



DIGITAL FACTSHEET DECEMBER 2019

DIGITAL SKILLS AND ONLINE LEARNING IN KOSOVO¹



DIGITAL SKILLS FOR VET STUDENTS

Policies, strategies, initiatives, practices

In 2016, the Ministry of Education, Science and Technology (MEST) adopted the Pre-university Curriculum Framework, which expresses the need to move into the digital era and states that digital skills and competence (DSC) should be an outcome of vocational schools². However, this initiative does not include an implementation plan, so does not clarify how the DSC objective is to be achieved.

Similarly, the EU's Digital Agenda for the Western Balkans³ and the national Digital Agenda 2013–2020 developed by the Ministry of Economic Development⁴ stipulate the need to enhance the provision of DSC in Kosovo. However, they do not address *what* and *how* DSC should be delivered by the vocational education and training (VET) system.

The National Strategy for Information Technology 2016–2021 provides for the creation of initial VET (IVET) schools specialised in information and communication technologies (ICT); these are not yet in place.

Although not specifically targeting the digitalisation of VET, EU and other international donors are working on the modernisation of the VET system, a process that could foster the integration of DSC in curricula and the use of technology in education. According to the Kosovo Education Strategic Plan 2017–2021 (KESP), there is no alignment between the VET curriculum and the labour market. Ongoing donor initiatives could help to fill the gap, and it is anticipated that an IVET curriculum and qualifications will be developed in the future in compliance with the national qualifications framework. Kosovo, with the support of the European Training Foundation (ETF), has formulated a skills 2020 framework, which presents the vision for skills development as well as priorities and a roadmap for human capital development.

No standard monitoring mechanisms are in place. Promoting DSC in IVET is increasing in the form of ad hoc projects as the need of the private sector for workers with ICT skills increases.

Practice Enterprises

The Kosovo Practice Enterprise Centre was established by the MEST with support from the Austrian and Swiss governments and training institutes. Under the supervision of the MEST, the Centre delivers DSC for IVET schools and students in the framework of a virtual business simulation. A total of 128 Practice Enterprises have been created in 39 IVET schools, delivering 6 hours per week of training on DSC, including Microsoft Office 365. In relation to this, the Kosovo Centre for Training Firms has hosted many activities, such as fairs, training and retraining courses, quality certifications, courses on Live@edu, Office 365 and banking software, and business collaboration symposiums.

<https://ks-practicefirms.com/>

¹ This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence – hereinafter 'Kosovo'.

² <https://masht.rks-gov.net/uploads/2017/03/korniza-kurrikulare-finale.pdf>

³ https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/swd_measures_in_support_of_a_digital_agenda_for_the_western_balkans.pdf

⁴ www.kryeministri-ks.net/repository/docs/Electronic_Communication_Sector_Policy_2013-2020.pdf



Facts and trends

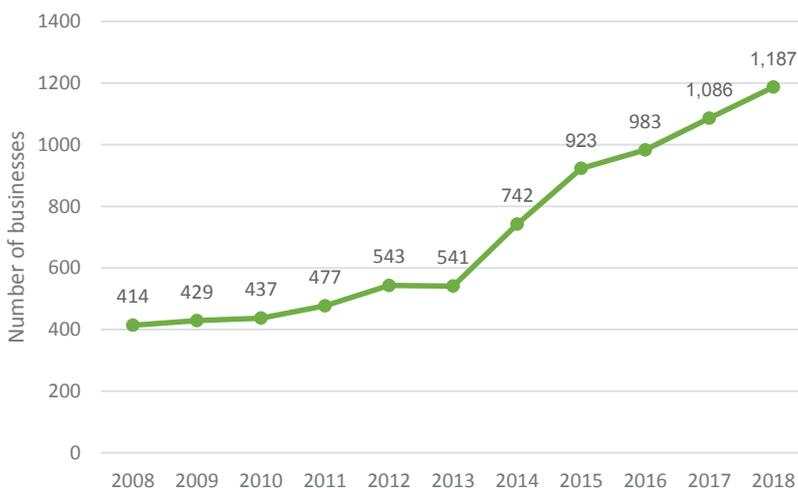
Kosovo's ICT industry is rapidly evolving and expanding, with many new players emerging both locally and from abroad. New companies bring new technologies and require different skill sets.

The country has a high rate of DSC usage. Data from STIKK, the Kosovo ICT Association, shows that more than 80% of the country's population are internet users, which is comparable with the level in developed countries. However, ICT is still mostly used for entertainment purposes.

