



CHAPTER 4

Higher Education Transformation, Institutional Diversity and Typology of Higher Education Institutions in Azerbaijan

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INTRODUCTION

Azerbaijan is a transcontinental country located at the crossroads of Eastern Europe and Western Asia, and bound by the Caspian Sea to the east. The country borders Iran and Turkey to the south, Russia to the north, Georgia to the northwest and Armenia to the west. It is the largest country in the South Caucasus region with a majority Muslim and Turkic population speaking the Azerbaijani (Azeri) language. In 2014, the population of the nation was equal to 9.5 million with more than half living in urban areas (53%). Azerbaijanis constitute the majority of the nation (91.6%), while Lezgins (2%), Armenians¹ (2%), Talysh (1.3%) and Russians (1.3%) make up the biggest minority groups. There has been

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moderate population growth due to a sharp reduction in the birth rate since the beginning of the 1990s. However, it is a young country with around 28% of the population aged 19–24.

The development of the Azerbaijani education system mirrors the country's historical transformations. The country first announced its independence in 1918 with the establishment of the Azerbaijan Democratic Republic (ADR). The first university in the country, Baku State University, was founded by the ADR in 1919. The new democratic republic was established by the Azerbaijani elite, who were educated in Europe and understood the necessity of building a national higher education system. The short life of the ADR did not allow the founders to expand the university and establish a full-blown higher education system; however, the first university in the country continued to function after the fall of the ADR. It was later enlarged during the Soviet period and became the major research and higher education institute in Azerbaijan (Isakhanli 2014).

Soviet forces ended the democratic republic in 1920 and established the Azerbaijan Soviet Socialist Republic (SSR). From then on, low literacy levels and minimal participation by women in social and economic life were major development issues in the country (Avakov and Atakishiev 1984). The primary goal for educational development was to increase literacy levels by providing free schooling for all. Teacher 'technicums'² began providing teacher training and the school system expanded throughout the country. This reform increased literacy levels up to 90% during the first two decades of the Soviet period (1920–1940).

Alongside general educational development, the higher education system began to form as well. Industrialisation and economic development were the leading forces impacting higher education development in the Azerbaijan SSR. The emergence of new industries and branches in the 1920s and 1930s necessitated the establishment of new educational programmes and institutions. Higher education had to adapt to the national economy and industrialisation. This was the main reason for the establishment of specialised higher education institutions (HEIs), such as the Petroleum Institute, the Agrarian Institute and the Azerbaijan Polytechnic Institute. The Azerbaijan State University³ and the Azerbaijan Petroleum Institute⁴ were the main research-oriented institutions in the country during the Soviet period. Industrialisation and labour market demands also shaped modes of higher education provision, which are still practiced today: evening and part-time (correspondence) classes were introduced during this time. Azerbaijan higher education planning was identical to

many other countries within the Union of Soviet Socialist Republics (USSR) and stemmed from the idea of the planned economy.

Depending on the length of studies and prior educational experiences, four types of degrees were awarded during the Soviet period (Table 4.1). Post-secondary institutions provided vocational training, which led to the junior specialist diploma. Higher education institutions (HEIs) granted graduates the specialist diploma. Research degrees were awarded by the Academy of Science, which included *Kandidat Nauk* and *Doktor Nauk*.

A major expansion in the number of HEIs during the Soviet period took place between 1970 and 1980; while in 1970 there were 80,000 students studying 138 specialisations at 13 HEIs, in 1980 the number increased to 107,000 students specialising in 158 areas at 17 HEIs (Mehdizade 1980; Salakov 1990). The system included one university, two institutes of art, the Baku Higher Party School (see Table 4.2) as well as institutes of engineering, agriculture, medical studies, physical education and economics. This was explained by the development of the economy and an increased population with a growing need for specialists with high-level qualifications. In 1990, just before the collapse of the Soviet Union, there were 17 HEIs providing education to 105,000 students in Azerbaijan. Between 1990 and 2014, the number of students increased to 150,000 while the number of HEIs expanded to 53.

Table 4.1 Main credentials awarded during the Soviet period

<i>Degree and diploma</i>	<i>Type of institution</i>	<i>Admission requirement</i>	<i>Length</i>
Diploma of Junior Specialist	Post-secondary, non-university institutions (<i>Ucilishe, Technicums</i>)	Completion of basic secondary education	2–4 years
Diploma of Specialist	University, Academy Institute, Polytechnic	Completion of secondary education	4 years (technology and economics) 5 years (all disciplines) 6 years (medicine)
<i>Kandidat Nauk</i>	Academy of Science	Diploma of Specialist	3 years
<i>Doktor Nauk</i> (Doctor of Science)	Academy of Science	<i>Kandidat Nauk</i>	5–15 years

Source: World Education News & Reviews (2015)

Table 4.2 Types of HEIs that emerged between 1919 and 1990 with student numbers for 2013–2014

