

Project
Guideline

kursori

How Open Online Education
helped Young People from
Kosovo and Albania Develop
Their Programming Skills.



With funding from:



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by the European Union



Implemented by



ALBANIAN INSTITUTE
of SCIENCE



kursori

Open ICT for
Youth Employability

Kursori.org is a Massive Open Online Course (MOOC), created for the expansion of students' general IT knowledge, enhanced understanding and skills for new technologies, career development, entrepreneurship, and ease of proper employment.



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1. Importance and Background of Online Education

Kur flasim për edukimin online, When we talk about online education, Open Data Kosovo together with the partner organization from Albania, the Albanian Institute of Science - AIS have used the benefits of online education as a tool to educate students using the best of the information, communication and technology field.

Online education is suitable for people who have family obligations and difficulty attending a regular class. Also, for students who do not have the opportunity to attend traditional learning classes.

In the digital age we live in, the use of technology during the learning process has become a necessity. Technology has the power and potential to transform the professional teaching environment. It influences successful teaching and creates opportunities for students to learn and collaborate with each other, through the exchange of ideas and experiences and the solution of common problems.

This development is best related to this initiative by Open Data Kosovo and the Albanian Institute of Science using a new education paradigm - MOOC (Massive Open Online Courses). In this MOOC scenario, a new dimension of educational opportunities brings together instructors and students around the world closer through the virtual internet medium. Institutions, instructors and students are able to collaborate with each other globally.



Using the benefits of MOOC (Massive Open Online Courses) Open Data Kosovo and the Albanian Institute of Science has created the [Kursori.org](https://kursori.org) platform using the edX framework.

(1) MOOC creates the opportunity for the exchange of ideas and knowledge and also helps improve learning skills by providing easy access to global resources.

(2) Improves intercultural relations, which lead to cooperation between teachers of institutions and students within the country and at an international level.

(3) MOOC increases active learning. Research shows that students learn more through active learning (when they have assignments or discussions on an issue) and not through listening to lectures. Students listen to the lectures more carefully if they have been given a problem or task to solve before the lectures. In this regard, the structure that most MOOCs have - short lectures, alternating with tasks and quizzes - seems to be ideal. Of course, this can also be done in a classroom, but it would be more difficult to ensure that all students participate: some may need a longer time to utilize the content of the lecture, and prefer to listen to it, again before performing the task. Contact by peers, facilitated by MOOC, can also trigger effective active learning.



2. Open ICT Education for Youth Employability

Open ICT Education for Youth Employability is a cross-border project implemented by two partner organizations from Kosovo (consequently Open Data Kosovo - ODK) and from Albania (consequently the Albanian Institute of Sciences - AIS). The project is funded by the Delegation of the European Union in Albania through the IPA Cross-Border Cooperation Programme - Albania and Kosovo.

More specifically, this project creates an opportunity for young people from the two regions, Lezha and Kurbin in Albania and 2 municipalities, Peja and Prizren in Kosovo.

Within this project, the Kursori.org platform has been developed, where this platform offers 3 courses in the ICT field and these courses are available online and in Albanian.

The 27-month long project (February 15, 2018 - April 15, 2020) aims to improve the employment opportunities of young people from Kosovo and Albania by providing open access to very important knowledge and skills in the field of Information and Communication Technology (ICT).



