



Can OER Resources & Methodologies Make a Difference in UGANDA?

Can we adapt what we have learned about integrating OER in various places around the world into a sustainable Learning Program in UGANDA?

UNICEF Report on Education in Uganda

The situation

- ▶ Uganda, like many sub-Saharan African countries, faces major challenges in providing quality and accessible basic education to children and adolescents.
- ▶ Early learning and development is compromised by the lack of pre-schools and other early childhood development (ECD) programmes and qualified teachers, as well as limited awareness and appreciation of the importance of ECD. One out of every 10 children between 3 and 5 years of age is enrolled in pre-primary education.
- ▶ Attendance at primary level has grown due to a universal primary education policy launched in 1997 but the quality of teaching and learning needs significant improvement. Teacher absenteeism is high in Uganda, with more than 60 per cent of teachers not in the classroom teaching regularly in Ugandan public schools.



The situation

- ▶ Many children do not complete their schooling nor have the competencies needed to do well in life. **Only 1 in 4 children who starts primary school makes it to secondary school.** Less than half (40 per cent) of students are literate at the end of primary school. Children with disabilities are largely excluded from formal schooling because of shortages of special needs teachers and facilities.
- ▶ Secondary education is still inaccessible to most adolescents. ***Less than a quarter (24 per cent) of adolescents are enrolled at this level.*** Early marriage, teenage pregnancy, abuse at schools and school fees keep many teens, especially girls, out of secondary schools.
- ▶ The school environment also plays a role in keeping children out of education.
 - ▶ Schools lack adequate toilets and washing areas
 - ▶ Sexual abuse is common - Close to a quarter (24 per cent) of Ugandan children have experienced sexual abuse in schools.
 - ▶ Canning at schools is rife despite an official ban on corporeal punishment.

<https://www.unicef.org/uganda/what-we-do/education>

Challenges that OER could help address

1. Lack of Quality Resources & Methodology

- ▶ Uganda primarily uses the old colonial teaching methodologies of memorization and regurgitation – if you don't remember what you were told a few strokes of the cane will do wonders!
- ▶ Teachers have few resources except for government mandated curriculum that is primarily fact based.
- ▶ The classroom is very rigid and structured – very little room for interaction or discovery.
- ▶ School is something be endured not enjoyed.



2. Teachers have significant challenges

- ▶ Teaching is not considered to be an honorable profession. You teach because you have no other option.
- ▶ The training that teachers get is reflective of the view that teaching is not a profession that requires much skill. Classroom discipline and enforcement of school goals is often the main focus.
 - ▶ *Even when children visit the zoo discipline is paramount. Children don't dare ask questions or break the formation in which the teacher moves them through the zoo.*
- ▶ Teachers pay is very low and unreliable. Most teachers have a second profession in order to survive.
- ▶ Class sizes are huge – often 60 or more students cramped into a space where we would have 20

3. Students are passive participants in the learning process.

- ▶ Pages of work is assigned in each class. The student spends hours in memorization of material in preparation of the test.
- ▶ There is very little practical application of what is being presented in the curriculum. Those students who do complete secondary school mostly don't have any life skills that can help them figure out a way to make a living.
- ▶ The asking of questions is discouraged. I think this is primarily due to the fact that the teacher is afraid he may not be able to answer.



Our Vision – OER Can Make a Difference!



**OPEN EDUCATIONAL
RESOURCES: SHARING
CONTENT AND KNOWLEDGE
DIFFERENTLY IS A DRIVER OF
INNOVATION IN EDUCATION**

Dirk Van Damme – OECD/CERI

Learning Centre

Our goal is to establish a Learning Centre that directs and oversees OER implementation in the K-12 schools.

The Centre would

- train and mentor teachers & administrators
- Create an OER Library that can be used offline
- carry out curriculum integration
- oversee local resource development
- Liaise with governmental agencies and authorities

This is a major undertaking that requires

- Expert guidance from people within the Open Education community to guide so that we don't reinvent the wheel.