<i>Type/focus of training</i>	<i>Year</i>	<i>Name</i>	<i>Loc.</i>	<i>Student</i>
Republic's leading university/ training of academic and research staff for other HEIs as well as chief public sector employees	1919	Azerbaijan State University	Baku	16,566
Specialised HEIs/training specialists in specific area of industry (engineering, agriculture, technology, etc.) or sector of economy (medical studies, teaching, art, etc.)	1920	Petroleum Institute	Baku	7,357
	1921	Baku Musical Academy	Baku	270
	1923	Theatrical Institute	Baku	2,120
	1929	Agrarian Institute	Ganja	5,040
	1929	State Pedagogical Institute	Baku	8,941
	1930	Medical Institute	Baku	6,725
	1930	Institute of Sport and Physical Ed.	Baku	3,721
	1930	Trade-Cooperative Institute	Baku	18,000
	1936	Painting Institute	Baku	854
	1950	Polytechnic Institute	Baku	8,589
	1972	Pedagogical Institute of Foreign Languages	Baku	5,501
	1972	Nakhchivan State Pedagogical Institute	Nakhchivan	5,403
	1973	Khankendi Pedagogical Institute	Khankendi	n.a
	1975	Construction Institute	Baku	5,576
1980	Technological Institute	Ganja	2,244	
Specialised/ideological, political	1939	Baku Higher Party School	Baku	n.a

Source: State Statistical Committee (2014), Mehdizade (1980), Salakov (1990)

Although the first university in Azerbaijan was established before the country was integrated into the Soviet Union, the higher education system developed and expanded during the Soviet period as shaped by economic planning, the emerging needs of industry and the ideological priorities of the system. Higher education continued changing and developing during the independence years as driven by various social, economic and political as well as international factors.

HIGHER EDUCATION SINCE INDEPENDENCE

With independence in 1991, Azerbaijan continued to maintain its well-developed educational system, with high levels of literacy as a legacy of the Soviet period. As soon as independence was obtained, the country repudiated the traditions of the Soviet past and started building policies for immediate changes to adapt to the new economic and political structure. This was accompanied by market privatisation and liberalisation. Yet economic decline and resource scarcity in all areas of social development, especially education, prevented the full implementation of reforms and adversely affected all levels of schooling. Moreover, educational institutions were often reluctant to embrace changes and maintained Soviet traditions of management, administration and teaching.

The country experienced a sharp economic decline between 1991 and 1994 that resulted in the loss of about 60% of its pre-independence gross domestic product (GDP) (World Bank 1997). Failures in the implementation of reform policies and the economic turmoil in this period (1991–1994) are related to the war in Karabakh (1988–1994) and the political instability in the country (Allahveranov and Huseynov 2013). Armed conflict with Armenia over Nagorno Karabakh escalated in the early 1990s, resulting in the occupation of about 20% of Azerbaijani territory; this issue remains unresolved. As a result of the war, Azerbaijan received about 1 million refugees from the occupied territory, which made up 11% of the total population. It was the largest Internally Displaced Persons (IDP) burden in the world at that time (UNECE 2010). Currently, Nagorno Karabakh is internationally recognised as Azerbaijani territory; however, the country is not in control of the disputed area. Therefore, this chapter does not include any information on HEIs in the occupied territory.

After agreeing to a ceasefire with Armenia in 1994, Azerbaijan started along a new development path. It signed oil and gas exploration contracts with foreign companies in 1995 that led to an extraordinary amount of

international investment flowing into the sector. As a resource-rich country, the oil and gas sector comprises a major part of the economy. The share of the oil sector in the state budget has reached 78% and accounts for 65% of GDP, with oil and gas products making up more than 92% of exports (Bayramov et al. 2014).

Despite the growth of the economy, educational funding did not keep pace with the overall economic improvements: the percentage of GDP allocated to education was 2.5% in 2013 with just 0.2% apportioned to higher education and science. This lack of resources led to lower quality at all levels of education. Corruption practices at universities that had roots in the later years of the Soviet period became more common during the early years of independence. Bribery was often practiced in student admission to universities and in obtaining diplomas. Hence, newly emerging private universities became alternatives for corrupt state institutions. Limited funds also urged universities to start charging student fees and establishing new educational programmes.

The participation of international organisations in the field of education was another factor impacting the development of the education sector, specifically higher education. Since the early 1990s, organisations such as the World Bank, the European Union, UNICEF, the Soros Foundation, IREX and the Eurasia Foundation have contributed to the development of the education sector through activities like direct grants and credits, technical assistance in launching programmes and sponsoring Azerbaijani students abroad.

These changes were also supported by legislation. The three-cycle degree system, permission to establish private universities, the right to own property and permission to set tuition fees were introduced in the Education Law. This was the first national legislative provision on education, which was adopted in October 1992. The Law reflected the first post-communist government plans regarding the modernisation and updating of the education system to meet international standards. It spelled out the educational structure, the main concepts of higher education and the unification of science and education within higher education institutions. Most importantly, it legalised revenue diversification for universities.

The Law also made a clear division between Bachelor and Master degrees and classified institutions based on the degrees they offered. HEIs are typified as one-tier institutions if they provide Bachelor degrees only (institutes, conservatories and higher colleges). Two-tier universities are

those offering Master and Doctoral studies in addition to Bachelor degrees. For instance, Baku State University (BSU) is an example of a two-tier HEI providing higher education in all three levels, while Mingechevir Polytechnic provided Bachelor degrees only. In line with the Law, both private and public universities were exempted from taxation and were independent in student recruitment and granting degrees. The Law did not include major changes to Doctoral studies, leaving the post-graduate landscape rather intact.

