## **2018 REPORT**

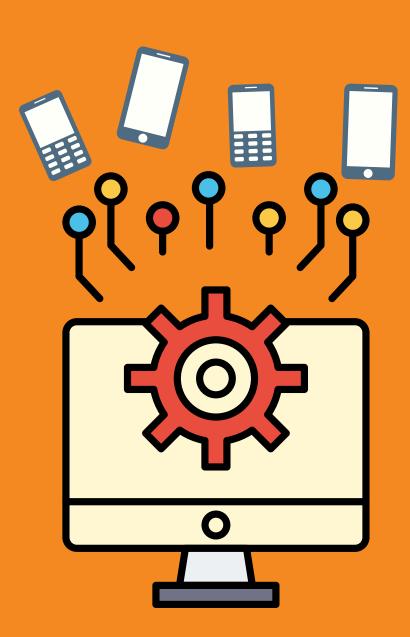


YouthMobile 2



United Nations Educational, Scientific and **Cultural Organization** 

## EMPOWERING THE NEXT **GENERATION**



**UNESCO Communication and Information Sector Knowledge Societies Division** 



## **Contents**

INTRODUCTION	
What is YouthMobile?	1
Why?	1
For Whom?	2
How?	3
MAJOR PARTNERS	4
COUNTRY PROJECTS 2018	5
Ethiopia: Code for the Future	
Ghana: Girls Can code	
Jordan	5
Kenya: Women in Tech	6
Lebanon	6
Mozambique	6
Nigeria: YouthMobile-FCTA Programme	6
Qatar	
Tanzania: Girls Enterpreneurship Summit	7
Vietnam: UNESCO Hackathon	8
Zimbabwe	8
COUNTRY HIGHLIGHT: NIGERIA	9
"Kids Spelling Phone" App	10
INTERNATIONAL EVENTS 2018	
Africa Code Week 2018	
Educode.be Conference	
FOSSASIA and UNESCO Hackathon	
ICTP Workshop	
MIL Week 2018	13
Mobile Learning Week Workshop - Room 7 Consortium	14
WSIS 2018 Workshop	
YOUTHCONNEKT Africa Summit	
YouthMobile Central Asian Contest	15
2019 PLANNED ACTIVITIES	16
Africa Code Week 2019	
Cuba Summer School	
FOSSASIA 2019	
Mobile Learning Week 2019 Workshop	
Qatar National Scratch Competition 2019	
Seychelles	
WSIS Hacakthon 2019	16
THE UNESCO YOUTHMOBILE TEAM	17



## INTRODUCTION

## What is Youth Mobile @??

The UNESCO YouthMobile Initiative leverages the widespread availability of mobile phones to empower youth through digital skills training. Young people are introduced to coding as both a resource to solve local issues and a tool to develop complex learning skills. Through YouthMobile training, students are encouraged to develop, promote and sell their own mobile applications, as the key to ensure sustainable development.

Since its launch in 2014 by the Knowledge Societies Division of UNESCO, the Initiative counts nearly 7,000 direct recipients of training in 27 countries, giving young people the skills to develop and distribute mobile apps for sustainable development.

YouthMobile is strongly committed to the realization of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals, in particular Goal 10 on reducing inequalities. The Initiative promotes the creation of inclusive digital societies, and strives to foster gender equality by unlocking the potential of women in ICT (SDG5). It supports the creation of positive socio-economic cycles, and tackles unemployment challenges. The Initiative contributes to the UNESCO Global Priority on Africa, with many of the programs implemented in African countries. As a flagship UNESCO program, YouthMobile partners with numerous local, regional and global organizations to amplify its outreach and ensure the long term impact of its projects (SDG17).

## Why?

The aim of the YouthMobile Initiative is to equip young people with the digital skills which enable them to develop actionable digital solutions to address local challenges, supporting themselves and their communities.

The Initiative recognizes the significant potential of mobile applications as a tool for achieving the SDGs. Smartphones are the only computer for millions of people around the world and significantly impact their lives every day: from communication to learning, from conducting business to playing games. At the end of 2018 more than half of the world population are online<sup>1</sup>, and estimates show that the next

billion new Internet connections will come from mobile devices in the hands of young people in developing countries<sup>2</sup>.

The positive impact of connectivity on a country's economy is well documented<sup>3</sup>. Access to the Internet allows marginalized groups to benefit from social, political and economic inclusion. Therefore, mobile application development is a key skill tapping significant opportunities for local communities, enabling solutions that were unthinkable just a decade ago.



