PCF5 APPLICATION

FLOSS4Edu - Free/Libre Open Source Software for Education

Widening Access to Education : Africa pioneers an International Initiative for Capacity Development in Open Education Resources (OERs)

<u>By</u>

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Keywords:

Open Educational Resources (OER), Free and Open Source Software, Access to Education, Wiki, Open Learning, Educative Technologies, Web2.0, Collaborative work, Content Creation, Educational Content

1. CONTEXT

In sub-Saharan Africa, the rate of children attending school is on average 78% for primary, 32% for secondary and 6% for tertiary education; 39% of children not attending school in the world are in the region. These statistics leads to reflection.

Web 2.0 technologies have fostered collaborative work; educators worldwide are developing a vast pool of educational resources on the Internet, open and free for all to use. This is an opportunity for teachers of africans institutions (universities, training centers, etc.) to develop Open Educational Resources adapt to Africa needs.

Free digital content seems to have today an undeniable importance to universal access to education (which is a goal of the Millennium Development Goals defined by the United Nations) in Africa in particular and in the developing countries in general.

2. THE FLOSS4EDU INITIATIVE

The FLOSS4Edu Initiative was launched in November, 2006 at a meeting that was held in Nairobi involving stakeholders from various Educational Institutions and Networks across several countries in Africa. The key objective of this meeting was to find out how to address the issue of shortage of high quality educational materials that can be made available to African Schools to enhance their learning experiences and to reach the majority of African population that is still illiterate. In line with the Millenium Development Goals (MDG's), the FLOSS4Edu project seeks to address access to education through eLearning supported by Educational materials that have been developed in a collaborative framework called Open Educational Resources (OER's). This will have a direct effect in fostering life-long learning and addressing illiteracy levels within the African continent.

3. THE FLOSS4EDU OBJECTIVES

The FLOSS4Edu initiative aimed at addressing the following challenges:

- The absence of Free content in African Schools
- The lack of skills and knowledge to use FLOSS technologies and
- Access to FLOSS resources given the high cost of bandwidth and shortage of FLOSS distribution channels

FLOSS4Edu vision was defined to be: "Making available appropriate educational content and a set of easy to use FLOSS tools to educational institutions while building the largest community of educational practitioners collaborating on the development of Free and Open Educational Resources in Africa".

4. THE ADVANTAGES OF OPEN EDUCATIONAL RESOURCES (OERS) IN AFRICA

FLOSS4Edu pioneers think they can achieve their goals through Open Educational Resources, the Cape Town declaration of last september has reinforced their idea. According to them, OERs refers to Educational materials that have the following attributes:

- 1. That access to open content (including metadata) is provided free of charge for educational institutions, content services, and the end-users such as teachers, students and lifelong learners;
- 2. That the content is liberally licensed for re-use in educational activities is free from restrictions to modify, combine and repurpose; and consequently, that the content should ideally be designed for easy re-use in that open content standards and formats are being employed;
- 3. That for educational systems/tools software is used for which the source code is available (i.e. Open Source software) and that there are open Application Programming Interfaces (open APIs) and authorizations to re-use Web-based services as well as resources."

OER's will offer the following benefits to Educational Networks and Institutions:

- Contribute to making education more accessible
- Provide a long-term conceptual framework for alliances in the creation, sharing and provision of educational resources based on a strong emphasis of reusability;
- Allow for a higher return on investment of taxpayers' money (public funds);
- Promote digital competence for the knowledge society beyond basic ICT skills;
- Enrich the pool of resources (content and tools) for innovating curricula and teaching & learning practices;
- Lead to a leverage in the educational quality of content through quality control, feedback and improvements;
- Foster lifelong learning and social inclusion.

OER's will offer the following benefits:

- Offer a broader range of subjects and topics to choose from and allow for more flexibility in hoosing material for teaching and learning;
- Save time and effort through reusing resources for which IPR/copyright issues have already been resolved;
- Provide a mechanism for continuous improvement
- Provide learning communities such as groups of teachers and learners with easy-touse tools

Promote user-centered approaches in education

With the scarcity of Educational materials available for Africa, the FLOSS4Edu Initiative was seen as a mechanism to develop Africanised Educational Materials on a platform of free will collaboration between Educational Practioners and member institutions in Africa. This materials will meet the characteristics above and will be available to Educational Institutions and members of public as resources that can enhance the learning environment, support eLearning and its perceived benefits of scalability and flexibility, help Africa to produce its content and document its knowledge resources and turn the sorry state of being just consumers of knowledge and not creators.

5. THE FLOSS4EDU STRATEGY AND ACHIEVEMENT

One of the Key Strategic actions of the FLOSS4Edu Initiative is to build capacity in the development of Open Educational Resources and the use of WikiEducator as a platform for OER content publishing and collaboration. As a result the FLOSS4Edu has been involved in various capacity building initiatives. This initiatives are undertaken in the various regional chapters and are based on the Learning4Content philosophy where Educational Practioners are engaged in Content Production in exchange of access and a commitment to train more people after being trained. Plans are underway to develop comprehensive certifications and content release licenses which shall be shared to the FLOSS4Edu Community.

In pursuit of this vision, FLOSS4Edu was incubated under the WikiEducator project (http://www.wikieducator.org). Relying on support from the Commonwealth of Learning and WikiEducator, the FLOSS4Edu Initiative was able to achieve the following:

- Establishment of 4 FLOSS4Edu Regional Chapters in Africa (East Africa, West Africa, Southern Africa and Francophonie)
- Capacity Building Initiatives 10 Face to Face Capacity building Workshops and through Learning4Content initiative look to conduct two online workshops in each commonwealth of states counties in Africa.
- Over 100 lessons developed by African Educational practioners as OERs.
- Influenced institutional change in Educational Networks to adopt the development of OFRs
- Continued partnership with institutions (Universities and Educational Networks)

With this progress, FLOSS4Edu has been able to influence Educational Institutions (University of Education, AMREF, Community Health Nursing Winneba and Kenya Educational Network (KENET) to develop their educational materials as Open Educational Resources that can be shared and re-used by other stakeholders.

To achieve the objectives of the project, a strategy has recently been adopted and will operate based on the following four (4) pillars:

- 1. **Collaboration4Content**: Build a network of Educational Practitioners (Individual and Institutions) willing to participate in the development of OERs
- 2. **Access4Content**: Adoption of the Open Digital Villages concept and provide access "paid" through content development
- 3. **Learning4Content**: Continue building capacity to Educational Practitioners in developing OER Content Carry out Learning4Content face-to-face and Online workshops in 18 countries members of the Commonwealth of States

4. **Advocacy4Content**: Solicit Educational Networks and Educational Networks to develop their Educational Materials as Open Educational Resources

6. FOR MORE INFORMATION...

- http://www.wikieducator.org/FLOSS4Edu
- http://www.col.org/colweb/webdav/site/myjahiasite/shared/docs/Connections_June20 07.pdf