The establishment of new public universities was carried out by merging and separating existing higher education institutions as well as non-university institutions, colleges⁵ and ‘technicums’ in early 2000. For instance, 11 teacher technicums in the different regions of Azerbaijan were upgraded to higher education institutions as branches of the Azerbaijan Teachers Institute. The National Conservatory was established on the foundations of the Baku Musical Academy. Two colleges of art and music were integrated into the Conservatory and the Painting Academy, respectively.

The increase in the number of HEIs was also related to the expansion of private and cross-border universities: more than 100 private post-secondary (vocational colleges) and higher education institutions were established during the first 5 years of independence. The key factor driving the expansion was increasing societal interest in privatisation and private enterprise. Corruption issues and low educational quality in public HEIs also contributed to the appeal of private institutions. Rather than launching studies with uncertain costs due to bribery in a public university, parents and students started viewing private universities as a better alternative (Catterall and McGhee 1996). Growing demand for graduates with English language skills trained in important fields such as business, management and administration combined with the failure of public universities to meet this demand due to outdated institutional traditions and low marketplace agility created fertile conditions for private universities. Another factor impacting increased interest in higher education stemmed from the degraded quality of vocational education and its decreased value in the country. Within 15 years after independence (1990–2005), the Gross Enrolment Ratio (GER) in vocational education fell from 38.9% to 14.2% (Azerbaijan Economists’ Union and UNICEF 2008).

The increase in the number of HEIs and interest in higher education was not followed by rapid and prominent growth in student enrolment (Fig. 4.1). On the contrary, the GER declined in the first years after independence and reached 1980s levels again, but not until 1998.

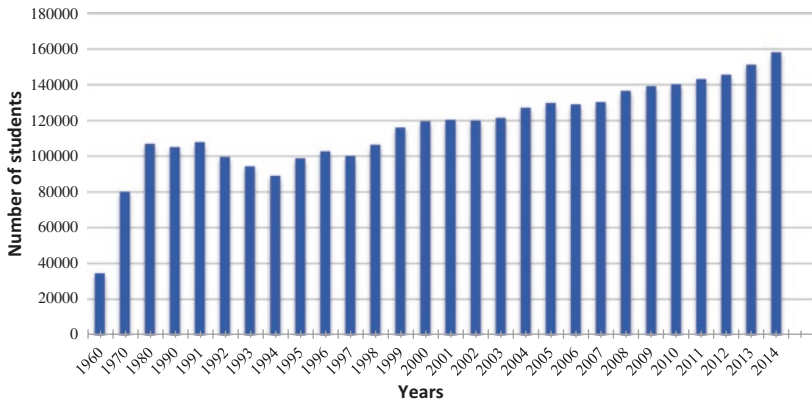


Fig. 4.1 Student enrolment in higher education (1960–2014) (Source: SSC 2014)

The decrease in enrolment was primarily due to the introduction of tuition fees and a new admissions system, which replaced Soviet institutional admission with standardised testing throughout the country. Families could afford neither tuition fees nor tutoring costs for admission exams (Silova and Kazimzade 2006).

In addition to educational legislation, changes in student admission procedures also marked a major turning point in higher education development. Accelerated corruption levels as a consequence of the general crisis in the country was the main driving force for altering student recruitment. To fight corruption, Azerbaijan was the first former Soviet Union country to introduce standardised testing in university admission processes in 1992 (Drummond and Gabrscsek 2012). The State Commission for Student Admission (SSAC) was established as the major administrative body for these tests. SSAC operates independently from the Ministry of Education (MoE) and reports directly to the President. Currently, SSAC administers school graduation exams, organises Bachelor and Master admission exams for both private and public HEIs, and implements student placement at HEIs.

The mushrooming of private institutions also ceased with the introduction of new quality assurance mechanisms. In 1995, only 10 out of 100 newly established private institutions acquired formal legal status after being evaluated by a Ministry of Education expert commission and obtaining permission from the Cabinet of Ministers (Catterall and McGhee 1996).

It was not only the decline in HEI numbers but also limited resources, centralised admission processes and educational quality that resulted in low participation rates in tertiary education (Aliyev 2011). In 2014, the GER for tertiary education was 23%.

Hence, higher education development in the first 10 years after Azerbaijani independence was associated with increased institutional diversity and differentiation. Loose regulations regarding the establishment of private institutions, increased demand for higher education and interest in private enterprise led to higher education attracting more students. Although the number of HEIs in the country skyrocketed initially with more than 100 new university and non-university institutions entering the market, differentiation in the Azerbaijani higher education system has been relatively slow since 2000.

