



Multiple education pathways for digital skills

Enabel cases from BF, NG, PS & UG

Belgian development agency

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Agenda

- 1 Digital Skills Framework
- 2 Digital Skills in Teacher Trainings  
- 3 Digital skills in STEAM 
- 4 Digital Skills for entrepreneurs / employment 
- 5 Digital Skills for security in digital education 
- 6 Q&A



Warm Up 🔥



1

Allez sur
wooclap.com

2

Entrez le code
d'événement dans le
bandeau supérieur

Code d'événement

PNTTEF



Activer les réponses par SMS

What digital skill do you value most in your life and why?



Introduction to Digital Skills

1

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D4D Hub Digital Skills Framework

FOUNDATION
INTERMEDIATE
ADVANCED
HIGHLY SPECIALISED

E.g. all citizens should be able to create digital content on digital platforms (i.e. skill) and be open to and respectful of the views of people on the internet even if they differ from one's own views (i.e. attitude).

Essential Digital Competences

The knowledge, skills, and attitudes that all citizens need for the confident, critical and responsible use of, and engagement with, digital technologies for learning, at work, and for participation in society

E.g. a mechanic needs to be able to work with digital diagnostics tools, a graphic designer needs to be able to work with visual design software packages, etc.

Sector/Job-specific digital skills

A set of specific technical digital skills needed for using digital equipment and/or software that are required for specific sectors, jobs or professional activities

Digital skills for ICT professionals:

Specialised technical digital skills required for developing, operating, maintaining, and - at the most advanced level - the ability to innovate digital technologies; as well as to exploit digital business opportunities

+ Soft Skills

E.g. a programmer needs to be able to adapt or develop code for a new software application, a cybersecurity expert needs to be able evaluate risks and implement security techniques, etc.

Different *types* of skills & proficiency levels



Uganda 

Digital skills in Teacher Training

2



Digital Skills in Teacher Training 🎓

Components

- Co-design
- Build on available gadgets
- Differentiated approach
 - Low/High Resource Context
 - Basic/Intermediate/Advanced Skills
- Teacher's needs
 - Equipment
 - Continuous Professional Development
 - Integration Tech < Pedagogy
- Sustainable & Scalable

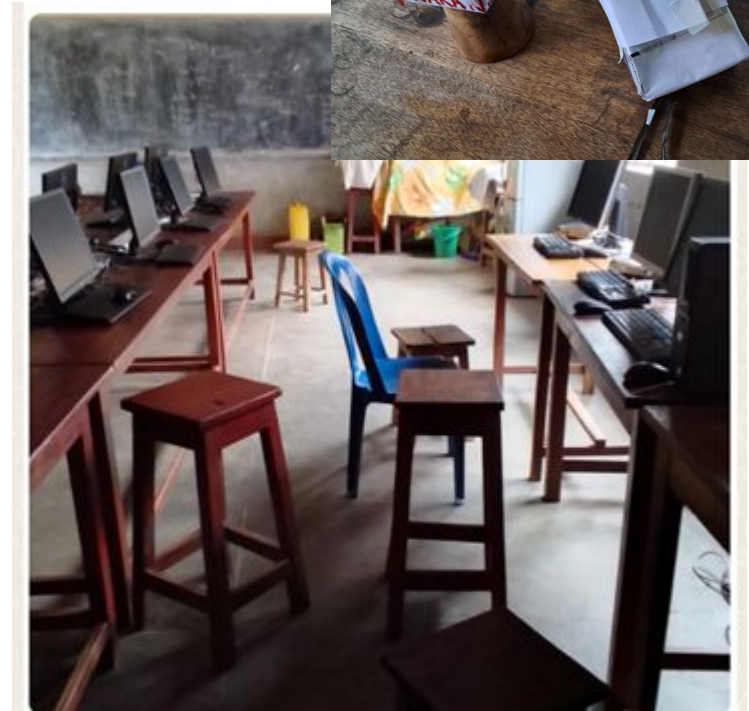




Digital Skills in Teacher Training 🎓

Equipment 🇬🇪

- **Challenge**
 - Low: Power cuts, Connectivity & Gadgets
 - High: Maintenance, Mobility & Availability
- **Task:** ICT integration
- **Action:**
 - Digital Hubs
 - Mobile Learning Toolkits
- **Result**
 - Existing evidence
 - Contextualize, Test & Develop
 - Training on Equipment & Application



This is the ICT lab of St.Gonzaga SS. It is only used for Computer/ICT teachers to teach computer lessons. It has challenges of unstable power supply, internet & maintenance. The other subjects do not benefit from it.

