“...sustainable development must be...a concrete reality for all of us – individuals, organizations, governments – in all of our daily decisions and actions, so as to promise a sustainable planet and a safer world to our children, our grandchildren and their descendants.”

Koichiro Matsuura, Director-General of UNESCO

“Our biggest challenge in this new century is to take an idea that seems abstract –sustainable development – and turn it into a reality for all the world’s people.”

Kofi Annan, Secretary General of the United Nations
WELCOME MESSAGE

The UNESCO Asia-Pacific Programme of Educational Innovation for Development (APEID) warmly welcomes you to the 10th APEID International Conference “Learning Together for Tomorrow: Education for Sustainable Development”.

This conference will promote the United Nations Decade of Education for Sustainable Development (DESD), 2005-2014, and highlight the importance of education in addressing the pressing issues facing our society today.

Members of the APEID network will gather with Education for Sustainable Development (ESD) researchers and practitioners at this conference to share research findings, innovative practices, experiences and lessons learned in the area of ESD. The conference will thereby provide participants with an opportunity to learn from each other about how education can help us to find solutions to ensure a future that balances social, cultural, environmental and economic needs.

At the conclusion of this conference we hope to have strengthened co-ordination and collaboration among APEID network members, raised awareness and understanding of ESD, and served as a catalyst for the creation of ESD action plans.

It is hoped that the conference will also serve as a change mechanism for the new era of APEID and ESD. UNESCO very much looks forward to your active participation.

Molly Lee
Coordinator, APEID
UNESCO Bangkok
## SCHEDULE OF EVENTS

### Day One

**Wednesday, 6 December**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Venue</th>
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<tbody>
<tr>
<td>7:00</td>
<td>Registration</td>
<td>Mezzanine</td>
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<tr>
<td>9:00</td>
<td><strong>Opening Ceremony</strong></td>
<td>Rainbow Room, 5th Fl.</td>
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<tr>
<td></td>
<td><strong>Welcome Speech</strong></td>
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<tr>
<td></td>
<td>Sheldon Shaeffer, Director, UNESCO Asia and Pacific Regional Bureau of Education, Bangkok</td>
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<tr>
<td></td>
<td><strong>Opening Address</strong></td>
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<td></td>
<td>H.E. Wichit Srisa-an, Minister of Education, Thailand</td>
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<tr>
<td>10:00</td>
<td>Press Conference</td>
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<td></td>
<td>Coffee Break</td>
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<tr>
<td>10:30</td>
<td><strong>Raja Roy Singh Lecture</strong></td>
<td>Rainbow Room, 5th Fl.</td>
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<td><strong>Introduction to the Raja Roy Singh Lecture</strong></td>
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<td></td>
<td>Victor Ordonez, Former Director of UNESCO Bangkok</td>
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<td><em>Education for Sustainable Development in Education Systems</em></td>
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<td>John Fien, Innovation Professor for Sustainability, RMIT University, Australia</td>
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<tr>
<td>11:30</td>
<td><strong>Concurrent Sessions: 1</strong></td>
<td>Rainbow Room, 5th Fl.</td>
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<tr>
<td></td>
<td>1A  : ESD in Higher Education</td>
<td>Queen's Park 2, 2nd Fl.</td>
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<td>1B  : From Theory to Practice: TVET as an Example of ESD in Action</td>
<td>Queen's Park 4, 2nd Fl.</td>
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<td>1C  : Environmental Education for ESD</td>
<td>Queen's Park 3, 2nd Fl.</td>
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<td>1D  : Assessing and Understanding Sustainable Development: Qualitative Analysis on ESD</td>
<td>Queen's Park 6, 2nd Fl.</td>
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<td>1E  : Integrating Values in Education for a Sustainable World</td>
<td>Saitip, 3rd Fl.</td>
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<tr>
<td>13:00</td>
<td>Lunch</td>
<td>Queen's Park 2-3, 2nd Fl.</td>
</tr>
<tr>
<td>14:00</td>
<td><strong>Plenary Session 1: Implementation Strategies for the Decade of Education for Sustainable Development</strong></td>
<td>Rainbow Room, 5th Fl.</td>
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<td></td>
<td><strong>Chairperson:</strong> Molly Lee, Coordinator, APEID, UNESCO Bangkok</td>
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<td><strong>Keynote speakers:</strong></td>
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<tr>
<td></td>
<td>• International, National and Local Implementation Strategies for ESD in the Asia-Pacific Region</td>
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<td>Shuichi Nakayama, Professor, Hiroshima University of Economics, Japan</td>
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<td>• Pilot Project of ESD in China</td>
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<td>Du Yue, Deputy Secretary General, National Commission of the People's Republic of China for UNESCO</td>
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<td>• Learning for Sustainable Development: The Possible Way Forward</td>
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<td>Shyamala Mani, Centre for Environment Education, India</td>
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<td>• Conceptual Framework of ESD in the Asian Context</td>
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<td>Samuel Lee, Secretary-General, Korean National Commission for UNESCO</td>
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<td><strong>Welcome Reception</strong></td>
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<td></td>
<td>Hosted by UNESCO Bangkok, Welcome Address by Sheldon Shaeffer</td>
<td>Queen's Park 2, 2nd Fl.</td>
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</table>
### Day Two

