasən magistratura qəbulunda ixtisas uyğunluğuna dair istisnalar daha çox olacaqmı? Əgər belədirsə, namizədləri hansı dəyişikliklər gözləyir?

7. Zəhmət olmasa, magistratura imtahanına xarici dil, informatika və məntiq fənlərinin daxil edilməsinin səbəbini izah edə bilərsinizmi? Məhz bu fənlərin seçilməsinin arxasında hansı məntiq dayanır? Bundan əlavə, niyə magistraturaya qəbul prosesi namizədlərin seçdikləri sahə üzrə baza biliklərini qiymətləndirmir?
8. Bizim müzakirə etmədiyimiz, lakin Sizin vacib hesab etdiyiniz hər hansı bir məsələ varmı?

Interview questions for the graduate with translation background

1. Could you please introduce yourself?
2. What is your bachelor's degree background?
3. Did you choose this specialization for a specific reason? What motivated you to pursue this qualification?
4. Did you participate in any organizations during your studies as an interpreter or translator? If yes, could you share your experience?
5. Upon graduation, have you ever worked as a translator or interpreter?
6. As I remember, since the 3rd academic year, students were divided into specific directions in translation, such as literary translation, medical translation, written or oral translation, legal translation, etc. Which direction did you choose?
7. Are you currently working? What is your occupation? Is it different from your specialization? Why?
8. Could you apply the knowledge you gained during your bachelor's degree to your current work?
9. Have you pursued further academic studies? If not, could you explain why? If yes, which specialization did you choose for your master's degree and why did you choose that particular one? (Additional questions may arise based on the interviewee's response.)
10. Why did you change the direction of your specialization? (if the interviewee applied for a different master's program)
11. How do you think to what extent your specialization meets the requirements of the labour market in Azerbaijan?
12. What are some challenges you face in the labor market? What kind of programs or methods have you used to align your skills with the current demands of the labor market?
13. Did your employer require you to obtain additional qualifications or participate in specific short-term programs? (For those who did not pursue a master's program.)
14. Do you think employers value full degree qualifications more, or do they prioritize short-term certificates to enhance specific skills and competencies?
15. How do you think translators and interpreters are perceived in the labor market today? Are they still in demand?
16. Do you see any differences between the work of a translator and an interpreter? For example, which one might be more easily replaced by AI?
17. From my perspective, the translation field is not fully replaceable by AI yet, and it may continue to be relevant for years because certain nuances cannot be transferred by AI. What are your thoughts on this?
18. In what areas of translation or interpretation do you think there is the most potential for growth or innovation?
19. Have you considered changing your specialization while studying? If so, to which field, and why would you choose that one?
20. Have you ever considered working in a specific area of translation or interpretation (e.g., legal, medical, journalistic)? If so, what area would you be interested in, and why?
21. As a graduate of the translation faculty, do you remember when International Translation Day is celebrated?
22. What advice would you give to someone considering a career in translation or interpretation?
23. Is there anything we haven't discussed that you think is important to mention?

Interview questions for the student of math specialization of ADA University

1. Could you please introduce yourself?
2. What is your bachelor's degree background?
3. Did you choose this specialization for a specific reason? What motivated you to pursue this qualification?
4. Why did you choose ADA University to study math?
5. Are you currently working? What is your occupation?
6. Have you ever considered working as a math teacher at a school?
7. Have you ever received job proposals to teach, or have you applied for teaching positions? Are you planning to do that?
8. How do you keep your math skills up to date? Do you engage in any continuous learning or development activities?
9. As you might know, according to our legislation, only graduates with a math teaching background are eligible to teach at public schools, and those interested in working in this field must apply for a retraining program. Do you feel there is a knowledge gap between math specialization and math teacher specialization? What do you think about this legislation?
10. What do you think are other barriers for math graduates to enter the teaching profession in public schools in Azerbaijan?
11. In your opinion, what are the most important qualities for a math teacher to have, and do you believe your education has helped you develop them?
12. If you wanted to work in a public school, would you apply for the retraining program (əlavə təhsil)? Why or why not?
13. Do you think there is a growing demand for math teachers in Azerbaijan? If so, in what ways can the education system address that demand?
14. Do you think math graduates are adequately prepared to meet the requirements of teaching in public schools? If not, what areas should be improved in their education?
15. Is there anything we haven't discussed that you think is important to mention?

APPENDIX 3**Survey questions**

1. Do you have a bachelor's degree?

Yes

No

Currently studying

2. When did you graduate with your bachelor's degree?

2020-2024

2015-2019

2014-2010

2009-2005

2004-2000

Before 2000

3. Do you have a master's degree?

Yes

Currently studying

No

I am planning to apply

4. If you have a master's degree, when did you apply for master's programs?

Upon completing my bachelor's degree

After a 1-3 year gap

After a 4-7 year gap

After an 8-10 year gap

After more than 10 years

5. Why did you apply for a master's degree?

To be more qualified in the field of my bachelor's background

To be more valued in the labor market

To gain specific knowledge related to my work

To change my specialization

Other

6. Are your bachelor's and master's specializations similar, the same, or different?

Similar

The same (???)

Different

7. If your specializations are different, please specify them (e.g., Bachelor in Translation, Master's in Public Administration).

8. If you did not apply for a master's degree, what is the reason behind your decision?

Legislation requirements to follow the same/similar specialization

Lack of quality education

Lack of financial resources to apply for a master's degree

I prefer short-term courses that provide professional certificates over full degree programs

Lack of interest

Already working and not seeing the need for a master's degree

Uncertainty regarding future plans or career goals

Master's programs in my selected field are few.

Other (please specify)

9. If your master's specialization is different from your bachelor's, what opportunities did you apply for?

Study abroad with a state-provided scholarship

International scholarship

Local universities

Other (please specify)

10. If you chose study abroad with a scholarship provided by the state, please indicate which one:

State Program for the education of young people at prestigious higher education institutions in foreign countries for 2022-2028

Bilateral State Scholarships (Hungary, China, Kazakhstan)

Dual degree programs

Other

11. If you chose a local university, please indicate the name of the university and both of your specializations:

ADA University

Dual degree programs (indicate between which universities)

The Academy of Public Administration under the President of the Republic of Azerbaijan
(Master's program for civil servants)

Other (please specify)

12. If you chose an international scholarship, please indicate which one:

Chevening Scholarships

Fulbright
Visby
Türkiye bursları (Türkiye Scholarships)
DAAD
Korean government scholarship
Erasmus+
Other (please specify)