



Access to Skills and Knowledge network

# OPEN LEARNING GUIDE

THIRD EDITION



## #ASKnet - Access to Skills & Knowledge network

#ASKnet is a cross-border consortium of community driven organisations with an aim to build a transformative and sustainable open society and a professional media skills ecosystem. The network provides access to a range of open source knowledge and information, media and IT related training as well as community oriented hands-on skills. The members of #ASKnet address local community challenges, support empowerment with knowledge and skills, inspire regional innovation and creativity, and engage peacebuilding and community empowerment among all members of society. <https://asknet.community/>

#ASKnet is supported by rOg\_agency for open culture and critical transformation (Berlin, Germany) and Hive Colab (Kampala, Uganda) as implementing partners. The project in the period of 2022-2025 is funded by means of the German Federal Ministry for Economic Cooperation and Development (BMZ).

icebauhaus supports an open dialogue between civil society, private sector and the academic world, and creates programmes aimed at bringing artists and creative individuals together, along with advancing the use and availability of digital and social media in development via educational events and technical support. icebauhaus also encourages the concept of social entrepreneurship with the help of knowledge transfer and pilot projects in our partner countries, and cooperates with major players from the field of international collaboration. <https://icebauhaus.com>

rOg\_agency for open culture and critical transformation focuses on practice and projects embedded in communities, and is dedicated to partnering with local grassroots organizations to support open knowledge, open technology, and peacebuilding efforts. Enabling access to information, countering online incitement to violence and creating media literacy oriented open educational resources (OER) rOg\_agency's network brings together arts, culture, open development and civil society. <https://openculture.agency>

The Open Learning Guide (#OLG) is an outcome of "Step Up Juba Media Lab" collaboration with Kapital Movie (2016) and the subsequent jHUB community (2017) in Juba, South Sudan, produced with the initiating project partners icebauhaus and rOg\_agency for open culture and critical transformation in Berlin. This third edition (2024), featuring new open resources is revised and updated from the "Let's Go jHUB" project.

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## OPEN HARDWARE + ELECTRONICS

**AFRIMAKERS**  
<https://afrimakers.org>  
Empowers makers in Africa to develop sustainable projects using prototyping to solve local challenges.

**#ASKotec KIT**  
<https://askotec.openculture.agency>  
'Access to Skills and Knowledge Open Tech Emergency Case' is a resource kit for community trainers, designed as a light and handy mobile workshop creation set.

**#ASKtraining REPAIR CAFE MODULE**  
<https://training.asknet.community/modules/communityrepair>  
Provides hands on experience on how to help your community repair broken devices and exchange knowledge. How to organise the event and run it professionally.

**#ASKtraining #ROSHOP**  
<https://training.asknet.community/modules/ROSHOP>  
Responsive Open Source Modular Housing Prototype (#ROSHOP) is a media and digital culture informed housing prototype for unstable environments.

**APPROPIEDIA SUSTAINABILITY WIKI**  
[https://appropedia.org/Welcome\\_to\\_Appropedia](https://appropedia.org/Welcome_to_Appropedia)  
Sharing knowledge and experience to build rich, sustainable lives.

**BRAILLERAP**  
<https://www.braillerap.org/en/index.html>  
BrailleRap is an open source Braille embosser, originally derived from 3D printers. Emboss text in any language on media including paper, card, PCB, aluminium, into Braille vector graphics.

**CRITICAL MAKING**  
<https://criticalmaking.eu>  
Framework used by SalvageGarden in the practice of co-creating assistive devices, to contribute to an open society via open source innovation.

**DOODLE 3D**  
<https://doodle3d.com>  
Free, open-source web app that turns 2D drawings into 3D objects.

**OPEN HARDWARE CANVAS**  
<https://github.com/ohwmakers/ohcanvas>  
Clarify your hardware project and think strategically about project goals, plans, and the resources you'll need.

**FABLAB - WHAT IS IT?**  
[https://en.wikipedia.org/wiki/Fab\\_lab](https://en.wikipedia.org/wiki/Fab_lab)  
A fab lab (fabrication laboratory) is a small-scale workshop offering digital fabrication.

**HOW TO START A FABLAB**  
<https://fabfoundation.org/getting-started>  
Spaces for community engagement, creativity, entrepreneurship and invention.

**IFIXIT**  
<https://www.ifixit.com>  
The free repair guide for everything, written by everyone.

**INSTRUCTABLES**  
<https://instructables.com>  
Share what you make with the world, and tap into an ever-growing community of creative experts. Participate in make-a-thons and add your own instructables.

