

March 2019



This project is funded
by the European
Commission

European Union Programme for Central Asia

Central Asia Education Platform Phase II (CAEP 2)

EuropeAid 2014/354952

**SUMMARY AND UPDATE ON EDUCATION SYSTEMS AND
POLICIES IN CENTRAL ASIA**

Review Report



Andrea Dubecova, Jan Helbich and Lucia Ulbrikova / on behalf of the EC and GOPA

Authors of the report:

Jan Helbich (Report Coordinator)

Andrea Dubecova (Reporting Expert)

Lucia Ulbrikova (Reporting Expert)

Local experts:

Selbi Jumayeva (Turkmenistan)

Zarrina Kadyrova (Tajikistan)

Assem Koishybayeva (Kazakhstan)

Aleksey Semyonov (Uzbekistan)

Nurkyz Suerkulova (Kyrgyzstan)

DISCLAIMER

This publication was produced with the financial support of the European Union. Its contents are the sole responsibility of the authors of the report and do not necessarily reflect the views of the European Union.

Table of Contents

| | |
|--|-----------|
| 1 INTRODUCTION | 3 |
| 1.1 Context and objectives of the study | 3 |
| 2 KAZAKHSTAN | 5 |
| 2.1 Country brief | 5 |
| 2.2 Overview of the current state of priorities | 6 |
| 3 KYRGYZSTAN | 17 |
| 3.1 Country brief | 17 |
| 3.2 Overview of the current state of priorities | 18 |
| 4 TAJIKISTAN | 25 |
| 4.1 Country brief | 25 |
| 4.2 Overview of the current state of priorities | 26 |
| 5 UZBEKISTAN | 34 |
| 5.1 Country brief | 34 |
| 5.2 Overview of the current state of priorities | 36 |
| 6 TURKMENISTAN | 45 |
| 7 REFERENCES | 46 |

1 Introduction

1.1 Context and objectives of the study

The Central Asia Education Platform Phase 2 (CAEP 2) project is about to close in mid-March 2019. In the second project phase (2015–2019), the project has commissioned, produced and disseminated a series of stock-taking and review reports, discussion and background papers on the priority themes identified both during the Riga and Astana Ministerial Meetings (including National Qualifications Frameworks (NQF), Mobility, Employability, Gender Equality).

In order to complete project activities under component 3 “Studies” and to enhance the visibility and communication of project results under component 2 “Communication and Mapping”, the project will elaborate a **final review report with information briefs covering all thematic priorities underlying the CAEP project**. The report shall also support the work of EU Commission services in developing the outline for the planned CAEP phase 3 by providing up-to-date information on CAEP 2 priority themes.

The **report and the information briefs shall cover both Higher Education (HE) and Vocational Education and Training (VET), provide a final update on the current developments in the CA countries** (e.g. on NQF, where the report dates back to 2016), and a concise and brief overview on thematic areas and recent policy developments not covered by review reports, but relevant to the project (e.g. on Quality Assurance and Accreditation, or more specifically, the introduction of autonomy to HEI in Kazakhstan, internationalisation of education in Uzbekistan etc.).

Furthermore, the information briefs will reflect the presentations held during the respective CAEP events (national meetings, regional conferences, peer learning and working group meetings, webinars) and **sum up the information contained in various subsections of the CAEP website in an updated, user-friendly way, providing a first-hand source of information about the current and on-going reform activities in the CA countries**.

In the second step, the **project will disseminate these information briefs** through the website, the conclusive CAEP Newsletter and direct mailing of the CAEP and wider education community.

This review report/ summary and information briefs will be produced by EU based experts in close cooperation with CA experts, facilitating access to the more detailed information on the respective topics on the CAEP studies to be found in the CAEP website.

The activity aims at providing a **review and update of the current education policies in the CA countries with a clear focus on the thematic priorities identified both in the Riga and Astana Ministerial Meetings in 2015/2017** respectively, in order to summarise and share the findings from the CAEP 2 with education practitioners and experts both in the EU and CA countries for further discussion among policy makers, education practitioners and related stakeholders in HE and VET.

As a result, the review report will contribute to the following outcomes:

- experience, lessons learned, best/ good practices shared, mutual understanding/ learning enhanced;
- evidence-based policy approach improved;
- results of the stock-taking exercise within Central Asia disseminated.

The report is divided into seven main sections. Following the introductory section, the second section provides a short country brief and an overview of the current state of priorities in the education system in Kazakhstan. The same format is used for the four subsequent chapters where Kyrgyzstan, Tajikistan, Uzbekistan and Turkmenistan and their recent policies and initiatives in the education system are summarised. The final section lists references used in composition of this report.

2 Kazakhstan

2.1 Country brief

Population (2017): 18,037,646¹

The Republic of Kazakhstan is situated in the north of Central Asia and with an area of 2,724,902 square kilometres it is the world's largest landlocked country, and the ninth largest in the world. Strategically, it links the large and fast-growing markets of China and South Asia and those of Russia and Western Europe by road, rail, and a port on the Caspian Sea. The country's 131 ethnicities include Kazakhs, Russians, Uzbeks, Ukrainians, Germans, Tatars, and Uyghurs. The Kazakh language is the state language, and Russian has equal official status for all levels of administrative and institutional purposes. Kazakhstan has transitioned from lower-middle income to upper-middle income status in less than two decades. The country moved to the upper-middle income group in 2006. Since 2002, GDP per capita has risen sixfold and poverty incidence has fallen sharply, showing a significant progress in country performance in the World Bank's indicator of shared prosperity.²

Education

Education is a high priority for Kazakhstan and in 2011, Kazakhstan was ranked first on UNESCO's "Education for All Development Index" by achieving near-universal levels of primary education, adult literacy and gender equality.³ In 2017, Kazakhstan had an estimated GDP per capita of USD 8,792.⁴ As Kazakhstan's overall economy has expanded in recent years, public expenditure in education has gradually increased to 3.7% of GDP in 2017.⁵

Kazakhstan was the first country in Central Asia to sign and ratify the Lisbon Convention (1999) and in 2010 joined the Bologna Process. Higher education in Kazakhstan is provided by 131 higher education institutions.⁶ Most higher education institutions now offer the 3-cycle higher education system although some 5 or 6-year Specialist Diplomas are still available, especially in the field of medicine.

At the beginning of the 2018/2019 academic year, 824 VET institutions were functioning in the Republic of Kazakhstan, 477 of which are state and 347 are private. The total number of students is 489,8 thousand. Compared with the 2017/2018 academic year, the number of students increased by 1.0%⁷. Although the share of VET in secondary education is only approximately 7%, VET is seen as an important driver for economic developments, and evidence-based policies and strategies are well integrated.

¹ <https://data.worldbank.org/country/kazakhstan>

² www.worldbank.org/en/country/kazakhstan/overview

³ Overview of the Higher Education System: Kazakhstan, 2017

⁴ <https://www.worldbank.org/en/country/kazakhstan/overview#1>

⁵ Education Policy Outlook: Kazakhstan, 2018

⁶ Effective Financing of Education Systems and Education Institutions in HE and VET in the EU and Central Asia, 2019

⁷ Committee on Statistics, Ministry of National Economy of the Republic of Kazakhstan

Useful links

Ministry of Education and Science: <http://edu.gov.kz/kz>

National Erasmus+ Office: <http://www.erasmusplus.kz/>

UN Country Profile: <http://data.un.org/en/iso/kz.html>

2.2 Overview of the current state of priorities

2.2.1 Qualification frameworks and standards

Since Kazakhstan became an independent state in 1991, it has undergone several changes and particularly the education system is currently undergoing a huge conversion phase. It is based on the *State Programme for Development of Education (SPDE) of the Republic of Kazakhstan for 2011-2020* which defines Kazakhstan as an educated country and a highly skilled workforce. The higher education system as well as the vocational education and training system are governed by the law *On Education*.

The National Qualifications Framework (NQF) in Kazakhstan was developed and legally established in 2012 as a part of the National Qualifications System (NQS). This system was designed to bring together all qualifications issued by various different organisations on the learning outcomes basis (qualifications are easy to compare by employers, educational institutions and individuals if they are classified in a common system). The NQF was also developed with the intention to be compatible with the European Qualifications Framework and as a tool for labour market relevance and educational quality.

The National Qualifications System consists of the following elements:

- 1. National Qualifications Framework (NQF)** – in Kazakhstan, this has been developed by the Ministry of Labour and Social Protection of Population of the Republic of Kazakhstan with the Ministry of Education and Science (MES).
- 2. Sectoral Qualifications Framework (SQF)** – it classifies the industry's requirements for each qualification depending on the complexity of the work and the skills used. In Kazakhstan, this has been developed by the Sectoral Council for a specific industry.
- 3. Occupational Standards (OS)** – this is a set of common requirements for the content of professional work to update the qualifications that meet the current needs of the labour market. In Kazakhstan, the development of occupational standards is carried out by the authorised state bodies of relevant fields of activity, together with the National Chamber of Entrepreneurs of Kazakhstan, employers' associations and industry associations of employees.
- 4. Evaluation of professional skills and awarding qualifications** – the evaluation system of professional training and demonstration of compliance with professional development requires independent certification centres, organised by the trade associations of employers.

The National Qualifications Framework consists of 8 levels of qualifications and it corresponds both to the education levels defined by the law *On Education* as well as to the European Qualifications Framework (EQF). The lower levels (1-2-3) of the NQF define the lower secondary and upper secondary education or vocational skills for people who can work effectively under supervision; the central levels (4-5) typically define the expected requirements for professionals who can act

independently, while the highest levels (6-7-8) define the capacity to analyse and innovate processes, create new knowledge and may include the ability to lead and manage people and processes. In the NQF, these are typically reserved for holders of higher education degrees.

In Kazakhstan, the roles in developing and maintaining qualifications are clearly defined between educational organisations, stakeholders, business associations and some public bodies. The Ministry of Education and Science (MES) is the main authority for higher education and TVET. It develops state compulsory educational standards for qualifications and professions (TVET) and for specialty (HE). The ministry also ensures that training of specialists meets the requirements of the labour market, expanding academic and managerial autonomy of universities and development and improvement of teacher training and other aspects. It is important to follow the global trends, mainly the convergence of the education system to the needs of the labour market.

The adoption of NQF in educational institutions has been preceded by several steps. In 2007, a three-level model of higher education (bachelor, master, postgraduate) was created and universities' rights to determine the content of educational programmes was also expanded. Between 2008 and 2010, ETF prepared guidelines and organised several workshops that outlined the principles for the process, the methodology and the importance to link the standards both with the labour market needs and qualifications. In 2011, Kazakhstan joined the European Higher Education Area and the full implementation of compulsory as well as recommended parameters of the Bologna Process are also outlined in the *State Programme for Education Development in the Republic of Kazakhstan*. In 2012, amendments to the law *On Education* were adopted and Complex Testing of Entrants (CTE) was introduced, 'professional lyceums' became 'vocational colleges' and their 'pupils' became 'students'. Also, new State Compulsory Educational Standards (SCES) for postgraduate, higher education and TVET were created with institutions being able to develop the curriculum. Since 2012, all TVET graduates must be certified. However, there is no mechanism to assign qualifications to current workers or for informal learning. In 2013, Ministry of Healthcare and Social Development (MHSD) developed the occupational standards implementation methodology which was later revised. Business or employers' associations started to design occupational standards for their economic sectors. In 2016, a key development concerning governance was supported by legislative changes in the education law and labour code and the National Chamber of Entrepreneurs became formally responsible for occupational standards. While previously line ministries had been in control of the sectoral frameworks, there is now a better coordination and a closer link to the private sector.

However, despite major efforts to align and update the NQF legislation process and occupational standards, there are several challenges, for example:

- the NQF descriptors need to be reviewed;
- there is a risk of fragmentation with a very high number of sector qualifications frameworks;
- links between occupational standards and educational standards and programmes and the assessment of graduates need to be strengthened;
- the NQS is seen as the sum of the NQF, SQFs, occupational standards and independent assessment centres; however, this view is not entirely correct.⁸

⁸ https://connections.etf.europa.eu/wikis/home?lang=en#!/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Kazakhstan%20-%20NQF%20Inventory

2.2.2 Quality assurance and accreditation

In 2015, Kazakhstan introduced independent accreditation of education providers and programmes for higher education and vocational education and training. This approach is expected over time to replace the existing quality-related processes. In 2017, the state certification of universities stopped being valid and was replaced by institutional and specialised accreditation. In 2018, 93% of civil universities (110) had passed international accreditation.⁹ This shift to external quality assurance has also helped internationalise Kazakhstan's education system. Similarly, a road map for the phased accreditation of VET educational institutions for 2016-2020 was developed and it is planned that from January 2020, the state certification in the VET system will be cancelled.¹⁰

There are 10 quality assurance agencies operating in Kazakhstan that are included in the Register of Accreditation Agencies, approved by the MES RK (four international - ASIIN, FIBAA, ACQUIN, MusiQuE and six national - IAAR, IQAR, KAZSEE, ARQA, ECAQA, IKAC). In 2017, two national QA agencies – IAAR and IQAR – became the members of ENQA and EQAR. With the adoption of new amendments to the law *On Education*, agencies of OECD countries will be able to enter the Register of Accreditation Agencies. According to these amendments, the Rules for the recognition of accreditation bodies, including foreign ones and the formation of a register of recognized accreditation bodies will be revised.

In terms of accreditation, Kazakh credit transfer system measuring the acquired knowledge is compatible with the European Credit Transfer System (ECTS) and it has been used since 2010. The Kazakh credit used to correspond to 45 hours of student workload to study the discipline in the academic period of a semester lasting 15 weeks. According to the renewed law *On Education*, the workload of 1 Kazakh academic credit (30 academic hours) now corresponds to 1 ECTS credit (25-30 academic hours)¹¹.

2.2.3 Employment and labour market needs

As already stated, the education system in Kazakhstan has undergone multiple reforms over the last decades. With the introduction of the National Qualifications Framework it has started to consider and take into account the learning outcomes as well as the labour market needs. The emphasis on work-based learning with the active participation of employer organisations also means that education and training sub-systems are open to one another and it allows people to move more easily between education and training institutions and sectors.¹²

The NQF covers both higher education and vocational education and training qualifications within an 8-level structure with levels 6-8 covering degrees awarded in HE and levels 2-4 covering qualifications in TVET. Level 5 is reserved for post-secondary education. The newly introduced Applied Bachelor Degree at level 5 is part of TVET but there are identical level descriptors for these qualifications as for academic bachelors awarded by higher education institutions that sit at level 6. The applied bachelor is not a real short cycle qualification as the duration is typically 4 years.¹³

⁹ Education Policy Outlook: Kazakhstan, 2018

¹⁰ Development of Kazakhstan's Education System: Presentation, 2018

¹¹ <http://adilet.zan.kz/rus/docs/V1800017554#z6>

¹² <http://www.cedefop.europa.eu/en/events-and-projects/projects/national-qualifications-framework-nqf>

¹³ https://connections.etf.europa.eu/wikis/home?lang=en#!/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Kazakhstan%20-%20NQF%20Inventory

Kazakhstan has made considerable progress with the introduction of the dual approach, as by 2016 about 60% of VET colleges applied the approach fully or at least in key elements. It foresees that up to 60% of all education content will consist of practical training, ideally provided by companies participating in the dual system.¹⁴ This approach was also legally established in the law *On Education* while introducing a position of a 'young specialist' – a student who holds an employment contract with a company. Furthermore, a new education standard was adopted to provide flexibility to providers working under the dual approach. The National Chamber of Entrepreneurs plays a key role in this as it is able to influence enterprises to take part and support partnerships with colleges at the local level. The Chamber is developing training for in-company trainers working with VET students. It also plays an important role in consolidating the efforts of the Ministry of Education and Science and the Ministry of Healthcare and Social Development.