**Thursday, 7 December**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Venue</th>
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<tbody>
<tr>
<td>8:30</td>
<td><strong>Concurrent Sessions: 3</strong></td>
<td></td>
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<tr>
<td></td>
<td>3B : TVET for All – A Master Key for Sustainable Development</td>
<td>Queen's Park 4, 2nd Fl.</td>
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<tr>
<td></td>
<td>3C : Innovative Initiatives at Educational Institutions: Leadership and Teacher Training for Sustainable Development</td>
<td>Queen's Park 5, 2nd Fl.</td>
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<td>3D : Information and Communication Technologies in Education 1</td>
<td>Queen's Park 5, 2nd Fl.</td>
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<td></td>
<td>3E : Education Partnerships: Consumer Behaviour Changes through the Private Sector and the Media for ESD</td>
<td>Saitip, 3rd Fl.</td>
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<tr>
<td>10:30</td>
<td>Coffee Break</td>
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<tr>
<td>11:00</td>
<td><strong>Plenary Session 2: Regional Perspectives on ESD</strong></td>
<td>Rainbow Room, 5th Fl.</td>
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<td><strong>Chairperson:</strong> Derek Elias, <em>Programme Specialist ESD, UNESCO Bangkok</em></td>
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<td><strong>Keynote speakers:</strong></td>
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<td></td>
<td>• UNEP's Approach to ESD in the Asia-Pacific Region: Leadership by Example at UNEP - Tongji Institute of Environment for Sustainable Development</td>
<td>Surendra Shrestha, <em>Director, United Nations Environment Programme, Regional Office of Asia and the Pacific</em></td>
</tr>
<tr>
<td></td>
<td>• Look Towards the Source: A Pacific Perspective of Education for Sustainable Development</td>
<td>Konai Thaman, <em>Professor of Pacific Education, University of the South Pacific, Fiji</em></td>
</tr>
<tr>
<td>12:00</td>
<td>Lunch</td>
<td>Queen's Park 2-3, 2nd Fl.</td>
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<tr>
<td>13:00</td>
<td><strong>Concurrent Sessions: 4</strong></td>
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<td></td>
<td>4A : Indicators and Assessment Tools for ESD</td>
<td>Rainbow Room, 5th Fl.</td>
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<td>4B : Innovative Approaches to Teacher Education for Sustainable Development</td>
<td>Queen's Park 4, 2nd Fl.</td>
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<td>4C : Education Partnerships: Collaborative Strategies for the Networking of Academic Institutions for ESD</td>
<td>Queen's Park 5, 2nd Fl.</td>
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<td>4D : Reform and Policy for ESD</td>
<td>Queen's Park 6, 2nd Fl.</td>
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<td>4E : Curriculum Development or ESD</td>
<td>Saitip, 3rd Fl.</td>
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<tr>
<td>15:30</td>
<td>Coffee Break</td>
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<tr>
<td>15:30</td>
<td><strong>Concurrent Sessions: 5</strong></td>
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<td></td>
<td>5B : Innovative Practices for ESD: Experiences from Formal and Non-formal Education</td>
<td>Queen's Park 4, 2nd Fl.</td>
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<td>5C : Education for Sustainable Development: Youth Leads the Way</td>
<td>Queen's Park 5, 2nd Fl.</td>
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<td>5D : Panel Discussion: A Conversation on Capacity-Building in ESD</td>
<td>Queen's Park 6, 2nd Fl.</td>
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<td>5E : Basic Education: Approaches from Around the World</td>
<td>Saitip, 3rd Fl.</td>
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<td>17:30</td>
<td>End of Day 2</td>
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**Day Three**  
**Friday, 8 December**