**MAKER ACADEMY**  
<https://tolocar.org/en/academy>  
3D Design, Scanning, Printing - Learner Modules related to the use of fab labs.

**MAKERS MAKING CHANGE**  
<https://www.makersmakingchange.com/s/resources>  
Assistive technology helps people with disabilities live, work, and play with more independence.

**OPEN! METHODS & TOOLS FOR COMMUNITY-BASED PRODUCT DEVELOPMENT**  
<https://opensourcedesign.net>  
Current practices of open source product development and guidance to support design process efficiency of open source product development projects.

**OPEN SOURCE ECOLOGY**  
<https://opensourceecology.org>  
Open source industrial machines that can be made for a fraction of commercial costs, designs shared online for free.

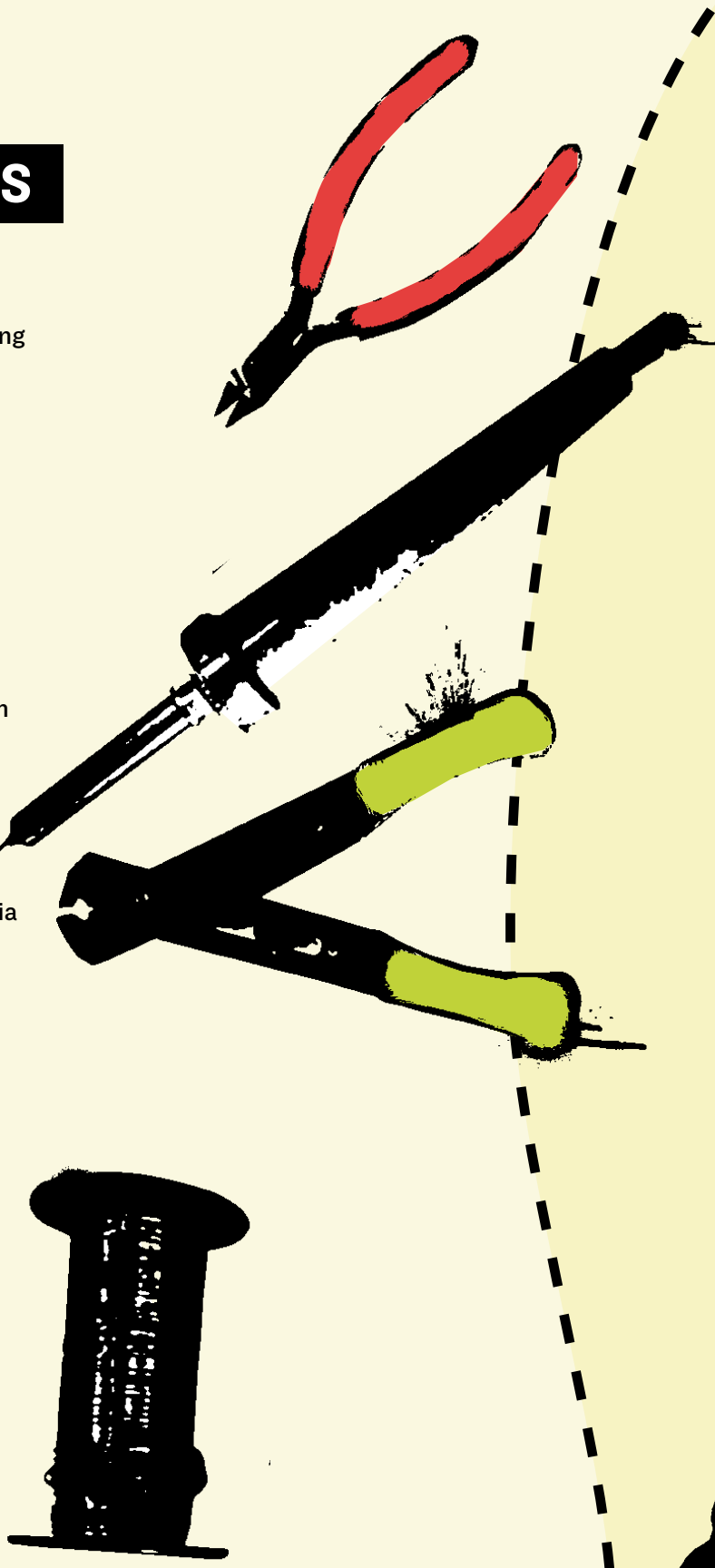
**OPEN SOURCE HARDWARE ASSOCIATION**  
<https://oshwa.org>  
Open hardware community ensuring technological knowledge is accessible to everyone.

