Use of Web 2.0 in the Schools of the PANAF Project

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In addition to the recently-submitted interim technical report for PanAf Phase 2, we felt it was important to note some highlights of the network’s research specifically regarding ‘Web 2.0’ in the sampled schools.

The PanAf network is centred on an open data set made available by researchers at the partner institutions. Open access, and ‘wiki’-style updating of the indicators is intended to echo the collaborative style of ‘Web 2.0’ in the project’s design.

The complete set of data at www.observatoiretic.org currently draws from 106 primary, secondary and tertiary (teacher-training) institutions in 12 African countries. These indicators represent over 240,000 learners…
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...and over 8,200 educators.

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2.4.1 Number of learners (n 230712) in the institution (n 106)

2.3.1 Number of educators (n 8200) in the institution (n 106)
Broadly speaking, ‘Web 2.0’ is defined as a collection of interactive and user-centred Internet applications, allowing for content contribution and online community. PanAf researchers are specifically interested in the use and impact of ‘Web 2.0’ in school settings. Historically, attention has been focused on ‘Web 1.0’ principles of access to Internet resources, such that Wikipedia has been seen as free knowledge ‘from’ the Internet for African schools. This is despite the fact that wikis are generally entirely the product of knowledge contributed by users ’to’ ‘Web 2.0’, and that African contributions to Wikipedia are vastly under-represented (in this single, but predominant, example).

Nearly 70% of the schools in the PanAf sample have some Internet connectivity. Nevertheless, class sizes and learner–computer ratios may be far from ideal.

Indicators from Phase 1 show that African learners are using computers and accessing the Internet for their schooling.
Recognizing that we have taken a relatively limited perspective on access (institutional computers in schools), acknowledging that Web 2.0 activity may well be happening at home and at cybercafés or on personal handsets, in Phase 2, PanAf researchers are asking additional questions about ‘Web 2.0’ applications…
### PanAf Phase 2 additional indicators

<table>
<thead>
<tr>
<th>Category</th>
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<th>ICT use</th>
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<td>Sub-Category</td>
<td>4.4</td>
<td>The types of ICT use by learners</td>
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These are summaries for the institution, based on discussion groups with 6-12 learners, it may be helpful to have two separate groups, one of female learners and one of males (discussions must also be recorded and uploaded to the institution's Auxiliary Documents).

**Indicator 4.4.3  Female learners’ points of access to computers/Internet (cybercafé, home, mobile…)**

In 150 words, list the various points of access to computers and the Internet for pedagogical use mentioned by female learners. Describe where and when computers and the Internet are most commonly accessed for pedagogical use, as well as why these are the most common/convenient points of access. Be sure to ask about access at home versus the school environment, versus Internet cafés, versus mobile handsets etc.

**Indicator 4.4.4  Male learners’ points of access to computers/Internet (cybercafé, home, mobile…)**

In 150 words, list the various points of access to computers and the Internet for pedagogical use mentioned by male learners. Describe where and when computers and the Internet are most commonly accessed for pedagogical use, as well as why these are the most common/convenient points of access. Be sure to ask about access at home versus the school environment, versus Internet cafés, versus mobile handsets etc.

**Indicator 4.4.5  Female learners’ participation in Internet-based social networking (MySpace, Facebook Twitter…)**

In 150 words, describe participation in Internet-based social networking by female learners. Are they using Facebook, MySpace, Twitter etc. pedagogically, how (communication, organization, collaboration etc.)? Which are the most common/convenient Internet-based social networking services for pedagogical use, why?

**Indicator 4.4.6  Male learners’ participation in Internet-based social networking (MySpace, Facebook Twitter…)**

In 150 words, describe participation in Internet-based social networking by male learners. Are they using Facebook, MySpace, Twitter etc. pedagogically, how (communication, organization, collaboration etc.)? Which are the most common/convenient Internet-based social networking services for pedagogical use, why?
In qualitative indicators currently available on the Observatory, educators’ and learners’ reports on the use and impact of ICT, with highlights extracted below:

**Types of ICT use by educators (e.g., PowerPoint presentation, Web resources)**

**St-Kizito Secondary School, Uganda**

The integration of ICT has greatly improved students’ interest in learning. Students link up with their fellow students and teachers and share information relevant to their academic progress, and they are also motivated to study more so that they can upgrade their ICT skills for future purposes.

**Tamale High School, Ghana**

Instructors for the Core ICT courses use the Internet to source teaching and learning materials for their lessons […] They also use multimedia equipment such as digital cameras to capture pictures and video clips to use for their lessons. Teachers use email to communicate with learners, (note, is bandwidth a ‘mental block’ to sharing media?), although students are not required to submit assignments through this medium.