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<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>8:30</td>
<td><strong>Concurrent Sessions: 6</strong></td>
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<td></td>
<td><strong>6B</strong> Basic Education: The Role of Teachers and Schools</td>
<td>Panorama 1, 3rd Fl.</td>
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<td><strong>6C</strong> ESD Lens Workshop</td>
<td>Panorama 2, 3rd Fl.</td>
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<td></td>
<td><strong>6D</strong> Innovative Approaches for All: Tools and Methodologies for Sustainable Development</td>
<td>Saitip, 3rd Fl.</td>
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<tr>
<td>10:30</td>
<td>Coffee Break</td>
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<tr>
<td>11:00</td>
<td><strong>Plenary Session 3: Innovative Practices in ESD</strong></td>
<td>Rainbow Room, 5th Fl.</td>
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<td>Chairperson: Abdul Hakeem, Coordinator, APPEAL, UNESCO Bangkok</td>
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<td>Keynote speakers:</td>
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<td></td>
<td>• European Experiences and Perspectives on Reorienting Curricula to ESD</td>
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<td>• Engaging the Arts for World Heritage Education with Education for Sustainable Development Perspectives: Some Approaches</td>
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<td>• Integrating School Reform with Community Development in the Mekong Delta of Viet Nam</td>
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<td>• Educating Rural People for Sustainable Development</td>
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<td>• Intercultural Education for Sustainable Development: Striking for Harmony in Diversities</td>
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<tr>
<td>12:00</td>
<td>Lunch</td>
<td>Queen's Park 2-3, 2nd Fl.</td>
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<td>13:00</td>
<td><strong>Concurrent Sessions: 7</strong></td>
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<td></td>
<td><strong>7A</strong> Information and Communication Technologies in Education 2</td>
<td>Rainbow Room, 5th Fl.</td>
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<td></td>
<td><strong>7B</strong> Integrating School Reform with Community Development in the Mekong Delta of Viet Nam</td>
<td>Panorama 1, 3rd Fl.</td>
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<td><strong>7C</strong> Educating Rural People for Sustainable Development</td>
<td>Panorama 2, 3rd Fl.</td>
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<td><strong>7D</strong> Intercultural Education for Sustainable Development: Striking for Harmony in Diversities</td>
<td>Saitip, 3rd Fl.</td>
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<tr>
<td>14:30</td>
<td><strong>Plenary Session 4: Integrative Approaches to ESD</strong></td>
<td>Rainbow Room, 5th Fl.</td>
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<td>Chairperson: Rupert Maclean, Director, UNEVOC</td>
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<td>Keynote speaker:</td>
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<td></td>
<td>• The Interdependency between Education and Sustainable Development</td>
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<td>• The Way Forward</td>
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<td>• Vote of Thanks</td>
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<td>• Closing Remarks</td>
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<td>Closing Ceremony:</td>
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<td>• The Way Forward</td>
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<td>• Vote of Thanks</td>
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<td>• Closing Remarks</td>
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<tr>
<td>15:30</td>
<td>Refreshments</td>
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<td></td>
<td>Departure of Participants</td>
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## Concurrent Sessions