**PAPER-DUINO**  
[https://paperpcb.dernulleffekt.de/doku.php?id=arduino\\_clones:arduino\\_clones\\_main](https://paperpcb.dernulleffekt.de/doku.php?id=arduino_clones:arduino_clones_main)  
A compilation of Arduino clones CC-BY-SA 4.0 Int. by Wolfgang Spahn

**SALVAGE GARDEN**  
<https://salvage.garden/what-we-do>  
Community Makerspace Singapore focused on Assistive Tech and openSourced hardware.

**WIKIFAB**  
<https://wikifab.org>  
Explore, Make, Share. Open source hardware documentation platform.

**WIKI-HOW**  
<https://wikihow.com>  
"We're trying to help everyone on the planet learn how to do anything. Join us."



## ARTIFICIAL INTELLIGENCE (AI)

**AI DISINFORMATION DETECTION GUIDE**  
<https://democracyreporting.s3.eu-central-1.amazonaws.com/images/6528fb3c06eb8.pdf>  
Synthetic Media Exposed: A Comprehensive Guide to AI Disinformation Detection

**AI GENERATED CONTENT: SUPERCHARGED BY AI**  
<https://theglassroom.org/supercharged-by-ai>  
How can we stay informed and aware about this rapidly-changing technology?

**GPT4ALL**  
<https://www.nomic.ai/gpt4all>  
Run Large Language Models Locally (offline and on CPUs / GPUs). Built with privacy and security first.

**OLLAMA**  
<https://ollama.com>  
An open-source project that enables users to run large language models (LLMs) locally.

**OPEN WEBUI**  
<https://github.com/open-webui>, <https://openwebui.com>  
Open WebUI is a self-hosted AI interface designed to operate entirely offline.

**HUGGING FACE**  
<https://huggingface.co>  
Hugging Face is an open-source artificial intelligence (AI) community platform.

**WE ARE AI**  
<https://dataresponsibly.github.io/we-are-ai>  
A 5 week learning circle on the basics and ethical dimensions of AI in modern life.

**WE ARE AI COMIC SERIES**  
<https://dataresponsibly.github.io/we-are-ai/comics>

## DIGITAL SECURITY

**SURVEILLANCE SELF-DEFENSE**  
<https://ssd EFF.org>  
Tools and tips for Safer Online Communication by the Electronic Frontier Foundation.

**ENCRYPTED EMAIL SERVICES**  
Tutanota: <https://tuta.com/> ProtonMail: <https://proton.me/mail>  
Email Services with end-to-end encryption.

**MAILVELOPE**  
<https://mailvelope.com/en>  
A browser add-on that allows you to encrypt and decrypt emails and files directly in your browser.

**SECURE OS**  
TailOS: <https://tails.net/index.en.html> Qubes OS: <https://www.qubes-os.org>  
Portable operating system that protects against surveillance and censorship.

**GHOSTERY**  
<https://www.ghostery.com>  
A privacy tool suite designed to enhance online security and reduce unwanted tracking.

**SAFE SISTERS GUIDE**  
<https://safesisters.org/resources/#2300>  
The guide helps women to live and be online safely. Learn about problems women face on the internet and make informed decisions to protect ourselves, make the internet a safe space for women!

**VERACRYPT**  
<https://www.veracrypt.fr/en/Home.html>  
A free open source disk encryption software for Windows, Mac OSX and Linux.

**WEB CHECK**  
<https://web-check.xyz>  
All-in-one OSINT tool for analysing any website.



## GLOSSARY

**AI** - Artificial Intelligence refers to sophisticated computer programs that "learn" from data in order to make decisions. Many AI systems are invisible to the public, yet the results of the decisions they make have a huge impact on modern life.

**Android** - is a robot designed to act and look like a human, and is now commonly known as a Linux-based open source mobile operating systems (OS), developed by Google for smart phones.

**Blended Learning** - is a form of teaching and learning where the student learns at least part of the content and instruction via digital and online media with some element of student control over time, place, path, or pace (the Step-Up Juba Media Lab / iceHubs Global eLEARNING platform is intended to encourage both Blended Learning, promoting OERs and the development of P2P for learning).

**Code-a- thon (or Hackathon)** - Computer programmers and developers, visual and user experience designers collaborate intensively to build innovative software.