The number of vocational schools providing dual education in 2018 (460 units) increased by 39 compared to 2016 (421 units) with the participation of 3,055 enterprises and with the coverage of 31 thousand students. The success of this approach is also mirrored in the increase of employed graduates from 51% in 2017 to 68% in 2018.¹⁵

At country level, regional employment centres facilitate youth employment. The programme *Youth practice* is targeted at graduates and helps acquire initial experience in a profession (specialty) for up to six months. The remuneration of participants of the *Youth practice* programme is financed through the state budget (at the amount of 35,676 tenge). Vacancies are posted on the websites of the centres.

Seasonal employment of students is available in the framework of the project *Zhasyl El*, which aims at improving the environment, the creation of woodlands and green spaces across the country, the formation of a protective attitude to natural resources of the native land, and the provision of attractive out-door and leisure activities for the population.

Projects that are implemented aim at training specialists in professions in demand, facilitate their employment and transfer young people from labour surplus areas to labor shortfall regions (*Serpin 2050*, *Mangilik yel zhastary - industriyaga*). The organisation of youth internships (*Satti kadam*) targets a smooth entrance into the labour market for young people; a programme called *With diploma to the village!* supports young specialists in rural areas. With the initiative of the *Chamber of Entrepreneurs*, student business incubators are created to involve young people in entrepreneurial activities¹⁶.

Since 2014, the State also allocates funds through grants in the framework of the programme *Serpin 2050* for training specialists in HEIs in seven regions. The programme aims to reduce unemployment in the southern regions and to prevent shortage of staff in pedagogical, technical and agricultural fields in the western, eastern and northern regions of the country. In the framework of this programme, 12,462 grants were allocated. In the 2016/2017 academic year, 4,212 grants were allocated in 22 universities and 30 TVET organisations¹⁷.

Another positive initiative, *The Programme for the Development of Productive Employment and Mass Entrepreneurship (2017-2021)* is accessible to young people under the age of 29, the unemployed and the self-employed. It supports a variety of active labour market measures, including initial vocational education and training and the teaching of basic entrepreneurship and micro-credit programmes.

¹⁴ Central Asia Education Platform Newsletter, June 2 2016

¹⁵ Development of Kazakhstan's Education System: Presentation, 2018

¹⁶ Overview of the Higher Education System in Kazakhstan, 2017

¹⁷ <https://bolashak.gov.kz/ru/novosti/1062-proekt-serpin-2050-uspeshno-realizuetsya.html>

Special support programmes for VET and higher education graduates have also been set up to facilitate a first employment.¹⁸

Monitoring the employment of graduates in Kazakhstan, based on the submission of certificates of employment, was practiced before 2014, but proved not to be accurate. The MES has developed a personalised mechanism to monitor the employment of graduates by creating the section 'Employment of graduates' on the portal of the Ministry of Health and Social Development through the integration of information systems of the Ministry of Education and Science, Ministry of Finance and the Ministry of National Economy.

Nevertheless, according to the National Chamber of Entrepreneurs *Atameken*, in 2018, 60% of graduates do not work in their specialty, which confirms the urgency of the problem of employment¹⁹.

2.2.4 Innovative teaching methods

Teaching and learning innovation is an important part of national policy of the Republic of Kazakhstan and its elements are reflected in key regulatory documents (such as in the law *On Education*). The foundation document driving the education reform in the country is *The State Programme of Education Development in the Republic of Kazakhstan for 2016–2019*.

In **higher education**, the main practices being developed are:

1. **Student-centred learning and curriculum update** – this approach allows building individual learning paths and supports the practice-oriented educational programmes. This naturally contributes to closer cooperation between universities and the labour market. A key development in the higher education system is the law on the expansion of university academic and managerial independence signed by the President of the Republic of Kazakhstan on July 4, 2018. This law enables universities to form 80% of the curriculum independently (however, it needs to be based on professional standards aligned with the NQF and social demand). This is significant progress although there are some challenges that need addressing such as lack of professional standards and insufficient involvement of employers.
2. **Capacity building of the pedagogical skills and language proficiency** – the World Bank is planning to develop new practice-oriented programmes in pedagogical specialties as well as to attract foreign specialists and strengthen the material and technical base of seven pedagogical universities. In 2016, nine Kazakh universities in cooperation with foreign partners developed 20 educational programmes in English and in September 2017, the first admission of applicants was carried out. In addition to this, the education system is also undergoing a transition to trilingual education – Kazakh, Russian and English language.
3. **IT skills and interdisciplinary programmes** – from September 2018, universities started to offer IT-related programmes. Special attention is paid to cyber security expert training and universities across the country are implementing related study programmes. Since 2016, an *Information and Communication Technologies* course in English is compulsory for all students and currently, 84 out of 130 universities prepare IT specialists. However, key challenges remain to be addressed such as lack of sufficient IT skills among teachers as well as the quality of courses provided.
4. **MOOCs and blended-learning** – Kazakh universities started to implement massive open online courses (MOOC) with assessment of the compliance of learning outcomes and student

¹⁸ <https://www.etf.europa.eu/en/regions-and-countries/countries/kazakhstan>

¹⁹ <https://www.zakon.kz/4945546-60-vypusknikov-vuzov-v-kazahstane-ne.html>

competencies. In 2017, the project *Open University of Kazakhstan* was launched offering free access to online courses from leading universities. In addition to this, recognising the results of non-formal learning has been prescribed for the first time by law. However, for this approach to be successful, clear guidelines and methodological support need to be developed and provided.

5. **Entrepreneurial skills** – the recent amendments of the law *On Education* enabled universities to create endowment funds and open start-up companies. The discipline *Basics of Entrepreneurship* is taught in more than 60 universities and there are about 30 universities and business schools across the country. Currently, 31% of Kazakh universities have business incubators and start-up laboratories. The lack of competence of teaching staff in the field of entrepreneurial education is being addressed by several learning opportunities offered to them, for example basics of entrepreneurship training, applied business study and others.
6. **Internalisation of the teaching staff** – since signing the Bologna Declaration in 2010, internalisation of higher education has been supported by the implementation of academic mobility of students as well as the teaching staff. Since 2009, Kazakhstan has been proactively attracting foreign specialists and this contributes to the adaptation of high standards of education in the Kazakh universities.
7. **Access to HE and inclusive education** – expanding access to higher education is achieved through educational grants and through increase in state orders (i.e. free study places) to 10 thousand places. In addition to this, 30% of state grants are allocated to socially vulnerable groups of population. Seven resource centres for inclusive education have been developed and compulsory lectures on inclusive education have been developed. Further work is still required on creating equal conditions and barrier-free access for students with special educational needs.

In **vocational education and training**, the main practices being developed are:

1. **Dual learning** - as already mentioned, Kazakhstan has made significant progress with the introduction of this approach and by 2019, it is planned to introduce dual training in 80.1% of colleges.
2. **Expansion of the accessibility among young people to the labour market** – one of the most successful initiatives is the *Free Vocational Education and Training for All* launched in 2017 by the Head of State. By offering the first vocational training free of charge, this project has contributed to stopping the negative trend in VET student population numbers.
3. **WorldSkills Kazakhstan** - in August 2014, Kazakhstan became the 70th member of international non-profit movement *WorldSkills International* which aims to increase the prestige of working professions and skills development. Its mission is to form the mechanisms of staffing of high-tech industries in technical professions on the basis of international standards, including the mechanisms of professional orientation, training, formation of expert communities and increase productivity.
4. **Inclusive education in VET** – in order to support socially vulnerable categories of population, the quota for admission of disabled people in VET institutions has been increased from 0.5% to 1%.
5. **Content update of the VET educational programmes in partnership with business** – in 2019, approximately 30 educational programmes will be developed and 30 existing standard educational programmes will be updated on the basis of the module-competence approach. The emphasis will be shifted from the learning process to the learning outcomes and to ensure the continuity of all levels of education, a gradual transition to credit-modular technology of education will be carried out.

2.2.5 Contribution of education to prevent violent radicalisation of youth

Education is a powerful tool for shaping people's attitudes and opinions and how they react to a diversity. However, it is crucial to ensure accessible education for all in order to provide them with this knowledge, skills and attitudes. Given the current global situation full of violent acts and radicalisation, the role of quality education as well as social inclusion is becoming even more critical. In addition to this, Kazakhstan's youth population is inherently heterogeneous as its members live in different provinces, urban and rural areas, have various levels of education, and speak either Kazakh or Russian, as pointed out by Irina Chernykh, chief research fellow at the Astana-based Kazakhstan Institute for Strategic Studies.²⁰ And as all these groups of population embrace various values and behavioural models, an increased awareness of social inclusion and its importance is essential.

In Kazakhstan, there are several examples of promising initiatives and practices promoting social inclusion. *The Education Improvement Programme* engages 20 government secondary schools and a few selected private schools in each of the three founding states of the University of Central Asia (UCA) – Kyrgyzstan, Tajikistan and Kazakhstan. The programme is designed to enhance students' academic achievements and opportunities for entry to high-quality universities and to be ready for responsible citizenship. One of its objectives is to improve learning outcomes for students and develop 21st century competencies. These include critical thinking, cooperation, communication that all lead to a socially inclusive approach to diversity and therefore, potentially reducing the chances of radicalisation. In each selected district, there is an EI District Resource School that shares experience and learning with other schools, providing an important cascading effect that will have a larger impact on education. Through on-going research, this programme aims to provide a model that can be adopted regionally and nationally.

Another example of promoting social inclusion in this region is the UNICEF-supported *Cash Transfer Programme for Pre-School Education in Kazakhstan* which found that the conditional cash transfers significantly increased the proportion of pre-school age children from poor households attending pre-school.

Although the economy of Kazakhstan has demonstrated a growth, poverty is still urgent in this region as more than 90% of poor families are multi-child families, and children make up more than 40% of all Kazakhstanis living below the poverty line.²¹ UNICEF together with the Ministry of Labour and Social Protection of the Republic of Kazakhstan conducted a research to study the barriers that poor and socially vulnerable families face when accessing social assistance and special social services. According to the UNICEF study, there are still categories of children coming from socially vulnerable families who do not have access to social benefits and special social services. Among the factors that impede access to social support are low awareness of government support measures and social worker's role, restrictive administrative rules, and negative attitudes towards children with disabilities.²²

On December 3-4 2018, an event titled *Youth Involvement and the Prevention of Violent Extremism -- Nexus Analysis* took place in Almaty, organised by the United Nations Development Programme (UNDP). It was the second of five regional dialogues within a UNDP regional project and stakeholders from the United Nations, government agencies, civil society and youth activists from all five Central Asian countries attended. The USD 6.4 million project is funded by the government of Japan and

²⁰ http://central.asia-news.com/en_GB/articles/cnmi_ca/features/2018/12/13/feature-01

²¹ <https://www.unicef.org/kazakhstan/en/social-inclusion>

²² <https://www.unicef.org/kazakhstan/en/social-inclusion>

implemented by UNDP offices in Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan.²³ It is aimed at mobilising the positive energy, open-mindedness and dynamism of young people in Central Asia as a potential force to counter extremist influences and narratives in the vulnerable communities. UNDP in Kazakhstan is the focal agent of the initiative while UNDP offices in Kyrgyzstan, Tajikistan and Turkmenistan will be responsible for implementing activities in the respective countries.²⁴

It seems that since radicalisation is an individual process and some may become radicalised under certain circumstances while others do not, it is mainly individual approach, time-consuming and cost-intensive work together with early intervention that is most effective as the above-mentioned projects confirm.

2.2.6 Contribution of education in addressing gender inequalities

The Constitution of Kazakhstan establishes that a citizen has a right to receive free higher education in public higher educational institutions on a competitive basis. There is also a guarantee of non-discrimination and equality embedded in Kazakhstan's Constitution and it is also reflected in the law of the Republic of Kazakhstan *On Education* (2007). The law of Kazakhstan *On State Guarantees of Equality Rights and Equal Opportunities of Men and Women* (2009) specifically refers to guarantees of gender education (article 12). Gender discrimination is prohibited.

Kazakhstan has almost reached gender parity in access to education. In the last five years, the overall trend was that women outnumbered men in higher education. In 2017/2018 academic year, 54.7% of all students enrolled to higher education institutions were women and 45.3% were men. The opposite trend is observed in enrolment of men and women to VET. In the last five years, the share of women enrolling to VET decreased. Men slightly outnumbered women and in 2017/2018 academic year, 53.3% of all students were men compared to 46.8% of women.

These patterns of education are correlated in the horizontal segregation of women in the labour market. At the level of HE, in 2017/2018 women were concentrated in traditional fields of study such as education (72.3%), health (63%), social science, journalism and information (79.6%). In fields such as ICT, engineering and constructions women made up about 30% of all students. Men were concentrated in technical fields such as hydrocarbon, transport and energy industries.

In the VET, gender segregation in disciplines which men and women study is even more evident. Women concentrate in areas of study such as medicine and pharmacy, education, economics, management, arts and culture. In sectors such as energy and transport, men reach close to 100% of students. In this respect, despite reaching close to gender parity levels in higher education, Kazakhstan faces a challenge in addressing traditional patterns of choices of study by boys and girls in VET and HE. From the long-term perspective, such segregation in education results in horizontal segregation in the labour market and consequently, in a gender wage gap.

An interesting initiative to weaken the stereotypes about male and female occupations and to increase the number of women studying technical and engineering subjects, is the *Girls Engineers* initiative launched in 2018 at the Eurasian Technological University. Special scholarships will be awarded to girls studying subjects such as mechanical engineering, transport techniques and technologies, energy and information systems.

²³ http://central.asia-news.com/en_GB/articles/cnmi_ca/features/2018/12/13/feature-01

²⁴ <http://www.kz.undp.org/content/kazakhstan/en/home/presscenter/pressreleases/2018/02/22/the-united-nations-development-programme-commences-a-regional-initiative-on-prevention-of-violent-extremism-in-central-asia-funded-by-the-government-of-japan.html>

The law *On Equal Rights and Equal Opportunities of Women* (2009) explicitly guarantees gender education in line with gender education policy. However, gender education has not been formally introduced into curricula at all levels of education. Therefore, a systematic approach to gender-responsive education is still needed. Although some elective gender courses were introduced in Kazakhstan's HEIs in Astana, Almaty and in the regions, these did not attract much interest and a systematic approach is critical to overcome the trend of gender segregation in the labour market.

However, according to the results of a gender study conducted by the Public Foundation *Institute for Equal Rights and Equal Opportunities of Kazakhstan* with the support of the Representative Office of the Friedrich Ebert Foundation in Kazakhstan, only 9.1% of respondents indicated that they receive knowledge about gender policy through the education system. Gender education has not been formally introduced into curricula at all levels of education and there is still work to be done in this area²⁵.

2.2.7 Effective financing of education systems and education institutions

Higher Education

The financing system of higher education in Kazakhstan was created in 1999 and it has remained relatively unchanged since then. The distribution of state resources is concentrated mainly on three objects:

- provision of state grants for studies and scholarships for students with high United National Test scores for certain academic programmes;
- support for international scholarships under the Bolashak programme and other educational activities;
- support for student grants and other expenses at Nazarbayev University.

In 2017, Kazakhstan's public spending on education amounted to 3.7% of GDP. The share of public funding on higher education remains consistently low at around 0.3% of GDP²⁶, funding on science does not exceed 0.2% of GDP. This level of investment as a percentage of GDP is lower than in many OECD countries and below the average level of 5-7% of GDP recommended by UNESCO. The financing of higher and postgraduate education in 2017 amounted to KZT 185.38 billion against KZT 187.6 billion in 2016. This is 1.6% of the total state budget and 0.38% of the country's GDP.²⁷

In Kazakhstan, the financing of higher education on a grant basis (state order) is carried out per student. The rate for calculating the cost of education per student in Kazakh HEIs under the state educational order is established by the Ministry of Education and Science. In 2017 it was amounted to KZT 596,188.²⁸

In 2017, there was a sustainable growth in the dynamics of the HE students. In 2017, the number of students increased by 4%. The increase in the total number of students is due to the growing number of universities in the country in 2016, as well as the introduction of paid doctoral studies.