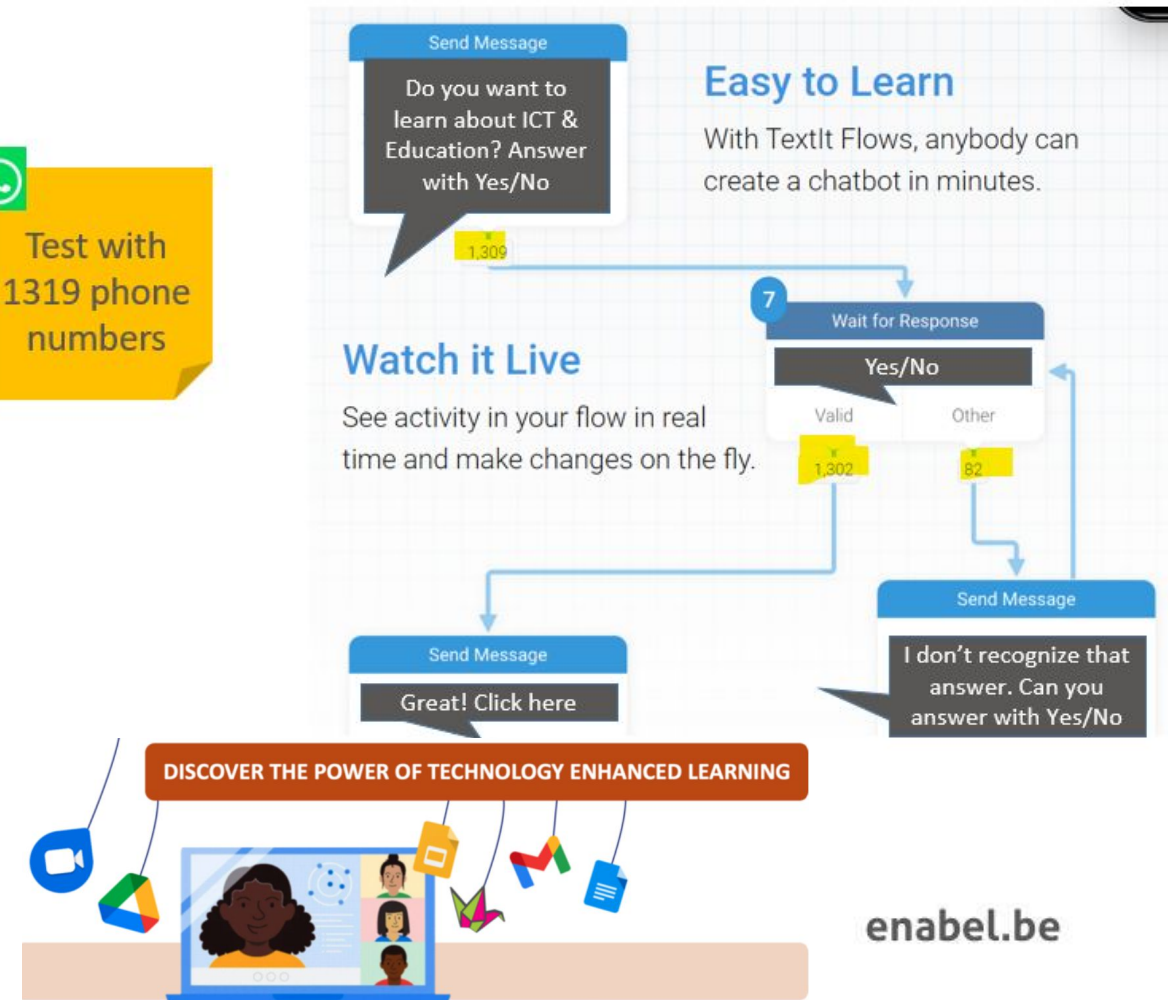


Digital Skills in Teacher Training

Continuous Professional Development

- **Challenge**
 - Trainings one off, no follow up
- **Task**
 - Integration ATL/ICT
- **Action:**
 - 8x Training Centers ICDL
 - [MOOCS](#): Tech < Pedagogy
 - ICT COP: Application
 - WhatsApp Chatbot
- **Result**
 - Gaining skills & Applying
 - Sustainable & Scalable