**DIY** - Do It Yourself

**DIWO** - Do It With Others

**ICT** - Information and Communications Technologies

**Maker** - refers to growing global maker culture movement, an extension of DIY (Do-It-Yourself) culture interested in creation and innovation of built objects that have a technological component. This can include home made robots, flying machines (such as South Sudanese inventor George Mel's airplane), traditional activities in arts and crafts which focus on using and learning practical skills and applying them to design and invention.

**MOOC** - Massive Open Online Courses offered by major universities for free study, aimed at unlimited participation and open access via the web.

**OER** - Open Educational Resources, which are freely accessible, openly licensed documents and media that are useful for teaching, learning, or for research purposes.

**P2P** - Peer to Peer ... a network that distributes tasks between peers (either similar computers, team members or colleagues). Peers are equal participants in an application or work pursuit. Graphically they form a decentralised 'peer-to-peer' network of nodes, as opposed to a centralised system. P2P can also be considered a model of collaborative learning, sharing and passing on of knowledge among like minded participants.

**RFID** - Radio-frequency identification (RFID) is the wireless use of electromagnetic fields to transfer data, automatically identifying and tracking tags attached to objects.

**Up-Cycling** - Also known as 'creative reuse', the process of transforming by-products, waste materials, useless and/or unwanted products into new materials or products of better quality or for better environmental value.

**UX** - User Experience refers to practical, experiential, and meaningful aspects of human-computer interaction. A 'good' UX indicates a technology that works well and is useful for the people it is intended to serve.

**Wiki** - a website or database developed collaboratively by a community of users, allowing any user to add, edit, revise and delete content.

**Wikipedia** - Collaborative global open encyclopaedia and knowledge resource.





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## OPEN KNOWLEDGE GUIDES

Open Knowledge is free to use, reuse, and redistribute without legal, social or technological restriction. Open knowledge is a set of principles and methodologies related to the production and distribution of how knowledge works in an open manner. Knowledge is interpreted broadly to include data, content and general information. <https://openculture.agency/open-educational-resources>

### OPEN LEARNING GUIDE (#OLG)

The #OLG is an introduction to publicly available and free to use shareable knowledge, including Open Educational Resources (OER) along with a range of free and open information platforms, focussing on media and online literacy, technology, peace innovation and DIY communities. Initially devised by a community of young South Sudanese, the #OLG, arranged thematically, highlights a small cross-section of open resources that can be used by people anywhere. It's just the tip of the iceberg in a vast and growing world of free, open and public knowledge resources!



## OPEN LEARNING INTRODUCTION PEER2PEER (P2P) & ICT LITERACY

### #ASKtraining PLATFORM

[https://training.asknet.community/modules/asktraining\\_overview](https://training.asknet.community/modules/asktraining_overview)

Browse modules, assemble your training sequence, and easily adjust settings. Learn to navigate modules, resources, and filters effortlessly, empowering yourself to craft dynamic and engaging training sessions.

### OPEN EDUCATIONAL RESOURCES (OER)

<https://training.asknet.community/modules/OER-basic-intro>

Webinar on the importance and tools for Open Educational Resources (OERs). Learn about the concepts, benefits and challenges of creating and sharing OERs.

### DEVELOP YOUR OWN OER MODULES

<https://training.asknet.community/modules/OER-dev>

Planning and organising OERs and example templates.

### MIGRANT MEDIA NETWORK

<https://migrantmedia.network>

#MMN provides young Africans with reliable information and training on migration issues and social media to make informed decisions and be aware of safer migration options to Europe.

### PEERAGOGY HANDBOOK

<https://peeragogy.org>

Peeragogy is another word for "peer learning". A range of techniques for self-motivated learners to connect with each other and develop stronger communities and collaborations.

### PEER-TO-PEER UNIVERSITY (P2PU)

<https://p2pu.org>

A university for the web. Built by an open community.

### WIKIPEDIA

<https://wikipedia.org>

Collaborative global open encyclopaedia and free knowledge resource. South Sudan: [https://en.wikipedia.org/wiki/South\\_Sudan](https://en.wikipedia.org/wiki/South_Sudan)

### MOZILLA PROJECTS + EXPERIMENTS

<https://future.mozilla.org/projects>

Creating a more personal, private and open-source internet, to support the future of an open web.

### OPEN SOURCE EDUCATION

<https://opensource.com/education/13/4/guide-open-source-education>

A guide to free and open source education. Stories about creating and sharing open source solutions.