<sup>1</sup> https://news.itu.int/itu-statistics-leaving-no-one-offline/

<sup>2</sup> https://www.blog.google/perspectives/caesar-sengupta/next-billion-users-are-future-internet/

<sup>3</sup> Various reports from ITU, Broadband Commission, DFID: http://www.broadbandcommission.org/Documents/publications/davos-discussion-paper-jan2016.pdf; https://www.gov.uk/dfid-research-outputs/the-impact-of-internet-connectivity-on-economic-development-in-sub-saharan-africa



The YouthMobile Initiative also aims to leverage open data as an opportunity for collaborative and open innovation. Countries around the world are more commonly releasing wide-ranging datasets<sup>4</sup>, allowing civil society and private industry to provide technological solutions. The Initiative uses coding and computer training as a means to introduce students to the crucial skill of data analysis.

Finally, YouthMobile strongly advocates for incorporating ICT teaching into national education curricula, vocational training, and informal education. Through its training, YouthMobile aims to equip the next generation with a practical skillset, and the confidence required to succeed in emerging knowledge societies as active citizens in their communities.

## For Whom?

The primary target of the YouthMobile Initiative is young people. YouthMobile understands that today's generation of young people are "digital native", born with the Internet at their fingertips. Fostering the innovative and creative digital capacity of the youth is pivotal to addressing challenges of sustainable development and peacebuilding. Therefore, the Initiative encourages young people to be active producers of ICT innovations. The purpose is to direct their technological agency towards addressing local needs, rather than being passive consumers. Locally adapted mobile apps may help increase mobile connectivity in an area, which contributes to ICT development and forms a virtuous cycle in the local community.



In line with UNESCO's commitment to equality between women and men, the YouthMobile Initiative pays particular attention to young women. According to the 2017 Broadband Commission Working Group report on Digital Gender Divide<sup>6</sup>, women often lack the digital skills or confidence needed to use the Internet, preventing access or restricting their use to a limited number of services and applications. GSMA's Mobile Gender Gap Report<sup>7</sup> stresses this point, indicating that women are on average 10% less likely to own a mobile phone and 26% less likely to use mobile internet in low and middle income countries – translating to 327 million fewer women digitally empowered.

By introducing young women to relevant digital skills, the YouthMobile Initiative helps empower them and makes strides towards gender equality. Gender-relevant YouthMobile projects include the cooperation with Germany's G20 #eSkills4Girls<sup>8</sup> project and platform in 2017, and the Girls Can Code program in Ghana. The Initiative has been presented at several major events including the 61st Commission on the Status of Women in New York and the 2017 Transform Africa Summit in Rwanda. The actions of the Initiative also aim to address the low rate of female participation in science, technology, engineering and mathematics (STEM) education and consequently STEM careers.

The YouthMobile Initiative also targets marginalized, disadvantaged or excluded groups, including rural populations, people with disabilities, Small Island Developing States (SIDS), and indigenous and minority communities.

<sup>4</sup> Global Open Data Index: https://index.okfn.org/

<sup>5</sup> UNESCO's Internet Universality Indicators: https://unesdoc.unesco.org/ark:/48223/pf0000265830.locale=en

<sup>6</sup> Broadband Commission Working Group on Digital Gender Divide http://www.broadbandcommission.org/Documents/publications/WorkingGroupDigitalGenderDivide-report2017.pdf

<sup>7</sup> GSMA Connected Women - The Mobile Gender Gap Report 2018

 $https://www.gsma.com/mobile for development/wp-content/uploads/2018/03/GSMA\_The\_Mobile\_Gender\_Gap\_Report\_2018\_Final\_210218.pdf$ 

<sup>8 #</sup>eSkills4Girls: Women's Pathways to the Digital Sector: Stories of Opportunities and Challenges: https://www.bmz.de/en/publications/type\_of\_publication/weitere\_materialien/study\_eSkills4girls.pdf



## How?

The first YouthMobile Experts Meeting was held at UNESCO's Headquarters in March 2014, which brought together world-leading trainers for mobile app development. They shared best practices and suggested a strategy to reach a critical mass of young people. The Initiative adopted their proposals and implemented the first YouthMobile training workshops a few months later.

The YouthMobile Initiative works through key partnerships with ICT-enabled youth organizations, private companies, and national agencies in UNESCO Member States. These partnerships seek to create



self-sustaining, long-lasting projects, encouraging different stakeholders to adopt open-licensed and multilingual training materials for mobile apps development for young people. The YouthMobile Initiative works with key partners to provide informal learning opportunities, including training sessions, workshops, hackathons and competitions. Coding tools such as MIT App Inventor and Scratch are used as predominant training materials.

The YouthMobile Initiative seeks to support activities crosscutting education, entrepreneurship and marketing, so that its students have opportunities to leverage their skillset and initiate viable business activities.





## **MAJOR PARTNERS**



Since 2016, UNESCO has partnered with SAP to support the annual Africa Code Week (ACW) initiative. ACW is the biggest digital literacy event on the continent. Its aim is to raise awareness of ICT for a critical mass of participants. The goal of the week is to widen access to coding workshops and resources to more than 6 million children and youth by 2020. Its 2018 edition has been a resounding success, which involved 2.3 million young people in workshops and training.