As public expenditure for higher education is relatively low, Kazakhstan's higher education relies heavily on private sources of funding. Private sources of financing tuition fees account for the largest share of higher education funding in Kazakhstan. In particular, private sources are the main source of income for private higher education institutions, where 88% of students pay all tuition costs on

²⁵ <https://www.zakon.kz/4872564-gendernoe-issledovanie-kak-v-kazahstane.html>

²⁶ Education Statistics, the World Bank: <https://databank.worldbank.org/data/source/education-statistics-%5e-all-indicators>

²⁷ Committee on Statistics, Ministry of National Economy of the Republic of Kazakhstan: <http://stat.gov.kz/>

²⁸ Ministry of Education and Science of the Republic of Kazakhstan: <http://www.edu.gov.kz/ru/index.php>

their own or are funded from non-state sources. Public funding is only available for about 22% of all students.

To conclude, Kazakhstan has a centralised education system, with extensive planning and a detailed system of norms. Kazakh schools have lower levels of autonomy; however, considerable efforts have been made to decentralise higher education for over a decade. Similarly, Kazakhstan is making efforts to reduce the large number of private institutions through mergers or closures.²⁹

Vocational Education and Training

At the beginning of the 2018-2019 academic year, 824 VET institutions were functioning in the Republic of Kazakhstan, 477 of which are state and 347 are private. The total number of students is 489,8 thousand. Compared with the 2017-2018 academic year, the number of students increased by 1.0%³⁰. In 2017, for the first time in 5 years, the contingent of VET did not decline. Previously, the number of college students annually decreased from 30,487 to 10,328 people. The launch of the project *Free VET for All*³¹ and the increase in the state order to 53.8% of students allowed to stop the negative trend.

From 2001 to 2016, the state budget expenditures on VET were almost unchanged and amounted to only 0.2%-0.3% of GDP. This is significantly lower than in other countries. However, financing of the VET system is growing every year. In general, over the past three years there has been an increase in public spending on the VET system. The financing of the VET system is carried out through the state orders provided by local executive bodies and the Ministry of Education and Science (MES), and the tuition fees. The authorised body (MES) and local executive bodies of the region, the cities of Astana and Almaty place a state educational order among VET institutions.

One of the most significant initiative concerning VET in Kazakhstan is *Free Technical and Vocational Education and Training for All* launched in 2017 by the Head of State. It aims to provide everyone with the first working specialty free of charge and it is expected that by 2021, more than 720 thousand citizens will receive free vocational education. The project is being implemented by the Ministry of Education and Science in close cooperation with the Ministry of Labour and Social Protection. As a result, in 2017, for the first time in five years, there was no reduction in the VET contingent.

While there have been some increases in education expenditure in recent years and the funding model aims to achieve improvements in how resources are allocated, Kazakhstan needs to achieve better efficiency, transparency and equity of resource allocation in the system in order to cater to the different needs and realities of students at different levels of the system. Strengthening expenditure monitoring, along with the transparency and flexibility of the process are also some challenges for Kazakhstan.³²

2.2.8 Expansion of academic autonomy of universities

²⁹ Education Policy Outlook: Kazakhstan, 2018

³⁰ Committee on Statistics, Ministry of National Economy of the Republic of Kazakhstan: <http://stat.gov.kz/>

³¹ <http://opencollege.kz/>

³² Education Policy Outlook: Kazakhstan, 2018

The system of higher and postgraduate education in Kazakhstan is currently undergoing a reform phase. On July 4 2018, the law *On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on Expansion of Academic and Managerial Independence of Higher Educational Institutions* was approved and adopted³³.

The Law was developed to implement the tasks outlined in the State of the Nation Address of President of the Republic of Kazakhstan and the Nation Plan *100 Concrete Steps*. The implementation of this law provides for amendments and additions to the Labor Code and three laws (*On Education, On Science and On the Commercialization of the Results of Scientific and (or) Scientific and Technical Activities*).

The law aims to gradually expand the academic and managerial independence of universities, taking into account the experience of the Nazarbayev University. In general, these changes regulate the three main activities of universities: *academic, managerial, and financial*.

To broaden *academic independence*, competences are provided for empowering universities in determining student admission issues, defining the structure and content of educational programmes. In terms of personnel issue, universities will be able to independently determine the procedure for hiring, to form the structure of the university and the staff.

A new *Classifier in the fields of study* is being introduced, within which universities will be able to develop new educational programmes³⁴. Together with these innovations, the licensing mechanism changes accordingly. If earlier the specialty was licensed by specialty through the number of books and the formal availability of teaching staff, now the field of study will be licensed.

Within the framework of *managerial independence*, universities are entitled to create endowment funds, to open start-up companies and affiliated branches in foreign countries. Universities with special status (national universities, state universities, Nazarbayev University) are given the function of awarding the PhD degrees.

In addition, the rules for the transformation of state and national universities into non-profit joint-stock company with 100% state participation are defined. The fixed periods of study at the bachelor's level are excluded; earlier this period was four years.

In order to improve the quality of the knowledge provided, low residence education and evening-time education at the higher education level are excluded. At the same time, special attention is paid to the introduction of non-formal education and its recognition by universities.

As part of the *financial independence* of universities, the norm regulating the cost of education in universities on a fee basis is excluded. This amendment is aimed at expanding the access of citizens to higher education, including the socially vulnerable groups of the population. In addition, universities may attract additional sources of financial and material resources, which will lead to diversification of sources of income and financial flows.

To conclude, 68 regulatory legal acts have been developed to implement the planned transformations. With the acquisition of academic autonomy, universities and stakeholders will have to face the challenges that will follow in the process of reforming the education system.

³³ https://online.zakon.kz/Document/?doc_id=39633866

³⁴ https://online.zakon.kz/Document/?doc_id=39785244#pos=8;-57

3 Kyrgyzstan

3.1 Country brief

Population (2017): 6,201,500³⁵

The Kyrgyz Republic is a landlocked country bordering with China, Kazakhstan, Uzbekistan and Tajikistan. It has an area of 200,000 square kilometres and its capital city is Bishkek. Kyrgyzstan gained independence from the Soviet Union in 1991 and adopted a parliamentary system in 2011. The majority of population is of Kyrgyz ethnic, followed by significant minorities of Uzbeks and Russians. The state language is the Kyrgyz language although Russian remains widely spoken and is the second official language. The Kyrgyz Republic has maintained macroeconomic stability, invested in infrastructure, and improved access to social services. Kyrgyzstan has an estimated GDP per capita of USD 1,220.³⁶

Education

The Ministry of Education and Science of the Kyrgyz Republic is the body of state policy and normative and legal regulation in the field of education, scientific, scientific-technical and innovative activity, intellectual property as well as in the sphere of upbringing, social support and social protection of students and pupils of educational institutions.³⁷

The higher education system of Kyrgyzstan consists of 52 higher education institutions, both public and private. Although it is not a Bologna signatory country, Kyrgyzstan has been working towards implementing key aspects of the Bologna reforms. In 2012, the traditional system of higher education qualifications (Specialist Diploma) was replaced with a new two-tier system in line with the EU (Bachelor's degree, Master's degree). For some specialties, the specialty is kept for example, in the sphere of medical education and some engineering and cultural areas. The third-tier PhD programmes are currently being piloted. At the same time, the traditional two-level system of assignment of academic degrees is maintained ('candidat nauk' – 'doktor nauk'). In 2015, there was a 45% gross enrolment ratio in tertiary education.

Vocational education in Kyrgyzstan is divided into primary and secondary vocational education. On average, the duration of training programmes ranges from one to two years (excluding time for general secondary education). Responsibility for VET falls under the Ministry of Education and Science and VET is part of the *Education Development Strategy 2012–2020*.

Useful links

Ministry of Education and Science: <http://edu.gov.kg/kg/>

National Erasmus+ Office: <http://erasmusplus.kg/en/%D0%BE-erasmus/>

³⁵ <https://data.worldbank.org/country/kyrgyz-republic?view=chart>

³⁶ <https://www.worldbank.org/en/country/kyrgyzrepublic/overview>

³⁷ https://supportthere.org/page/higher-education-kyrgyzstan#_Toc488826499

UN Country Profile: <http://data.un.org/en/iso/kg.html>

3.2 Overview of the current state of priorities

3.2.1 Qualification frameworks and standards

The perspectives of integration of the Kyrgyz educational system into the international educational area have driven the Ministry of Education and Science of the Kyrgyz Republic and educational organisations to adapt a variety of international practices. One of the initiatives that became a crucial subject for discussion in academic society and at the ministerial level, has been the National Qualifications Framework (NQF) which is one of the main objectives of the *Concept for the Development of Education 2017-2020*. Since this concept was developed, several important steps have been taken to support the development of NQF and to modernise and adapt existing qualifications with the aim of better aligning them with the needs of employers and the labour market, and consequently, ensuring better quality education.³⁸ It should be noted that these efforts to develop the individual elements of the Qualification System have been financed largely by major international donors such the European Union, Asian Development Bank and GIZ³⁹. The active involvement of the Ministry of Education and Science and other governmental bodies started with the TEMPUS project QUADRIGA – Qualification Frameworks in Central Asia: Bologna-based Principles and Regional Coordination (2012-2014). It provided valuable input to the elaboration of the NQF in Kyrgyzstan by mobilising national expertise and facilitating exchange at regional level with Kazakhstan and Tajikistan.

The National Qualifications System has only started its development recently with the National Qualifications Framework draft developed in 2017. According to the draft concept, the system includes:

- National Qualifications Framework;
- professional standards and procedures for their recognition;
- industry/ sectoral qualification frameworks;
- qualification assessment and assessment institutes.

The NQF project has been developed under the QUADRIGA project and it provides for nine levels including level 5 (a short cycle), level 6 (the first cycle/ bachelor's degree), 7a (the second level/ specialisation), 7b (the second level/ master's level) and levels 8-9 (the third cycle/ doctoral programmes).⁴⁰

However, despite considerable efforts in this area, there are still many challenges to overcome in order for NQF to be integrated in the system. And given the limited expert and financial resources of the country, the role of the international assistance remains a crucial one.

3.2.2 Quality assurance and accreditation

New state education standards of higher professional education based on the qualifications framework for the European Higher Education Area (QF-EHEA, Dublin descriptors) were approved

³⁸ Central Asia Education Platform Newsletter, October 3 2016

³⁹ Gesellschaft für Internationale Zusammenarbeit

⁴⁰ https://supportthere.org/page/higher-education-kyrgyzstan#_Toc488826499

on September 15, 2015. They introduced an ECTS compatible credit system (1 credit in the national system of Kyrgyzstan is equivalent to 1 ECTS credit) with the following programme requirements:

- level 1 - Bachelor programmes (4 years, 240 credits), considering that general secondary education in the Kyrgyz Republic is 11 years;
- level 2 - Master programmes (2 years, 120 credits);
- level 3 - PhD programmes (3 years, 180 credits), this level, not yet adopted by law, is in a discussion of amendments to the Law of the Kyrgyz Republic *On Education*;
- training of specialists (5 years, 300 credits, medical specialists 6 years and 360 credits).

Public and private higher education institutions pass through the state licensing procedure to begin the implementation of educational programmes. Monitoring of their activities is carried out by the Ministry of Education and Science of the Kyrgyz Republic. Since September 1, 2016, *the Law on Education* foresees the introduction of independent accreditation, through independent accreditation agencies. Their status is recognised by the National Accreditation Council.

3.2.3 Employment and labour market needs

In Kyrgyzstan, the main vision of the Education Development Strategy is to ensure a significant improvement of the education system and to provide equal access to quality education. One of the aims of the strategy is also to ensure that the citizens will be able to *'handle general and specialised knowledge and skills that will allow them to be successful in life and labour market'*.⁴¹ To implement the tasks set in the concept of the National Qualification System, an inter-departmental working group was established under the leadership of the MES KR.

Since Kyrgyzstan is not a formal member of the Bologna Process, it is implementing it on a voluntary basis by ad hoc groups under the supervision of the Ministry of Education. As already mentioned, Kyrgyzstan is only at the beginning of implementing National Qualifications Framework which is an important element of the Education Development Strategy. Its objectives are to *'enhance transparency of qualifications, facilitate mobility of citizens to other countries, structure and integrate education and training systems in the country, enhance employability, boost lifelong learning and link qualifications better to the labour market.'*⁴²

The labour market in Kyrgyzstan is influenced by a number of factors including a shift away from agriculture towards services, a slowdown in economic growth since 2013, and a significant informal sector (71.7% of those employed in 2015), especially in rural areas (79.2% of those employed).⁴³ People aged under 20 account for 41% of Kyrgyzstan's population; those aged 20-29 are a further 20%. However, the economy is unable to provide adequate work for many young people, so youth unemployment is high, at 18%.⁴⁴ In addition to this, poverty levels are still high – in 2016, 25.4% of the population was below the poverty line with the majority present in the countryside. Educational attainment is broadly greater among urban citizens.⁴⁵

⁴¹ Education Development Strategy of the Kyrgyz Republic for 2012-2020

⁴²https://connections.etf.europa.eu/wikis/home?lang=en#/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Kyrgyz%20Republic%20-%20NQF%20Inventory

⁴³ Torino Process 2016-17: Kyrgyz Republic: Executive Summary, 2017

⁴⁴https://connections.etf.europa.eu/wikis/home?lang=en#/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Kyrgyz%20Republic%20-%20NQF%20Inventory

⁴⁵https://connections.etf.europa.eu/wikis/home?lang=en#/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Kyrgyz%20Republic%20-%20NQF%20Inventory

The education and training system are poorly integrated, so that the NQF should address the issue of building pathways. VET remains a second-class option although specialists of VET system are in more demand on a labour market than alumni of higher educational institutions.⁴⁶ Graduates of initial VET have been especially successful on the labour market in recent years, demonstrating high activity rates (75.6% in 2015) and low unemployment rates (7.4% in 2015). Secondary VET graduates have also largely been successful, although they have seen rising unemployment rates in recent years.⁴⁷

Kyrgyzstan has a number of good practice cases illustrating the close cooperation between individual VET schools and enterprises. The significant progress in the VET system represents the introduction of work-based learning through piloting an apprenticeship scheme in 2016.⁴⁸ Work-based learning became an integral part of the VET system in Kyrgyzstan and its most common forms are various internships that are mandatory at all VET levels. However, only a small number of VET schools ensure practical training within the enterprise due to predominance of small and micro enterprises in the country.

The VET system in Kyrgyzstan has undergone significant changes in terms of its governance and in 2015, the overall responsibility (initial and secondary VET, the VET Agency) was given to the Ministry of Education and Science while previously, this responsibility had been shared with the Ministry of Labour. Similarly to other Central Asia countries, the VET system reforms are supported by the European Training Foundation (ETF). For example, together with the Asian Development Bank it supported the development and testing of a VET graduate tracer study methodology.

Interesting initiatives are being taken by higher education institutions as for most of them, one of the most important strategic directions is cooperation with the business environment and government bodies. Higher education institutions actively involve representatives of the business environment and government agencies (for example, tax authorities, the financial police, the National Bank) to develop state educational standards, graduate programmes, curriculum adjustments, guest lectures, courses and internships.

Another way of strengthening the links between employment and the labour market is implementing the Labour Market Information System (LMIS) as presented in Brussels in February 2019. LMIS is a special open system of employment, which will provide useful information on current trends in the labour market, list popular professions as well as existing vacancies.⁴⁹ Also, in order to organise events to track graduates of educational institutions of higher professional education and to obtain timely information about the employment of university graduates, in September 2016, the Ministry of Education and Science developed and approved the *Methodology for tracking the employment of graduates of educational institutions of higher professional education of the Kyrgyz Republic*.

3.2.4 Innovative teaching methods

In the Kyrgyz Republic, the teaching and learning innovation is an important component of the national policy which is reflected in the document *Concept and Strategy for the Development of Education in the Kyrgyz Republic 2012-2020*. There is no specific budget for innovations in teaching and learning but the funds are allocated from the country's budget for the preparation of

⁴⁶https://connections.etf.europa.eu/wikis/home?lang=en#!/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Kyrgyz%20Republic%20-%20NQF%20Inventory

⁴⁷ Torino Process 2016-17: Kyrgyz Republic: Executive Summary, 2017

⁴⁸ Astana Declaration, 2017

⁴⁹ Presentation by N. Kulmambetov at the Regional Conference: Strengthening education reforms and employability in Central Asia and the EU, February 13 2019

programmes for teachers working in the field of vocational education. In higher education institutions, funding is allocated from the university budget. The key aims of the above-mentioned strategy are to increase the relevance of education to labour market needs (i.e. to focus on skills and competence rather than on knowledge exclusively), to improve quality and effectiveness of education provision, to increase access and inclusive approach in education by diverse teaching methods and technologies and to internationalise teaching provision and learners' interaction across countries.