 Test with 1319 phone numbers





Palestine 🇵🇸

Digital skills in STEAM Interventions

Through the experience of Saja Sabbah, Sama Kittaneh, and Sadeel Sabbah

3



Project Background

Inclusive Access to Quality Education & Learning

Objective: Boys and girls, young women and men access quality education and acquire STEAM and 21st century skills in a conducive learning environment.

Result: Enhance Quality Education and Learning outcomes in STEAM and 21st Century Skills.

4 QUALITY EDUCATION

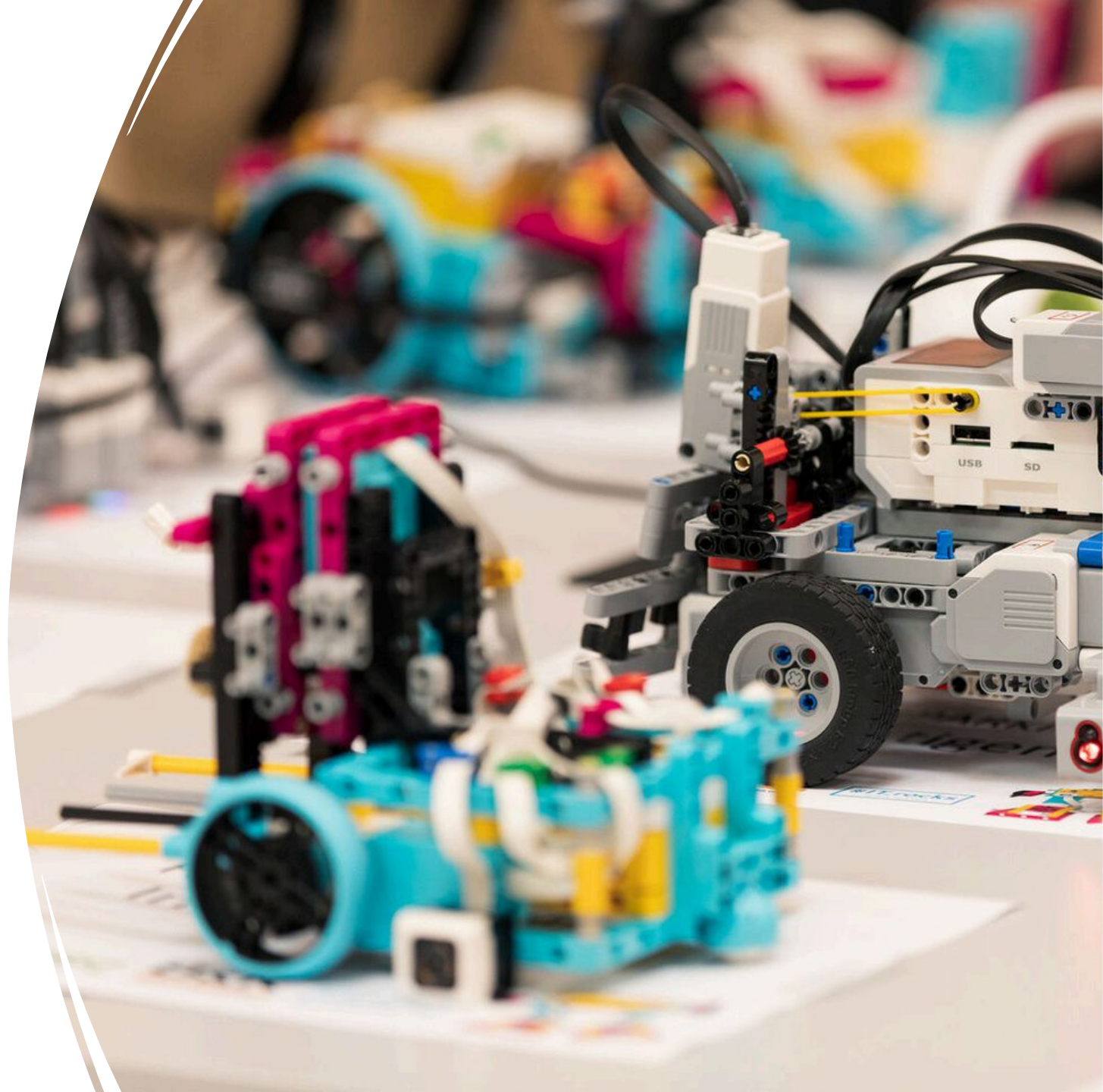




What is WRO?

Is an international competition aimed at encouraging students and young people to develop their skills in fields of science, technology, engineering and mathematics(STEM) through designing and programming robots. It is organized annually with teams participating from different countries around the world.

The competition targets students from different age groups, starting from elementary level to university students.







Three Tier Olympiad

Python Training:



National Robotics Olympiad:

- Clubs
- District Level
- Regional Level
- National Level

World Robotics Olympiad:



- Robotics competitions 4 Categories
- WRO reaches over 100 countries worldwide.