Africa Code Week - http://africacodeweek.org/

FOSSASIA is a reference event for Free and Open Source Software in Asia for developers, designers, startups, and contributors.

FOSSASIA - https://fossasia.org/





Federal Capital Territory Administration

In July 2017 UNESCO Abuja partnered with FCTA to launch the YouthMobile project in Nigeria, aiming to empower 1000 young people on mobile apps development and entrepreneurship. The first 400 beneficiaries graduated in March 2018, 600 more participants are included in the project in the second phase.

YouthMobile in Nigeria - Twitter @unesco\_abuja https://twitter.com/unesco\_abuja

In 2015, UNESCO KFIT (Korean Fund-In-Trust) launched 'ICT Transforming Education in Africa', which is a 4-year project to foster human and social development in Mozambique, Rwanda and Zimbabwe, through the use of information and communication technology. The YouthMobile initiative and related coding trainings have taken place in Mozambique in September and started in Zimbabwe in December 2018.

UNESCO KFIT - https://en.unesco.org/themes/ict-education/kfit





## **COUNTRY PROJECTS 2018**

### ETHIOPIA: CODE FOR THE FUTURE

#### **Ongoing**

Under the framework of the YouthMobile initiative, the Code for the Future project targets young girls who have basic programming knowledge to equip them with industry level skills and create the opportunity to open a start-up business or get employment opportunities in the tech industry. In early November 2018, 75 girls received a two-day intensive hackathon by experienced programmers. They then received two career coaching sessions in small groups of four. In December, 20 projects were selected for further support and coaching, out of which 12 will be selected for public pitching early 2019. Finally, three participants will be selected and awarded as the winners of the project.

http://www.iceaddis.com/code-for-the-future/

## GHANA: "GIRLS CAN CODE" PROJECT

#### January - June 2018

Within its Information for All Program (IFAP), UNESCO implemented a 6-month first phase of the Girls Can Code project targeting 150 girls, 11 to 14 years old. Girls are drawn from 5 different schools across the country. For this project, UNESCO cooperates with a number partners, including DreamOval, Filhet-Allard, Ghana-India Kofi Annan Centre of Excellence in ICT (AITI-KACE), amongst others. The "Girls Can Code" project officially started on January 17th, 2018, and was inaugurated by the First Lady of Ghana Mrs. Akufo-Addo.



#### **BOOT CAMP November - December, 2018**

Following the completion of 6 months of training for 150 girls, the 30 top-performing girls were chosen to take part in a two week boot camp organized by the UNESCO Accra Office and IFAP. The boot camp offered intensive training, and gave the girls an opportunity compete in designing apps. The boot camp also showcased the products of the Girls Can Code training.

https://en.unesco.org/news/girls-can-code-unesco-s-information-all-programme-launches-new-project-ghana

## **JORDAN**

#### October 14 - November 15, 2018

In Jordan, YouthMobile implemented a 78 hour intensive training project. 49 students, including 24 girls, from two universities received 60 hours of Android app development training sessions and had 18 hours of workshops about the SDGs framework and its purposes and uses. As a result, the students produced 10 mobile applications, which were released on the Google Play Store. The mobile apps addressed local issues including unemployment, mobility challenges, and lack of public transportation and educational opportunities for young people. The students gave very



positive feedback after the training. One of the trainees Basheer Shahabi said "My experience during the training was very unique; getting to meet new ambitious individuals that share the same passion to help their societies was very eye opening, and even though we were competing, we were like a family, which made the experience very special."

http://www.jordantimes.com/news/local/students-develop-apps-tackle-pressing-social-issues



### KENYA: WOMEN IN TECH

#### February 26 - March 2, 2018

On the occasion of the Nairobi Innovation Week in March 2018 themed "Innovating for a Better Tomorrow", UNESCO organized a five-day workshop for thirty University students from both private and public universities in Kenya with a passion for making an impact through ICTs. The workshop contributed towards networking, capacity building, investment, and support opportunities for young people in East Africa. The workshop helped build their experience in programming (learning-to-code) and problem solving (coding-to-learn). The workshop was followed by a two-day hackathon, 5 to 6 March 2018, focused on mobile apps for women empowerment and accessibility.

http://www.unesco.org/new/en/nairobi/about-this-office/single-view/news/women\_in\_tech\_unesco\_youthmobile\_making\_an\_impact\_through

**LEBANON** 

June 25-29, 2018



UNESCO Beirut worked with Digital Opportunity Trust (DOT) Lebanon to implement a training and capacity building program to generate innovative solutions for the development of local communities. 17 young people from Syria and Lebanon, 35% girls, were trained in skills for mobile app development during five days, to become trainers at local NGOs. Five NGOs from both countries are now able to implement and monitor capacity building for youth on mobile app development, enabling them to become entrepreneurs. This activity was implemented in collaboration with the Syrian NATCOM, networks

of youth NGOs created by UNESCO Beirut through NET-MED and other projects in both Lebanon and Syria.

