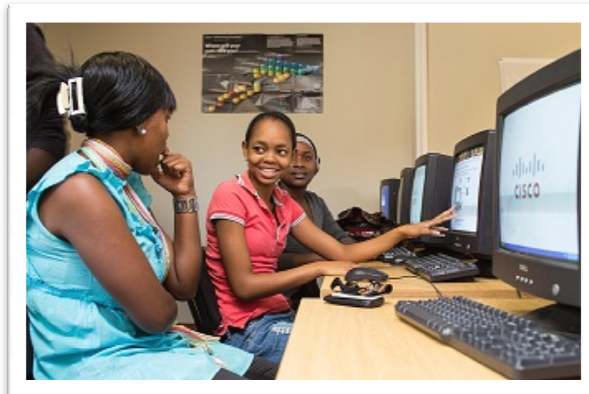


Being smart about using internet in education

Is the use of technologies like the computer and internet in education changing teaching and learning? Yes! This is what dozens of African researchers, working from 2003 to 2012 in collaboration with researchers at the University of Montreal, found. Field data from over one hundred schools across the continent has been made available as open data at www.observatoiretic.org.



And below are 20 evidence-based recommendations from the interdisciplinary research team for schools and policy makers, plus recommendations on how to boost African research on information and communication technologies (ICT) in education. For more information, consult the web site of the Education Research Network for West and Central Africa (Ernwaca) at www.ernwaca.org/panaf.*

12 ways to optimize the use of ICT at your school

1. Ensure **equal access to ICT for all students**: girls as well as boys. Be systematic and innovative about it.
2. Ensure **equal access to ICT for all teachers**, particularly in the teachers' room (not all teachers are comfortable using computers in front of their students).
3. Given the potential of the Web, ensure all computers at the school are **connected to the internet**.
4. Organize relevant **training programs** so all teachers may use ICT in their teaching practice. *Appropriate training for teachers is a determinant factor in the pedagogical integration of ICT.*
5. When teaching computer courses, **take into account the students' technology needs, skills and habits**.
6. Support teachers and find innovative ways to **motivate teachers** to make collaborative use of ICT.
7. Find ways to **make ICT mobile** (i.e. mobile computer labs, mobile phones) and transportable so that as many students and teachers as possible can benefit.
8. **Use ICT both inside and outside the classroom** for teaching and learning school subjects.
9. Set up projects that **put students in contact with students from other schools**, regions and countries.
10. Designate an **ICT resource teacher to each school or to a number of schools** (no need for computer experts). A teacher adept at techno pedagogical applications motivates his or her colleagues to integrate ICT into their teaching practice.
11. Promote **collaborative work and social interaction** by having students use ICT. This also helps students be better prepared for their professional and personal lives.
12. Use ICT to **facilitate school organization and administrative management** (e.g., student's records).

Adapted slightly from:

When technology makes a difference: 12 ways to optimize the use of ICT at your school /
Quand les technologies font la différence : 12 façons d'optimiser l'usage des TIC dans votre école,
available at: www.africaict.org/documents.php

8 recommendations for **policy makers, teacher trainers and other education administrators**

1. Develop a **national policy** for the pedagogical integration of ICT.
2. Develop a national policy for **teacher training** in the pedagogical integration of ICT.
3. Provide **ongoing training for school staff**; to make the training more relevant, it would be preferable to hold training sessions in the schools and classrooms, using on-site ICT equipment.
4. Develop techno-pedagogical **resource banks** for different education levels; teachers do not always have time to search for and assess such materials.
5. Set up **incentive plans** for teachers and students to use ICT, i.e. extend low-interest credit for equipment purchases, provide recognition and/or grants for techno-pedagogical projects.
6. Set up spaces for **collaborative dialogue** on the pedagogical integration of ICT (e.g., committee meetings, forums, round tables, annual conferences among schools, ministries, teachers, training institutions and industry).
7. Identify the academic competencies to which ICT can be applied for teaching and learning; **relate ICT to specific subjects and competencies** when integrating them into school curriculums and programs, including **guidelines for teachers** on the pedagogical integration of ICT.
8. Establish public-private **partnerships**; the terms and conditions of such partnerships must be explicitly stated and formalized to ensure that all pedagogical decisions remain the purview of education stakeholders.



Adapted slightly from:

Orienting and supporting the pedagogical integration of ICT in African countries:

8 recommendations for policy makers, teacher trainers and other education administrators /
8 recommandations à l'intention des décideurs politiques, des formateurs d'enseignants et d'autres administrateurs de l'éducation, available at: www.africaict.org/documents.php

8 recommendations to **spur African research on ICT in education**

1. **Revisit previously gathered data** (e.g., observatoiretic.org).
2. Conduct **empirical studies** on ICT use in classrooms and schools.
3. **Vary the types of empirical studies** on ICT in education.
4. Increase the number of **publications** addressing the pedagogical integration of ICT.
5. Ensure that research results exert an **impact on both users** (teachers, principals and students) **and policymakers**.
6. Foster the integration of **young researchers** into research projects on the pedagogical integration of ICT.
7. Learn to **consider diverse dimensions** when conducting studies, such as gender, national languages, culture, persons with special needs, and geographic and socioeconomic circumstances (e.g., rural and urban areas).
8. **Use ICT** to support scientific research.

Adapted slightly from:

8 recommendations to spur African research on ICT in education /

8 recommandations pour dynamiser la recherche africaine sur les TIC en éducation, available at: www.africaict.org/documents.php

Compiled May 2013 for www.kathryntoure.net.

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