From the supply side, there are 70 IVET schools in Kosovo. In these schools, DSC is provided only as a subject and rarely as a qualification, such as in the Gjin Gazulli IVET school in Prishtina, which is in the process of becoming a new Centre of Competence (CoC) in ICT. So far, no specific ICT-qualified vocational schools exist in the country. According to KESP, the ratio of computers to students in Kosovo's vocational schools is 1:46. Each school provides 2 hours of DSC per week, equivalent to 72 hours per year. During this limited time, learners acquire basic software application skills. However, in line with the overall quality of VET, also the acquisition of DSC remains at a low level.

There is a mismatch between the supply of DSC by the national education system and the technical requirements of companies. In other words, the number of students being trained in a particular ICT profile does not meet the demand for new employees from ICT companies⁵.

Number of businesses registered in the ICT sector, 2008–18



Source: Kosovo Business Registry Agency

ICT Centre of Competence

Supported by LuxDev, the ICT Centre of Competence (CoC) focuses, in one of its components, on the development of six ICT qualifications (application developer – coding, business informatics technician, systems technician, graphic design technician, mediamatician/interactive media design technician, electronic technician), which are a priority for the ICT sector in Kosovo. The project will support the MEST in the development of the full range of qualification components for these profiles, including the occupational standards, curricula, teaching and learning materials, and capacity development of managers and teachers. All qualification sets will be designed and developed based on a balance of theory and practice that will reflect the real needs of the local and international labour market, facilitating the transition of students into the labour market immediately after graduation.

<https://niger.luxdev.lu/en/news/show/2019-04-23>

Training in smart homes (TBD)

Students at the Gjin Gazulli IVET school received training in smart homes. After months of training with Smart Home Europe, with GIZ support students built and implemented a smart home system. This enables homes and buildings to be converted into intelligent machines, increasing comfort, security and energy efficiency.

⁵ <https://masht.rks-gov.net/uploads/2017/03/korniza-kurrikulare-finale.pdf>



DIGITAL SKILLS FOR VET TEACHERS AND TRAINERS

Policies, strategies, initiatives, practices

According to the VET Law⁶, the Agency for Vocational Education and Training and Adult Education (AVETAE) is responsible for the continuing professional development (CPD) of VET teachers and instructors in Kosovo. Overall, IVET teachers lack pedagogical training, subject-specific practical training, and training related to specific requirements for competence-based curriculum implementation. This situation is also caused by the limited budget for teachers' CPD at the municipal level⁷. There are no formal DSC requirements for entering the profession of IVET teacher or trainer.

A major challenge is that former BAT (technical education basis) IVET teachers have become ICT teachers with no ICT qualifications and thus lack the appropriate DSC. In addition, teachers lack motivation because of low salaries and there are no monitoring mechanisms in place and statistics on teachers' DSC.

The AVETAE Guideline for Pedagogical Teaching Trainings⁸ notes that the offer of courses for employed IVET teachers is limited and courses are often provided and funded by various donors. Vocational school teachers generally have far fewer opportunities for professional development than general school teachers. They are not provided with pre-employment training on DSC, and once they are employed they have limited relevant support.

Overall, the current CPD provision of DSC and digital and online learning (DOL) for IVET teachers and trainers exists only as donor initiatives or ad hoc projects. One important initiative is the EU ALLED⁹ project, which provides training in mechatronics and remote control programming. The project includes equipment, learning materials and DSC training for VET teachers and trainers.

In the period 2014–18, 200 VET teachers and trainers were trained within the framework of the Microsoft Innovation Education Experts (MIEE) project on how to integrate technology into the classroom. Other recent examples include the training on AutoCAD software delivered by AVETAE and the DSC trainings provided for teachers and trainers in 39 vocational schools by the Kosovo Practice Enterprise Centre.

ALLED

The EU-financed project 'Aligning Education with Labour Market Needs' (ALLED) helps VET schools to offer qualitative programmes based on labour market needs, including training teachers in DSC, providing sustainable quality mechanisms, and providing relevant equipment.

The project is entering its second phase (ALLED 2) aimed at providing IVET schools, teachers and trainers with practical skills, including DSC, and young people with employability skills based on labour market demands.

This project is partnering with 20 vocational schools covering approximately 1 000 teachers and trainers. The project refers to the EU frameworks for entrepreneurship (EntreComp) and digital competence (DigComp), and aims to train VET teachers and trainers on video pedagogy and the use of simulation software.