## **MOZAMBIQUE**

#### **Ongoing**

Mozambique joined the UNESCO YouthMobile Initiative in training young people to code and to use mobile phones as a resource to solve local problems. The one-year project was launched at the Science and Technology Park of Maluana, Maputo Province in Mozambique on 28 September 2018. More than 200 students in Mozambique will benefit from the initiative that aims to develop 20 prototype mobile applications. Funding for the project is provided by UNESCO Korean Funds-In-Trust and it aims to foster human and social development in Mozambique, Rwanda and Zimbabwe, through the use of information and communication technology (ICT).

https://en.unesco.org/news/youthmobile-transforming-education-mozambique

## NIGERIA: SCALING UPTHEYOUTHMOBILE-FCTATRAINING PROGRAMME Ongoing

Since July 2017 UNESCO Abuja has partnered with FCTA (the Federal Capital Territory Administration) to implement the YouthMobile program in Nigeria, aiming to empower 1000 youth on mobile apps development and entrepreneurship. In March 2018, 418 beneficiaries graduated from the program. The second phase of the program, which expands

program. The second phase of the program, which expands the first phase of the project funded by FCTA, began in early September 2018, and has an additional target of 363 youths. The second phase of the project will last for 10 months. The

focus of the training stays on combating unemployment.

https://www.youtube.com/watch?v=BnK9R60WRB0

Voltable Decision of the Control of

http://www.nta.ng/international/20180309-use-your-skills-for-nation-building-fct-minister-urges-ict-graduands/



#### OATAR

#### January-June, 2018

Following the strength of previous YouthMobile projects in Qatar, the Initiative implemented a 6-month project. The training was completed in two phases: first a 9-week training organized to empower 200 students, 60% girls, in grades 7 and 8 from eight schools in Qatar to learn coding to build mobile apps. The second phase was a competition that allowed students to showcase their applications. 35 students, half of which were girls, participated in the second phase to create the best mobile app under the theme "Helping My School". The competition was in cooperation with Qatar Computing and Research Institute, Arab Women in Computing, and



Qatar National Commission to UNESCO. The YouthMobile coding competition witnessed great success. The participants, trainers and student beneficiaries are looking forward to further development of the programme in the near future.

http://www.unesco.org/new/en/media-services/single-view/news/qatar\_youngest\_mobile\_apps\_developers\_rewarded at youthmobil/

## TANZANIA: GIRLS ENTERPRENEURSHIP SUMMIT

November 9, 2018



UNESCO YouthMobile was presented at the national Girls Entrepreneurship Summit as an opportunity for digital skills development and confidence building for youth. This was the first entrepreneurship summit held in Tanzania to serve the need for inspiration and motivation of young girls to contribute to local and global development through innovation and entrepreneurship. UNESCO also led a discussion on the potential and the roles of youth in implementation of the Global Goals. 100 girls were trained and showcased their work on data and design thinking concepts, building applications and innovative products to address social and economic challenges in their respective communities.

https://www.girlsummit.africa/

## TUNISIA: AFRICAN UNION WORKSHOP

#### November 23, 2018

The second edition of "Youth Entrepreneurship Capacity Building Workshop on coding, ICT, TVET and STEM" was organized by the African Union International Centre for Girls' and Women's Education in Africa. A trainer from the UNESCO YouthMobile activities presented the YouthMobile initiative, including the targeted group, tools used and the development methods. The panel also emphasized the importance of gender equality in all the YouthMobile projects.

http://appinventor.mit.edu/explore/blogs/karen/2018/12.html



# VIETNAM: UNESCO HACKATHON ON CLIMATE CHANGE AND SUSTAINABLE DEVELOPMENT

#### October 13-14, 2018

UNESCO, together with FOSSASIA, organized a hackathon in Vietnam, following the same theme as the UNESCO Hackathon in March during FOSSASIA 2018, "Climate Change and Sustainable Development". The hackathon brought together innovators, hackers, and scientists to create open source apps that help journalists to monitor and use scientific knowledge and information relating to climate change. It aimed to raise awareness and engagement of journalists on climate change reporting based on the UNESCO's guidebook, as well as encouraging females to participate in replicable and scalable tech development. 204 participants in 24 project teams engaged in the competition.



https://unesco.sciencehack.asia/

https://blog.fossasia.org/unesco-hackathon-vietnam-2018-wrap-up/

https://bangkok.unesco.org/content/unesco-hackathon-sets-its-sights-climate-change-solutions-asia-pacific

### **ZIMBABWE**

#### **Ongoing**



On December 10, YouthMobile launched a four-phase program, sponsored by the UNESCO KFIT "ICT Transforming Education in Africa" initiative. 30 participants selected from 7 different institutions gathered in Africa University in Mutare, who will receive intensive training on their digital skills. The project aims to equip the participants with further technical skills in order to build their own mobile applications and empower their local community. The first phase of the project was a five-day boot camp from 10 to 14 December. Online Coaching and Hackathon will be organized in January 2019, and a Shark Tank will be launched on 28 January as the closure of the project.

