



How to instill the love of Science in Students?

IBSE for Girls/Primary Connections Workshop

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Why?

- Perversion of science (science subjects) at all levels of schooling
 - Hard – difficult to pass
 - For boys or “Tom-boys”
 - Not rewarding
 - Scientists are mad
 - Scientists are social outcasts
 - Scientific career – a tough struggle
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Science – the “engine of economic growth” – Critical issues in development

- Democratic governance
 - Education
 - Employment
 - Health
 - Poverty
 - Hunger and Malnutrition
 - Environment
 - Gender
 - Human security
 - Conflict and Crisis Prevention
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Why? ... Despite this thesis

- ❑ Worrying decline in the quantity & quality of scientists
- ❑ Low levels of enrolment (critical mass 40% to foster economic growth, most countries in Africa are below 5%)
- ❑ Institutional disinterest – Closure of science Faculties & Departments
- ❑ Marginalization of sciences – world economic order (Liberalization policies)

How?

- “Charity begins at home” – Domestic science & its applications
 - Change institutional culture (s) thru, policies in favour of sciences
 - Role models – greater visibility of practicing scientists is a “magnet” – attract students to science
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Mentoring & Networking programs

- Professional Association
 - Avoid isolation of scientists
 - School clubs
 - Field visits
 - Career guidance
 - Competition between the Arts & Sciences
 - Avoid social constructs
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- Affirmative action – policies or otherwise
 - 2.5 points for Girls in science disciplines

- Resource support

- Advising and influencing governments
 - Take responsibility for science teaching and learning infrastructure
 - Commitment to close the gap
 - Offer awards, grants and fellowships
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□ Curriculum design

- Pedagogy vs Andrology
 - IBSE – learner centered approach
 - Mandatory to pursue sciences
 - Compartmentalization of science subjects as opposed to Generalization
 - Avoid early specialization
 - Define skills-base
 - ..., etc
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□ Engage with the 'general public'

- Public understanding of science

- Public dialogue on the role of science and scientific innovations

- Public concerns regarding scientific innovations should be handled cautiously based on evidence and respect of social values and ethical issues

Capacity

- Build capacity to enhance best practices in teaching and learning of sciences at all levels
 - Environment
 - Methods and content plus skills
 - The teacher-student interaction
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Thank You