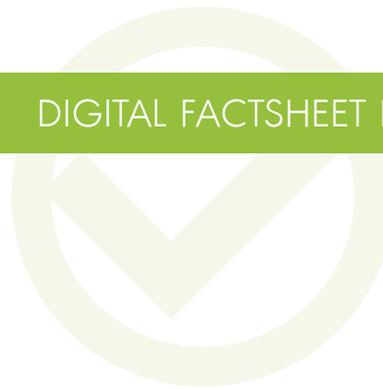
<http://alled.eu/en/>

⁶ www.kuvendikosoves.org/common/docs/ligjet/Law%20for%20vocational%20education%20and%20training.pdf

⁷ www.etf.europa.eu/sites/default/files/m/484071EDB588DA0CC1257FCD005FB852_CPD%20Kosovo.pdf

⁸ <https://aaaparr.rks-gov.net/attachments/Udhezues%20-%20Per%20trajinime%20pedagogjike%20te%20mesimdhenesve%20ENG.compresse.pdf>

⁹ <http://alled.eu/en/project/>



When it comes to DOL for CPD, the GIZ Youth, Employment and Skills (YES) project started in February 2019 and provides e-content for pedagogy training for IVET teachers and trainers. Another project launched recently is the Office 365¹⁰ project, which provides training for ICT teachers in IVET schools. In an ETF survey, 82% of IVET teachers said that CPD is needed to help them understand new technologies in the workplace¹¹.

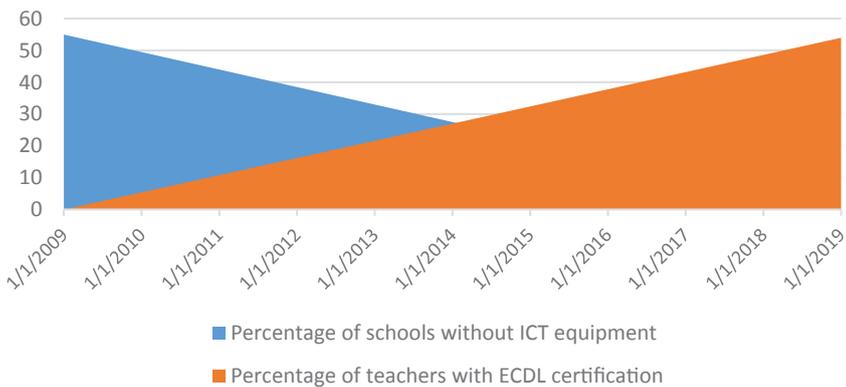
Facts and trends

Since 2009, the European Computer Driving Licence (ECDL) certification has been offered to all IVET teachers and according to KESP 2017–2021, 57% of IVET teachers have received ECDL training.

The majority of vocational schools have internet connectivity. Moodle is growing in popularity in Kosovo, but there is no evidence that it is used in IVET schools. According to KESP, only 44% of schools have ICT equipment.

The e-Education platform offers resources for advancing the teaching process in IVET schools. Teachers and trainers can register and learn innovative methods of teaching and learning for their students. This platform is provided by the MEST and can be used by students and parents. It counts around 100 000 users.

Teachers with ECDL certification and schools without ICT equipment, 2009–19 (%)



Source: KESP figures

e-Education

The overall goal of this project is to modernise Kosovo's education system in line with existing best practice. The aim is to increase the quality of teaching through the establishment of a central DOL platform.

The project provides easy access for teachers and students from across pre-university formal education. It aims to enhance the DSC of all teachers and students through the provision of e-learning in the field of ICT.

The project also plans the provision of the state matura exam with the support of digital means, including VET.

<https://e-edukimi.rks-gov.net/wp/index.php/en/home/>

¹⁰ <http://shkollat.org/>

¹¹ https://connections.etf.europa.eu/wikis/home?lang=en-gb#!/wiki/W5d6783a44efb_4f07_b375_e897124cc465/page/Kosovo%20-%20CPD%20Survey%20Results



DIGITAL AND ONLINE LEARNING IN INITIAL VET

Policies, strategies, initiatives, practices

Kosovo had developed a strategy promoting DOL, which expired in 2015. Further steps would be necessary to implement the stated goals, but there are no indications in KESP 2017–2021 of how implementation is progressing¹².