http://www.unesco.org/new/en/harare/about-this-office/single-view/news/young\_creatives\_trained\_in\_mobile\_apps\_development/

More information about YouthMobile 2018 country projects at https://en.unesco.org/youthmobile



## **COUNTRY HIGHLIGHT: NIGERIA**

The UNESCO Abuja office has built a strong partnership with the Federal Capital Territory Administration in Nigeria, implementing the YouthMobile program. In July 2017, the program was launched with 418 youths in Abuja, most of whom had little to no experience in ICT education or coding skills. The students were given the opportunity to learn skills in any area of their choice in software, hardware, entrepreneurship in ICT and networking. Trainers taught courses on the core programming languages HTML, CSS and JavaScript, as well as Android mobile development, and front and backend design for websites and mobile applications. The students graduated from the program in March 2018, with much success.

The program boasts many positive outcomes - 62% of the recipients are now skilled in web and mobile app development, with a further 38% skilled in computer networking and repairs. 28% of graduates have developed apps that can be downloaded on the Google Play store. 25% have secured internships or paid jobs upon completion of the course, and 15% report being selfsustained. YouthMobile Nigeria also set up a computer hub for followup mentorship and guidance for the graduates after the training, to ensure they are supported in the post-training period.





The skills and applications developed in the program have direct effects in the lives of the beneficiaries and their communities. One example is Agrotech, an application developed by a group of graduates, which meets farmers' needs for access to agricultural information, critical to improving crop and livestock Agrotech productivity. helps record keeping in agricultural industries, helping farmers and agribusinesses to function more effectively. As a result, Agrotech users have seen production increases of up to 85% due to increased efficiency.

The second phase of the program was initiated in early September 2018, and so far 363 participants have joined the program. 20.4% of the current cohort are women, and there is a great enthusiasm amongst the participants. In 2019, the second phase of the UNESCO-FCTA YouthMobile program aims to train a total of 600 youth, bringing the total for the project to 1,000 youths trained.



## "Kids Spelling Phone" App

Christiana Oluwakemi Owoyele was a participant in the first phase of the UNESCO-FCTA YouthMobile training, who learned coding and programming skills for mobile app development:

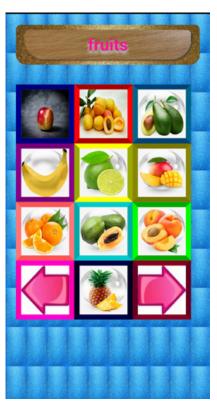
"Prior to my encounter with the YouthMobile Initiative, I thought mobile app development was exclusively for the 'too smart for Harvard's or the Silicon Valley gurus. But today, thanks to the YouthMobile project, I can proudly call myself a mobile app developer. Though I know I still have a whole lot to learn, I am also aware of great possibilities ahead."

Christiana has designed and launched her app Kids Spelling Phone, which is a fun and interactive game designed to help kids learn spelling and vocabulary for words and numbers. The features of the app include:

- Users can select if they want the word spelled to them or if they want only the pronunciation
- Click on each number or image to display the spelling and display a larger image
- Quiz section where kids can test their knowledge and play
- Learn to spell: numbers one to one hundred, insects, fruits, drinks, food, places, activities, colors, tools, nature, parts of the human body, occupations, vehicles, clothing items, school items, and more!

Kids Spelling Phone can be found on the Google Play Store: https://play.google.com/store/apps/details?id=kids.spelling.phone









## **INTERNATIONAL EVENTS 2018**

### AFRICA CODE WEEK 2018

#### October, 2018

UNESCO YouthMobile supported SAP and partners for the third year to organize the largest annual coding event on the African continent. Throughout the month of October 2018, Africa Code Week successfully held training sessions in 37 countries in Africa. Over 2.3 million teachers, students and trainers participated in 63,759 free workshops where they were taught coding skills. With 46% female participation and 23,000 teachers trained throughout year 2018 in the run-up to October events, Africa Code Week makes huge strides towards empowering girls in the digital century while building community capacity in ICT education. Actively supported by 28 African governments, over 130 implementing partners and 120 ambassadors across the continent, Africa Code Week is driving sustainable learning impact to help bridge the digital and gender skills gap in Africa in support of SDG #1 (No Poverty), #4 (Quality Education) and #5 (Gender Equality). UNESCO and its Field Offices organized training sessions and provided support for thousands of teachers and young people in 18 countries: Angola, Burkina Faso, Burundi, Cameroon, Democratic Republic of Congo, Egypt, Ethiopia, Gambia, Kenya, Lesotho, Madagascar, Mozambique, Namibia, Nigeria, Rwanda, Senegal, Tanzania, and Zimbabwe.

https://africacodeweek.org/ https://en.unesco.org/news/africa-code-week-2018-launched-world-teachers-day-cooperation-youthmobile













### **Country Focus**

#### **Burundi**

167 teachers from 70 schools in Gitega, Cibitoke and Bujumbura regions and volunteers were trained as future ICT trainers. 10,500 students were trained in the Scratch programming language, a further 120 girls were trained in Java. UNESCO Bujumbura also hosted the first #eSkills4Girls inter-school hackathon, with the top 31 girls from 3 different schools competing to present their digital solutions. Separately, 20 girls were trained on Webdesign for social change; and 4 ICT clubs were created in schools. An introduction to coding session was also carried out at an orphanage in Kinama.