It is our hope that we will be able to network with participants in this conference who can provide the guidance and counsel we need to make the Learning Centre a place that will bring the benefits of open learning to K-12 students in Uganda.

- Committed personnel that are willing to do the heavy lifting.

We have some core team in place. Based on the guidance we get we will add team members as needed.

- Financial resources since this will not be an income generating enterprise.

We are seeking advice on where we could find support for this project

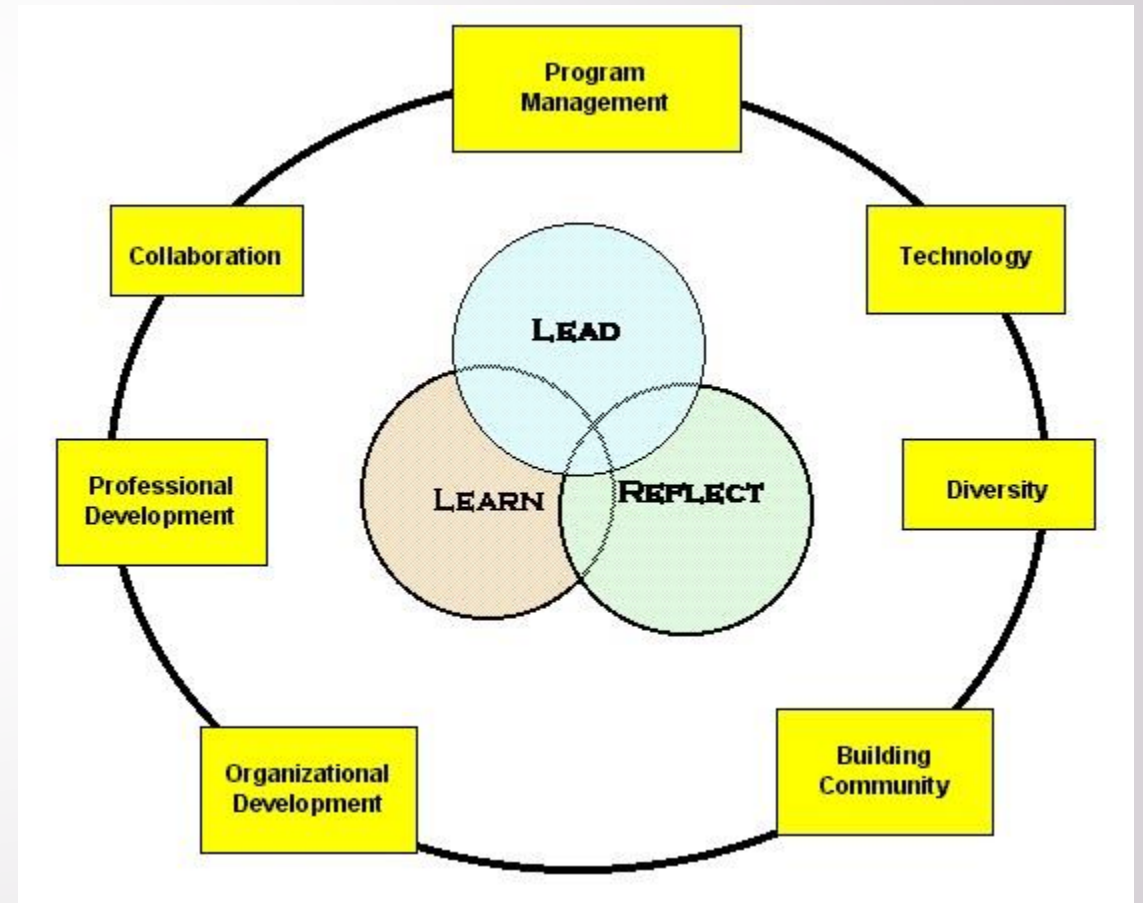
Training Administrators

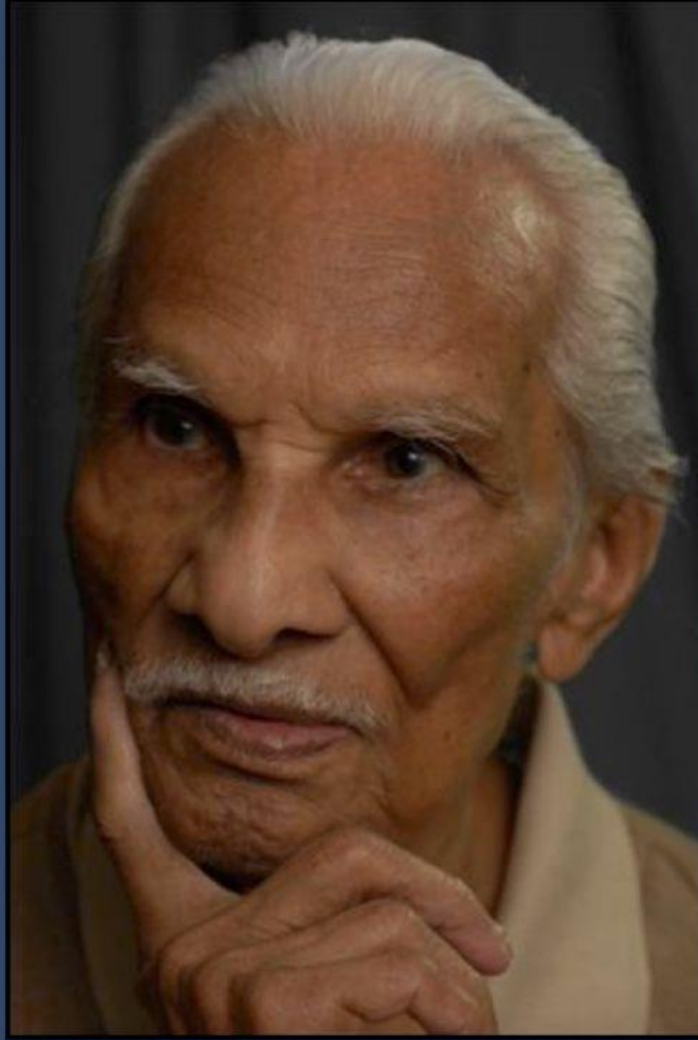
The training of school principals and administrators is crucial if changes are to be made in the way students are educated in Uganda.

School leaders often have no passion about how to make learning an exciting and interesting endeavor.

The passion for a new and exciting engagement with learners must come from the school leaders.

What resources are available to bring the leaders on board?





Teaching is more than
a noble profession. It
is a vocation, a calling...
A teacher is the most
important person in
any civilization, as on
him depends the
molding of the nations.
— Randall Butisingh

Training Teachers

Teaching isn't a job to fill the gap until something better comes along.

There must be a fire that burns in the heart of the teacher that compels him/her to enrich young minds.



1. Teachers must be instilled with the belief that teaching is the most noble of professions.

It is critical that teachers view themselves as vital members of society that have the privilege of developing young minds

2. Teachers must become adept at making learning fun and interactive.

This type of teaching is not learned from a book but from observation and mentorship.

3. Teacher must learn to curate materials in a way that encourages students to explore and discover the lessons the teacher is trying to convey.

There are many open education tools that can make the job easier for the teacher but they are only useful if the teacher knows where to find them.

We Need a Mentor!

Maybe there are some who can mentor us on our journey?



What resources are there in this community that can develop these essential skills in the teachers in Uganda?

It may be that what we are attempting to do doesn't have a model to follow. We may have to custom make a training program for teachers to meet our needs.

Hands on Material for the Students

Most learning in Uganda is done by memorizing and copying material from a book. There are very few hands on materials available. What is available is quite expensive.



We need to do two things.