## eLEARNING RESOURCES

### ALISON ONLINE TRAINING

<https://alison.com>

Free, high-quality online education resources to help you develop essential, certified workplace skills.

### EDX

<https://edx.org>

Access to free education for everyone. Harvard University, MIT & submit your own courses!

### ELEARNING AFRICA

<https://elearning-africa.com>

Perspectives on ICT, Education and Development in Africa.

### KHAN ACADEMY

<https://khanacademy.org> <https://youtube.com/c/khanacademy>

"You can learn anything." Global Classroom offers a free world class education for anyone, anywhere.

### CRASH COURSE

<https://youtube.com/user/crashcourse/playlists>

youtube channel with courses in short episodes.

### SCHOOL OF LIFE

<https://youtube.com/user/schooloflifechannel>

Essays, philosophy, short video series.



## PEACE + INNOVATION

### #DEFYHATENOW

<https://defyhatenow.org>

#defyhatenow provides community-based and data-driven solutions to the problem of hate speech, disinformation and countering online incitement to violence.

### PEACETECH TOOLS

<https://peacerep.org/peacetechn-tools>

PeaceTech innovation tools focus on data to support analysis of peace and transition processes and implementation and include search peace data, visualise trends, maps and PeaceFem mobile app.

### DIGITAL PEACEBUILDING SUPPORTED BY AI

Watch Video: [https://youtu.be/2w0vNbIOKYE?si=7damtbxLszAL\\_vh9](https://youtu.be/2w0vNbIOKYE?si=7damtbxLszAL_vh9)

Social media analysis made by and for peacebuilders. Machine learning and AI tools support digital peacebuilding app Phoenix to work ethically with social media data to inform programming.

### PHOENIX

<https://howtobuildup.org/programs/digital-conflict/phoenix>

Phoenix is an open source, non-commercial platform designed to enable peacebuilders and mediators to conduct ethical and participatory social media listening in order to inform conflict transformation work.

### TECHNOLOGY IN PEACEBUILDING

Interview with Caleb Gichuhi, Africa Lead at How to Build Up.

<https://peacerep.org/2024/04/18/technology-in-peacebuilding-interview-with-caleb-gichuhi-africa-lead-at-how-to-build-up>

### CONCILIATION RESOURCES

<https://www.c-r.org/learning-hub>

We share lessons from peace processes and use past experience to adapt to the changing realities of conflict and global politics as we shape solutions for the future.

### PEACETECH LAB

<https://www.peacetechnlab.org/hate-speech-lexicons>

Lexicons identify and explain inflammatory language on social media, offering alternative words and phrases that can be used to combat hate speech.

### ICT4PEACE

<https://ict4peace.org>

ICT4Peace facilitates communication between communities involved in conflict prevention, mediation and peace building, through better understanding Information Communications Technology (ICT) & media.

### PEACEHACKCAMP

<https://peacehackcamp.net>

Bringing together peacebuilders, tech innovators and open culture advocates from across South Sudan and beyond to hack, code, make and collaborate for peace!

### TOLOCAR MOBILE MAKERSPACE FOR PEACE

<https://tolocar.org/en>

The Tolocar project uses mobile makerspaces equipped with tools, open source hardware machines and consumables to support humanitarian activities in Ukraine.



## CODING AND PROGRAMMING

### #ASKnet GITHUB GUIDE

[https://training.asknet.community/modules/documents\\_on\\_github](https://training.asknet.community/modules/documents_on_github)

The #ASKnet Github Guide gives you a jumpstart on using Github: Create repositories, share your projects and knowledge with others and grow your learning along with your community.

### CODE ACADEMY

<https://codecademy.com>

Learn to code, interactively. For free.

### DATA DETOX KIT

<https://tacticaltech.org/projects/data-detox-kit>

Guides to discuss, how you can take control of your privacy, security, and wellbeing.

### DATA DETOX X YOUTH

<https://datadetoxkit.org/en/families/datadetox-x-youth>

Activity book to help young people take control of their tech with simple activities for reflection.

### FUTURE LEARN

<https://futurelearn.com/courses/collections/make-it-digital>

British MOOC initiative, related to Open University. Media-topics, digital storytelling. Learn to code and get creative with programming and digital technology.

### RAILS GIRLS

<https://railsgirls.com/materials>

Tools and a community for women to understand technology and build their ideas.