#### **Democratic Republic of the Congo (DRC)**

On October 26, UNESCO Kinshasa in partnership with the Fondation Lumumba Lab launched the Africa Code Week event in DRC – training approximately 200 teachers. The event was chaired by the Minister of Primary, Secondary and Professional Education, supporting the many initiatives implemented by the government to train teachers and future workers, and contributing to the 2016-2025 Sectoral Strategy Plan for Education and Training jointly conducted with UNESCO.

#### Kenva

From 19 October to 31 November, UNESCO Nairobi partnered with local authorities and organisations, to co-organize the trainings and events in Africa Code Week. 200 teachers and ICT scholars were trained as trainers and 250 learners of all ages were trained on web development using Scratch, HTML & CSS, child online protection and safety, Google CS and online branding. 50 policy makers and educators gathered during the event to discuss the future use of ICT in education. More than 200 Africa Code Week events in 2019 are expected to expand the positive influence of ICT education in Kenya.

#### Mozambique

UNESCO Maputo organized training for young people from the District of Manhiça. The training took place at the Science and Technology Park of Maluana (MPC&T), using the ICT facilities of the Park and five trainers from MPC&T. From 18-25 October, 157 students, 43.4% girls, participated in the training, aged between 12 and 17 years old, out of which 68 were girls. The students were trained in the Scratch coding language and other coding tools.



#### Namibia

On 11,13 and 14 September, UNESCO Windhoek organized a train-the-trainer workshop in the National Library and Archives in Namibia. 119 teachers from the Hardap, Khomas and Otjozondjupa Regions received training in the Scratch programming language. Additional training for 160 teachers was conducted in Oshana, Ohangwena regions on 16 October, Omusati and Oshikoto regions on 18 October, 2018. From 14 to 28 October, 5530 Students from schools across the country received training in Scratch coding. 2600 students, almost half of the participants, were girls.

#### Nigeria

From 15 to 26 October 2018, UNESCO Abuja organized coding training for 804 students and 38 teachers. Ten facilitators - including eight beneficiaries from the UNESCO-FCTA YouthMobile project, who graduated in March - trained students from five schools in the Federal Capital Territory Abuja. The students were able to create their own webpages using the Sublime Text editor.

#### Senegal

From 17 to 31 October, UNESCO Dakar helped organize trainings for 11,147 children during the Africa Code Week event.

#### **Tanzania**

From 6 to 20 October, UNESCO Dar es Salaam partnered with Apps and Girls to organize coding training for 212 girls at two schools in the Kisarawe district and four schools in Ilala district. The girls learned Scratch, a visual programming language for basic coding skills. There was also an interactive session on how youth can contribute to the implementation of the SDGs on a community level. To support their learning after the programme, the girls were given coding guides and USB disks with the learning material including digital coding content and the offline version of Scratch. They were also informed of different existing programs, hubs and creative spaces in the region, where they can continue their learning and get follow-up support.

#### **Zimbabwe**

From 13 to 27 October, UNESCO Harare partnered with local government to implement training for 24195 students - of which 12775 were girls. The training was carried out at 114 schools, and 1000 teachers received training. The training was targeting primary and secondary school learners.

The training content was largely drawn from Scratch material supplied by SAP as part of the e-learning model which seeks to promote the integration of ICTs across all the learning areas as defined in the Curriculum Framework.





### EDUCODE.BE CONFERENCE

#### August 27-28, 2018

UNESCO YouthMobile supported the first Educode.be international conference organized by several universities in Belgium. The conference aimed to sensitize teachers about the need to prepare youth for the challenges of the digital society by integrating computer science elements, such as computational thinking and coding, into teaching practices.

https://educode.be

### FOSSASIA AND UNESCO HACKATHON

#### March 24 - 25, 2018



UNESCO organized a hackathon to spread the idea and practices of Open Source and Open Data for civic engagement, education, science, culture and development of knowledge societies. The theme of the 2018 UNESCO hackathon was "Climate Change and Sustainable Development". The hackathon encouraged its 92 participants to leverage open datasets to provide smart solutions to pressing environmental and social issues affecting the world in line with the SDGs. Participants grouped in 14 different teams and proposed innovative solutions, including an Al-powered, smart recycling app, a personal carbon footprint tracker and a flood prediction app.