The ICT infrastructure in IVET schools is expanding. In a survey by STIKK, 30% of respondents stated that the infrastructure is good. Internet penetration is very high in Kosovo – more than 80%, according to a STIKK study¹³. However, the use of technology in the classroom, such as smartboards, e-resources, and simulation tools in school workshops, is very limited in vocational schools. In addition, there are no common guidelines or standards defining how DOL should be embedded in IVET schools.

There are no dedicated agencies in place to support digital education in school, and the role of ICT school coordinator is absent in IVET schools. As a result, DOL has been used in IVET teaching, learning and assessment only to a limited extent.

With the support of the ETF and of the European Commission, SELFIE¹⁴ was launched and piloted in Kosovo in May 2019. It aims to improve the digital readiness of primary and secondary schools, including vocational schools.

A major challenge is the lack of standard monitoring mechanisms for DOL in IVET and of an implementation plan to support its adoption.

Facts and trends

Broadband internet is available in 100% of vocational schools. All these schools have, for example, Facebook pages but they hardly use learning management tools such as Moodle. A major challenge is teachers' and trainers' lack of motivation to use such tools and a lack of training on Moodle, video conference tools, etc. In Kosovo, DOL is still not regarded as being feasible, practical or beneficial. This is expected to change in the near future as the country has the necessary infrastructure, such as internet access – Kosovo shows a high level of internet usage (88%) – yet Kosovo is still not using it appropriately to leverage its benefits. Another challenge is that projects and initiatives in the country rarely benefit the end users, and Kosovo therefore needs to improve its internal capacity to scale up innovative projects.

SELFIE

In 2019 the MEST, in collaboration with the ETF and the European Commission, launched the SELFIE pilot in Kosovo. SELFIE is a self-assessment tool for primary, secondary general and vocational schools that guides the school community – school leaders, teachers and students – in a collective reflection process on the use digital technologies (DOL) in teaching, learning and assessment practices.

So far, more than 500 participants have been involved in the pilot and SELFIE is expected to be progressively extended to all primary and secondary schools, and IVET schools.

https://ec.europa.eu/education/schools-go-digital_en

ICT Centre of Competence (Gjin Gazulli VET school)

In November 2018, LuxDev project KSV/020 signed an agreement with the Municipality of Prishtina for the upgrade of Gjin Gazulli IVET school to a new ICT Centre of Competence (CoC). The project has committed to providing full technical and financial support to the new centre in its two main components during the three-year upgrade process.

The first component of support includes the construction and renovation of the current school premises to international standards for an ICT CoC. The project will also provide assistance with installation of furniture and ICT equipment.

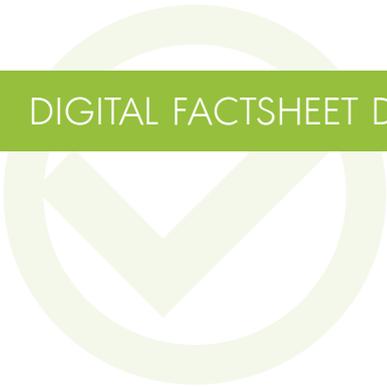
It is expected that this CoC will trigger DOL activity in Gjin Gazulli and other vocational schools in Kosovo.