## VIDEO + SOUND EDITION + 3D ANIMATION

### AUTODESK

<https://autodesk.com/education/free-software/3ds-max>

3D modelling, animation, rendering, and compositing tool for games, film & motion graphics artists.

### AUDACITY

<https://audacityteam.org>

Audio editing and recording. Free, open source, software for podcasts, voice-overs.

### BLENDER

<https://blender.org>

Free and open source tools to create, transform and edit your visual effects and models.

### DESCRIPT

<https://www.descript.com>

Edit audio and video and publish them. Transcribe, add captions to create video, podcasts and webinars.

### LOOM VIDEO

<https://www.loom.com>

Free screen recorder to create webinars and video content.

### PIXAR IN A BOX

<https://khanacademy.org/partner-content/pixar/start>

Khan Academy collaboration with Pixar on animation.

### TINKERCAD

<https://www.tinkercad.com>

An excellent, intuitive, free and simple CAD tool for 3D Design, electronics & coding.

### VIDEO & FILMMAKER – TUTORIALS

<https://videoandfilmmaker.com>

VFX, 3D Landscaping, Microphone and Sound Mixing, DIY Filmmakers Toolkit.

### aVLC MEDIA PLAYER

<https://videolan.org/vlc>

Free, open source flexible media player, runs on virtually any operating system.

## OPEN LANGUAGE RESOURCES

### DUOLINGO

<https://duolingo.com>

Learn a language for free, for ever. Learn anytime, anywhere.

### OPEN CULTURE

FREE LANGUAGE LESSONS

<https://www.openculture.com/freelanguagelessons>

### OPEN UNIVERSITY

FREE LANGUAGE COURSES

<https://www.open.edu/openlearn/languages/free-courses>

## BUSINESS & SOCIAL INNOVATION TOOLS

### BUSINESS MODEL CANVAS FOR SOCIAL ENTERPRISE

<https://bmtoolbox.net/tools/social-business-model-canvas>

Social Innovation Lab tool helps to design Business Models to focus on the social impact.

### BUSINESS MODEL CANVAS

<https://www.strategyzer.com/library/the-business-model-canvas>

The canvas offers 9 building blocks to quickly design an overview of your business model.

### GIG GLOBAL INNOVATION GATHERING

<https://globalinnovationgathering.org>

A vibrant, diverse and growing community of innovation hubs, makerspaces, hackerspaces and grassroots innovation communities around the world.

### LIBREOFFICE

<https://libreoffice.org>

Free & Open Source Office suite.

### OPEN SOURCE ALTERNATIVES FOR ALMOST EVERYTHING

<https://osalt.com>

Find the best open source software alternatives to commercial software.

### OPENOFFICE, OPENOFFICE IMPRESS 3.0

<https://openoffice.org>

Open Source word, spreadsheet and drawing office suite.

## DIGITAL STORYTELLING PLATFORMS

### AFRICAN DIGITAL HERITAGE

<https://africandigitalheritage.org/category/resources>

Resources and cultural heritage toolkit for practitioners working at community level.

### AFRICAN STORYBOOK

<https://www.africanstorybook.org>

Open access to picture storybooks in the languages of Africa. For children's literacy, enjoyment and imagination. Create a new picture storybook, translate a story, adapt a story for a different reading level.

### JAYLIT

Journal of African Youth Literature

<https://www.jaylit.com/c/news/spotlight>

### MIT OPEN DOCUMENTARY LAB

<https://docubase.mit.edu>

An interactive curated database transforming documentary in the digital age.

### MAKE A FILM ON YOUR SMARTPHONE

<https://www.docfilmacademy.com/blog/6-steps-to-getting-cinematic-footage-on-your-smartphone>

Guide on How to Film Cinematic Videos with Your Smartphone

### SOUND AFRICA

<https://www.soundafrica.org>

A platform for quality independent podcast documentaries from the African continent.



## #ASKNET TOOLS AND RESOURCES

The #ASKnet and related members curate and share Open Learning Guides, toolkits, and resources from their work so that others can adopt, adapt and deploy them in their own communities to promote local innovation and peer-to-peer knowledge exchange. <https://asknet.community>

### #ASKtraining

The #ASKtraining platform has been developed to help compile, share and streamline the running of all forms of community oriented workshop and peer to peer learning content. <https://training.asknet.community>

### #ASKotec

#ASKotec is the 'Access to Skills and Knowledge open tech emergency case', a multi-purpose resource, repair and training kit created for mobile field-use where there is no or limited access to electricity and internet connectivity. <https://askotec.openculture.agency>