- 2024 in Turkey under the Theme: Earth Allies







Clubs

In 2023 60 clubs were established in West Bank, East Jerusalem and Gaza focused on robotics and programming.



New Horizon won first place in Robo Mission Senior Category. They were qualified to compete in Panama.

In 2024 60 clubs were established in West Bank and East Jerusalem focused on robotics and programming.



New Horizon team won first place and will compete in Turkey at the international event.



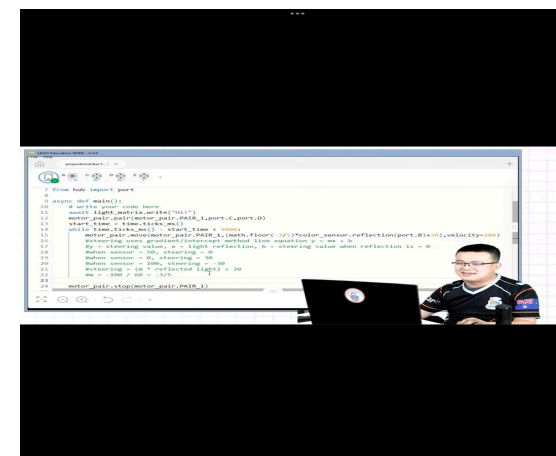
Example of programming:

At the beginning of our learning, we faced some problems when we moved from learning simple programming in the school in Arabic (scratch) to programming in English (spike) and then to learn Python.





Step two



Step three



Social media was our first destination and our only way to overcome the problems facing us.



We searched on social media such as YouTube and joined groups on Facebook where members learn this programming from all over the world through our communication. We also got to know teams from around the world. After several months, we met in international and national competitions.





Digital Transformation

Our development methods in the field of robotics design:

