PanAfrican Research Agenda on the Pedagogical Integration of Information and Communication Technologies

INTERNATIONAL EXPERT MEETING ON ICT IN EDUCATION INDICATORS (BUSAN, SOUTH KOREA, JULY 7th - 9th, 2009)

Toby Harper-Merrett
Université de Montréal
My goal is to introduce you to IDRC’s ongoing PanAf research agenda, and to draw out elements of its style and content that contribute to our discussion of ICT in education indicators at a global scale.
the PanAf agenda

- partners
- question
- methods
- outputs
- [www.observatoiretic.org](http://www.observatoiretic.org)
- outcomes
- opportunities
- discussion
partners

• International Development Research Centre (IDRC - Canada)  www.idrc.ca

• Educational Research Network for West and Central Africa (Bamako)  www.ernwaca.org

• Université de Montréal  www.crifpe.ca

• infoDev (World Bank)  www.infodev.org

• UNESCO Institute for Statistics  www.uis.unesco.org
phase 1 (2007-2009)

- **South Africa**: School of Education, University of the Witwatersrand
- **Côte-d’Ivoire**: École Normale Supérieure, Abidjan
- **Congo**: École Normale Supérieure, Brazzaville
- **Kenya**: School of Continuing and Distance Education, University of Nairobi
- **Cameroun**: Département de Sciences de l’Education, Ecole Normale Supérieure, Université de Yaoundé
- **Ghana**: University College of Education, Winneba
- **Mali**: Département des Sciences de l’Éducation, Institut Supérieur de Formation et de Recherche Appliquée, Bamako
- **Mozambique**: Department of Evaluation & Research, National Institute for Education Development, Maputo
- **Uganda**: School of Adult Education & Communication Studies, Makerere University, Kampala
- **République Centrafricaine**: École Normale Supérieure, Bangui
- **Sénégal**: Faculté des Sciences et Technologies de l’Éducation et de la Formation, Université Cheikh Anta Diop de Dakar
- **The Gambia**: Science and Technology Department of the University of the Gambia, Banjul
question

How, for whom and under what circumstances can the pedagogical integration of ICTs substantially improve the quality of teaching and learning at all levels and scales of African education systems?
challenges

• The depth of previous research on the pedagogical integration of ICTs in Africa does not reflect the demonstrated importance of the issue

• Results of past studies have lacked a harmonized communication facility

• African education researchers would benefit from methodological and dissemination capacity building
PanAf responses

• Collect new school-scale data, using mixed methodologies
• Create innovative opportunities for knowledge sharing
• Provide learning opportunities for those involved
methodology

• School-scale questionnaires and recorded interviews (mixed quantitative and qualitative)
• Summary analysis by national experts, immediate upload to www.observatoiretic.org
• Not nationally “representative”; real examples of leadership, best practices and challenges
• Limited definition of technology enhanced learning - “computer use in schools”
outputs

- 20,000 data-points for 180 indicators
- 12 major categories (Policy, Access, Training, Use, Impact, Management, Gender...)
- **117 schools**, 71% public, 42% secondary
- **8,940 educators**, 84% public, 56% secondary
- **242,873 learners**, 90% public, 52% secondary
parce que souvent elles ne savent pas traiter les informations. Si elles recherchent sur le net généralement c’est des sujets d’exposés qu’un professeur leur donne, le professeur ne prend même pas la peine de savoir si les élèves savent rechercher etc, elles nous les balancent, nous essayons de les encadrer mais nous remarquons qu’une fois que les élèves ont ouvert les sites elles copient simplement, elles collent et elles ramènent ça. Donc ça n’a aucun intérêt parce que les élèves ne tirent pas de connaissance véritablement de ça. - L’outil informatique crée les conditions d’une démocratisation du savoir, donc l’enseignant n’est plus détenteur d’un savoir qu’il communique etc. mais le savoir est à la disposition de tout le monde, mais ce que ça impose aussi c’est que, il faut que l’enseignant se mette dans une posture où il devient facilitateur et où il aide l’élève à savoir identifier les bons sites dans certains cas, et leur faire comprendre que tout ce qui est sur Internet n’est pas forcément vrai ou bon et qu’il est important de croiser les informations pour avoir des données assez justes.