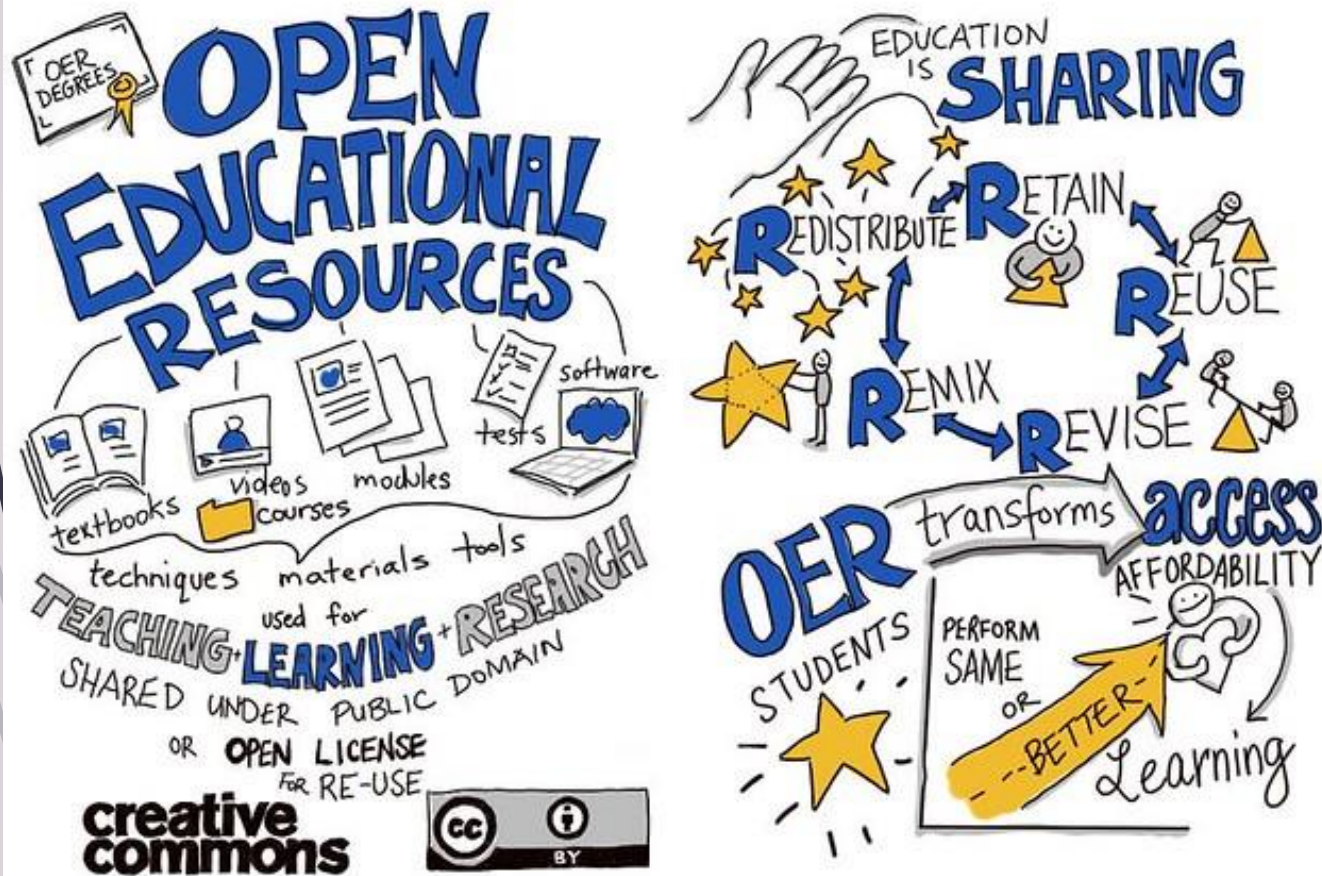
1. Create a Design Studio that works with educators to design simple manipulatives, games and other hands-on learning materials.
2. Set up a Workshop that manufactures these items at a low cost.