Ministerial Training



Through Experience



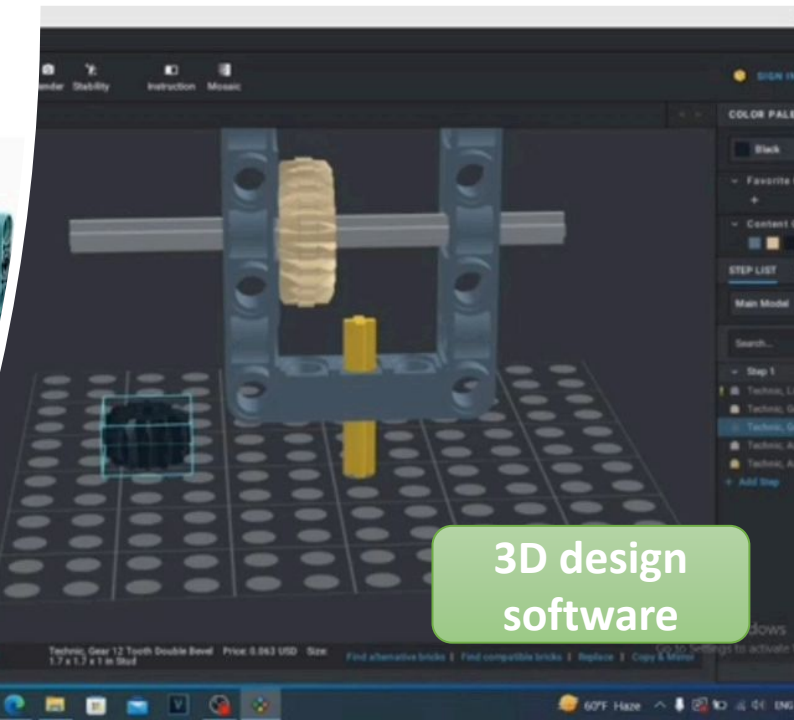
SPIKE Prime
Robots

YouTube Videos

14



3D design software

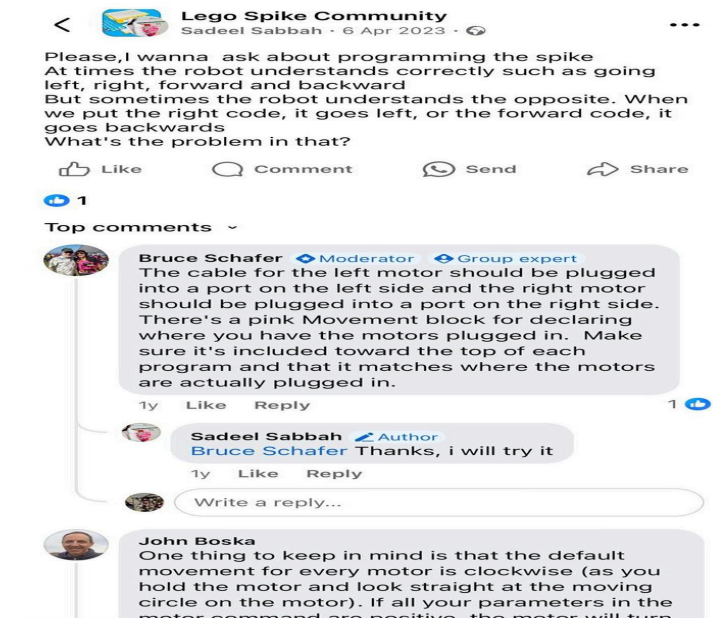
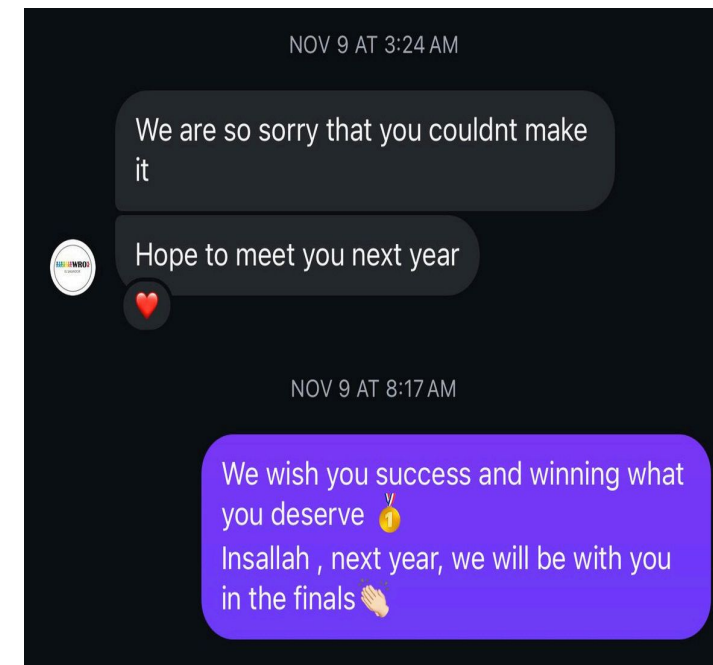


3 Spike Prime Robot Designs



Digital Transformation Continuation...