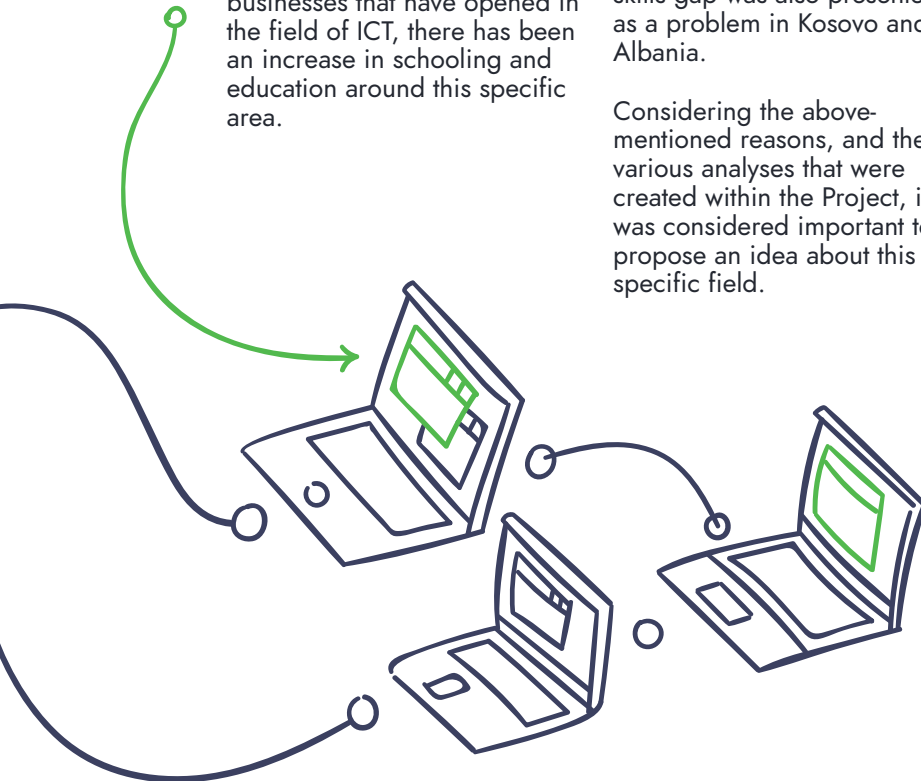
→ Why ICT?

The field of Information and Communication Technology is a highly sought after and developing field both globally and at a national level (Kosovo and Albania). In Kosovo, the ICT field has experienced a rapid development over the years, especially after 1999.

Only in the last 10 years there has been an increase in businesses operating in the ICT field by 187%, as stated in The Future Workplace Platform (www.thefutureworkplace.org). However, in addition to businesses that have opened in the field of ICT, there has been an increase in schooling and education around this specific area.

In the last 5 years in Kosovo, there has been an increase of 49% of graduates in Universities operating with an ICT related curricula. However, in addition to the development of businesses and universities operating in this field, the market skills gap was still present. Due to the fact that the development of the field of ICT gained momentum, the curricula of educational institutions failed to be fully updated to be in line with the development of the field at a global level. Therefore, the ICT skills gap was also presented as a problem in Kosovo and Albania.

Considering the above-mentioned reasons, and the various analyses that were created within the Project, it was considered important to propose an idea about this specific field.





→ Project Goals and Objectives

'Open ICT Education for Youth Employability' project has one overall objective and some other specific objectives.

The overall objective of the project:

1. To foster youth employability by providing an open access to critical knowledge and skills, and by strengthening cross-border cooperation between specialized knowledge centres.

Specific objectives of the project:

1. Provide critical IT knowledge to students of high schools, vocational schools, and universities via the regional Massive Open Online Course (MOOC) platform;
2. Empower the youth to find employment, launch an entrepreneurial initiative and/or pursue further studies in a high potential field by supporting them in actively utilising the newly acquired knowledge;
3. Support the regional knowledge centres (universities, high schools, vocational schools) in increasing the practical applicability of their IT teaching to the needs of the labor market, and create a network of IT skills enthusiasts, learners, and pioneers in the region.



Some of the main indicators and results of the Project are:

1. 10% of students who have completed the three courses will work in the ICT field (working for someone or self-employed) 6 months after completing the courses;
2. 10% of students who have completed the three courses will continue their higher education in the ICT field one year after completing the courses;
3. 10 prototype digital solutions for personal or business use will be developed;
4. 500 students will be enrolled in the Kursori platform;
5. 400 students will complete all three courses on the Kursori platform;
6. 7 specialized learning centers (secondary schools, vocational schools, and universities) will incorporate skills acquired from online courses in regular teaching;
7. 2 on-going cooperation activities between specialized learning centers in Kosovo and Albania aimed at fostering youth employability in the IT field will take place.

In general, the indicators of the Project at the same time present the results which will be seen after the completion of the Project.

3. About Open Data Kosovo

Open Data Kosovo (ODK) designs, develops and creates digital solutions for a wide portfolio of partners, including Kosovo's public institutions. The organization's expertise in data collection and analysis, equips partners with tools and knowledge that support data driven decision-making, and policy-making in daily strategies.

All projects developed by Open Data Kosovo are based on increasing transparency in governance processes, by opening government data and shedding light on the internal affairs of government activities (e.g. opening procurement data to document and better monitor procurement practices).