<https://niger.luxdev.lu/en/news/show/2019-04-23>

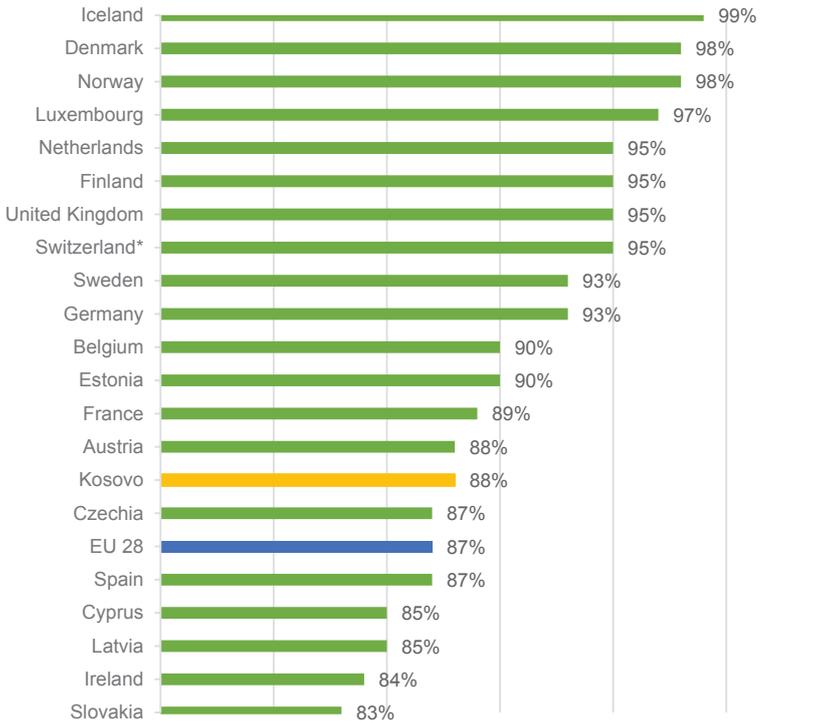
¹² <https://bit.ly/2OYk71g>

¹³ <https://stikk.org>

¹⁴ https://ec.europa.eu/education/schools-go-digital_en



Internet connectivity in some EU countries and Kosovo (%)



Source: Statista/World Bank



DIGITAL AND ONLINE LEARNING IN CONTINUING VET

Policies, strategies, initiatives, practices

Adult learning is regulated and falls within the responsibility of AVETAE. There are limited policies and strategies in place covering DOL in CVET and adult learning, and no major initiatives or common guidelines and standards on how to use DOL in CVET institutions in Kosovo.

The promotion of DOL in CVET can be observed mainly in the delivery of DSC training to IT professionals. Labour market demand for DSC is increasing and the recruitment of skilled workers is challenging, as the DSC offer is limited, although growing rapidly. DSC is embedded in CVET and adult learning mainly through private and non-governmental organisation (NGO) initiatives, such as online schools and private training centres. Online schools are mainly a private endeavour for young people. Many qualifications for IT professionals are offered by private companies, such as Cactus Education¹⁵, ProEd¹⁶ and Open Data Kosovo¹⁷.

Cactus Education also provides ICT qualifications in network and system administration and in web and mobile application development. Other examples include KosLift¹⁸, ECDL academy and jCoders.

The Millennium Foundation Kosovo recently launched 'The Future Workplace' project. Implemented by Open Data Kosovo and Kosovo Chamber of Commerce, it provides some data on DSC supply and demand in the country¹⁹.

Sixteen companies provide standardised courses for Cisco, Microsoft, etc., but there is a clear lack of technical training to increase the proficiency of IT professionals in programming and database management.

DOL is not a criterion in the accreditation and evaluation of CVET and adult training centres.

Cactus Education

Cactus Education is the first associate V level professional school in the ICT field. As a higher education institution, it provides students with a two-year professional study programme in the fields that are most in demand in the ICT industry. The two study majors are system and network administration, and web and mobile application development.

First institution to be accredited by the National Qualification Authority and licensed by the MEST, Cactus Education aims to prepare students for the local and international labour markets and ensure their employment in the shortest time possible by providing a world-class education and expertise through continuous innovation, applying international standards and the latest trends in technology.

<https://cactus.education/>

Kursori

The overall objective of the Kursori project is to foster youth employability by providing open access to critical ICT knowledge and skills in general digital competence, and by strengthening cross-border cooperation between specialist learning centres. The focus is on the acquisition of ICT high-value skills by young people in the target region, and on making this knowledge accessible to everyone by removing entry barriers in an increasing number of professional and educational fields. Kursori intends to create the first online, independent learning platform in Albanian.

<https://kursori.org/>

¹⁵ <https://cactus.education/>

¹⁶ www.proedacademy.com/en/

¹⁷ <https://opendatakosovo.org/>

¹⁸ <https://koslift.org/>

¹⁹ <http://134.209.235.191/en/home>



Facts and trends

A major challenge is the lack of standard monitoring mechanisms for, and official data on DSC and DOL in CVET and adult learning.

DOL is expected to grow as private initiatives such as digital schools and training centres invest in their ICT infrastructure to attract more citizens. Hence, there are significant opportunities for the private sector and NGOs to fill this gap by creating private CVET institutions. In a survey by the Dutch Embassy in Kosovo, only 29% of respondents from private companies said they were satisfied with their local ICT infrastructure.

Techspierience

The overall objective of Techspierience is to foster the employability of Kosovo's young people by leveraging the potential of modern technologies and intensive DSC development.

<http://techspierience.opendatakosovo.org/>