- Communication with other team members..
- "Searching for information in the Spike Prime community includes experts from all over the world."



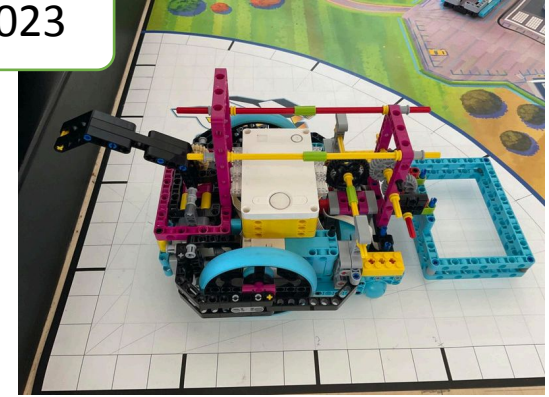
These are some of
the designs we
have created and
used in
competitions:

*Do you notice the
development?*

2023



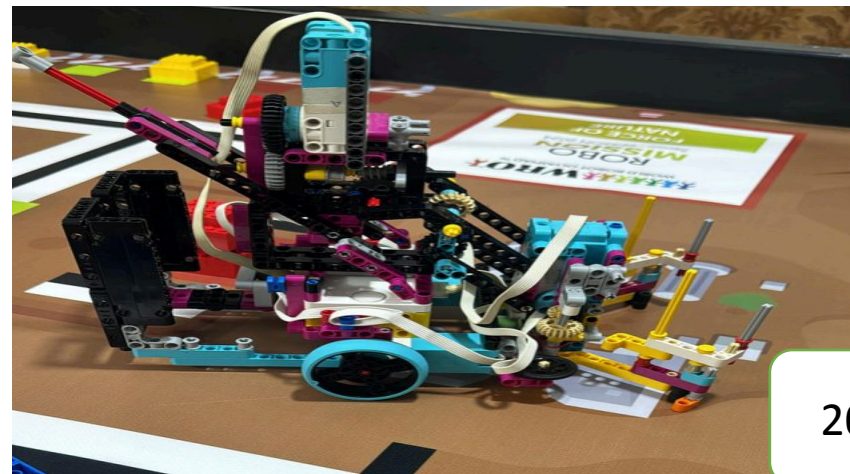
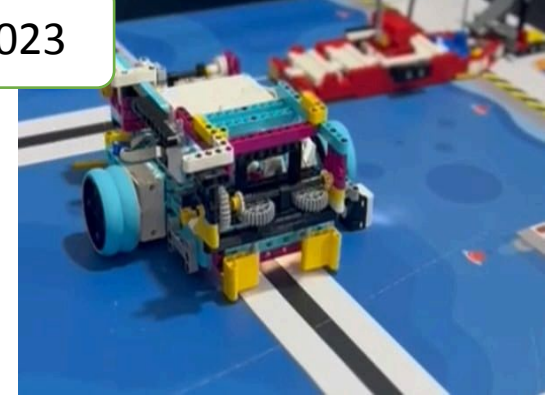
2023



2023



2023



2024

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Uganda 🇺🇬 & Burkina Faso 🇸🇩

Digital skills for entrepreneurship /
employment

4

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Digital Skills for Entrepreneurs



THE WORLD BANK



- World Bank pulse report-Sub Saharan Africa(2024):Digital skills enhance access to information, reduce transaction costs, and facilitate more efficient business operations.
- There is a clear correlation between digitization, entrepreneurship, and decent work.
- **Digitization** can enhance **entrepreneurial** activities by making it easier to start and run businesses, which in turn creates more job opportunities and **improves working conditions**.



*Digital Economy Contribution: Up to \$180 billion to Africa's GDP by 2025.



From AEDIBNET....