https://en.unesco.org/news/unesco-open-data-and-science-hackathon-fossasia-2018-summit-singapore http://bangkok.unesco.org/content/code-green-join-unesco-science-and-open-data-hackathon-fossasia-summit

## ICTP WORKSHOP

#### **September 17, 2018**

The UNESCO YouthMobile panel took place the first day of the five-day "Advanced Workshop on Technology for Sustainable Development: Low-Cost Tools to support Scientific Education" organised by ICTP (International Centre for Theoretical Physics) in Trieste, Italy. In the panel, the YouthMobile initiative was introduced to participants, including the targeted group, countries covered, tools used and the potential goals. The panel also emphasized the importance of having Open Solutions as well as gender equality.

http://indico.ictp.it/event/8334/session/0/contribution/3/material/slides/

## **MIL WEEK 2018**

#### October 24-31, 2018

The Media and Information Literacy Week is an international annual conference organized by UNESCO. The 2018 edition focused on the main theme of "Media and Information Literate Cities: Voices, Powers and Change Makers". UNESCO YouthMobile organized a workshop on "Smart Cities and Immigration Challenges: Digital Literacy and Integration" to address the

"We have seen here the power of technology [...] to enhance the quality of learning and to reach all marginalized populations"
Audrey Azoulay, Director-General of UNESCO February, 2018

ongoing challenges and possibilities that smart cities offer to allow for a better integration of migrants. Refuhelp, a social startup created in France by refugees, made a presentation on their experience in ICT and policy issues related to immigration.

https://en.unesco.org/news/unesco-youthmobile-highlighted-refugees-made-platform-2018-global-media-and-information



## MOBILE LEARNING WEEK WORKSHOP - ROOM 7 CONSORTIUM

#### March 26, 2018

Mobile Learning Week(MLW) is UNESCO's flagship ICT in education event. The 2018 edition, under the theme "Skills for a Connected World", examined the types of skills needed in and for a connected economy and society, with a focus on digital skills and competencies. YouthMobile showcased how the initiative itself can help build future skills for the digital economy. It also reviewed how its strategies for delivering coding skills are useful and efficient within the context of SDG 4.

Room 7 is a consortium of coding schools for refugees created after MLW 2017. Representatives of the consortium attended the 2018 edition elaborating on their collaboration strategy and vision. YouthMobile collected testimonies from participating organizations and beneficiaries, with the objective to showcase the practices, and attract more refugee coding schools to join the consortium in the future.

https://www.room7.org/

https://en.unesco.org/sites/default/files/mlw2018\_workshop-we\_can\_work\_it\_out\_building\_future\_skills\_for\_the\_digital\_economy.pdf

### WSIS 2018 WORKSHOP

#### March 19, 2018

In WSIS 2018, UNESCO led intense discussions around "Youth, Access to Knowledge and SDGs Strategy for Building Youth Skills in Digital Technologies". The discussions highlighted that the global vision of universal Knowledge Societies is increasingly relying upon free, open and trusted use of new technology. The role of YouthMobile was emphasized in improving access to knowledge and information, as well as contributing to local and global communities.

https://www.itu.int/net4/wsis/forum/2018/Files/documents/outcomes/WSISForum2018\_ForumTrackOutcomes.pdf

## YOUTHCONNEKT AFRICA SUMMIT

#### October 6 -7, 2018

Focused on supporting the efforts of young African app developers, the YouthMobile workshop was organized for 25 international youth participants from Nigeria, Ghana, Kenya, Mauritius, South Sudan, and Rwanda, many of which former YouthMobile students.

This event was organized in Rwanda as part of the Youthconnekt Africa Summit, in collaboration with the UNESCO Offices in Nairobi, Accra, Abuja and Harare. It was supported by the UNESCO Korea Funds in Trust project "ICT Transforming Education in Africa", the UNESCO Information For All Programme (IFAP) and KLab Rwanda.

Led by a team of trainers from Kenya and Rwanda,



the participants worked in teams to improve and finalize mobile apps developed by YouthMobile students to respond to pressing local needs and address sustainable development. After two days of intensive collaborative development, the participants were able to release final products, including mobile apps such as "Spelling Phone", aiming to improve learning outcomes for children; "Agro Assist", providing farmers with the information they need; "Votestart"; "DK Hospital Management System"; "FitGirl"; and "Youth Mobile Prep".

https://en.unesco.org/news/unescos-youthmobile-initiative-youthconnekt-africa-summit-2018