**Types of ICT use by learners**

**Kibuli Secondary School, Uganda**

Students from this institution use ICT in the following ways: surfing for academic purposes, such as on a given topic, playing games and watching movies, communicating with friends both within the country and abroad, photocopying notes, making PowerPoint presentations as well as installing games and movies on the computers using compact disks. The students in the discussion stated that they were able to communicate with their friends, parents and teachers because they had email addresses. Out of the 9 students, seven had personal email addresses.

**Escola Secundária Quisse Mavota, Mozmabique**

Students communicate with other students from other schools using email, exchanging and sharing notes or information on what they learn.
Female learners’ participation in Internet-based social networking (MySpace, Facebook Twitter, etc.)

Escola Secundária Francisco Manyanga, Mozambique

Girls in this school very often use websites for socialization. They particularly use MSN, Mig33, Facebook and Twitter to share information with other people they know, and even with those they do not know. [...] The use of these services gives significant help to the students in their work as well as in the whole teaching and learning process and it encourages the girls to learn more.

Escola Secundária Josina Machel, Mozambique

The social service websites, namely, Hi5, Facebook, MSN (Messenger), have been used to share non-academic issues. MSN is rarely used for academic issues.

Male learners’ participation in Internet-based social networking (MySpace, Facebook Twitter, etc.)

Longla Comprehensive College, Cameroon

Male learners do participate in social Internet networks like Myspace, Facebook, Twitter, and even others like interpals and tag. [...] As time went on, they got to know about the world from these their friends in other parts of the world, ask each other about their fields of studies, and share knowledge in subjects like business management and marketing with friends in Columbia and Brazil.

Escola Secundária Francisco Manyanga

Similar to Facebook, the Mig.33 is the website the students have been using the most in their sharing of information related to school and other issues. In many cases, these websites are used to share information on general knowledge rather than academic related issues. Although these services are not often used for academic matters, they have brought positive results, as they make it easier for the students to find any information they need.
Stated impact (by learners) of ICT on access to knowledge

Collegio Kitabu, Mozambique

ICT have been having a quite positive impact on the access to knowledge / information, since one can get information within a short time if we compare with information that one would get through reading several books. Knowledge that students get from the Internet allows them to actively participate during the lesson, making the student the centre of the teaching and learning process. Although students recognise the importance of ICT, they still say that they need to be assisted by a teacher, since he is the one who organizes the student’s knowledge.

LCAD, Mali

We have noted easier and more realistic access to resources. Some tasks have become easier, particularly researching information and creating email accounts. Films can also be created easily with Windows Movie Maker, as well as photo retouching. We can quickly make slide presentations of photos and set up blogs.

Randpark School, South Africa

“Computers give you access to knowledge all around the world”. The Senior Phase group commented that the Internet has made it easier to access information. A library book may not have the information needed and one can just go onto the Internet and type what you need into Google. Alternatively one can use Encarta or Wikipedia. The idea that students might contribute to Wiki is absent completely.
CONCLUSION

The above anecdotal evidence, obtained through a quick survey of the available data, suggests that Internet use within institutions remains focused on drawing from available resources (although not specifically which ones – wiki/open vs. others), communicating and sharing, and limited social networking. There is no mention, for example, of creating or uploading assignments to work on them collaboratively, nor any discussion of digital “identities”, nor participation in creative communities. In fact, although wikis are repeatedly mentioned, there is no mention of any contributions by students or teachers to these resources. Some problems such as plagiarism and the reliability of Internet sources do not seem to have been taken into account either, which suggests that the use of Web 2.0 for academic purposes needs to be encouraged, but that teachers also need to be trained in this area. On the other hand, we note that Web 2.0 appears to be used frequently for social purposes (e.g., Messenger, Hi5, Facebook) as well as for recreational purposes (e.g., video games) by the surveyed students. We may interpret this trend positively for several reasons: first, there is every reason to believe that the use of Web 2.0 for social purposes contributes to develop technological skills in students that could later be transferred to their schoolwork; second, socialization and sharing via Web 2.0 tools will be a predominant aspect of daily life as students grow up, along with virtual learning, particularly for distance and blended learning. Having already developed the habit of sharing and socialization through Web 2.0, students will be familiarized and prepared for emerging teaching and learning modes as they continue their schooling. The use of Web 2.0 for personal and social purposes and the impact on education is therefore a point of interest, and the new Observatory criteria will deepen our understanding of these in future.