Outside of Kosovo, ODK leads and collaborates on various initiatives that promote best open data practices, including Open Contracting Data Standards. The ODK has also received international recognition for developing a red-flag algorithm that automatically analyzes Open Procurement Data in Kosovo

and highlights possible irregularities in the use of public money. The other pillar on which the ODK operates is the empowerment of young people, the increase of youth participation in decision-making, and the reduction of the ICT skills gap in Kosovo and the region, all of which by developing technical skills among young people.



Last but not least, for the first time in the Western Balkans, ODK was a finalist and was recognized in the prestigious Forbes 30 Under 30 magazine under the Law and Public Policy category, due to its successful implementation of various projects aimed at institutional transparency of transparency and accountability for Kosovar society, was introduced to such a magazine. The importance of using technology has been and will remain the main pillar of the work of the ODKt.



4. About AIS




AIS is an Albanian organization established in 2011 and operating in the Republic of Albania. The organization operates based on 3 key pillars: Transparency and Accountability through Open Data; Civic Technology; and Citizens' Participation. The organization is quite well-known for the public opinion in Tirana and plays an active role in the field of transparency. The work and activities of the organization encompasses programs related to capacity building, training and assistance to governmental administration employees, representatives of civil society, youngsters and local journalists.

The aim of these activities is the use of technology and innovation by officials and local stakeholders, to self-sufficiently provide transparency and accountability. In the latest years one of the main targets of AIS work has been to foster youth employability by providing an open access to critical ICT knowledge and skills.

Also, the use of ICT solutions in several AIS projects has generated good results in terms of transparency, information, accountability and good governance. AIS projects have also given concrete results in the conservation and promotion of the Albanian cultural heritage values.



The projects attract media interests and are known to the public in Albania, as well as in Kosovo, Macedonia, Montenegro and Serbia. Journalists, students, and civil society activists not only have profited from it, but also became part of the activities establishing in this way a form of eParticipation network. AIS organized the first Hackathon in Albania in 2011 followed by many other Hackathons, Datathons and BootCamps through the years. Also organized the only two DiploHacks held in Tirana in 2016 and 2018.



5. How to Establish Cooperation with Educational Institutions in Kosovo and Albania?

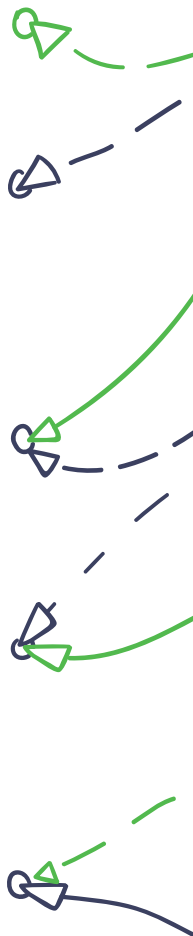
Both ODK and AIS operate in the field of transparency with the help of public institutions in Kosovo and Albania through an established collaboration. Civil society has a very specific role in the governance triangle, and this role is to also serve as an intermediary between citizens and certain state policies.


In order for such a project to achieve the expected results through defined indicators, cooperation with educational institutions is an obligation instead of a preference. Therefore, in most cases of such Projects, the months at the beginning of the Project are allocated to prepare all the supporting documents which give greater security to such collaborations.

For the project in question, a total of 4 Memorandums of Understanding have been signed, of which one corresponds to the Vocational School "Kolin Gjoka" in Lezha, one for the Kurbin education office (responsible for 4 high schools), one for "Ukshin Hoti" University in Prizren and one for "Haxhi Zeka" University in Peja.

In order to establish productive collaborations through such MoUs, both parties must share at least the same vision and mission. Therefore, before signing an MoU, the scope of action of the parties and the common interest must be in line. Since this Project delivered an open online education platform, cooperation with educational institutions was more than necessary.

Initially, the cooperation established with the "Haxhi Zeka" University was done fairly easily and was conducted directly with the respective institution. Due to the fact that the University in question had already been exposed in various EU-funded projects, they were very open to collaborate. The nature of the project is unique and highly necessary for educational institutions in Kosovo and Albania, which made it even easier.





Initially, before the memorandum of understanding was signed with “Haxhi Zeka” University, a meeting was scheduled where the idea of the project and the benefits for the University were revealed if students agreed to participate in these open online courses. Then, with the consent of the idea and the willingness to cooperate, the cooperation agreement was reached.

The same procedure continued with “Ukshin Hoti” University in Prizren, the University which was also a beneficiary of various collaborations with the European Union.