In the early 2000s, the number of private HEIs dropped from 18 to 15 as some were closed down (Fig. 4.2). The number of public HEIs, however, increased from 29 to 37 due to newly established universities and academies with diverse study areas, such as the Azerbaijan Diplomatic Academy and the Baku Higher Oil School. Stagnation in the number of private universities since the 2000s can be explained by increased requirements for establishing HEIs and social favouritism for public institutions

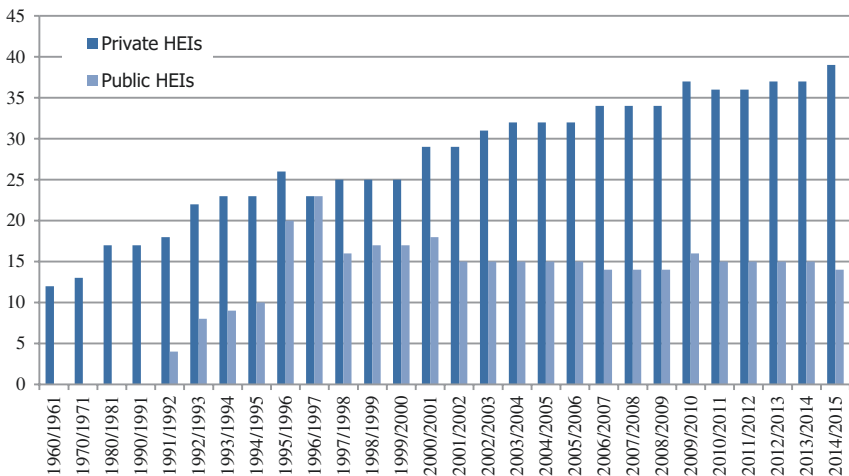


Fig. 4.2 Number of private and public HEIs in Azerbaijan, 1960–2014 (Source: State Statistical Committee 2014)

as stable establishments stemming from mistrust in short-lived private ones, as well as ministry and state demands. While public institutions grew in number and profile, many HEI branches dropped off. Four branches of the Azerbaijan Institute of Teachers were closed due to alleged corrupt practices in 2014–15.

Harmonising the higher education system with the Bologna Process requirements and the need for more clarity in HEI management necessitated updates in legislation. The Second Education Law was adopted in 2009 after 15 years of discussion. The transition period was accompanied by political turmoil and the adoption of the new Law was delayed until the late 2000s, when the country started benefiting from the oil boom and developing fast.

The Second Law established a new system for Doctoral education, culminating in either a Doctor of Philosophy (PhD) or Doctor of Science, the latter being an amalgam of Soviet and Western Doctoral degrees. As the leading educational document, the Law also aimed to clarify education structure and the educational system. It determines the characteristics of HEIs (Table 4.3) that divides HEIs into universities, academies and institutes based on their research and teaching focus. In the document, universities represent multi-profile institutions and, in addition to teaching, function as research institutes. Academies included primarily specialised HEIs with a narrow focus of study like military schools, the Academy of Painting and the Azerbaijan Diplomatic Academy. Institutes encompassed specialised institutions that provided professional training. However, the title of “institute” is slowly being phased out in the current Azerbaijani higher education system. By Presidential decree, “institute” is being replaced with “university” in HEI titles. The only HEI still carrying the “institute” title is the Nakhchivan Institute of Teachers.

It is also worth mentioning that the distinction between universities and academies is vague in reality. In September 2015, the Azerbaijan State Oil Academy was renamed the Azerbaijan State University of Oil and Industry with no major structural or institutional changes. University representatives explained the inclusion of the word “industry” in the title by pointing out that the HEI’s focus is not limited to the oil sector, but this does not explain why the institution was upgraded from an academy to a university. Again by Presidential Decree in December 2014, the Azerbaijan Tourism Institute was renamed the Azerbaijan University of Management and Tourism. Similarly, in July 2015, Mingechevir State University was established on the foundations of the former Mingechevir Polytechnic

Table 4.3 State defined characteristics of HEIs

Education/teaching and learning	Research
Student body (bachelor, master, and doctoral degree students studying part time and full time)	Total budget for research and science funding
Teaching staff (tenure and adjunct professors)	Number of articles published in local scientific journals
Country ranking	Number of articles published in international peer reviewed journals
Average SSAC scores	Number of patents and patent applications
Choice of high scorers	Number of international research science projects partnered/joined
Presidential scholarship winners	Number of national and regional science projects partnered/joined
Eight group programmes and required scores	Number of professors who are members of ANAS, PhD/ DSc programme offering universities
Top ten programmes	Number of research institutes under the HEI
Financing	Internationalisation
Universities with rights to independent funding allocation	Number of international students (bachelor, master and doctoral degree)
Sources of income other than from tuition and state funding	Number of international students sponsored by the HEI
Income from research activities	Number of exchange programmes administered by the HEI
Income from tuition	Number of professor exchange programmes
	Number of international programmes
	Number of international exchange projects, number of contracts with foreign universities, institutions, organisations, etc., number of international faculty

Source: Education Law (2009)

Institute. The purpose of this was to provide one comprehensive state university in each big city in the country. The latest upgrade was the inclusion of the Azerbaijan Institute of Teachers under the Azerbaijan Pedagogical University. This was to optimise the number of HEIs in the country and increase the efficiency of their governance.