**Day One: 6 December 2006**

**Concurrent Sessions 1: 11:30 - 13:30**

<table>
<thead>
<tr>
<th>Session</th>
<th>Chair</th>
<th>Venue</th>
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<tbody>
<tr>
<td><strong>1A: ESD in Higher Education</strong></td>
<td>Seu’ula Johansson-Fua (to be confirmed)</td>
<td>Rainbow Room, 5th Floor</td>
</tr>
<tr>
<td><strong>1A.1. Higher Education in India and Sustainable Development</strong></td>
<td>Nilima Bhagabati, <em>Department of Education, Gauhati University, India</em></td>
<td></td>
</tr>
<tr>
<td><strong>1A.2. Realizing Sustainable Development in Higher Education through Soft Skills</strong></td>
<td>Maria Salih, <em>Sultan Idris University of Education, Malaysia</em></td>
<td></td>
</tr>
<tr>
<td><strong>1A.3. Science Education Mentoring Programme in Timor Leste</strong></td>
<td>Alisher Umarov, Programme Specialist, UNESCO Jakarta</td>
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</tr>
<tr>
<td><strong>1B: From Theory to Practice: TVET as an Example of ESD in Action</strong></td>
<td>Astrid Hollander</td>
<td>Queen’s Park 4, 2nd Floor</td>
</tr>
<tr>
<td><strong>1B.1. Recognizing the Prior Learning Experience of TVET Teachers</strong></td>
<td>Don Adams, and Donna Hensley, <em>University of Newcastle, Australia</em></td>
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</tr>
<tr>
<td><strong>1B.2. The Learning Factory: An Innovative Model of Vocational Education in Thailand</strong></td>
<td>Nuanjan Puyakoon, <em>Office of the Education Council, Thailand</em></td>
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</tr>
<tr>
<td><strong>1B.3. Self-Sufficient Schools: Fostering Entrepreneurship to Finance Sustainable Education</strong></td>
<td>Nik Kafka, <em>Teach A Man To Fish, United Kingdom</em></td>
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<tr>
<td><strong>1B.4.</strong></td>
<td>Jong Hoon Ghang</td>
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<tr>
<td><strong>1C: Environmental Education for ESD</strong></td>
<td>Montip Tabucanon</td>
<td>Queen’s Park 5, 2nd Floor</td>
</tr>
<tr>
<td><strong>1C.1. UNEP’s Annual Leadership Programme on Environment for Sustainable Development</strong></td>
<td>Jeonghyun (Emily) Park, <em>UNEP-ROAP, Thailand</em></td>
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<tr>
<td><strong>1C.2. Implementing Environmental Education for Sustainable Development</strong></td>
<td>Phanitda Chenrachasith and Hongtu Chen, <em>Naresuan University, Thailand</em></td>
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<tr>
<td><strong>1C.3.</strong></td>
<td>Susan Tung Nyuk Lin, SJK (C) Chi Hwa, <em>Malaysia</em></td>
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<tr>
<td><strong>1C.4. An Integrated Approach to Sustainable Development: Pacific Island Countries</strong></td>
<td>Jese Verebalavu-Faletoese, <em>University of the South Pacific, Fiji</em></td>
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</tr>
<tr>
<td><strong>1D: Assessing and Understanding Sustainable Development: Qualitative Analysis on ESD</strong></td>
<td>Rosalyn McKeown</td>
<td>Queen’s Park 6, 2nd Floor</td>
</tr>
<tr>
<td><strong>1D.1. What do we Seek when we Seek Sustainability of Projects?</strong></td>
<td>David W. Chapman, <em>University of Minnesota, USA</em></td>
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<tr>
<td><strong>1D.2. A Taxonomy of Learning for Sustainable Development</strong></td>
<td>Alan McLean, <em>Universiti Tun Abdul Razak, Malaysia</em></td>
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</tr>
<tr>
<td><strong>1D.3. Qualitative Research Approaches for Understanding the Progress of the DESD</strong></td>
<td>Kimiharu To, <em>State University of New York, USA</em></td>
<td></td>
</tr>
<tr>
<td><strong>1D.4. What does ESD do? A Geophilosophical Analysis</strong></td>
<td>Noel Gough, <em>La Trobe University, Australia</em></td>
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</tbody>
</table>
## 1E: Integrating Values in Education for a Sustainable World