We look for guidance from those within open education to share with us the resources that have already been developed.

The Design Studio and Workshop will become learning centres that teach young people skills that they can replicate throughout the country as new schools open.

The Hardware Challenge

Access to Technology is often a challenge



- Lack of computers, printers, audio-visual equipment.
- Low bandwidth for downloads – internet not accessible
- Expensive internet connection
- Lack of skilled personnel to set up and operate the hardware

How is this handled in other places?

The Hardware Challenge –

Proposed solution

- The Learning Centre downloads, organizes and curates OER materials on a local computer.

The Learning Centre (LC) becomes a type of clearing house.

The would operate a model school where material would be tested before being sent to the other schools.

- A server is setup at each participating school

Material from the Learning Centre is transferred (by using a physical hard drive) to the server at the school.

- The school server is connected to each classroom using wifi.

Teachers and potentially students can log into the server to obtain information that is downloaded.

Teachers can design and store lessons on the server using OER materials that have been downloaded.

The Hardware Challenge –

Proposed solution continued....

- The school system would be set up with a battery backup system (and solar panels if possible) to facilitate continued learning during frequent power outages.
- Each classroom would have a computer terminal with a 30'' TV screen.
- The teacher and even the students could have laptops that would be able to connect to the local network is so desired.
- The school would have a printer and scanner connected to the server
- The Learning Centre would train techs to maintain and troubleshoot at each school.

Are there any places in the Open Education World that have set up this type of program?

Uganda Ministry of Education

- ▶ We have good rapport with the District Education Officer (DEO) for the Ministry of Education in Uganda. He is very keen on having new ideas and methodologies introduced in his school district.
- ▶ The DEO is very pleased with the program and educational philosophy of U-Can International School. He commonly tells people that U-Can is the best school in his district.
 - ▶ U-Can is the for profit school we currently operate in Uganda
 - ▶ It could be used as an initial model school that can show good teaching methodology and hands-on learning.
- ▶ The DEO has invited U-Can to conduct teacher development courses.

The challenge has been to offer a coordinated program. We can now introduce some of the more advanced schools in the district to the OER resources that are available.



The Financial Side

- ▶ We have a vision but we don't have financial resources to implement this project.
- ▶ If anyone has suggestions of who we could approach that would take interest in working with us it would be very much appreciated.
- ▶ It is envisioned that 5 pilot schools would be set up in order to show proof of concept and to ascertain the effectiveness of the strategies employed.

Collaboration

Here is where we need to collaborate

- ▶ Identify and develop materials that can be integrated into a K-12 curriculum
- ▶ Guidance in how to implement OER into our setting
- ▶ Counsel and materials in designing a training program for teachers, principals and administrators
- ▶ Assistance in with software to use on the server and in classroom that will help us incorporate OER into the schools that we are setting up.
- ▶ Ideas on funding sources for this program

The conference has really given us much better understanding of Open Education. We have a good start.

We “Need Insight and Momentum”

To bring Open Education to the youth in Uganda

About the Presenters

► Beat Odermatt

- Beat has over 30 years of educational experience in Africa. He has set up and managed educational programs with international development organizations in Ethiopia, Kenya, South Sudan and Uganda.
- Currently he is the Director of U-Can International School in Entebbe, Uganda. In partnership with his daughter Miriam, he founded U-Can in 2013 as a school that offers a fun and collaborative educational program to the local and international community. The school has adapted Canadian curriculum materials to use in Uganda.

► Miriam Odermatt

- Miriam has been a teacher all her life – all the way from tutoring her classmates in primary school to principal of U-Can International School.
- She loves teaching and in particular enjoys developing resources that can be used by teachers to make learning more effective.
- Miriam would be very happy if she could bring the quality of education offered at U-Can to a much wider group of students in Uganda. Everyone should have the chance at a quality education.

- The school's website is www.ucan.co.ug.