Admission plays an important role in shaping HEI diversification and the higher education market in Azerbaijan. Although universities set their admission cut-off scores, the bar fluctuates based on general student test performance. Student placement is carried out based on an HEI admission plan designed by the MoE and confirmed by the Cabinet of Ministers. HEI ranking is a new phenomenon for the higher education system in Azerbaijan,

and the ranking system was established in 2013 to increase competition among HEIs. The ranking is issued by SSAC based on applicant HEI preferences and the average admission score of enrolling students. Recently, the MoE commissioned a study that yielded another country ranking of HEIs with the purpose of creating more competition in the higher education market. The study not only produced a country ranking of HEIs, but also proved a positive relation between ranking and student choice (Ahmadov 2014). For instance, Khazar University and Qafqaz University are private HEIs often chosen by high scoring students (on the admission test), despite requiring a lower passing score than public HEIs. Hence, the admission process is the major driver of vertical diversity in the system.

EUROPEANISATION AND INTERNATIONALISATION OF HIGHER EDUCATION

Not only socioeconomic and political changes within the country but also global trends have affected the system in Azerbaijan. From the initial reforms and decrees, Azerbaijan clearly aimed to transform Soviet education by establishing and following Western educational values and modes to discard the remnants and values of socialist education. Other higher education systems and institutions were observed for insight and good examples, and were used as a basis for benchmarking. Moreover, educational policies in the country were closely associated with foreign policy. Azerbaijan joined the Council of Europe in 2001 and has been a part of the European Neighbourhood Policy since 2004. Accession to the Bologna Process in 2005 took higher education on a more defined development path. Many important reforms following the accession were directed towards harmonising the higher education system with European standards.

Joining the Bologna Process also increased student mobility in higher education and positively affected internationalisation by opening opportunities for participation in various exchange programmes, expanding university partnerships and transferring credits to other universities. Currently, Azerbaijani universities participate in European Union educational programmes such as Trans-European Mobility Programme for University Studies (TEMPUS) and Erasmus+.

Increased political relations with neighbouring countries after independence brought about increased student mobility within the region and contributed to the movement of students among the former Soviet republics. After independence, relations with neighbours such as Iran became

stronger and closer than in Soviet times. Most international students in Azerbaijan currently come from Turkey (57%) and Iran (13%). There are also many students from the former Soviet Union (12%), mostly from Turkmenistan and Kazakhstan as well as neighbouring Georgia (Fig. 4.3).

Universities are free to attract and recruit international students. In 2013, there were more than 3,971 international students studying in Azerbaijan, which comprised 2.6% of the total student body. Although some universities provide international programmes in English, the state mandates the provision of core courses in the Azerbaijani language. Therefore, in case they do not master Azerbaijani or Russian, international students are expected to take a preparatory Azerbaijani language course for one or two semesters. The majority of international students in Azerbaijan opt for studies in fields such as medicine, economics, humanitarian and technical studies.

In line with inbound student mobility, the number of Azerbaijani students studying abroad grew as well. Shortly after joining the Bologna Process, an order to launch a scholarship programme for Azerbaijani citizens to study abroad (between 2007 and 2015) was signed by the President in 2006. Programmes of study are defined and listed by the MoE based on assumed labour market need. Most of these students study in the fields of medicine, economics and technology and the most attractive destinations for studying abroad are the United Kingdom, Turkey and Germany. In 2015, a total of 3,558 students received the state scholarship to study in 32 countries at 379 universities.

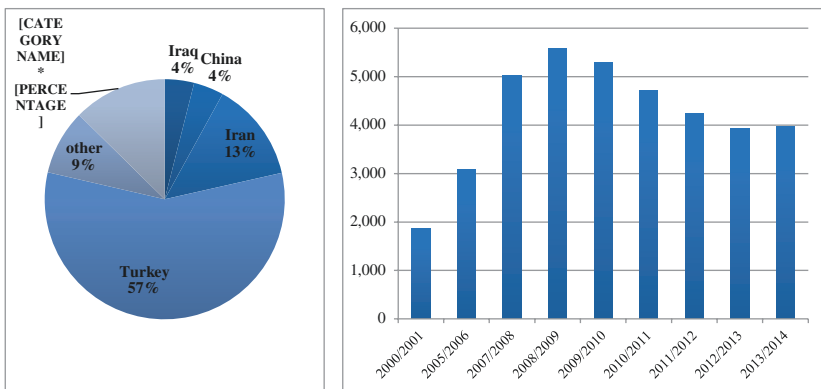


Fig. 4.3 International students based on home country (2013–2014) and Dynamics in International Student Participation since 2000 (Source: SSC (2014), *Commonwealth of Independent States)

GOVERNANCE OF HIGHER EDUCATION: ROLE OF THE STATE

According to the Education Law of the Republic of Azerbaijan (2009), the major goal of higher education is to provide education that integrates the demands of society and the labour market to develop highly specialised experts, researchers and academic staff for the country. The governance of higher education remains quite centralised, with all policies and reforms decided and very often imposed by the Cabinet of Ministers and the MoE. The MoE is the central executive body governing the education system. It participates in the development and implementation of state policy for education.