The latest well-established innovations in the field of higher education and vocational education and training include the student-centred learning (inclusive approach), competence-based teaching and learning (focus on learning outcomes), inquiry-based learning, research-based learning (typically for master study programmes), action learning and role playing. There are some cases of online and interactive learning practice as well as dual learning (combining classroom study and workplace practice) and ICT-based pedagogy.

Despite significant efforts to reform the system, there remains major room for improvement. Interesting findings have been published by various authors where it is generally agreed that although Kyrgyzstan has been politically independent from the Soviet Union for more than 20 years, education in Kyrgyzstan has not changed significantly over that period. Today, as in the Soviet era, a teacher in a conventional classroom is considered to be an expert and a provider of knowledge. This system tends to promote 'reproductive knowledge', i.e. knowledge that should be memorised for further reproduction, rather than 'productive knowledge' that might be used creatively. The findings of the study indicate that a small proportion of schools seem to be promoting student-centred teaching approaches. While some teachers have adopted modern teaching approaches, the majority of primary and secondary teachers use predominantly conventional methods.⁵⁰

3.2.5 Contribution of education to prevent violent radicalisation of youth

One of the institutions that aims to address security-related concerns including arms control, confidence- and security-building measures, human rights and national minorities is the Organisation for Security and Cooperation in Europe (OSCE). One of its flagship educational initiatives in Central Asia is the OSCE Academy in Bishkek which promotes its commitment to young people in the Central Asia countries and in Afghanistan. It aims at fostering regional cooperation, conflict prevention and good governance through post-graduate education, professional trainings and intellectual exchange. The Academy provides expert training and education in human rights, conducts demand-driven and practice-oriented research on pertinent topics, supports the cooperation among the Central Asian academic institutions and also establishes a regional network of professionals and researchers. It launched two master's programmes – in 2004, master's programme in Political Science with focus on Central Asia; in 2011, master's programme in Economic Governance and Development.

As already stated, education plays an important role in promoting values such as tolerance, non-discrimination, freedom, inter-cultural understanding and cooperation. An interesting project encouraging these principles and focusing on street children was the *Vocational Education for Street Children in Kyrgyz Republic* project. It supported the reintegration of street children into normal life through specialised vocational training in the Bishkek area by providing methodology and pedagogy from Akershus University College from Norway (the project was funded by the Government of Norway). Through teachers' capacity building, elaborating of training curricula and cooperation with the private sector, this methodology enhanced the employment opportunities for street children and

⁵⁰ Teachers' Pedagogical Approaches in Kyrgyzstan: Changes and Challenges, 2015

significantly improved their life chances by integrating them into working life or, in some cases, into further studies.

Kyrgyzstan also takes part in the *Education Improvement Programme* together with Kazakhstan and Tajikistan. It is designed to enhance students' academic achievements and opportunities for further studies and develop competences such as critical thinking, creativity, cooperation and communication which all lead to a socially inclusive approach to diversity.

3.2.6 Contribution of education in addressing gender inequalities

The legislation of Kyrgyzstan establishes several guarantees of the right to education and gender equality. The Constitution in its Article 45 specifies the right of everyone to education and notes the role of the state in establishment of conditions for the development of state, municipal and private educational institutions. Article 16 of the Constitution guarantees equal rights for men and women, and specifically refers to measures aimed at ensuring equal opportunities for men and women which should not be considered discriminatory.

As to the education sector, several policies and laws were adopted to ensure the implementation of constitutional guarantees, specifically, the law *On Education* (2003), the law *On Status of Teacher* (2001), the law *On Primary Vocational Education* (1999). The law *On Education* establishes the right to education regardless of sex, ethnicity, language, social and material status, restrictions related to health, nature of activities, religious beliefs, political and religious convictions, place of residence and other grounds (article 8). The law *On Status of a Teacher* enumerates principles of pedagogical activities of teachers. Amongst them, it mentions the prohibition of direct, hidden and indirect discrimination, restriction of rights or provision of privileges to students based on grounds of sex, race, language, disability, ethnicity, religious beliefs, age, origin, property and other status and other groups (article 4). The law *On State Guarantees of Equal Rights and Equal Opportunities of Men and Women* prohibits direct and indirect gender discrimination. The indirect discrimination also includes the reproduction of gender stereotypes with use of media, education, culture and other ways which inflicted or may inflict negative impact such as harm to people of certain sex (article 5). These laws are gender neutral. They establish a set of strong guarantees of equality in education; however, these guarantees are not supported with effective implementation mechanisms.⁵¹

A review of statistical data demonstrates a high concentration of women in traditionally 'female' occupations. In Kyrgyzstan, boys tend to enrol more to primary vocational education than to secondary vocation and higher education. In secondary vocational education and higher education, women considerably outnumbered men. In secondary vocational education, share of men remained at the level of about 43%. At the level of higher education, during the last five years some increase in enrolment of men was registered. Despite some decrease in women's enrolment to HE in Kyrgyzstan, their share remains high and they still outnumber men enrolled to HE institutions.

Girls tend to enrol in subjects such as education, health, economics and management. Men study specialised technical subjects, including agriculture. Gender wages in traditional 'female' jobs are 2.5 times lower compared to 'male'. Moreover, these jobs are mainly funded by the public sector. Thus, women are not fully benefiting from private sector development, where salaries are higher than in the public sector.

In higher education, a similar trend is evident. In 2017/2018 academic year, women in Kyrgyzstan selected education (86.6%) and service (66.6%). Men outnumbered girls in majority of other

⁵¹ Kochorbaeva Z. et al., 2016

subjects, particularly in technical science (72.4%) and interdisciplinary science (74%). More women than men pursue research degree.

Given the key gender concerns in VET and HE in Kyrgyzstan, one of the strategies is to encourage women to select non-traditional occupations for study and then, jobs. *The National Strategy of the Kyrgyz Republic on Achievement of Gender Equality until 2020* envisages change in this situation. It mentions that gender asymmetry in the labour market will be overturned in the various economic sectors. It aims to result in reduction of vertical and horizontal segregation and implementation of the principle 'equal pay for the work of equal value'. *The Strategy of Education Development for 2012-2020* targets to increase the share of girls enrolling to VET schools.

To conclude, Kyrgyzstan is committed to address current gender inequalities in VET and HE. However, clear strategies that use international experience in this area are missing. For instance, there is a lack of system-wide approach to ensure gender mainstreaming in the education sector. Gender expertise of educational standards, training and methodological materials is not applied. Experts note that a rapid review of these materials revealed that they may reproduce gender stereotypes and perceptions. Another challenge is the lack of strong human resource capacity and methodologies to build/ improve gender competence of teachers inside the teachers training and the improvement of the qualification framework.⁵² The qualification framework for teachers should include gender dimensions in addition to knowledge of subject, specifically, a requirement of knowledge and skills in pedagogical practices to prevent and overcome gender stereotypes and gender-based discrimination and promote gender equality.

3.2.7 Effective financing of education systems and education institutions

Higher Education

In recent years, in the system of higher education, the main direction of the reform policy has been the creation of uniform conditions for the financing of universities with a focus on providing services, rather than on financing infrastructure. Key standards of education financing are specified in Chapter VI of the Law on Education. Currently, the procedure and methodology of financing of educational institutions is performed in accordance with the Government resolution No. 370 dated 1.07.2016⁵³ from the republican budget funds on the basis of the state educational grant from 1.09.2016⁵⁴.

The calculation of the size of the state educational grant is carried out on the basis of the actually established consolidated costs of organisations of higher professional education both at the expense of budgetary funds and at the expense of funds from the provision of educational paid services, per one student. The Ministry of Finance and sectoral ministries finance the expenses of universities from the state budget under a single cumulative expenditure item. With an increase or decrease in the volume of approved budget estimates for universities, the new budget is determined as a revised financing plan for the relevant period. Accounting and reporting of funds of the republican budget of universities is carried out according to established treasury procedures. Universities prepare reports and submit them to sectoral ministries. Sectoral ministries compile summary reporting data on the means of the republican budget on the basis of university reports. Sectoral ministries then submit

⁵² Kochorbaeva Z. et al., 2016

⁵³ As amended by resolutions of the Government of the Kyrgyz Republic from 20.07.2016, № 406; 3.02.2017, № 71; 2.06.2017 № 339, 23.06.2017, № 404; 20.09.2017, № 591; 15.05.2018, № 234.

⁵⁴ It does not apply to higher educational institutions of the State Committee on Defense Affairs of the Kyrgyz Republic and the Ministry of Internal Affairs of the Kyrgyz Republic.

reports on higher education institutions to the Ministry of Finance, according to the form and deadlines set by the Ministry of Finance.

The National Development Strategy of the Kyrgyz Republic for 2018-2040 sets the task of 'changing the system of financing the higher education sector'. In particular, for the period up to 2023, it is indicated, 'the state will support the direct participation of business in training, in the formation of educational programmes, as well as the creation of *university-production* systems' and the creation of a separate national government project to support three leading public universities in the country to join the leading world rankings.

Vocational Education and Training

In initial vocational education, the principle of per capita financing is currently used. The methodology was developed and tested as part of the Asian Development Bank project. Government resolution No. 545 from November 22, 2018 *On measures for the implementation of normative financing in state educational institutions of primary vocational education of the Kyrgyz Republic* approved the procedure for determining the standards of budget financing, standard norms and the procedure for the formation and execution of expenditures of state professional lyceums of the Kyrgyz Republic, as well as a list of state professional lyceums of the Kyrgyz Republic, which are not covered by the mechanism of normative financing.

There are three public administrations in charge of VET in Kyrgyzstan – The Ministry of Education and Science, The Ministry of Labour and Social Protection and the VET Agency. The State Agency of Vocational Education became a government body in the system of technical and vocational education in 2008. Its objectives and functions are to implement the integrated government policy on providing the labour market with a skilled workforce and meeting the needs of society in vocational education with regard to the interest and capacities of citizens. The structural chart of the Agency reflects its departmental affiliations.⁵⁵

The Agency, according to the calendar plan, determines benchmarks for the expenses of state vocational schools from the republican budget funds based on the general need for budget financing and a single standard for covering the need. The head of the state professional lyceum is personally responsible for preventing misuse of funds and accounts payable at the end of the financial year. State professional lyceums also prepare reports on the means of the republican budget and submit it to the Agency on the forms and terms established by the Ministry of Finance for budget organisations. The Agency then forms a consolidated report on the republican budget and special funds based on reports of state professional lyceums.

⁵⁵ World TVET Database: Kyrgyzstan, 2013

4 Tajikistan

4.1 Country brief

Population (2017): 8,921,343⁵⁶

The Republic of Tajikistan is a mountainous, landlocked country in Central Asia with an area of approximately 144,000 square kilometres (mountains cover more than 90% of the country). It borders with Afghanistan, Uzbekistan, Kyrgyzstan and China. It has an area of 143,000 square kilometres and its capital city is Dushanbe. Tajikistan became an independent sovereign nation in 1991 when the Soviet Union disintegrated. Most of Tajikistan's population belongs to the Tajik ethnic group, who speak Tajik (a dialect of Persian). Many Tajiks also speak Russian as their second language. Tajikistan has a transition economy that is highly dependent on remittances, aluminium and cotton production. It has an estimated GDP per capita of USD 801.⁵⁷

Education

Higher education in Tajikistan is provided by a total of 39 institutions. Although Tajikistan is not a Bologna signatory country, most HE institutions have now introduced 4-year bachelor degrees, 3-year PhD degrees and 2-year master degrees in line with the EU system; some 5 or 6-year specialist diplomas are still offered in professional fields such as medicine, veterinary medicine, pharmacy and engineering. The Government of Tajikistan has set a vision to modernise the higher education system, especially its contents towards more professionally-oriented skills to better meet the labour market demand and to build country's capacity.

Vocational education and training is provided by primary vocational (lyceums) and secondary vocational (colleges) institutions. Primary vocational institutions are administrated by the Ministry of Labour, Migration and Employment of the Republic of Tajikistan (MLME) and secondary vocational institutions are administrated by the Ministry of Education and Science (MES). Both ministries maintain a centralised management structure for the two subsystems.

Useful links

Ministry of Education and Science: <http://maorif.tj/>

National Erasmus+ Office: <http://erasmusplus.tj/?lang=en>

UN Country Profile: <http://data.un.org/en/iso/tj.html>

⁵⁶ <https://data.worldbank.org/country/tajikistan>

⁵⁷ <http://www.worldbank.org/en/country/tajikistan/overview>

4.2 Overview of the current state of priorities

4.2.1 Qualification frameworks and standards

The legislation of Tajikistan seeks to provide the quality of professional education mainly through establishing the *State Educational Standards (SES)* for each specialty of every level of professional education and to enforce these standards by licensing, certification and state accreditation of educational institutions. Such mechanism of ensuring, monitoring and evaluation of the quality of vocational education leads to a slight improvement in education quality; however, the current situation does not meet the goals and objectives of the national strategic documents yet. It is characterised by the absence of statistics, structuring and systematisation of the received qualifications and it is probably the result of a low level of readiness for the National Qualifications Frameworks (NQF), a lack of staff capacity required for the development of professional standards at all levels of professional education, as well as the limited financial resources of the country for the implementation of appropriate measures to improve the situation.

The evolution of the qualification system in Tajikistan is currently mainly at the stage of policy and methodology formulation. With adoption of the *National Education Development Strategy of the Republic of Tajikistan until 2020 (2012)*, a more significant progress in the political perception of the problem of the vocational education quality in the country began. This strategic document assumes a transition to competency-based education, the modular organisation of educational programmes at all levels on the basis of the qualification requirements of the National Qualifications Framework. In 2012, the law *On the Training of Specialists Tailored to Needs of the Labour Market* was adopted, which aims to define the legal, financial and organisational basis of partnership between state and private sectors in the process of training of specialists according to the needs of the labour market.

A draft of the NQF concept has been developed and discussions are taking place regarding the need to establish a mechanism and special institution for the horizontal and vertical structuring of qualifications in the country. In this process, the higher education system is more successful, which is probably associated with the Tajikistan's intention to entry into the space of the Bologna Process. In the current period of development of the vocational education system in Tajikistan (with the country's labour redundancy and presence of a large volume of foreign labour migration), the importance of qualification framework has now been established as it is seen as a central element of the process of entering into the European space of vocational education as well as for achieving comparability and transparency of vocational education.

Currently, there are three types of training programmes implemented in higher education institutions:

- 4-year bachelor's programme after the general secondary education (11 grade);
- 2-year magister's programme after the Bacalaureate;
- 3-year PhD programme after the Magistracy.

The description of qualifications and its consistency to the needs of the labour market play a key role in ensuring the quality of vocational education. However, the adopted laws and regulations in the field of vocational education in Tajikistan do not contain a clear definition of the quality concepts and quality assurance, nor potential quality assurance systems and tools to improve the quality of education.