The aim of this course is to **address the needs of marginalised groups by enhancing their inclusion and possibilities in entrepreneurship by raising their digital and entrepreneurship capacities.**

1. **A white paper/ research was done**, analysing the need for a digital skills academy and the existing capacities and skills in sub-Saharan Africa. This is the basis for DES Course curriculum.
2. This programme was created and tested in 2023 in **2 test hubs, Uganda and Morocco.**
3. Finally, the results were capitalised upon in order to scale it up and build it as a **sustainable and inclusive programme for African youths and innovation hubs**

IMPLEMENTING PARTNERS



AfriLabs

TARGET GROUP



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... to the creation of the DES Framework

The rationale:

- Limited digital skills trainings
- Courses are often targeted to a high end/ privileged audience & male-dominated.
- Level of maturity of digital ecosystems differs(this suites any context)
- No national or contextual aspects taken into account.

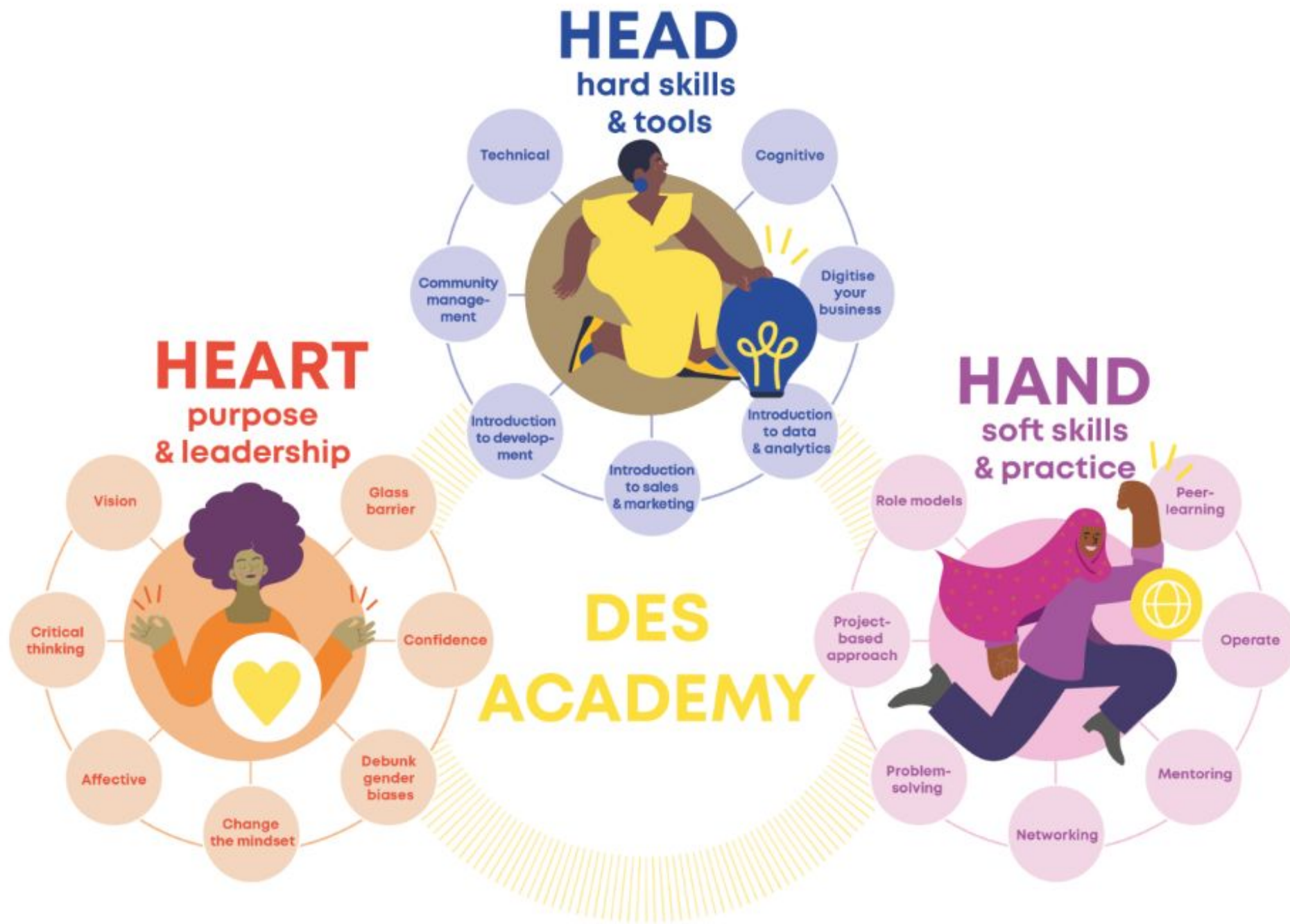


Vision of the DES Course

The objective:

Provide beneficiaries an opportunity to craft their 'own' academy by either following all three-week training, 2 week out of three or only selected modules to match their entrepreneurs needs.