There are six universities that have obtained autonomy from the state. Such HEIs acquire funding directly from the Ministry of Finances and are not steered by any other governmental institution. Universities with this level of autonomy are allowed to define the contents of education, set their own admission plan in all three degree levels and independently award scientific degrees and scientific titles. Ten HEIs are under the auspices of other ministries, state companies and other affiliated institutions. For instance, the Azerbaijan Medical University is under the Ministry of Healthcare, while the State Academy of Sports and the University of Management and Tourism are under the Ministry of Youth and Sports.

Curricula, teaching methodologies and course priorities in higher education are defined at the national level and built around state-level higher education standards. All HEIs including public, private and international institutions as well as autonomous universities are obliged to follow these standards. State standards also outline the different higher education degree levels, higher education management, HEI infrastructure, quality standards for education providers and measurement tools for student competences as well as educational programmes.

The state budget is the basis for public HEIs, while private HEIs heavily depend on tuition fees. Such institutions also obtain resources from trustees, partnerships with industry, bank loans and various local and international grants. Both public and private HEIs are free to define their tuition fees. The fee amount is usually based on the reputation of the HEI and its place on the ranking list. Starting in 2010, the state uses a funding model based on the number of students admitted and defines the amount per student, varying by field of study within a range of 1500–1800 AZN⁶; there is an exception for medical students (2500 AZN). In 2013, the state started paying public HEIs for students who scored sufficient points to

make them eligible for free state university seats, but chose to study in private HEIs. Currently, students studying on a state scholarship and exempt from tuition constitute one-third of the student population (36%), and only 1.24% of these students study in private HEIs (State Student Admission Committee 2014).

HIGHER EDUCATION AND RESEARCH

The First Education Law (2003) declared the unification of research and teaching within higher education. There was a slow increase in HEI research activity, with still a strong role for the Azerbaijan National Academy of Sciences (ANAS) in overseeing research work. The MoE and the ANAS are the main bodies responsible for Doctoral programmes. In 2013, 106 institutions were carrying out research activities, of which 73 were scientific institutions and 33 HEIs. The cabinet, the MoE and the ANAS decide on the plan for Doctoral candidate admission and issue permits for establishing new Doctoral programmes. Only the six aforementioned autonomous universities are free to decide on their Doctoral programmes. The academic Doctorate is the only type of Doctoral programme that still reflects the practices of the Soviet period. The Doctorate degree is divided into two levels: (1) a PhD degree (*fəlsəfə doktoru*) that takes three to four years depending on the mode of study; and (2) a Doctor of Science degree (*elmlər doktoru*) that can be continued after the PhD degree with four to five years of study.

HIGHER EDUCATION LANDSCAPE IN AZERBAIJAN

Changes in the higher education system in Azerbaijan since its independence have developed and occurred at varying paces. Accelerated institutional differentiation in the early years after independence yielded good quality in private HEIs, as well as low calibre institutions that contributed to the aggravated corruption in the education system. Most in the latter category were phased out. On the one hand, the state still maintains strong control over the higher education market, and on the other it introduces incentives for HEIs to trigger competition.

During the academic year 2013–14, about 151,000 students studied in 53 HEIs (see Fig. 4.4). For that academic year, 40,884 students were admitted to universities, a majority of 87% at the Bachelor level with only 14% in private universities. The number of students paying tuition fees has

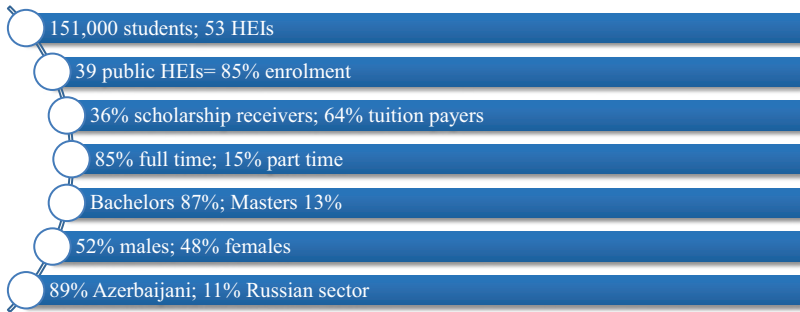


Fig. 4.4 Student body characteristics for 2014/2015 (Source: State Statistical Committee 2014)

been increasing every academic year; in 2000 only 45% of students were expected to pay for higher education, but this number grew to more than 60% by 2013. In addition to being able to study for free, students who score highest on admission exams are also awarded with a presidential scholarship. In 2013, 102 top scoring applicants received the scholarship (State Student Admission Committee 2014). Also in 2013, 96,720 students participated in admission exams, and about 35% were successful. About 60% of the applicants were high school graduates in the same year, and 70% of these high school graduates failed to score the minimum admission points required (150 out of 700) and therefore did not gain access to the higher education system.

Educational programmes in HEIs are offered in three languages: the official language, Azerbaijani, as well as Russian and English, although there are no programmes taught completely in English. Admission to HEIs, however, is carried out in Azerbaijani and Russian. In 2013, the majority of students (89%) were admitted to Azerbaijani language programmes, with 11% opting for Russian language programmes. The majority of public universities (32) and a few private universities (4) provide programmes in the Russian language (SSAC 2014).