4.2.2 Quality assurance and accreditation

The main body, which is responsible for Quality Assurance is the State Agency on Supervision in the Sphere of Education operating under the Ministry of Education and Science. External quality assurance system currently consists of three consecutive steps of licensing, attestation, and accreditation. However, all three steps are drawing on the same standards and using more or less the same procedures and actors, thus overburdening HEIs without adding value to system's improvement.⁵⁸

Tajikistan's current quality assurance model follows the practices common to those promoted by the ministries in post-Soviet systems and is not in line with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (European Standards and Guidelines - ESG), which the government aims to comply with. The State Agency for Supervision in the Sphere of Education (SASSE) is in charge of the external quality assurance under the Ministry of Education and Science. It aims to assure quality primarily by setting state educational standards and requiring HEIs to be in compliance with the standards through licensing, state attestation and accreditation. However, the model does not clearly define the concepts of quality and quality assurance, or the nature of quality enhancement or quality assurance system and tools. The SASSE does not have sufficient exposure to the ESGs and lacks the capacity to improve the national QA system. Also, as a result of conflicts of interest - the Ministry of Education and Science is both the founder and regulator of state HEIs - the majority of HEIs remain open whether or not they meet the standards. Therefore, strengthening the capacity of SASSE and aligning the existing model with the ESGs would help improve the quality of higher education.⁵⁹

The Centre for Methodological Support and Quality Monitoring of VET was set up in 2014. This centre together with GIZ⁶⁰ in Tajikistan developed educational modules for VET and is functioning under the head of the Ministry of Labour, Migration and Employment of Population of Republic of Tajikistan.

4.2.3 Employment and labour market needs

National priorities in the field of education are formulated in the *National Strategy for Education Development of the Republic of Tajikistan till 2020* and the *Education Action Plan 2018–2020*. The Strategy 'is aimed at renewal of the education system, so that education could implicitly perform the mission of the key resource for improving the well-being of the society and citizens, as well as effectively respond to economic challenges of the developing country and globalisation process.'⁶¹ The strategy covers both higher education and vocational education and training.

Tajikistan recognises the importance of linking VET with the requirements of the labour market and the economy as a whole as well as the importance of social partnership for the improvement of VET quality.⁶² In addition to this, in 2016, a new law *On Adult Education* was adopted which creates the possibility for individual citizens to have work skills that they have obtained in non-formal settings certified by various state agencies.

⁵⁸ Overview of the Higher Education System: Tajikistan, 2017

⁵⁹ Republic of Tajikistan: Tajikistan: Higher Education Sector Study, 2014

⁶⁰ Gesellschaft für Internationale Zusammenarbeit

⁶¹ National Strategy of Education Development of the Republic of Tajikistan till 2020, 2012

⁶² The Law on Training Specialists Based on Labour Market Needs, 2012

Concerning the NQF, Tajikistan is only in conceptualising phase. It adopted the framework in 2012 within the *National Education Development Strategy* and assumes a transition to competence-based training in VET as well as the complete adoption of an NQF. Tajikistan has adopted the National Classification of Occupations (NCO) in 2013, which links occupations to qualifications. The NCO consists of four levels, where level 2 and 3 are covering VET, and level 4 is covering HE.⁶³

According to the World Bank study from 2017, Tajikistan's economy is not creating sufficient jobs for its rapidly growing workforce, so its most valuable asset – human capital – is largely underutilised. There is an urgent need to alter the existing growth model to ensure faster job creation and improved job quality.⁶⁴ Women and youth are the least represented in the labour force. Inactive youth, i.e. those who are neither employed nor in school, represent 40% of the total youth population, which is high by international standards.⁶⁵ Also women are much more likely to be out of work than men and there are limited capabilities to adapt the workforce to the labour market demands for skilled specialists.⁶⁶ Limited mobility and access to higher professional education have increased the significance of vocational training, but substantial reforms are needed to strengthen the system. Quality assurance measurements remain fragmented and differ between regions and therefore, a streamlined approach to evaluate the quality of education, monitoring, and assessment is much needed.⁶⁷

To conclude, the Tajik labour market lacks qualified people in most branches of industry and is characterised by high unemployment and low salaries. Young people with traditional vocational qualifications, such as those provided by initial VET, experience considerable difficulties in finding employment in the country, and most of them become migrants. Estimates of the number of migrants vary from one eighth to one third of the workforce. On the other hand, every year many vacancies remain unfilled due to lack of relevant competencies.⁶⁸ Therefore, there is a strong need to revitalise skills development and to improve transparency and efficiency through streamlining numerous specialisations into a manageable number of broad occupations or career paths. Additionally, the quality and relevance of programmes of studies needs to be improved in order to target gaps in the labour market, and to make vocational, professional and higher education institutions more accountable for quality results.⁶⁹ As already stated in the previous sections, key elements of this process are the strengthening of quality assurance mechanisms and the recognition of qualifications at national level.

4.2.4 Innovative teaching methods

One of the most important strategic documents regulating the goals and objectives of the national policy in the field of training and education is the *National Strategy for the Development of Education of the Republic of Tajikistan until 2020*. As one of the priorities for the development of the higher education system it explicitly states '*...support and development of innovative professional educational*

⁶³ https://connections.etf.europa.eu/wikis/home?lang=en#/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Tajikistan%20-%20NQF%20Inventory

⁶⁴ <http://www.worldbank.org/en/country/tajikistan/publication/tajikistan-addressing-challenges-to-create-more-and-better-jobs>

⁶⁵ <http://www.worldbank.org/en/country/tajikistan/publication/tajikistan-addressing-challenges-to-create-more-and-better-jobs>

⁶⁶ <https://www.etf.europa.eu/en/regions-and-countries/countries/tajikistan>

⁶⁷ <https://www.etf.europa.eu/en/regions-and-countries/countries/tajikistan>

⁶⁸ https://connections.etf.europa.eu/wikis/home?lang=en#/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Tajikistan%20-%20NQF%20Inventory

⁶⁹ https://connections.etf.europa.eu/wikis/home?lang=en#/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Tajikistan%20-%20NQF%20Inventory

*programmes and technologies, creation and development of a database of electronic learning tools in open access, an increase in the share of independent student activities in mastering training programmes, based on the widespread use of information resources and ICT, as well as the transition to a new generation of standards based on competency model and modular organisation of programmes with the obligatory involvement of employers.*⁷⁰

Taking into account the latest achievements of science and technology, the strategy highlights the transition to new educational approaches such as competence-oriented education (focusing on the learning outcomes), project-based learning methods (implying the need to integrate acquired knowledge and skills), increase of independent learning activities and implementation of individual educational trajectory in a profile school of the highest level (as a practice of responsible choice).

The key objectives of the strategy are not only to improve the quality and effectiveness of educational provision but also to increase its accessibility and inclusiveness by using a differentiated set of learning strategies and technologies to facilitate attendance and achieve good results for all students, including students with special needs or difficult socio-economic conditions. It also aspires to internationalise teaching and ensure student interaction between countries, as well as ensure participation in international curricula.

In higher education institutions, new practical measures and approaches have been developed, such as:

- introducing information technologies – electronic laboratories with access to the Internet, electronic boards, electronic library;
- creating an inclusive learning environment – by implementing distance learning technologies based on the MOODLE electronic platform (i.e. open source platform);
- introducing creative learning methods - role-playing games, brainstorming, individual and group work, discussions;
- introducing lifelong learning – centres for short-term adult education have been established;
- training specialists that meet the labour market demand – technological parks have been created, combining the initiatives of the university's research, design, information technology and business activities.

While there have been efforts to actively introduce and utilise innovative teaching methods (interdisciplinary joint project activities, online co-education, 'inverted class' technology, dual learning and many others), there have been difficulties in applying them actively given the age, skills, experience and ability of teachers. Therefore, this is an area that needs addressing, for example through cooperation and partnership with other countries.

4.2.5 Contribution of education to prevent violent radicalisation of youth

In May 2017, OSCE organised a three-day interactive workshop on the role of youth in positive messaging against Violent Extremism and Radicalisation Leading to Terrorism (VERLT) at their office in Tajikistan. The purpose of the workshop was to enhance the capacity of youth, civil society, law enforcement agencies and the media to jointly resist violent extremist propaganda in the public domain, to develop their critical thinking skills and to inform them about various methods of developing effective counter narratives in response to VERLT. Representatives of the Prosecutor

⁷⁰ National Strategy for the Development of Education of the Republic of Tajikistan until 2020

General's Office presented the national strategy on the fight against terrorism and violent extremism, and underscored that this is the first government policy document of this kind to be adopted in Central Asia.⁷¹ As the Counter Terrorism and Police Issues Advisor at the OSCE Office in Tajikistan pointed out young people tend to spend a lot of time using modern technology and online communication and therefore it is essential to improve their critical thinking skills in order to effectively resist violent propaganda in the public domain. This naturally links with the role of education and equipping young people with the necessary strategic communication skills and ability to express their views in public.⁷²

OSCE continually emphasises the importance of education and a 'whole-of-society' approach to tackling the phenomenon of violent extremism and in May 2018, they organised a training event in Dushanbe. This was a train-the-trainer course where teachers were able to discuss and learn practical techniques on when and how to discuss the issue of violent extremism and radicalisation with their learners and create a classroom climate that is inclusive and open. By empowering local teachers in taking preventive measures against violent extremism, this approach aims to strengthen the role of education in building community resilience against terrorist radicalisation.⁷³

Another initiative, funded by the Central Asia Institute (CAI), focuses on young women and their freedom to access education. CAI promotes education, especially girls' education in the mountainous regions of Tajikistan. Courses of English, Russian and IT enabled the students to apply to universities after secondary school and choose professional occupations.

Together with Kazakhstan and Kyrgyzstan, Tajikistan also takes part in the *Education Improvement Programme*. It is designed to enhance students' academic achievements and opportunities for further studies through developing competences such as communication, critical thinking, creativity, and cooperation.

4.2.6 Contribution of education in addressing gender inequalities

In Tajikistan, the right to education for all is guaranteed by the Constitution and the state takes over the obligation to ensure fulfilment of this right. The Constitution also establishes a principle of non-discrimination and equality and specifies that all the rights and freedoms are provided to all without distinction on the basis of nationality, race, sex, language, religion, political convictions, and education, social or material status (article 17). This provision is reproduced in the majority of laws including the laws governing the education sector. There are five major laws related to education. The general law of Tajikistan *On Education* (2013) sets the general framework for all levels of education in Tajikistan. This law is gender neutral and it only refers to special conditions for children with special needs. The area of VET is governed by three laws: 1) *Law on Primary Vocational Education* (2003) and the *Law on Secondary Vocational Education* (2015). Both laws are gender neutral and extend special treatment only to people with special needs, orphans, underage and abandoned children. The third law is the law *On Adult Education* (2017). It is aimed at the provision of various forms of adult education including formal, non-formal education and informal education with opportunity to validate skills and get the certificate. This law is also gender neutral. The law governing the HE system is the law *On Higher and Postgraduate Education* (2009) and it does not establish any special measures to advance enrolment of girls/ boys to higher education. Special guarantees on ensuring equal opportunities for men and women in education and science are

⁷¹ <https://www.osce.org/office-in-tajikistan/318226>

⁷² <https://www.osce.org/office-in-tajikistan/318226>

⁷³ <http://en.unesco.kz/training-teachers-to-prevent-violent-extremism-among-youth-in-tajikistan>

established by the law *On State Guarantees of Equal Rights of Men and Women and Equal Opportunities for their Exercise* (2005).

However, despite the legal declaration of these rights and guarantees, there are no effective mechanisms for implementation. For example, no systematic revision of curricula and/ or introduction of mandatory gender courses across all subjects have not been undertaken. Tajikistan has also adopted a *National Development Strategy 2030* and a *Mid-Term Development Programme for 2016-2020* in line with SDGs. Both programmes mentioned gender inequality in HE and VET and committed to address them. However, special measures or references to achievement of progress supported by gender-sensitive situational analysis are not fully elaborated in the targets and specific strategies.

Similarly to Kazakhstan and Kyrgyzstan, Tajikistan maintains the prohibition of use of women's labour in certain occupations. In 2017, by its *Resolution the Government of Tajikistan* adopted a list of occupations where use of women's labour is prohibited. It is needless to point out that such list restricts opportunities of women to receive VET and HE, and subsequently, employment in prohibited sectors.

Gender inequality in VET and HE is cumulated and starts at the secondary education level. Compared to boys, girls have fewer chances to be eligible to access higher education as they are less likely to graduate from secondary education. In this respect, enrolment of girls to higher education was almost three times lower compared to boys in 2012-2014.⁷⁴ Recently, the share of girls enrolled to HE institutions was increasing steadily. In the 2015/2016 academic year, 33.2% of all students enrolled to higher educational institutions were girls.⁷⁵ And, for the first time in the last decade, a clear growth trend began to stabilise. The introduction of a national central standardised university entrance exam in 2014 might have had a positive impact on this.⁷⁶

Due to stereotypes, girls select traditional 'female' occupations which later results in gender segregation in the labour market. At the level of HE, in 2016/2017 women largely concentrated in subjects of study such as education, culture and arts, followed by economy. Men were highly present in all fields of study except education. In addition to this, there is a prevailing rural/ urban divide in access to higher education. In rural areas, the quality of education is much lower compared to urban areas and people from low-income families face difficulties in accessing higher education due to the commercialisation of the system. In terms of income levels, men and women belonging to households with high consumption levels are more likely to complete higher education compared to men and women belonging to households with low consumption levels.⁷⁷

4.2.7 Effective financing of education systems and education institutions

Higher Education

With a view to developing the higher education system and integrating into the European Higher Education Area, the government is currently focusing on joining the Bologna Declaration. Although the government has started undertaking some of the necessary reforms (for example, implementation of the European Credit Transfer and Accumulation System), yet major reforms, such

⁷⁴ Agency of Statistics under the President of Tajikistan: Women and Men in the Republic of Tajikistan, 2016

⁷⁵ Agency of Statistics under the President of Tajikistan: Women and Men in the Republic of Tajikistan, 2016

⁷⁶ Presentation of Mirboboev at the CAEP Regional Conference, Brussels, February 13, 2019

⁷⁷ The Republic of Tajikistan: Tajikistan: Analysis of the Higher Education Sector, 2014

as the establishment of a credible quality assurance system and national qualifications framework, are yet to be developed, adopted and operationalised. As the World Bank pointed out in their *Higher Education Sector Study*, the major overhaul of the higher education system, especially with regard to higher education governance, quality assurance, teaching, learning and student assessment, is to be undertaken as a matter of urgency.⁷⁸

The main problem of financing higher education in Tajikistan is the lack of public funding allocated from the budget. Strong economic growth in recent years has helped increase public funding for education in general, and for higher education. Primarily, due to low higher education enrolment rates relative to wealthier countries, higher education's share of the overall education budget is lower than that of wealthier countries, but similar to that of neighbouring countries⁷⁹.

There are two groups of higher education students in Tajikistan – those whose studies are funded by the government from the state budget (budgetary groups) and those who are self-funded and pay tuition fees (non-budgetary or contract groups). State HEIs primarily rely on two sources for financing: (i) the state budget for budget-seats; and (ii) tuition fees. Recently, the government started counting revenues raised by HEIs as part of the state budget for higher education; about 56% of the higher education budget is actually raised by HEIs themselves. Budget seats have been allocated to HEIs and programmes according to historical allocations without strategically reflecting the changing labor market demand.⁸⁰

Another challenge regarding the financing model of higher education is the unnecessary bureaucracy caused by involvement of different ministries. The main role of the state lies with the Ministry of Education and Science, while HEIs are accountable to the Ministry of Finance for the use of budgetary allocations. Other ministries are involved when discussing issues within their competence such as the Ministry of Labour, Migration and Employment of Population and the Ministry of Economy Development and Trade.

In terms of autonomy and governance, the Ministry of Education and Science retains strong control over higher education and the system remains heavily centralised. Similarly, budget allocation is not connected either with the educational process or its results but is solely based on the observance of established estimated assignments within the framework of the economic budget classification, i.e. financial discipline.