- Enable budding entrepreneurs acquire both soft and hard skills required to design and run a digital business.
- Develop an entrepreneurial spirit and start self-sustaining businesses.
- Stimulate future entrepreneurs' brains to solves problems that affect their communities (respond to a need with a skill)





What's included?

- 3 modules
- 15 sub modules
- 1 Certification
- 25 Videos
- Over 30 Valuable Resources

<https://www.academy.afrilabs.com/course/dgtskills>





Paas-Panga – Burkina Faso

- **Who?**
 - Youth of Centre-East region of Burkina Faso – 1500 from different communities
 - Local civil servants,
 - Entrepreneurs
- **What?** Training programme of basic, intermediate and advanced digital skills
- **Who?** Youth of Centre-East region of Burkina Faso, local civil servants, and entrepreneurs
- **Challenges:** security context, varying levels of digital skills, low connectivity & ICT equipment
- **Results:**
 - Youth equipped with the skills to participate in the digital economy,
 - Creation of local relevant digital content
 - Entrepreneurs are using digital tools (ex: digital accounting, social media marketing, etc.) and increasing their profits
 - Networking between participants helping each other in the business creation process



Niger 

Compétences de sécurité dans l'utilisation du
numérique éducatif

5



Compétences pour la sécurité dans l'utilisation du numérique éducatif

CONTEXTE

- Le numérique de plus en plus présent dans l'éducation
- Elèves exposés à la **désinformation**, le **cyber crime** et tout autres **formes de violences** sur le web et les réseaux sociaux avec des conséquences parfois importantes
- Sensibiliser/aider les élèves à faire **une utilisation responsable, sécurisée et fiable** des technologies numériques

1

**Formation de base
en informatique et
aux TICs**

**Utilisation
responsable
d'internet, des
plateformes et
réseaux sociaux**

2

3

**Guide de bonnes
pratiques des
réseaux sociaux**

**Sensibilisation/Cons
ientisation des
élèves sur leurs
droits numériques**

4



Guide de bonnes pratiques

- Cadres législatifs et réglementaires en vigueur
- Utilisation des technologies numériques (y inclus les médias sociaux) en milieu scolaire
 - Respect des autres utilisateurs, de la vie privée et la protection des informations personnelles,
 - Respect des règles de l'établissement scolaire, vigilance face aux arnaques et au phishing
- Les conséquences de la violation des règles / lois
- Sécurité et protection

IMPLIQUÉS:

Ministère de l'Éducation Nationale à travers:

- La direction informatique,
- La direction de la législation

L'Agence Nationale pour la Société de l'Information ANSI

La Haute Autorité à la Protection des Données à caractères personnelles HAPDP

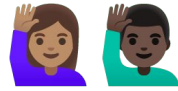
Ministère des Postes et de l'Économie Numérique

Sociétés civiles



6

Q&A



Welcome to reach out to kirsten.vancamp@enabel.be



Paas-Panga – Burkina Faso

Enabel's implementing partner in the region:

DG Jeunesse. They contacted most of the participants via WhatsApp , other informal channels, youth associations and radio ads

Bimades & Wakatlab and Keolid as local implementing partners for the training sessions

Who?

Youth of Centre-East region of Burkina Faso – 1500 from different communities

Local civil servants,

Entrepreneurs

Results

Youth equipped with the skills to participate in the digital economy,

Creation of local relevant digital content

Entrepreneurs are using digital tools (ex: digital accounting, social media marketing, etc.) and increasing their profits

Networking between participants helping each other in the business creation process