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<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker/Institution</th>
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</thead>
<tbody>
<tr>
<td>11:30</td>
<td>1.E.1</td>
<td>Living our Values in Education: Principles and Practice</td>
<td>Christopher Drake, Association for Living Values Education International, China</td>
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<tr>
<td>11:50</td>
<td>1.E.2</td>
<td>Re-introducing life-skills education and value clarification in the learning environment</td>
<td>Sven Coppens, Plan West Africa Regional Office, Senegal</td>
</tr>
<tr>
<td>12:10</td>
<td>1.E.3</td>
<td>Making Dialogue among Different Religions: An Analysis of Values Education under the Integrated Learning Subject in the Philippines</td>
<td>Hirofumi Nagahama, Kyushu University, Japan</td>
</tr>
<tr>
<td>12:30</td>
<td>1.E.4</td>
<td>Towards the Reconstruction of a Network of College UNESCO Clubs</td>
<td>Makoto Kobayashi, Tamagawa University, Tokyo</td>
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## Concurrent Sessions 2: 16:30 – 18:00

### 2A: UNESCO National Commission Initiatives for ESD

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<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker/Institution</th>
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</thead>
<tbody>
<tr>
<td>16:30</td>
<td>2.A.1</td>
<td>Implementation of the DESD in New Zealand</td>
<td>Hayden Montgomerye, Education, Youth and Human Rights, New Zealand National Commission for UNESCO</td>
</tr>
<tr>
<td>17:10</td>
<td>2.A.3</td>
<td>Preciosa S. Soliven, Secretary General, UNESCO National Commission of the Philippines</td>
<td>UNESCO National Commission of the Philippines</td>
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### 2B: Education Partnerships: Community Cooperation and Partnerships for ESD

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<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker/Institution</th>
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</thead>
<tbody>
<tr>
<td>16:30</td>
<td>2.B.1</td>
<td>Engaging the Community through Collaborative Teaching to promote ESD</td>
<td>Shahed Khan, University of Western Sydney, Australia</td>
</tr>
<tr>
<td>16:50</td>
<td>2.B.2</td>
<td>Action Research Centre for Human and Community Development</td>
<td>Makoto Suemoto, Kobe University, Japan</td>
</tr>
<tr>
<td>17:10</td>
<td>2.B.3</td>
<td>Implications of School-Community Partnerships for Education for Sustainable Development</td>
<td>Deborah A Rath, Assumption University, Thailand</td>
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</tbody>
</table>

### 2C: Reorienting Teacher Education to Address Sustainability

<table>
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<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker/Institution</th>
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</thead>
<tbody>
<tr>
<td>16:30</td>
<td>2.C.1</td>
<td>Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability</td>
<td>Rosalyn McKeown, University of Tennessee, USA</td>
</tr>
<tr>
<td>16:50</td>
<td>2.C.2</td>
<td>Capacity Building for ESD: Implications for Teacher Education and Training</td>
<td>Chan Lean Heng, Universiti Sains Malaysia</td>
</tr>
<tr>
<td>17:10</td>
<td>2.C.3</td>
<td>Education for Sustainable Development: Experiences from Chulalongkorn University</td>
<td>Athapol Anunthavorasakul, Chulalongkorn University, Thailand</td>
</tr>
<tr>
<td>17:30</td>
<td>2.C.4</td>
<td>Reorienting Teacher Education for Sustainable Development</td>
<td>Taruna Choudhery Dhall, Kurukshetra University, India</td>
</tr>
</tbody>
</table>
### 2D: Education for Sustainable Agricultural Innovations and Practices