The number of programmes at HEIs and their diversity has been increasing, with universities establishing new programmes that do not require much investment in infrastructure such as information technology, business administration and financial management. Often such courses are offered by most HEIs, which leads to duplication and overlap. HEIs offer educational programmes in eight areas that were defined by the Cabinet of Ministers in 2009: education; humanitarian and social sciences; arts and

culture; economics and management; natural sciences; technical and technological sciences; agriculture; healthcare, well-being and service. The majority of students enrol in education, technical sciences and economics (70% for both Bachelor and Master degrees). HEIs try to expand their programmes in these qualification groups to attract more students.

CURRENT INSTITUTIONAL TYPOLOGY

Currently, HEIs in Azerbaijan can only be compared by using the state's institutional ranking. This ranking system incorporates only one dimension, student choice after the admission exam, and fails to reflect other major institutional functions. The current ranking does not provide any information on research quality, international orientation or institutional interaction with industry. The ranking also neglects the diversity of fields and educational programmes offered by the institutions. Although about 70% of HEIs in Azerbaijan can be defined as rather specialised institutions based on their title and educational study focus, each educational programme is offered by at least 10% of HEIs. Hence, the ranking does not sufficiently describe why students choose this or that specific university. The following dimensions were used within the research to classify HEIs in Azerbaijan (Table 4.4).

Table 4.4 State defined typology of HEIs

<i>Type</i>	<i>Description</i>	<i>Number</i>
Academy (<i>Akademiyə</i>)	Implements higher and in-service training programmes, and conducts fundamental and applied scientific research	Public 11, Private 1
University (<i>Universitet</i>)	Leading multi-profile higher educational institution, which carries out a broad range of specialist training at all levels of higher education, in-service training programmes, and conducts fundamental and applied scientific research	Public 21, Private 14
Institute (<i>Institut, ali məktəb</i>)	Independent HEIs, independent research focused establishment, or a structural unit of a university, which carries out the training of specialists on specific specialties, as well as provides in-service training programmes	Public 1, Private 0
Conservatory (<i>Konservatoriya</i>)	Provides training for highly specialised experts in the field of music	Public 1, Private 0

Source: Education Law (2009)

In addition, HEI reputation and prestige levels are often mentioned in state documentation and policy papers, and were also incorporated into the typology (Table 4.5). University websites were also analysed to gauge HEIs' missions. Five public HEIs that require a special aptitude test as part of the admission process, which are affiliated with various defence and military ministries and state bodies, were excluded from this study. No data were accessible on research and education dimensions, and no international students were admitted to these institutions.

Flagship University. Baku State University (BSU) is the oldest university in Azerbaijan and is popular with prominent alumni and acclaimed professorial staff who are also active participants in the political and social life of the country. The current and former President of the country, as well as presidents and national leaders of various countries are honorary Doctors of the university. BSU is home to the highest number of students with the highest average scores and is considered "a leader of HEIs" and a "scientific and educational centre" of the higher education system. It is also one of the six completely autonomous HEIs in the country that attract the highest number of international students.

Leading public specialised HEIs. This group is comprised of eight HEIs popular among high scoring students with high cut-off scores and includes both recently established and older universities. These HEIs offer specialised studies in diverse fields such as diplomacy, executive education, languages, economics and oil engineering. This group is also diverse when the four dimensions are taken into account. Two of the institutions were established in the last 5 years: the Azerbaijan Diplomatic Academy, established in 2006, and Baku Higher Oil School, established in 2011. These are comparatively new HEIs and are popular among high scorers on the admission test. Both HEIs are selective and competitive, with the highest points required for admission and highest average points scored among admitted students (590 for ADA and 660 for BHOS).

Public specialised HEIs. This group makes up 70% of all public HEIs and enrolls one-third of the total student body. Unlike the previous group, this cluster requires comparatively lower cut-off scores and enrolls students with lower average scores. The group includes HEIs with a narrow focus that require a special aptitude test, for example the Painting Academy, Conservatory, and University of Art and Architecture. HEIs within the group have a relatively weak international focus and conduct mostly applied research. Although this group recently started providing PhD studies, there is still a limited research focus.

Table 4.5 Classification of HEIs in Azerbaijan

<i>Title/number</i>	<i>Institutional characteristics</i>	<i>Example</i>	<i>Students</i>
Flagship University (1)	Comprehensive, research focused institution which provides multi-profile educational programmes. Major provider of doctoral study programmes	Baku State University	16,988
Leading public specialised HEIs (8)	HEIs with high average admission scores and include research focused and teaching-focused institutions. Provider of specialised educational programmes for different areas of industry and social life	Diplomatic Academy, Medical University, Azerbaijan State University of Oil and Industry, etc.	37,143
Public specialised (12)	Provides specialised training on narrow fields, such as music, art, painting, languages, etc. Some of these HEIs have special aptitude test. Low focus on internationalisation, doctoral studies and research	Painting Academy, Music Academy, Slavic University, etc.	39, 137
Regional comprehensive (5)	Universities established on the basis of upgraded institutes. Carries a goal of serving a higher education centre for big region of the country and provide with training in various areas. Low focus on internationalisation, doctoral studies and research	Ganja State, Mingechevir State, Lankaran State, Nakhchivan State, Sumgayit State	18, 663
Regional specialised (3)	This group also includes 7 branches of Azerbaijan Pedagogical University. Teaching, Agriculture and technology focused institutions with low focus on internationalisation	Agrarian University, Technological University, Nakchivan Teachers' Institute	9473
Private leading comprehensive (4)	4 private comprehensive universities with higher average scored points compared to other private HEIs. High cut-off score. Choice of presidential scholarship holders. Holds at least 5 out of 8 educational programmes	Khazar U, Odlar Yurdu U, Qafqaz U, Western U.	17,987

