Health Informatics Capacity Development through South-South, North-South and South-North Collaboration: The INDEHELA Experience

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INDEHELA initiative

INDEHELA (Informatics Development for Health in Africa) is a long-term initiative to strengthen the capacity of the participating African higher education institutions to contribute to the socio-economic and human development in their countries, particularly in the scientific field of Health Informatics (HI) and the practice of e-health.

… by means of international collaboration.
INDEHELA partners and projects: Finland+Nigeria, 1989-2003

- MINPHIS (1989-): System devl
INDEHELA partners and projects: +Mozambique+South Africa, 2004-2008

- MINPHIS (1989-): System devl

INDEHELA partners and projects:
+ Savonia, 2009-2011

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<th>SUAS-FI</th>
<th>UEM-MZ</th>
<th>CPUT-ZA</th>
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- MINPHIS (1989-): System devl
- INDEHELA-Education (2009-2011): Student and staff exchange / North-South-South pgm
INDEHELA-Education
intensive courses

Designing and
Implementing
Information Systems in
Health Care

Information Systems Analysis
and Design in Health Care
INDEHELA partners and projects: now

- **SUAS-FI**
  - WellNet (1998-2013): Student and staff exchange / North-South-South pgm
- **UEM-MZ**
- **CPUT-ZA**
  - MINPHIS (1989-): System devl
- **UEF-FI**
  - SocioTech SA (2009-2011): R&D / SAFIPA programme
- **OAU-NG**
  - INDEHELA-Education (2009-2011): Student and staff exchange / North-South-South pgm
  - INDEHELA-ICI (2011-2012-?): HI capacity development / HEI ICI programme
  - INDEHELA-Exchange (2012-2014?): Application to North-South-South programme

- **FinMoz** (2011, 2012-): Municipal cooperation / North-South pgm
- **STIFIMO** (2011, 2012-): R&D / STIFIMO programme
- **Incubator Hub**
- **Kujali Living Lab**
- **HumSec MoMoBu** (2012?): Innovation chain R&D / Tekes

Mikko Korpela
29/11/2011
Current INDEHELA projects – 1 ISD4D research project

A Holistic Information Systems Development Approach for Societal Development

- Funding from the Academy of Finland for 4 years from Sept 2011
- 2 workshops per year, ZA and MZ alternating
Objective

Develop a comprehensive approach (methodology) for the analysis and design of sustainable and scalable socio-technical information systems that promote societal development of local communities in varying developing-country contexts.
The holistic ISD4D approach
Research design

REFLECTION:
Integration, Adaptation

ACTION: Trial & Feedback

Network cooperation

Case projects in Maternity Health

Existing models
Existing knowledge
Knowledge to be gathered

PARTICIPATORY ACTION RESEARCH

Holistic ISD4D Approach

Guidelines, methods

IS Developer

Work Developer

RESEARCH INPUTS

RESEARCH RESULTS

RESEARCH UTILIZATION

Education, further research

International, multidisciplinary research group

Finland

Mozambique

South Africa

Mother, Citizen, Community

Health service provider

Services

Tools
Action research in real-life cases
INDEHELA-ICI: Institutional Collaboration Instrument for Informatics Development for Health in Africa

- Focuses on developing the capacities of three African HEIs in Health Informatics and e-health education in three areas:
  1. **Staff** development
  2. **Educational** capacity development
  3. **Administrative** capacity development.

- **Partners**: Finland: UEF and Savonia; Africa: OAU, UEM, CPUT
- **Expected timeframe**: 3-5 years (two funding periods)
- **Current funding**: 18 months (till end of 2012)
Expected results by end of 2012 (current funding):

• **Staff development:**
  • 6-10 junior and 3-5 senior academic staff have been identified
  • Each junior member with a feasible postgraduate degree plan / proposal
  • Supervisors appointed, African-Finnish co-supervision / mentoring groups

• **Educational capacity development:**
  • Each African partner HEI has the curriculum and a timed plan for implementing its Masters and/or certificate programme
  • First modules have been designed, the teaching / learning methods set, and at least one pilot module implemented in each African partner HEI

• **Administrative capacity development:**
  • Project Coordinator / Project Officer / Administrator with good organizing skills has been identified and employed in each African partner HEI
  • Legal and financial project administration practices created within each HEI and at the international level
  • Personal development plans approved for each project officer
Core activities required to achieve the results:

**workshops at all African partner HEIs**

1. OAU, Nigeria: September 2011
2. CPUT, South Africa: November 2011
3. OAU, Nigeria: February 2012
4. UEM, Mozambique: June 2012
5. OAU, Nigeria: November-December 2012

Senior experts from both African and European partners

Between workshops, **electronic communication**
(web site, email lists, skype meetings, skype lectures)

At OAU and UEM, **infrastructure development**, too
INDEHELA-ICI project, cont.
Discussion: Some key enablers and obstacles

• A little bit of money is a key enabler, to enable people travel to meet each other; big money not needed

• Shared interest and purpose is the key enabler

• Loose group of projects with same direction enabled specific funding for specific parts of the bigger picture

• Capacity develops by doing, supported by ability to learn from theories and other people – so a combination of both action and research is a key enabler

• Differences between contexts are an obvious obstacle that must be recognized, appreciated and overcome

• Red tape is an awful obstacle