Vocational Education and Training

Vocational institutions are administered by two ministries – the Ministry of Labour, Migration and Employment (MLME) which administers primary vocational institutions and the Ministry of Education and Science (MES) which administers secondary vocational institutions. The division of responsibility between these two ministries for two levels of education is reflected in the strong divide between two delivery networks consisting of technical schools (colleges) and vocational schools, respectively. The Ministry of Education maintains full control of the general education element of vocational curricula, and decides on the certificate for which a given vocational programme can qualify. This means that there can be no revision of the content of VET programmes without the full participation of the Ministry of Education.⁸¹

⁷⁸ Republic of Tajikistan: Tajikistan: Higher Education Sector Study, 2014

⁷⁹ Republic of Tajikistan: Tajikistan: Higher Education Sector Study, 2014

⁸⁰ Republic of Tajikistan: Tajikistan: Higher Education Sector Study, 2014

⁸¹ The Reform of Vocational Education and Training in the Republic of Tajikistan, 2007

The main financing source of VET institutions is the public sector (the government) and the learners themselves through tuition fees. There are no additional sources of funding for VET institutions in Tajikistan, except for financial assistance from international organisations (Asian Development Bank, EU). For example, a recent ADB project in Tajikistan is targeted at unskilled youths and adults, especially women and girls, who will be able to obtain competitive technical qualifications, skills, and jobs from improved technical and vocational education and training.⁸²

⁸² <https://www.adb.org/publications/taj-strengthening-tvet-project-brief>

5 Uzbekistan

5.1 Country brief

Population (2018, January 1st estimate): 32,653,900⁸³

Uzbekistan is a landlocked country in Central Asia that borders with Kazakhstan, Tajikistan, Kyrgyzstan, Afghanistan and Turkmenistan. It is Central Asia's most populated country and most of its population are ethnic Uzbeks. It has an area of 447,400 square kilometres mostly covered by deserts and mountains. Its capital city is Tashkent. The Uzbekistan's economy is in a gradual transition to the market economy. Uzbekistan is a major producer and exporter of services, food products, energy products, ferrous and nonferrous metals, machinery and automobiles⁸⁴, it has become the largest electricity producer in Central Asia.⁸⁵ Uzbekistan has an estimated GDP per capita of USD 1,533.⁸⁶ Since 2016, major reforms are taking place in the framework of Uzbekistan's *Development Strategy for 2017-2021*. These reforms concern all sectors of the economy and education is not an exception. Reforms are profound in their nature and assume total reconsideration of the governance principles, liberalisation of the economy, enhancement of healthcare and education quality and access and others.⁸⁷

Education

There are currently 96 higher education institution in Uzbekistan out of which 24 are universities, 35 are institutes, 1 academy, 21 branches of HEI, 1 conservatory, 1 highest school, and 7 affiliations of foreign institutions.⁸⁸ HEIs report to the Ministry of Higher and Secondary Specialised Education (MHSSE), additionally specialised HEIs are coordinated by other sectoral ministries.⁸⁹ As of 2017, there were seven representations of foreign HEIs in Uzbekistan - the Plekhanov Russian Academy of Economics, the Westminster International University in Tashkent, the branch of Lomonosov Moscow State University, the Management Development Institute of Singapore, the Gubkin Russian State University of Oil and Gas, the Polytechnic University of Turin, and the Inha University.⁹⁰ All of them are located in Tashkent city. As of 2017, there was no registered private HEI in Uzbekistan.⁹¹

⁸³ The State Committee of the Republic of Uzbekistan on Statistics, report available from: <https://www.stat.uz/uploads/docs/demografiya-van-dek-2017-uz-.pdf>, accessed on 14 March 2019

⁸⁴ The State Committee of the Republic of Uzbekistan on Statistics, report available from: <https://stat.uz/ru/press-tsentr/analiticheskie-stati/433-analiticheskie-materialy-ru/2044-statistika-vneshnej-torgovli>, accessed on 14 March 2019

⁸⁵ <https://en.wikipedia.org/wiki/Uzbekistan>

⁸⁶ <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=TJ-UZ-KG-TM-KZ>

⁸⁷ <http://lex.uz/docs/3107042>

⁸⁸ Ministry of Higher and Secondary Specialised Education of the Republic of Uzbekistan, available from <http://www.edu.uz/ru/otm/index>, accessed on 14 March 2019

⁸⁹ <https://supportthere.org/page/higher-education-uzbekistan>

⁹⁰ <https://www.azernews.az/region/125247.html>

⁹¹ Overview of the Higher Education System: Uzbekistan, 2017

In the light of reforms in the educational sector, the government has opened its educational market to foreign educational providers. In 2018, Webster university has launched a programme on the basis of Tashkent University of World Languages, NCUK has launched admission to its foundation programmes, Amity University has announced plans to open campus in Uzbekistan in 2019-2020. Moreover, five major universities of the Russian Federation, namely National Research Technological University 'Moscow Institute of Steel and Alloys', Bauman Moscow State Technical University, Sechenov First Moscow State Medical University, Moscow Architectural University, Russian Technological University, have announced intentions to open affiliated branches in Uzbekistan.

One of the considerable reforms in 2016 is the full modernisation of bachelor and master curricula, in consideration of the best practices of successful universities of the world. The modernisation considers new requirements for teaching staff and study programmes have been revised and updated taking into account changing labour market requirements.⁹² This reform is based on sustainability principles and programmes are being reconsidered on a yearly basis.

The number of vocational colleges has grown rapidly, from under 50 in 1998 to over 1,500 in 2014.⁹³ Until 2018, the secondary VET education was coordinated by the Centre for Secondary Specialised Vocational Education under the Ministry of Higher and Secondary Specialised Education, after 2018 by the Centre for Professional Education under the Ministry of Higher and Secondary Specialised Education. Both the government and international partners have made significant investments in infrastructure in recent years, particularly in the secondary specialised education sector, to enhance the quality of vocational training.⁹⁴

Since 2016, the vocational education and training system has been going through major reforms. Together with the overall system, the transition between secondary and secondary specialised education has been reviewed in order to provide opportunities for students to choose between school/ lyceum/ college as opposed to lyceum/ college after completion of the first nine years of schooling starting from 2017/18 academic year. In 2018, a Decree of the President of the Republic of Uzbekistan *On Measures for Cardinal Improvement of the General Secondary, Secondary Specialised and Professional Education*⁹⁵ has been adopted. There are two major changes provided for in the decree. The first one is that from the 2018/2019 school year, compulsory general secondary and specialised secondary education is carried out in general education schools, including boarding schools, specialised schools, and academic lyceums on the basis of continuous and 11 years cycle. The second one is that starting from the 2019/2020 school year, admission to vocational colleges will be carried out from among graduates of 11th grade of general education schools on a voluntary basis in order to obtain the relevant specialty (profession) with a term of study from six months to two years. In 2018, Centre of Vocational Education has been created to replace the Centre for Secondary Specialised Vocational Education in order to further enhance the quality of vocational education in the country and support the implementation of the decree.

Useful links:

Ministry of Higher and Secondary Specialised Education: <http://www.edu.uz/en/>

National Erasmus+ Office: <http://www.erasmusplus.uz/>

UN Country Profile: <http://data.un.org/en/iso/uz.html>

⁹² <https://supporthere.org/page/higher-education-uzbekistan>

⁹³ <https://www.caep-project.org/uzbekistan/>

⁹⁴ <https://www.caep-project.org/uzbekistan/>

⁹⁵ <http://www.lex.uz/docs/3523198>

5.2 Overview of the current state of priorities

5.2.1 Qualification frameworks and standards

The existing structure of qualifications is well regulated in Uzbekistan and the system is centrally controlled by the relevant ministries. The system of qualifications has been considerably reconsidered after gaining independence by the Republic of Uzbekistan and current system is developed based on contemporary needs in country's development. The legislation in the area is aiding further development of the system both structurally and content-wise. A lot of emphasis is given to the employment of international experience for the development of the current system and ensuring continuity of education.⁹⁶

In Uzbekistan, the direct management of the educational institutions is mainly carried out by two sectorial ministries - the Ministry of Public Education (MPE) and the Ministry of Higher and Secondary Specialised Education (MHSSE). On September 30, 2017, the Ministry of Pre-School Education of Uzbekistan was formed to carry out single policy in pre-school education⁹⁷. Requirements regarding the quality and content of education, necessary levels of students' training as well as qualification requirements are defined in the State Educational Standard (SES), which are regularly updated. It is a basis for preparation of other normative documents, regulating the educational process and evaluating the activities of educational institutions.

Most educational establishments in Uzbekistan that award exit qualifications are working based on the National Classifier code, i.e. all exit qualifications are assigned one of the codes, which is used to determine the qualifications and relevant SES that was used in order to provide education for this particular profession. The list of modules and number of study hours for each module (in accordance with SES) are defined in the teaching plans that are approved by the rector of the university and are further disseminated to the faculties. All individual module programmes are then developed based on the teaching plans and SES.

Although there is no National Qualification Framework (NQF) currently present in Uzbekistan, many systems that have been employed can serve as a basis for its development. While individual specialities and areas have their own set of standards and qualifications that are centrally regulated, the overall national framework for all levels would make it easier to compare education in Uzbekistan to its equivalents in other countries and make it easier to develop and modify the internal structure of qualifications. As identified in the Central Asia Education Platform study in 2016, another potential area of development could be for all SESs to be cross-comparable and developed based on a single framework at the national and international level.⁹⁸ As most SESs are available in Uzbek language, an English and a Russian version would be helpful as well – English to allow international comparison and Russian to enable better regional integration.

5.2.2 Quality assurance and accreditation

In Uzbekistan, as already mentioned, there is no formal National Qualifications Framework in place. However, there are NQF-type instruments such as the State Educational Standards and National

⁹⁶ National Qualifications Framework in Central Asia, 2016

⁹⁷ Ministry of Pre School Education of Uzbekistan, official website, available from: <http://mdo.uz>

⁹⁸ National Qualifications Framework in Central Asia, 2016

Classificators that provide a structure of defined and validated qualifications, awarded at defined levels. These specify how qualifications relate to each other and thus how a learner can progress between them. In higher education, level structures are similar to the Bologna framework. Currently, qualifications and curricula are adopting learning outcomes approaches; an example is the state educational standard for foreign languages.⁹⁹

The State Inspection for Supervision of Quality in Education under the Cabinet of Ministers of the Republic of Uzbekistan is authorised to undertake attestation and state accreditation of all educational establishments in Uzbekistan regardless of their corporate subordination or type of ownership.¹⁰⁰ Prior to 2017, this function was carried out by the State Testing Centre under the Cabinet of Ministers of the Republic of Uzbekistan. Rating of HEIs aiming to stimulate the improvement of their quality has been introduced by the resolution *On the Introduction of a System of Rating Assessment of Higher Educational Establishments of the Republic* (2012). A revised version of the rating system has been implemented in 2018 by the State Inspection for Supervision of Quality in Education and its results as well as methodology are available in public domain.¹⁰¹ The revised rating is based on Times Higher Education (THE), Quacquarelli Symonds (QS), Academic Ranking of World Universities (ARWU) and other renown rating systems.¹⁰² In case of international universities, internal quality assessments are conducted by foreign partners. Although educational institutions are not seeking independent accreditation in Uzbekistan as it is not required by law, current reforms facilitate increased presence of foreign providers of education in the market, which in turn increases presence of independent accreditation in addition to state accreditation in the country.

Quality assurance is mainly concerned with educational standards and accreditation. Its elements are included in the legislation covering education - the law of the Republic of Uzbekistan *On Education* (1997), the *National Programme on Personnel Training* (1997), the Cabinet Ministers' Resolution *On Development and Introduction of Educational Standards to the System of Continuous Education* (1998) and resolution *On Approval of the State Higher Education Standards* (2015).

One element of quality assurance is strong employer input to curricula and qualifications, so that this provides some degree of labour market relevance to new qualifications. The ministries are careful to consult employers and also bring in foreign experts to advise on some aspects of qualification design. However, given limited progress of NQF plans, there are, unsurprisingly, no mechanisms to monitor the NQF's development and the country is not a member of any international network in quality assurance.¹⁰³

5.2.3 Employment and labour market needs

Uzbekistan is not a member of the Bologna Process and has no particular mechanisms supporting its implementation developed yet. The law *On Education* 'determines the legal basis of training, education, professional training of citizens and is aimed at providing constitutional right of everyone on education.'¹⁰⁴ An important legislation is the Decree of the President of the Republic of Uzbekistan

⁹⁹ https://connections.etf.europa.eu/wikis/home?lang=en#!/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Uzbekistan%20-%20NQF%20inventory

¹⁰⁰ Overview of the Higher Education System: Uzbekistan, 2017

¹⁰¹ The State Inspection for Supervision of Quality in Education, rating of higher educational establishments, available from <<http://reyting.tdi.uz>>, accessed on 14 March 2019

¹⁰² State Inspection for Supervision of Quality in Education under the Cabinet of Ministers of the Republic of Uzbekistan, official website, <http://tdi.uz/uz/news/view/yurtimizdagi-oliy-talim-muassasalari-reytingi-infografika>

¹⁰³ https://connections.etf.europa.eu/wikis/home?lang=en#!/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Uzbekistan%20-%20NQF%20inventory

¹⁰⁴ <http://cis-legislation.com/document.fwx?rgn=846>

On Measures to Further Expand the Participation of Industries and Economic Sectors in Improving the Quality of Training of Specialists in Higher Education (2017) aiming to strengthen the cooperation among education, science and business in ensuring highly qualified experts for the needs of Uzbek economy. Similarly, a decree from January 2018, *On Measures for Improvement of the System of Secondary, Secondary Specialised and Vocational Education*, aims to improve the education sector based on experience of developed foreign states and to create conditions for training highly skilled specialists.

Overall economic development of the country is guided by successive governmental industrial modernisation policies aiming at expansion of the middle class, promotion of shared prosperity, and elimination of poverty through the creation of quality jobs. Uzbekistan has a very young and rapidly growing population. As a result of demographic trends, the country is experiencing a rapid increase in the working age population, significantly increasing the number of the population overall. The highest employment rates have been registered in construction, the housing and communal sector, domestic services, trade and public catering, transport and communication.¹⁰⁵

The reforms in educational sector are ongoing. Since 1998, Uzbekistan has extended compulsory education from 9 to 12 years. Within the compulsory upper secondary segment, the vast majority of students (93%) were directed into a VET stream. The remaining 7% attended lyceums with a more academic profile. As a result of this approach, the percentage of the total student population in upper secondary education is extremely high. Given the size of its VET system (which catered for over 1.4 million students in 2015), Uzbekistan has focused on supporting VET provision of comparable quality in terms of teaching and infrastructure in urban and rural settings, so that students can study close to their homes. In its Torino Process report, Uzbekistan also refers to an attempt to link VET provision in rural areas to rural development programmes and development plans for the agricultural and agri-food sector.¹⁰⁶ In 2017, the schooling system was reconsidered and currently Uzbekistan has 11 years of compulsory schooling. The option to stay at school until grade 11 or to transfer to a lyceum/college for two years of upper secondary education has been introduced and on the first launch resulted in majority of students making a decision to stay at schools. This has temporarily decreased pressure on the VET sector, but created a challenge for the schooling system coordinated by the Ministry of Public Education, which is also currently undergoing a major period of transformation.

Differences between rural and urban experiences are important in terms of ensuring that the benefits of vocational education are evenly distributed. The Government acknowledges that the quality of the workforce is important to meeting the occupation and qualification requirements of employers and, as a result, the engagement of business sector in the VET system is highly developed in Uzbekistan. Over the last few years, the business sector participated in implementation of programmes aimed at improving employability and employment of VET graduates, in elaboration of new professional standards for emerging VET sectors, and in development of small businesses and entrepreneurship in VET system.¹⁰⁷ This is further enhanced by the current reforms as VET educational establishments are to be transferred to relevant sectoral ministries, departments, business associations, commercial banks and large enterprises, which even further increases their link with the employers.