### YOUTHMOBILE CENTRAL ASIAN CONTEST

Nov 26, 2018 - Jan 25, 2019



**Central Asian Contest** 



26 November 2018 - 25 January 2019

UNESCO Almaty launched a YouthMobile competition for the development of an open solution promoting access to information in Central Asia. Young people from Kazakhstan, Kyrgyzstan and Tajikistan submitted their proposals for mobile apps, open educational resources, and tech-based training materials that offer local solutions, contributing to the SDGs. The UNESCO competition encourages young girls and women to participate to address the problem of underrepresentation of women in the technology sector in Central Asia. The winning proposal will be announced at the awards ceremony in Almaty, 14 February 2019.

http://en.unesco.kz/apply-for-youthmobile-mobile-applications-contest

More information about YouthMobile 2018 international events at https://en.unesco.org/youthmobile





## 2019 PLANNED ACTIVITIES

### **AFRICA CODE WEEK 2019**

UNESCO will continue its partnership with SAP to participate in the organisation of Africa Code Week 2019 through the UNESCO Field Offices network.

### **CUBA SUMMER SCHOOL**

In 2019, UNESCO Havana will organize the "Juventud APK" initiative, to be implemented in collaboration with the Ministry of Communications of Cuba and Joven Club de Computación y Electrónica. The activity will be implemented in three phases. Phase one will include a training of trainers workshop to build the capacities of the Joven Club de Computación teaching staff, to develop mobile applications for sustainable development using App Inventor. During phase two, some of the teachers trained in phase one will facilitate one capacity building workshop for mobile apps targeting 40 young men and women from Old Havana. A training guide will be produced to assist teaching staff from other provinces to replicate the workshops. In phase three, Juventud APK will expand the implementation of training workshops to a national scale. The workshops will be offered by Joven Club de Computación as part of its summer educational program. The project aims to train at least 40 teachers and 200 young people to develop more than 40 mobile apps for sustainable development.

## FOSSASIA 2019

In 2019, UNESCO YouthMobile will continue to partner with FOSSASIA in holding the 2019 Summit between 14 and 17 March in Singapore.

# MOBILE LEARNING WEEK 2019 WORKSHOP

YouthMobile is working with the Kenyan Africa Code Week Ambassador to organize a workshop themed "AI for Young Learners in Africa" during Mobile Learning Week 2019 in May. The workshop aims to make learners comfortable with AI and equipped for future labour market demands, prepare young learners to switch from being consumers to creators of technology, and diminish the literacy gap in the AI field, by training educators.

# QATAR NATIONAL SCRATCH COMPETITION 2019

UNESCO Doha Office will continue to co-organize the Qatar National Scratch Competition in 2019. This competition aims to acknowledge young people and inspire them to pursue careers in digital, data and technology professions, which will finally enhance the creation of a more sustainable educational and economic future, in support of the national vision of Qatar 2030. The competition opens to all students aged between 6 and 18.

### **SEYCHELLES**

YouthMobile is working with the Department of Information Communications Technology of Seychelles with the objective to launch a pilot project in 2019. The objective would be to introduce youth, especially young women, to programming and problem solving and build key capacities. The training will target two groups of students: those without knowledge of programming concepts (Beginners); and those with knowledge of objectoriented programming and the programming language Java (Intermediate). Beginner level students are planned to be taught using MIT App Inventor, while Intermediate students will be taught on Android Studio. Both groups will be taught business skills including marketing, business and presentation skill development.

## WSIS HACKATHON 2019

UNESCO will partner with ITU to host the WSIS Hackathon for 2019. The theme of the hackathon is "Hacking Solutions for Lifelong Learning and Livelihoods" (#HSLLL). There will be two stages for the hackathon, the first one will be online regional competitions for participants all over the world to pitch ideas in teams and compete between their fellow participants in the same region. The second and final stage will be in Geneva, where the participants selected for the final round will develop their digital solutions over the three-day global hackathon.

# THE UNESCO YouthMobile @ TEAM

#### **Knowledge Societies Division, UNESCO, Paris:**

Davide Storti, Pietro Desideri, Sydney Patterson, Yufan Hu

**UNESCO Field Offices,** involved Abuja, Accra, Addis Ababa, Almaty, Amman, Bangkok, Beijing, Beirut, Brasilia, Dakar, Dar es-Salaam, Dhaka, Doha, Hanoi, Harare, Havana, Juba, Kinshasa, Libreville, Maputo, Nairobi, San José, Windhoek, Yaoundé.

**Special acknowledgement to**: A. Caine, C. Morales, P. Irankhah, J. Kaisaris, H. Doucouré, L. Young, L. Liu, J. Mello, A. Humo, P. Pécome, J. Hamou, W. Grenier-Chalifoux, Z. Hu



Communication and Information Sector Knowledge Societies Division 7, place de Fontenoy 75352 Paris 07 SP, France

#### Contact us:

youthmobile.info@unesco.org

#### **Visit our website:**



https://en.unesco.org/youthmobile https://fr.unesco.org/youthmobile

Content developed by Davide Storti, Sydney Patterson, Pietro Desideri, and Yufan Hu All photos © UNESCO Vector icons created by Freepik Design layout by Yufan Hu