Regarding the establishment of cooperation with Educational Institutions in Albania, the journey has been slightly different. For “Kolin Gjoka” vocational high school in Lezha operating under the Ministry of Finance in Albania, the agreement was immediately signed with the school director Mr. Bardh Dedgjonaj as a legal representative.

While for the four high schools in the Kurbin region which depend on the Ministry of Education, Youth and Sports under the supervision of the Kurbin Education Office, the process has been more complicated and prolonged. The Kurbin Education Office had to legally receive a confirmation from the responsible Institution, in this case the Ministry of Education.

The communication process with this Institution has been very formal, through official channels (email and mail) and extended. After 6 months of continuous communication between the two implementing organizations (AIS and ODK), the Kurbin Education Office and the Ministry the confirmation for signing the agreement with the Director of the Education Office Mrs. Majlinda Cara was reached. Despite the prolonged process to reach the signing of the agreement, during this period very good communication and trust bridges were established with both of these Institutions. Such a collaboration was proved to be successful by the very fast communication in the period of isolation due to Covid-19 Pandemic.



6. Kursori and it's Journey

Online education is rapidly becoming a major global phenomenon. This is also why we came up with the idea to create the Kursori platform to facilitate and provide comfort to students, especially to those who have secondary language problems.

In addition, Kursori is built on top of the edX platform founded by Harvard and MIT, where edX is home to more than 20 million students, with most of the world's top-ranked universities and major industrial enterprises offering courses that are accessible to all by eliminating cost, location and access barriers. Meeting the requirements so that people can learn on their own terms by eliminating the above-mentioned barriers.

The online course curricula is specifically designed to help students develop the skills they need in order to advance in their careers and excel in their professional and academic journeys. The online curriculum is tailored to complement the lessons learned from school or university and help students/ individuals for an excellent performance.

The initial goal of Kursori was to provide three courses in the field of programming which would increase the employment opportunities in this field; a field in high demand in the labor market in Kosovo, Albania, and globally. This is because, in principle, the countries targeted by the project do not have a developed economy, and this field enables you even greater employment opportunities.



6.1. Introduction to course content

The courses are built in a format where after each unit there are quizzes and practical exercises.

- The difficulty and content of the practical exercises is related to the unit that the user has already followed.
- Practical exercises help users to be ready to use the new knowledge learned in school and work at the end of the course.

→ Course #1: Practical Web Application Development

Statistics: 79 videos divided into 7 chapters and 7 hours of video content.

This course is designed to demonstrate basic coding skills. Through this course you will learn the planning and development of basic web applications, which include primary front-end technologies such as: HTML, CSS, Bootstrap, Javascript and jQuery.

→ Course #2: Database Design, Analysis, and Web Integration

Statistics: 75 videos divided into 7 chapters and 7 hours of video content.

This course reveals the main topics of database design, analysis and web integration. This course aims to help students who have no prior knowledge in database management, a very sought-after topic in the current and future job market.



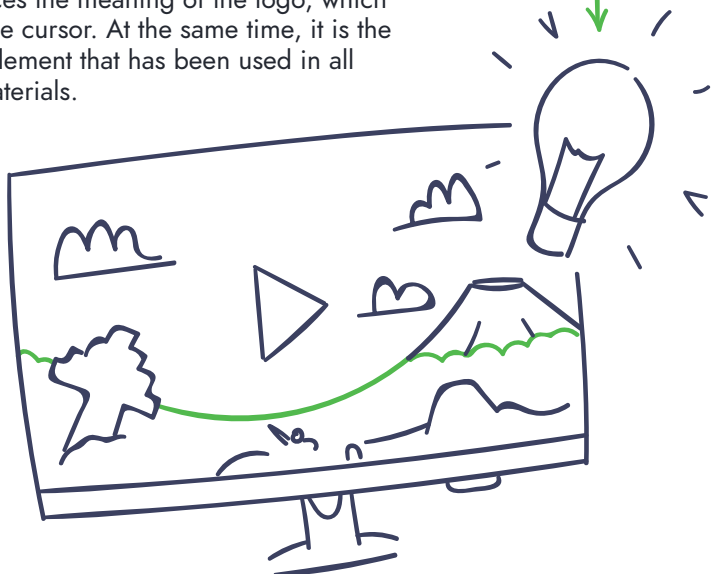
→ Course #3: Scalable Software Development

Statistics: 106 videos (98 lectures + 8 quizzes) divided into 8 chapters and 7 hours of video content.

This course is dedicated to prepare students on a professional level, with the concepts, methods and opportunities of the scalability/expansion of a particular system architecture. At the same time, students will develop skills to design, configure and build a proper scalable software.

