Problems and Prospects of Space Education in Africa: ARCSSTE-E’s Scorecard

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15th UN/IAF-Sponsored Workshop on Space Education and Capacity Building for Sustainable Development
Major problems (confronting African Countries)

- Low GDP/huge external debts/Foreign Aids.
- Lacking in infrastructures/funding for space research/development programmes.
- Scarcity of space experts & huge costs of training the personnel (brain drain - attractive/better opportunities in dev. countries).
- Unsustainable/unstable (space) science education policies; uncoordinated regional scientific activities (priorities) and cultural/colonial differences.
- Mitigating social problems: famine, high-level illiteracy, poverty, hunger, wars, etc.
Prospects (partnering for technical support)

- NEPAD
- UN- OOSA, UNESCO, WMO, UNDP, FAO, etc.
- NASA, ESA, India, China, etc.
- USAID, SAREC, SIDA, etc.
New Partnership for Africa Development (NEPAD)

“This is a programme of action for the redevelopment of the African continent”

The plan addresses key social, economic and political priorities in a coherent and balanced manner.
ARCSSTEE-E
(http://www.oauife.edu.ng/research/arcsstee)

- MOU yet to be signed by all the member states - no Governing Board.
- Hosted by Obafemi Awolowo University, Ile-Ife, Nigeria.
- Solely funded by NASRDA (Nigeria).
- Travel Support provided by UNOOSA.
ARCSSTEE – Budget 2006

- **Personnel/Overhead** –
  US$ 150,000

- **Capital projects** –
  US$ 50,000

- **Scholarships (for African students)** –
  US$ 40,000

- **Space Edu./outreach programme**
  US$ 25,000
Training/workshops - ARCSSTEE

- 2000 – RS/GIS(1)
- 2001 – RS/GIS(2), SatMet(1)
- 2002 – SatCom(1)
- 2003 – SatMet(2)
- 2004 – RS/GIS(3), SatCom(2), SatMet(3)
- 2005 – RS/GIS(4), SatCom(3), BSAS(1)
- 2006 – RS/GIS(5)

Students can continue to do a 1-year in-country resident project leading to the award of a masters degree
CAPACITY BUILDING:
NASRDA/ARCSSTE-E venture

Advert out for the PGD programme
in SST Application (July 2005)

Offers:
- Tuition waiver
- Boarding/living expenses
- Travel support (OOSA)

Eligibility: English-speaking African countries
## APPLICATION SUMMARY/STATISTICS

<table>
<thead>
<tr>
<th>Country</th>
<th>No.</th>
<th>SATCOM = 11 Applicants</th>
<th>SATMET = 2 Applicants</th>
<th>BSAS = 3 Applicants</th>
<th>R8/GIS = 71 Applicants</th>
<th>Total = 87 Applicants</th>
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<tbody>
<tr>
<td>Botswana</td>
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</tbody>
</table>

- Total = 87 applicants

(Dated: 30/09/2005)
Space Science Education/ Capacity Building

- motivation and the relevance;
- approach, curricula and techniques;
- role of space science teachers;
- training requirements;
- workshops/seminars, etc.;
EDUCATION:
World Space Week 2005
World Space Week exhibitions – 10/10/2005
World Space Week – Participants from the local schools in Ile-Ife (10/10/2005).

<table>
<thead>
<tr>
<th>Name of School</th>
<th>Type</th>
<th>Level</th>
<th>Ages (Years)</th>
<th>Number</th>
<th>Sex ratio (M:F)</th>
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</thead>
<tbody>
<tr>
<td>Sunshine Nur. &amp; Prim.</td>
<td>Private</td>
<td>Primary</td>
<td>7 – 10</td>
<td>20(2)</td>
<td>12:8</td>
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<tr>
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<td>Primary</td>
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<td>Secondary</td>
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<td>Secondary</td>
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<td>Adepetu Comp. High</td>
<td>Private</td>
<td>Secondary</td>
<td>10 – 15</td>
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<tr>
<td>Moremi High School</td>
<td>Public</td>
<td>Secondary</td>
<td>13 – 17</td>
<td>10(2)</td>
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<tr>
<td>Oduduwa College</td>
<td>Public</td>
<td>Secondary</td>
<td>12 – 17</td>
<td>10(2)</td>
<td>6:4</td>
</tr>
</tbody>
</table>

Statistics: Number of Schools invited = 8; Teachers accompanying = 17; Total Number of pupils = 87 (Male:Female ratio = 46:41); Age range = 7 – 17 years.
In the future …..

- To promote widespread participation of Africans through the provision of scholarships.
- RS/GIS is the most attractive option.
- Promote regional collaboration and sharing of resources/facilities among African countries.
- NEPAD is a relevant instrument for promoting space education and capacity building for Africa.
Thank you.