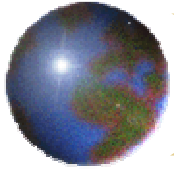


*E-Human Capital & Investments
in e-literacy:
Comments & Proposals*

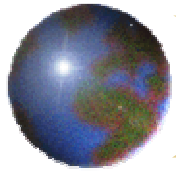
Dr. Nasser Saidi

@ UN ICT TF 5th Meeting Global
Forum Geneva 12 September 2003



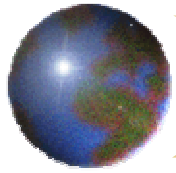
Human Capital & Investments in e-literacy

- ✚ Education & Training are investments in Human Capital (HC) and yield returns over the lifetime of individuals and for societies
- ✚ Human capital is major source of economic development & growth
- ✚ Human capital is the major source of wealth of modern economies: about 60%-70% of total wealth
- ✚ Human capital fundamental to building market-based institutions, good governance and democracy
- ✚ Women & Minorities are major beneficiaries from human capital investments
- ✚ Benefits from Media Information & Communications Technologies (MICT) require educated populations
- ✚ Proposals for adoption by UN ICT TF Global Forum



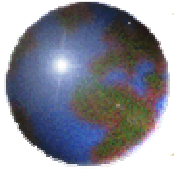
Human Capital Investments: basic principles

- ❖ People cannot be separated from their knowledge, skills & health:
 - ❖ Enhances labor mobility between sectors and internationally
 - ❖ HC investments less risky than other investments in volatile, uncertain environments
- ❖ Education and training, health expenditures are the most important investments in human capital: but we must expand definition to include *e-Human Capital*, that is, *the MICT knowledge, information, ideas, skills of individuals*



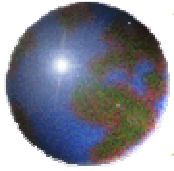
HC & Economic Development

- ❖ HC major source of labor productivity growth and of innovation which enhance economic development & prospects, reduces regional & communitarian & gender disparities
- ❖ HC implies better educated citizens which enhances and underlies democracy and ‘good governance’ practices and institutions
- ❖ HC means individuals who are able to build & contribute to sustaining market-based economic institutions and private initiatives



Women & HC investments

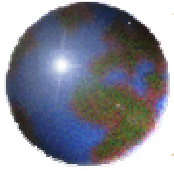
- ✦ Increased investments in females' HC has important social & demographic effects:
 - ▣ Large increase in labor force participation: higher incomes & more freedom for women
 - ▣ Reduced fertility, lower number but higher quality investment in children
 - ▣ Spillover effects: better family health and higher 'social capital'
 - ▣ Lowers difference in earnings and discrimination ratio between male & female earnings
- ✦ Female e-HC investments can generate high returns
- ✦ *ICT Programs & Investments should target girls and young women*



Ten Lessons for ICT and Education in the Developing World

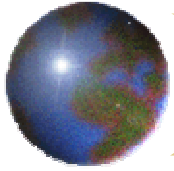
(Source: R. J. Hawkins,)

- ❖ 1. Computer labs in developing countries take time and money, but they work
- ❖ 2. Technical support cannot be overlooked
- ❖ 3. Non-competitive telecommunications infrastructure, policies, and regulations impede connectivity and sustainability
- ❖ 4. Lose the wires: go wireless
- ❖ 5. Get the community involved
- ❖ 6. Private-public sectors partnerships are essential
- ❖ 7. Link ICT and education efforts to broader education reforms
- ❖ 8. Training, training, training: train the teachers !
- ❖ 9. Technology empowers girls
- ❖ 10. Technology motivates students and energizes classrooms



HC and modern MICT

- ❖ Modern MICT cannot pay off in the absence of an e-literate labor force
- ❖ MICT increases the productivity of HC leading to higher real wages
- ❖ Women tend to derive major gains from ICT because they can tele-work and because the services sector is a major user of ICT and tends to favor employment of women and, as a result, leads to an increase in the relative wages of women

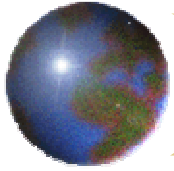


HC and modern MICT

Distinguish 2 aspects of relationship between MICT and HC:

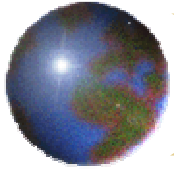
1. Use of MICT for education, distance learning & teaching, on-the-job training, health investments
2. Investments in e-Literacy and e-HC

Note that it is only investments under [2] that lead to accumulation of e-HC



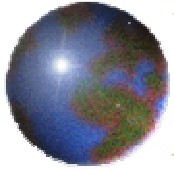
WSIS Related Proposals [1]

- ✦ **Recognize *e-Human Capital* (e-HC) as a distinct, essential component of HC, along with health, education and on-the job-training**
- ✦ **Develop indicators on MICT that reflect investment in e-HC**
 - ❑ Focus not only on inputs but also on *outputs*
 - ❑ Develop indicators on costs, prices, financing & investment
 - ❑ Develop indicators on ICT-related efficiency & productivity indicators
 - ❑ Develop indicators on industrial structure and competition in MICT sector



WSIS Related Proposals [2]

- ❖ Encourage empirical work on the relationship between MICT indicators and **MDG**
- ❖ Encourage governments to provide fiscal & tax incentives for e-HC investments including on-the –job training in ICT
- ❖ E-Learning: reform school curricula to incorporate MICT courses, leading to the delivery of a ***General Digital Certificate***, the minimum level of MICT literacy required to participate in the e-Economy and e-Society



WSIS Related Proposals [3]

- ✿ Revise National Income Accounting to account for investments in MICT and in e-HC (hardware, software, on-the-job, self-investment)
 - ✿ Introduce reporting on MICT into General Data Dissemination Standard (GDDS)
- ✿ Develop an *e-Literacy Indicator* to be published & incorporated into development indicators
- ✿ Specify policy objectives in terms of e-Literacy Indicator
- ✿ Given importance of legal, institutional & regulatory barriers for access to MICT, develop *Indicators of Legal & Regulatory Barriers*