2009-01-15

6.3 Documentation produite par les apprenants en utilisant les TIC

6.3.1 Impacts des

Avec l’utilisation de l’ordinateur, l’Internet facilite les recherches pour faire des exposés de PC,
Institution details

Only institutions qualifying for these characteristics will be shown.

☑ Vocational ☑ Non-vocational
☑ Trains teachers ☑ Does not train teachers
☐ Public ☐ Private
☑ Urban ☐ Semi-urban ☐ Non-urban

Students' gender

☑ Mixed

1. Category: 7 Institution management and ICT
   Subcategory: 7.1 The number of institutions with ICT integration plans
   Indicator: 7.1.1 Institution has ICT integration plan?
   [ Delete this row ]

2. Category: 4 ICT use
   Subcategory: 4.5 The percentage of courses taught using ICT
   Indicator: 4.5.4 The percentage of courses taught using ICT
   [ Delete this row ]

3. Category: 4 ICT use
   Subcategory: 4.2 The frequency of ICT use by learners for academic purposes
   Indicator: 4.2.1 Average ICT use by learners for academic purposes (hours per week)
   [ Delete this row ]
## Exportable Data

<table>
<thead>
<tr>
<th>Continent</th>
<th>Region</th>
<th>Country</th>
<th>Institution</th>
<th>4.2 The frequency of ICT use by learners for academic purposes (hours per week)</th>
<th>4.5 The percentage of courses taught using ICT</th>
<th>7.1 The number of institutions with ICT integration plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>Central Africa</td>
<td>Cameroon</td>
<td>Lycée Bilingue de Yaounde</td>
<td>1.5</td>
<td>45.45 % (10 / 22)</td>
<td>Yes</td>
</tr>
<tr>
<td>Africa</td>
<td>Central Africa</td>
<td>Cameroon</td>
<td>Lycée Général Leclerc</td>
<td>2.0</td>
<td>64.71 % (11 / 17)</td>
<td>No</td>
</tr>
<tr>
<td>Africa</td>
<td>Central Africa</td>
<td>Cameroon</td>
<td>Lycée Joss</td>
<td>Data not available</td>
<td>100.00 % (22 / 22)</td>
<td>Yes</td>
</tr>
</tbody>
</table>
4.2.1 Average ICT use by learners for academic purposes (hours per week)

- Mixed, urban, public secondary institutions with an ICT integration plan (n9): 2.7
- Mixed, urban, public secondary institutions with no ICT integration plan (n16): 3.1
- All private secondary institutions with an ICT integration plan (n6): 2.3
- All private secondary institutions with no ICT integration plan (n8): 1.4
4.5.4 The percentage of courses taught using ICT

- Mixed, urban, public secondary institutions with an ICT integration plan (n9): 31.7%
- Mixed, urban, public secondary institutions with no ICT integration plan (n16): 21.0%
- All private secondary institutions with an ICT integration plan (n6): 18.5%
- All private secondary institutions with no ICT integration plan (n8): 20.8%
4.9.1 Stated factors (by learners) that are challenges to ICT use

• “The students lamented that if one does not take computer option then he/she has no access to the computers.”

• “...no time given to us for practice yet computer is a practical subject, restrictions to access the computer lab which even discourage students from using it even when they have some free time...”

• “The main barrier in the use of ICT is the computer room fee charge.”
6.2.2 Stated impact (by educators) of ICT on (learners') access to knowledge

• “...as a result of the presence of the Internet. They can ably now surf new information related to any [...] they can read for themselves new information, compare what they have been taught...”
outcomes

• Enhanced research capacity in partner institutions
• Analysis, dissemination, and publication of research results
• 12 national multi-stakeholder policy dialogue sessions to link research to recommendations
• Phase 2 (2009-2011) will also produce practical guides for implementation in schools
opportunities, phase 2 (2009-2011)

• Capacity building
• Scientific publication
• Evidence-based policy decision-making
• Leading pedagogical practice
• Improved educational outcomes
Discussion

How can the PanAf network (an “existing international ICT indicator project” contribute to this meetings’ objectives? :

• Questions about PanAf?
• Formulation and implementation at a global scale?
• Indicators (convergence and concordance)?
• Organizational tasks?
• Pilot countries?
• Timetable?