¹⁰⁵ https://connections.etf.europa.eu/wikis/home?lang=en#!/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Uzbekistan%20-%20NQF%20inventory

¹⁰⁶ Torino Process 2016-17: Central Asia, 2017

¹⁰⁷ Executive Summary of the Torino Process 2016-17: Uzbekistan report, 2017

5.2.4 Innovative teaching methods

The right to education for all country's citizens is grounded in the Constitution of the Republic of Uzbekistan. The law *On Education 'determines the legal basis of training, education, professional training of citizens and is aimed at providing constitutional right of everyone on education'*,¹⁰⁸ Over the last years, Uzbekistan has been experiencing a number of reforms and the field of education is not an exception. The Decree of the President of the Republic of Uzbekistan *On Measures for the Further Development of the Higher Education System* of April 20, 2017 focuses on the improvement of the education - a fundamental revision of the content of training of personnel at the level of international standards. At the same time, the *Programme for the Comprehensive Development of the Higher Education System for the Period 2017-2021* has been approved. It considers measures to strengthen and modernise the technical base of higher education institutions, equipping them with modern educational and scientific laboratories and modern information and communication technologies.¹⁰⁹

Modern higher education in Uzbekistan uses a wide range of interactive teaching methods and innovation technologies such as computer simulations, business games, case studies and others. The State Educational Standards recommend various teaching methods and techniques in the education process - interactive education methods, problem solving technique, game-based techniques, pedagogical strategies for the development of critical thinking, learner-centred education technologies, education technologies based on the effective organisation and management of the education process, differential training, individualisation of education, programmed learning technologies, integrated teaching methods and others. Teachers have the right to choose their teaching methodology and technique. The list of the main training materials for the compulsory disciplines is recommended by a programme, developed by the leading HEIs together with other HEIs and approved by MHSSE.¹¹⁰

The government also supports the system of retraining and enhancement of knowledge, skills and competences to accommodate for personal and profession development of citizens. In many areas such as health, education and state service, the workers are required to attend professional development events. At the same time, professional development activities are also organised for unemployed citizens at the state level. These initiatives are supported by the resolution of the Cabinet of Ministers *On Measures for Creation of Professional Training Centres for Unemployed Citizens on the Territory of the Republic of Uzbekistan*.¹¹¹ Moreover, professional development abroad is also supported by the government through the '*El-yurt umidi*' *Foundation for Training Specialists Abroad and the Dialogue with Compatriots*.¹¹² These measures are financed through various channels including State Budget of the Republic of Uzbekistan, tuition fees of students, charitable donations of individuals and legal entities, grants from international financial institutions and foreign organisations, State Employment Promotion Fund, as well as other sources not prohibited by law.

Some universities run their own professional development programmes, which are available to public as well as staff. For example, Westminster International University in Tashkent (WIUT) is running a special course in teaching and learning for the past 12 years aimed at pedagogical skills

¹⁰⁸ <http://cis-legislation.com/document.fwx?rgn=846>

¹⁰⁹ http://mdis.uz/educating_for_innovation_and_innovation_in_education

¹¹⁰ Overview of the Higher Education System: Uzbekistan, 2017

¹¹¹ https://nrm.uz/contentf?doc=497580_postanovlenie_kabineta_ministrov_respubliki_uzbekistan_ot_10_04_2017_g_n_199_o_merach_po_sozdaniyu_centrov_professionalnogo_obucheniya_bezrabotnyh_grajdan_na_territoriyah_respubliki_uzbekistan&products=1_vse_zak_onodatelstvo_uzbekistana

¹¹² https://nrm.uz/contentf?doc=557610_ukaz_prezidenta_respubliki_uzbekistan_ot_25_09_2018_g_n_up-5545_ob_organizacii_deyatelnosti_fonda_el-yurt_umidi_po_podgotovke_specialistov_za_rubejom_i_dialogu_s_sootchestvennikami_pri_kabinete_ministrov_respubliki_uzbekistan&products=1_

development and exposure to diversity of teaching, learning and assessment methods. Moreover, WIUT is running short executive courses such as 'Assessment Matters' where participants are exposed to the learning outcomes-based approach, assessment principles and techniques. The university delivers programmes validated by the University of Westminster in the UK and shares best practices of European system of education with wider community in Uzbekistan.

5.2.5 Contribution of education to prevent violent radicalisation of youth

On June 11-12, 2018, the Government of Uzbekistan along with the Organisation for Security and Co-operation in Europe (OSCE) organised an international conference on *Role of Youth in Preventing and Countering Violent Extremism and Radicalization that Lead to Terrorism* that took place in Tashkent and Samarkand. 164 experts from 22 countries and international organisations such as United Nations (UN), OSCE, European Union (EU), and about 50 members from the Youth Union of Uzbekistan participated in the conference to discuss a common understanding on the issue of preventing and countering violent extremism and radicalisation that leads to terrorism.¹¹³ The key objective of the conference was to look at best practices and develop a holistic approach to preventing and countering the spread of violent extremism and terrorism among the youth. Experts like S. Frederick Starr and Savante E. Cornell have argued that Uzbekistan can be viewed as a new model for reform in the Muslim world. According to them, 'Uzbekistan is laying the foundation of an important and unprecedented new direction and model for the Muslim World.'¹¹⁴ This approach evolved over the last two decades and is now focusing on the youth and raising awareness among them. More than 62% of the population comprises of young people under the age of 30 in Uzbekistan, hence the greater stress on various youth programmes.¹¹⁵

The Youth Council in Uzbekistan is central to the cause of youth development. More than 10 million youth are part of this union. In addition to this, Uzbek Government has intensified its effort particularly in relation to the migrant youth by providing them with education and options of employment. At the same time, the Uzbek government has also given help to some 9,000 children of extremists who were involved in acts of terrorism.¹¹⁶ The Uzbek Government also pays special attention to promoting art, culture, and sports in its various programmes for the youth. For example, under its state programme for further improvement of children's music and art schools for 2016-2020, 278 music and art schools have been built. These are equipped with modern training equipment and musical instruments.¹¹⁷

All the above-mentioned efforts and initiatives are being supported and reinforced by Uzbekistan's active measures in relation to inclusive education of children and young people. As a result, progress has been made in the effective integration of children with disabilities into mainstream education. As of 2017, 5,000 teenagers with disabilities (including hearing impairment, visual impairment, musculoskeletal disorders and common diseases, and mild or moderate learning disabilities) were studying at vocational colleges and academic lyceum in Uzbekistan.¹¹⁸ The annual Resolution of the Cabinet of Ministers *On Admission to Secondary Specialised, Vocational Educational Institutions in the Republic of Uzbekistan* pays special attention to the creation of conditions and guarantees for the right

¹¹³ <https://idsa.in/idsacomments/preventing-and-countering-violent-extremism-uzbek-model-msroy-270618>

¹¹⁴ Uzbekistan: A New Model for Reform in the Muslim World, 2018

¹¹⁵ <https://idsa.in/idsacomments/preventing-and-countering-violent-extremism-uzbek-model-msroy-270618>

¹¹⁶ <https://idsa.in/idsacomments/preventing-and-countering-violent-extremism-uzbek-model-msroy-270618>

¹¹⁷ <https://idsa.in/idsacomments/preventing-and-countering-violent-extremism-uzbek-model-msroy-270618>

¹¹⁸ Torino Process 2016-17: Uzbekistan: Executive Summary, 2017

to choose an educational institution for children with special educational needs. An important aspect of the Uzbek VET system, which is unparalleled in international educational practice, is that young people with disabilities (based on the nature and complexity of their condition) who have graduated from academic lyceums and vocational colleges on the basis of integrated education, and adolescents (based on the nature and complexity of their condition) who have completed 12-year compulsory education under general terms have equal rights. In other words, after graduating, students have a sufficient level of knowledge to enter higher educational institutions and continue in their selected specialism.¹¹⁹

5.2.6 Contribution of education in addressing gender inequalities

Gender equality in education in Uzbekistan is guaranteed by the Constitution of the Republic of Uzbekistan. According to the law *On Education*, adopted in 1997, men and women have equal rights to education and choice of profession regardless of sex, language, age, race, ethnicity, convictions, attitude to religion, social origin, types of actions, public standing, place of residence and length of residence in the territory of the Republic of Uzbekistan.¹²⁰ There is no evidence of gender inequality in the system of continuous education in Uzbekistan as the state focuses on the coverage of girls' training at academic lyceums and vocational colleges. As a result, the enrolment of girls has increased in professions such as knitted-garment technologist, seamstress, cook, fashion designer, hair stylist and master of decorative art.¹²¹

Gender equality is almost balanced at vocational colleges (49.1% of the pupils are girls and 50.9% are boys). However, at the same time, there are significant disparities in vocational colleges in terms of the distribution of students by areas of specialisation. Girls are in the majority in professions such as education (76.3% girls, 23.7% boys), and healthcare, physical education and sport (75.6% and 24.4%, respectively), while boys are in the majority in professions in the field of transport and communications (71.3% boys, 28.7% girls), manufacturing and construction facilities, and agriculture (60.4% and 39.6%, respectively).¹²² Labour statistics confirm a similar trend. In the labour market, women are heavily concentrated in health, wellness, social welfare and education (81.6%), culture, arts, science (72.1%). Men are highly concentrated in construction (92%), transport, and communication (88.7%).¹²³

In 2014, the State Committee on Statistics of the Republic of Uzbekistan in cooperation with the Women's Committee of Uzbekistan established a separate web-page dedicated to gender statistics. Nevertheless, obtaining access to reliable gender statistics in Uzbekistan is a major challenge. Current publicly available gender statistics lack globally identified indicators.¹²⁴ This concern is also relevant to the education sector, where available gender statistics also lacks globally identified indicators. Statistics on enrolment to VET and HE institutions found in public access, demonstrates a persistent gender gap. Despite small increase in enrolment of girls to HE since 2012 (by 2%), the enrolment of boys to HE is two times higher than that of girls.¹²⁵ Despite formal equality in access to education in Uzbekistan, there are several obstacles for girls to access VET and HE. Similarly to other Central Asia

¹¹⁹ Torino Process 2016-17: Uzbekistan: Executive Summary, 2017

¹²⁰ Torino Process 2016-17: Uzbekistan: Executive Summary, 2017

¹²¹ Torino Process 2016-17: Uzbekistan: Executive Summary, 2017

¹²² Torino Process 2016-17: Uzbekistan: Executive Summary, 2017

¹²³ <https://gender.stat.uz/en/>

¹²⁴ Uzbekistan Country Gender Assessment: Update, 2018

¹²⁵ Gender Equality in Higher Education and Vocational educational and Training in Central Asia, 2019

countries, one of the major obstacles are entrenched gender stereotypes about roles of women and men in society. The location of higher educational institutions (mainly in Tashkent, Samarkand, Republic of Karakalpakstan) and costs associated with accommodation and travel as well as costs of studies for HE are decisive for making choices of continuation of education by girls and boys in families. Families, especially the low-income ones, tend to prioritise boys over girls in investing to education. Besides, age of enrolment to HE coincides with the traditionally appropriate marriage age for girls which tends to be prioritised.¹²⁶

Like other Central Asian countries, Uzbekistan maintains a list of works with unfavourable working conditions on which use of women's labour is fully or partially prohibited¹²⁷; however, unlike other Central Asian countries, the government has publicly announced that the list will cease to exist after May 1, 2019¹²⁸. Another example of shifting approaches is that Uzbekistan has had a Women Committee, which addresses some issues of gender inequality since 1991, and in 2019, it was proposed to create the Men Committee¹²⁹ in the Republic, which indicates the change in perception of gender equality in the society. Moreover, the *Development Strategy for 2017-2021*, under its clause 4.2 states that one of its goals is '*improvement of the system of social protection of the population and health care, increasing the socio-political activity of women*'. These steps indicate that Uzbekistan is taking concrete steps to ensure eradication of gender inequality.

5.2.7 Effective financing of education systems and education institutions

Higher Education

In Uzbekistan, the annual public expenditure on education accounts for 10-12% of GDP. More than 70% of public expenditure on education is allocated to general secondary and specialised secondary as well as vocational education.¹³⁰ A new funding system for public-funded institutions, which was introduced in 1999, has improved their capacity for a more flexible and efficient use of extra-budgetary resources, self-financing and the attraction of private and foreign investment. Higher education institutions are funded from the central budget. The share of private funding (i.e. tuition fees) reaches 60% of the total funding of current expenditures of HEIs.¹³¹ A new per-capita financing procedure of normative planning and budgeting of HEIs was introduced from September 1, 2010. The budget for each HEI is calculated taking into consideration the basic normative expenditure for training of one student on state grant. Routine expenditures of HEIs mainly include staff costs, student stipends, social payments and taxes, as well as expenditures for routine repairs and renovations and consumables.¹³²

In 2017, Decree of the President of the Republic of Uzbekistan *On Measures for Further Development of Higher Education System*¹³³ was approved and provided for the financing of its implementation. The decree has approved the *Programme for the Integrated Development of the Higher Education System for the period 2017-2021*. The funds are provided for works on construction, reconstruction, overhaul and equipment of educational and scientific laboratory buildings, sports facilities, social and engineering infrastructure, taking into account their technical condition, as well as the material and technical security of each higher educational institution. The decree also stipulates that the State

¹²⁶ Uzbekistan Country Gender Assessment: Update, 2018

¹²⁷ <http://lex.uz/docs/514958#523439>

¹²⁸ <https://www.gazeta.uz/ru/2019/03/07/women/>

¹²⁹ <https://upl.uz/policy/10446-news.html>

¹³⁰ Overview of the Higher Education System: Uzbekistan, 2017

¹³¹ Overview of the Higher Education System: Uzbekistan, 2017

¹³² Overview of the Higher Education System: Uzbekistan, 2017

¹³³ <http://www.lex.uz/docs/3523198>

Investment Committee of the Republic of Uzbekistan, together with interested ministries and departments, should carry out systematic work with international financial institutions and foreign donors to attract concessional foreign loans and grants for the implementation of the programme. Finally, it indicates that the main source of funding for the implementation of the programme would be the Foundation on Development of the Material and Technical Base of Educational and Medical Institutions under the Ministry of Finance of the Republic of Uzbekistan as well as resources of state corporations who oversee some specific educational institutions.

Over 90% of extra-budgetary funds come from student tuition fees. Other sources of income of HEIs are educational services, entrepreneurial, consulting, expert, publishing, research and other activities in accordance with the University Charter.¹³⁴ These funds may be used mainly for further improvements of infrastructures and facilities. Enterprises, institutions and individuals offer education grants for students to cover tuition fees in order to meet the demand for particular specialists or in order to obtain corresponding higher education. International HEIs operating in Uzbekistan are almost fully financially independent, because they are largely financed from tuition fees paid by students. For instance, Turin Polytechnic University operates under Uzavtoprom Association and its expenditures are covered largely from internal funds of the Association and partially from tuition fees.¹³⁵

The role of tuition fees is not underestimated and recent reforms allow for universities to establish the fees at the sustainability level. One example of accumulating funds from fees is introduction of so-called 'super contract'. Due to the fact that places in higher education are limited based on the quota, applicants who have achieved the minimum admission requirements but could not score enough points to take the place as per quota are given a chance to study provided that their tuition fees are higher. This allows universities to accumulate additional funds to be directed for development, research and improvement of their material-technical base as well as provide opportunity for youth to obtain education. This example is a part of a wider change, which aims at moving away from centrally planned quota to university planned quota. From 2019/20 academic year, it is planned that the universities would be able to establish their own admission quotas based on the labour market needs and their capabilities to deliver quality education. This in turn would contribute to the government aim to increase the coverage of population with higher education.

Currently, Uzbekistan has many examples of self-sustainable educational establishments at pre-school and school level, and some examples of self-sustainable universities. Current reforms potentially would lead to increased number of institutions in VET and HE systems that would be able to sustain themselves with a decreased reliance on the state budget.

Vocational Education and Training

In terms of financing generally, Uzbekistan's education system outperforms peer countries in the lower middle-income group. Public spending on education is high in Uzbekistan and closer to those found in higher income countries. In 2010, total education expenditures reached 33.8% of the public budget and 8.3% of GDP.¹³⁶ Around 24% of the education budget is being used for financing of the secondary specialised professional education.¹³⁷ Since 2010, per-capita financing has been gradually introduced in the financing model of secondary specialised professional education in Uzbekistan. There are also some existing examples of specific industry support for vocational education in some

¹³⁴ Overview of the Higher Education System: Uzbekistan, 2017

¹³⁵ Overview of the Higher Education System: Uzbekistan, 2017

¹³⁶ Data of the Ministry of Finance of the Republic of Uzbekistan. Quoted from Torino Process: Uzbekistan, 2012

¹³⁷ Calculated based on the Ministry of Finance's data (including recurrent and capital expenditures). Quoted from Torino Process: Uzbekistan, 2012

sectors, for example automotive industry where General Motors provided financing for some schools or the petrochemicals/ gas sector where industry supports vocational training for workers in the industry.