(continued)

Table 4.5 (continued)

<i>Title/number</i>	<i>Institutional characteristics</i>	<i>Example</i>	<i>Students</i>
Private specialised and comprehensive (10)	Includes specialised and comprehensive private HEIs, with low international and research focus, lowest average admission scores. Also includes the HEI with the smallest student body—Baku Asia University, 200 students	Cooperation U, Azerbaijan U, Baku Islamic U, etc.	10,078
Regional comprehensive private (1)	The only private university in the region that provides educational programme in various areas. No focus on internationalisation and research	Nakhchivan University	972

The *regional comprehensive* group encompasses five comprehensive state universities operating in big cities such as Ganja, Sumgayit, Nakhchivan, Lankaran and Mingechevir. They were developed and upgraded from regional technicums into universities to serve as major comprehensive education providers in various regions. This group also includes two autonomous HEIs: Nakhchivan State University and Azerbaijan Agrarian University. This group has a low international and research focus, enrolls students mostly from neighbouring regions and provides comprehensive educational programmes. This group requires lower admission scores and has a less intensive international and research focus.

The *regional specialised* group is comprised of HEI branches: three that provide specialised training in technology, agriculture and teaching and seven branches of teaching schools. However, the main campus and steering body of these branches, Azerbaijan Pedagogical University, is located in Baku. This group supports very few international students (seven students on average) and limited Doctoral studies (65 students on average). The major function of this group is meeting regional needs for a specialised work force.

Private leading comprehensive. Despite unequal competition conditions for private universities, some private HEIs perform with a strong portfolio and attract high-quality applicants each year. This group consists of four private universities in the capital city of Baku with higher average scored

points compared to other private HEIs. These are also the first established private institutions, which function mostly on the basis of income from tuition fees. Being deprived of any kind of state funding, these HEIs can compete with other public HEIs. Qafqaz University, for example, was established by a Turkish foundation and has the biggest local and international student body with the highest number of research institutes and industry partnerships among private HEIs.

Private comprehensive and specialised. The remaining private comprehensive (six) and specialised (four) institutions require the lowest admission scores. This group is represented by the biggest (3900) and the smallest (200) student bodies amongst private institutions. HEIs within this group are teaching focused with very limited international activity. Although there are some research projects being conducted, none of these universities offer Doctoral degrees.

The *regional comprehensive private* group consists of only one private HEI, Nakhchivan University. It is located in the Nakhchivan Autonomous Republic with a student body of about 1000. This university provides no Doctoral study programme and enrolls no international students. The role of the university is to provide alternative public education educational opportunities, mainly for local residents of Nakhchivan.

CONCLUSION

The higher education system in Azerbaijan was characterised by three primary types of institutions during the Soviet period and has now transformed into a more diverse system with seven types of HEIs. The number of HEIs has tripled and student enrolment has increased 68% in comparison with the highest enrolment rates in the 1980s. A major increase was also observed in the number of comprehensive universities as a result of the government's regional development policy. While during Soviet times there was only one comprehensive university (Azerbaijan State University), there are now 5 state and 11 private comprehensive universities.

Similar to the Soviet period, regional HEIs currently provide training in various areas to meet regional needs. When types of HEIs are compared, there is an apparent difference in relation to research and internationalisation policies between regional and capital institutions. Capital public and some private HEIs focus more on research and attract international students, while regional HEIs perform lower in these two dimensions.

The higher education system has changed and developed through internal (demographic, political, social and economic) and external factors (international relations, involvement of international development organisations). These factors have led to accelerated growth in the number of higher education institutions, educational programmes and opportunities. They include population increase, a large proportion of youth in society and an increased interest in higher education qualifications and the changed nature of the economy. This interest was also met by international organisations that contributed to the internationalisation and financing of higher education. Major drivers of change in the system were increased attention to privatisation and private institutions, emerging demand for skilled labour in the new open market, a recognised need for an education system upgrade based on international standards and a desire to participate more in student mobility. Similar to the Soviet period, changes in the economy and market dynamics are still driving major changes in the higher education system and shaping its diversity today.

NOTES

1. In Nagorno Karabakh.
2. Technical vocational educational institution.
3. This institution was called Baku State University between 1919 and 1920. In 1991, the name was reintroduced.
4. This institution was called the Azerbaijan State Oil Academy between 1991 and 2015.
5. College—an educational institution that provides educational services based on secondary professional and vocational programmes and has the right to confer sub-bachelor vocational and professional degrees (Education Law 2009).
6. AZN- Azerbaijani New Manat (1400–1700 USD in 2015).

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