6.2. The idea behind the animation

Animation pursues the idea that the invention of education is a turning point in history and has made it possible to accelerate all human achievements. By inventing the concept of education, people have created the technology evolution code. Using the cursor as an animation subject reinforces the meaning of the logo, which also contains the cursor. At the same time, it is the main graphic element that has been used in all promotional materials.



7. A European Union funded program

“Open ICT Education for Youth Employability” project is part of the Cross-Border Cooperation Programme between Kosovo and Albania funded by the European Union, through the Instrument for Pre-Accession Assistance (IPA). This program aims to strengthen good neighboring relations by encouraging cooperation between people, communities and state institutions.



Cross-border IPA programs have been launched since 2007, with the aim of fostering cooperation between Member States and candidate countries and also among potential candidates in the European Union. Thus, IPA is an instrument created by the EU to strengthen institutional capacity by providing them with assistance and technical assistance in administrative, political, social and economic reforms.

Through cross-border IPA programs, in this case between Kosovo and Albania, the border has promoted cooperation between communities on both sides of the border, and the transformation of the border into an opportunity for development and cooperation. This has also been used, given that there are no linguistic or cultural barriers between the two countries.

Open Data Kosovo and the Albanian Institute of Science have benefited from the funds allocated for the years 2014-2015 of IPA II, the cross-border cooperation programme, as part of Lot III - Socio-Economic Integration of Youth. This priority was intended to make an investment in youth and investment in education and their training in the labor market.

This priority was identified as a result of the space taken up by the space that included the cross-border part where the project targeted high unemployment among young people and the use of technology as a means of employment given its exponential growth over the years.

8. Recommendation from our beneficiaries

"While you're thinking about indoor activities, what if you were to learn coding?" The Kursori.org platform is available free of charge and I invite all students and pupils to register. You will find there 3 courses for developing web applications and integrating software products.

Besa Shahini, Minister from the Ministry of Education, Sports and Youth - Albania



"An opportunity is the greatest privilege that one can be given and this privilege was offered to us by you and your platform. Not only that, but also it encouraged us to cooperate with each other, which is the foundation that leads to success."

Jonida Paja, Student from "Arif Halil Sulaj" High School in Mamurras - Albania.



"Kursori is the best chance to be employed. Definitely, a very good project brought to us by dedicated staff. It is an open door for everyone, a support and an opportunity to build my future."

Redian Marku from "Arif Halil Sulaj" High School in Mamurras - Albania



Programming has been something I have been interested in since an early age. The language barrier and the lack of the right mentor was limiting me from achieving my goal. This platform opened a window to what I've been searching for so long.

Enxhi Legisi from "At Shtjefen Gjeçovi" High School in Laç - Albania



Kursori.org platform is more than an online course for me. I see this platform as something new, a new way, a new chance I would have never been given, a way for me to reach my expectations, fulfill my dreams, broaden my horizon. It is the start of a path I have chosen to follow. It is something that has helped me broaden my mind and have yet another chance to be what I want, who I want myself to be. I see this platform as a chance for something better, a door opening, a way for me to reach my goals in life.

Rubin Zefi from "At Shtjefen Kurti" High School in Gorre - Albania.





Open Data Kosovo encourages me to work hard and be creative. A diamond is a modification of carbon. In the beginning, without using Kursori I was like carbon, and now by using Kursori, I am modifying into diamond.

Ajshë Komoni from "Haxhi Zeka" University in Peja - Kosovo.



For me as a student eager to excel in my career and in my professional journey, Kursori Platform is of big assistance. I can practice the lectures I followed from the course videos in the effective development of many websites.

Stela Dedgjonaj from "Kolin Gjoka" Vocational High School in Lezha - Albania.



"I feel very happy to be part of Kursori Platform. I see Kursori as a new opportunity to expand my knowledge, and to put my dream of being a future programmer to life."

Ergi Sylja from "Milot High School" in Milot - Albania



"Working with ODK and the Kursori platform is a great privilege, because they encourage young girls to code and express themselves in a society with the view that girls are not capable of doing this kind of job."

Fatima Elezi from the "Ukshin Hoti" University in Prizren - Kosovo



"Kursori Platform has given us a rare opportunity to learn, to develop our ideas and to have a secure future through the development of technology in our country!"

Fatjona Shala from the "Ukshin Hoti" University in Prizren - Kosovo



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