Vocational Education and Training system also undergoes major reforms in Uzbekistan. In 2018, a Decree of the President of the Republic of Uzbekistan *On Measures for Cardinal Improvement of the General Secondary, Secondary Specialised and Professional Education*¹³⁸. According to the decree, vocational colleges were transferred to sectoral subordination to relevant ministries, departments, business associations, commercial banks and large enterprises, taking into account existing real personnel needs in accordance with the target parameters of regional socio-economic development programmes and the labour market forecast. This transition has a major impact on financing of professional colleges. It stipulates that the maintenance of vocational colleges at the expense of the State Budget of the Republic of Uzbekistan is carried out until the completion of the training of students admitted to study in vocational colleges until the 2017/2018 academic year (inclusive). Organisations that have taken responsibilities for vocational colleges have received a number of privileges in the form of tax exemptions and compulsory payments. The funding of professional colleges under the ministries and state departments is drawn from funds received for training on a fee-contract basis; budgetary and extra-budgetary funds of ministries and departments, provided annually in their estimates of expenditures for these purposes; funds from other sources not prohibited by law. While professional colleges transferred to business associations, commercial banks and large enterprises should draw funds not only from fees and other sources but also from own funds as they have no budgetary allocations. At the same time, the government also provides for admission of students from low-income families to professional (multidisciplinary) colleges, regardless of jurisdiction, free of charge.

In terms of governance, the latest changes have reduced the financial pressure on the government. As under previous regulations expenditure was high, partnerships with the business community should provide boost to further development of a continuing vocational sector. This could further be developed on regional basis, or through an industry-sectoral approach, or through a national process.¹³⁹

¹³⁸ <http://www.lex.uz/docs/3523198>

¹³⁹ Torino Process: Uzbekistan, 2012

6 Turkmenistan

[to be added]

7 References

- 60% of University Graduates in Kazakhstan Do Not Work in Their Specialty.* (November 12 2018). Retrieved from <https://www.zakon.kz/4945546-60-vypusknikov-vuzov-v-kazahstane-ne.html>
- Almaty Conference Focuses on Preventing Youth Radicalisation.* (December 13 2018). Retrieved from http://central.asia-news.com/en_GB/articles/cnmi_ca/features/2018/12/13/feature-01
- Asian Development Bank. (2018). *Uzbekistan Country Gender Assessment: Update.* Retrieved from <https://www.adb.org/sites/default/files/institutional-document/479841/uzbekistan-country-gender-assessment-update.pdf>
- Astana Declaration.* (June 23 2017). Retrieved from <http://events.caep-project.org/astana2017/download/astana-declaration/?wpdmdl=216>
- Central Asia Education Platform Newsletter.* (June 2 2016). Retrieved from http://www.caep-project.org/wp-content/uploads/2017/04/Newsletter_2_June-2016_EN_V2.4_Normal.pdf
- Central Asia Education Platform Newsletter.* (October 3 2016). Retrieved from file:///C:/Users/lucia/Desktop/Summary%20Report/Useful%20documents/Kyrgyzstan/Newsletter_3_Oktober-2016_En.pdf
- Central Asia Education Platform. (2016). *National Qualifications Frameworks in Central Asia.* Retrieved from <https://www.caep-project.org/studies-and-reports/>
- Central Asia Education Platform. (2017). *Current State of Reform Developments in Central Asia Countries with regard to HE (Bologna Process) and VET (Torino Process).* Retrieved from <https://www.caep-project.org/studies-and-reports/>
- Central Asia Education Platform. (2018). *Good Practices in CA and the EU on Collaboration between Business and HE and VET Institutions to Strengthen Employability of HE and VET Graduates.* Retrieved from <https://www.caep-project.org/studies-and-reports/>
- Central Asia Education Platform. (2018). *The Role of Education in Supporting Social Inclusion and Resilience against Radicalisation among Youth in the EU and in CA.* Retrieved from <https://www.caep-project.org/studies-and-reports/>
- Central Asia Education Platform. (2019). *Effective Financing of Education Systems and Education Institutions in HE and VET in the EU and Central Asia.* Retrieved from <https://www.caep-project.org/studies-and-reports/>
- Central Asia Education Platform. (2019). *Effective Financing of Education Systems and Education Institutions in HE and VET in the EU and Central Asia.* Retrieved from <https://www.caep-project.org/studies-and-reports/>
- Central Asia Education Platform. (2019). *Gender Equality in Higher Education and Vocational Education and Training in Central Asia.* Retrieved from <https://www.caep-project.org/studies-and-reports/>

Central Asia Education Platform. (2019). *Teaching and Learning Innovation in Higher Education and Vocational Education and Training*. Retrieved from <https://www.caep-project.org/studies-and-reports/>

Committee on Statistics: Ministry of National Economy of the Republic of Kazakhstan. [n.d.]. Retrieved from <http://stat.gov.kz/>

Development of Kazakhstan's Education System: Presentation. (October 11 2018). Retrieved from https://www.caep-project.org/wp-content/uploads/2018/08/Chikibayeva_Presentation_EN.pdf

EACEA. (2017). *Overview of the Higher Education System: Kazakhstan*. Retrieved from http://www.erasmusplus.kz/attachments/article/196/countryfiche_kazakhstan_2017.pdf

Education Development Strategy of the Kyrgyz Republic for 2012-2020. [n.d.]. Retrieved from <https://www.globalpartnership.org/country/kyrgyz-republic>

ETF. (2007). *The Reform of Vocational Education and Training in the Republic of Tajikistan*. Retrieved from <https://www.etf.europa.eu/en/publications-and-resources/publications/reform-vocational-education-and-training-republic>

ETF. (2017). *Torino Process 2016-17: Central Asia*. Retrieved from <https://www.etf.europa.eu/en/publications-and-resources/publications/torino-process-2016-17-central-asia>

ETF. (2017). *Torino Process 2016-17: Kyrgyzstan: Executive Summary*. Retrieved from <https://www.etf.europa.eu/en/publications-and-resources/publications/torino-process-2016-17-kyrgyzstan-executive-summary>

ETF. (2017). *Torino Process 2016-17: Uzbekistan: Executive Summary*. Retrieved from <https://www.etf.europa.eu/en/publications-and-resources/publications/torino-process-2016-17-uzbekistan-executive-summary>

ETF. *Torino Process 2016-17: Kazakhstan*. Retrieved from <https://www.etf.europa.eu/en/publications-and-resources/publications/torino-process-2016-17-kazakhstan-executive-summary>

European Commission. (2017). *Overview of the Higher Education System: Tajikistan*. Retrieved from https://eacea.ec.europa.eu/sites/eacea-site/files/countryfiche_tajikistan_2017pdf.pdf

European Commission. (2017). *Overview of the Higher Education System: Uzbekistan*. Retrieved from https://eacea.ec.europa.eu/sites/eacea-site/files/countryfiche_uzbekistan_2017.pdf

Foreign Universities in Uzbekistan Exempt from All Taxes. (January 10 2018). Retrieved from <https://www.azernews.az/region/125247.html>

Gender Study: How Kazakhstan Implements Policies for Women and Men. (August 11 2017). Retrieved from <https://www.zakon.kz/4872564-gendernoe-issledovanie-kak-v-kazahstane.html>

Higher Education in Kyrgyzstan. [n.d.]. Retrieved from https://supportthere.org/page/higher-education-kyrgyzstan#_Toc488826499

Higher Education in Uzbekistan. [n.d.]. Retrieved from <https://supportthere.org/page/higher-education-uzbekistan>

Inventory of NQF Recent Developments in ETF's Partner Countries: Uzbekistan. (February 27 2017). Retrieved from

https://connections.etf.europa.eu/wikis/home?lang=en#!/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Uzbekistan%20-%20NQF%20inventory

Kazakhstan. [n.d.]. Retrieved from <https://data.worldbank.org/country/kazakhstan>

Kazakhstan. [n.d.]. Retrieved from <https://www.etf.europa.eu/en/regions-and-countries/countries/kazakhstan>

Kazakhstan: Country Context. [n.d.]. Retrieved from <https://www.worldbank.org/en/country/kazakhstan/overview#1>

Kazakhstan: Overview. [n.d.]. Retrieved from <https://www.worldbank.org/en/country/kazakhstan/overview>

Kochorbaeva, Z. et al. (2016). *Gender and Inclusive Assessment of Education in Kyrgyz Republic: Analytical Review*.

Kyrgyz Republic. [n.d.]. Retrieved from <https://data.worldbank.org/country/kyrgyz-republic?view=chart>

Kyrgyz Republic: Overview. [n.d.]. Retrieved from <https://www.worldbank.org/en/country/kyrgyzrepublic/overview>

Law of the Republic of Uzbekistan: About Education. (August 29 1997). Retrieved from <http://cis-legislation.com/document.fwx?rgn=846>

Ministry of Education and Science of the Republic of Kazakhstan. [n.d.]. Retrieved from <http://www.edu.gov.kz/ru/index.php>

Mirboboev. (February 13 2019). *Ongoing Reforms and Achievements in the Education System of the Republic of Tajikistan Presentation*. Retrieved from https://www.caep-project.org/wp-content/uploads/2019/02/CAEP_RC_Brussels_TJK_Mirboboev_en_25_2slides_bw.pdf

National Qualifications Framework. [n.d.]. Retrieved from <http://www.cedefop.europa.eu/en/events-and-projects/projects/national-qualifications-framework-nqf>

National Strategy for the Development of Education of the Republic of Tajikistan until 2020. (2012). Retrieved from <http://planipolis.iiep.unesco.org/en/2012/national-strategy-education-development-republic-tajikistan-till-2020-5674>

NQF Inventory Kazakhstan 2018. (January 14 2019). Retrieved from https://connections.etf.europa.eu/wikis/home?lang=en#!/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Kazakhstan%20-%20NQF%20Inventory

NQF Inventory Kyrgyzstan 2018. (January 10 2019). Retrieved from https://connections.etf.europa.eu/wikis/home?lang=en#!/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Kyrgyz%20Republic%20-%20NQF%20Inventory

NQF Inventory: Tajikistan. (March 8 2017). Retrieved from https://connections.etf.europa.eu/wikis/home?lang=en#!/wiki/Wf591e43b607e_4ccf_8d94_a3256a255147/page/Tajikistan%20-%20NQF%20Inventory

OECD. (2018). *Education Policy Outlook: Kazakhstan*. Retrieved from <http://www.oecd.org/education/Education-Policy-Outlook-Country-Profile-Kazakhstan-2018.pdf>

On Amendments and Additions to Certain Legislative Acts of the Republic of Kazakhstan on the Expansion of Academic and Managerial Independence of Higher Educational Institutions. [n.d.]. Retrieved from https://online.zakon.kz/Document/?doc_id=39633866#pos=1;-16

On Amendments to the Order of the Minister of Education and Science of the Republic of Kazakhstan. (April 20 2011). Retrieved from <http://adilet.zan.kz/rus/docs/V1800017554#z6>

Open College. [n.d.]. Retrieved from <http://opencollege.kz/>

OSCE Office in Tajikistan Holds Workshop on Role of Youth in the Prevention of Terrorism. (May 19 2017). Retrieved from <https://www.osce.org/office-in-tajikistan/318226>

Project Serpin-2050. (2016). Retrieved from <https://bolashak.gov.kz/ru/novosti/1062-proekt-serpin-2050-uspeshno-realizuetsya.html>

Roy, M. S. (June 27 2018). *Preventing and Countering Violent Extremism: The "Uzbek Model"*. Retrieved from <https://idsa.in/idsacomment/preventing-and-countering-violent-extremism-uzbek-model-msroy-270618>

Saidhonov, S. [n.d.]. *Educating for Innovation and Innovation in Education.* Retrieved from http://mdis.uz/educating_for_innovation_and_innovation_in_education

Shamatov, D. A. (2015). *Teachers' Pedagogical Approaches in Kyrgyzstan: Changes and Challenges.* Bangkok: UNESCO Commissioned Study.

Social Inclusion. [n.d.]. Retrieved from <https://www.unicef.org/kazakhstan/en/social-inclusion>

Starr, S. F. and Cornell, S. E. (May 12 2018). *Uzbekistan: A New Model for Reform in the Muslim World?* Retrieved from <https://www.silkroadstudies.org/resources/pdf/publications/1805FT-UZ-3.pdf>

Tajikistan. [n.d.]. Retrieved from <https://data.worldbank.org/country/tajikistan>

Tajikistan. [n.d.]. Retrieved from <https://www.etf.europa.eu/en/regions-and-countries/countries/tajikistan>

Tajikistan: Addressing Challenges to Create More and Better Jobs. (February 2017). Retrieved from <http://www.worldbank.org/en/country/tajikistan/publication/tajikistan-addressing-challenges-to-create-more-and-better-jobs>

Tajikistan: Overview. [n.d.]. Retrieved from <http://www.worldbank.org/en/country/tajikistan/overview>

Tajikistan: Strengthening Technical and Vocational Education and Training: Project Brief. (December 2016). Retrieved from <https://www.adb.org/publications/taj-strengthening-tvet-project-brief>

The Government of the Republic of Tajikistan. (2012). *National Strategy of Education Development of the Republic of Tajikistan till 2020.* Retrieved from <http://planipolis.iiep.unesco.org/en/2012/national-strategy-education-development-republic-tajikistan-till-2020-5674>

The Republic of Kazakhstan. (July 4 2018). *On Introducing Amendments and Additions to Some Legislative Acts of the Republic of Kazakhstan on the Expansion of Academic and Managerial Independence of Higher Educational Institutions.* Retrieved from https://online.zakon.kz/Document/?doc_id=39633866

The Republic of Kazakhstan. (October 13 2018). *On Approval of the Classifier of Training Areas with Higher and Postgraduate Education*. Retrieved from https://online.zakon.kz/Document/?doc_id=39785244#pos=0;137

The United Nations Development Programme Commences a Regional Initiative on Prevention of Violent Extremism in Central Asia, Funded by the Government of Japan. (February 22 2018). Retrieved from <http://www.kz.undp.org/content/kazakhstan/en/home/presscenter/pressreleases/2018/02/22/the-united-nations-development-programme-commences-a-regional-initiative-on-prevention-of-violent-extremism-in-central-asia-funded-by-the-government-of-japan.html>

The World Bank. *Education Statistics*. Retrieved from <http://datatopics.worldbank.org/education/>

The World Bank. *The Republic of Tajikistan: Tajikistan: Analysis of the Higher Education Sector*. (2014). Retrieved from <http://documents.worldbank.org/curated/en/154891468114540289/Tajikistan-Higher-education-sector-study>

Training Teachers to Prevent Violent Extremism Among Youth in Tajikistan. (June 14 2018). Retrieved from <http://en.unesco.kz/training-teachers-to-prevent-violent-extremism-among-youth-in-tajikistan>

Unemployment in Kazakhstan Decreases in June. (July 13 2018). Retrieved from <https://www.azernews.az/region/134774.html>

UNESCO-UNEVOC. *World TVET Database: Kyrgyzstan*. Retrieved from https://unevoc.unesco.org/wtdb/worldtvvetdatabase_kgz_en.pdf

Uzbekistan. (March 7 2019). Retrieved from <https://en.wikipedia.org/wiki/Uzbekistan>

Uzbekistan. [n.d.]. Retrieved from <https://data.worldbank.org/country/uzbekistan>

Uzbekistan. [n.d.]. Retrieved from <https://www.caep-project.org/uzbekistan/>

Uzbekistan: Overview. [n.d.]. Retrieved from <http://www.worldbank.org/en/country/uzbekistan/overview>

World Bank. (October 2014). *Republic of Tajikistan: Tajikistan: Higher Education Sector Study*. Retrieved from <http://documents.worldbank.org/curated/en/154891468114540289/pdf/ACS103830WPOP100sector0study0final.pdf>