**Chair:** Zhou Nanzhao  
**Venue:** Queen's Park 6, 2nd Floor

- **16:30** 2.D.1. Overview of the University of Tsukuba Seminars on Agricultural Education  
  Hideo Hasegawa, *University of Tsukuba, Japan*
- **16:50** 2.D.2. Education for Sustainable Development of Agriculture and Animal Husbandry in Asia and the Pacific: Role of OASERD  
  Satoshi Ishii, *Obihiro University of Agriculture and Veterinary Medicine, Japan*
- **17:10** 2.D.3. Agricultural Education for Sustainable Development: Today's Need, Tomorrow's Bullion  
  Farhad Lashgarara, *Islamic Azad University, Iran*
- **17:30** 2.D.4. Scientific-Technical Vocational Education for Marginalized Girls in Indonesia  
  Alisher Umarov, *Programme Specialist, UNESCO Jakarta*

### 2E: Environment and School Initiatives (ENSI)

**Chair:** Sun Kyung Lee  
**Venue:** Saitip, 3rd Floor

- **16:30** 2.E.1.  
  Daniella Tilbury, *Australian Research Institute in Education for Sustainability, Australia*
- **16:50** 2.E.2.  
  Sun-Kyung Lee, *Cheongju National University of Education, Republic of Korea*
- **17:10** 2.E.3.  
  Christine Affolter, *Stiftung Umweltbildung Schweiz, Switzerland*
Day Two: 7 December 2006

Concurrent Sessions 3: 8:30 – 10:30

3A: Panel Discussion: International Education and Intercultural Learning for Sustainable Development

**Chair:** Zhou NanZhao

**Venue:** Rainbow Room, 5th Floor

**Speakers:**
- Lourdes Quisumbing
- Victor Ordonez
- Renato Opertti
- Joy de Leo
- Wang Daoyu
- Zhao Li

3B: Panel Discussion: TVET for All – A Master Key for Sustainable Development? Hosted by UNEVOC and InWENT

**Chair:** Rupert Maclean and Harry Stolte

**Venue:** Queen’s Park 4, 2nd Floor

**Speakers:**
- John Fien
- Harry Stolte
- Ligaya Valmonte
- Jianrong Zhang
- Nguyen Viet Thang

3C: Innovative Initiatives at Educational Institutions: Leadership and Teacher Training for ESD

**Chair:** Christine Affolter

**Venue:** Queen’s Park 5, 2nd Floor

8.30 3.C.1. Sustainable Development in the Context of Globalisation: Challenges And Prospects For Education And Training

Elwyn Thomas, **University of Huddersfield, UK**

8:50 3.C.2. Curriculum Greening Initiatives: Faculty Perspectives in Teacher Education Program at Universiti Sains Malaysia

Sharifah Norhaidah Syed Idros, **Universiti Sains Malaysia**

9:10 3.C.3. Achieving the Goals of the UN Decade for Sustainable Development: Educational Leadership for Sustainable Futures

Greg Cairnduff, **Programme Director, University of Tasmania, Australia**


Suseela Malakolunthu, **University of Malaya**

9:50 3.C.5. Education for Sustainable Development: The South Australian Initiative

Sue Coad, **APNIEVE, Australia**

3D: Information and Communication Technologies 1

**Chair:** Myung Sook Pang

**Venue:** Queen’s Park 6, 2nd Floor


Fumihiko Shinohara, **Tokyo Gakugei University, Japan**

8:50 3.D.2. Jeong Hee Seo, Korea Education and Research Information Service (KERIS), Republic of Korea


### 3E: Consumer Behaviour: Changes through the Private Sector and the Media for ESD

**Chair:** Richard Welford  
**Venue:** Saitip, 3rd Floor

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<tr>
<td>8.30</td>
<td>3.E.1</td>
<td>Expanding the Scope of Education for Sustainable Development among Employees of Organizations Implementing the Environmental Management System</td>
<td>Nik Ramli bin Nik Abdul Rashid, University Teknologi Mara, Malaysia</td>
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<td>8.50</td>
<td>3.E.2</td>
<td>Media Literacy for Sustainable Development: The Challenge for Thailand</td>
<td>John Langer, Victoria University, Australia</td>
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<td>9.10</td>
<td>3.E.3</td>
<td>Education for Sustainable Development: Private Sector Engagement</td>
<td>Zinaida Fadeeva, United Nations University - Institute of Advanced Studies</td>
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### Concurrent Sessions 4: 13:00 – 15:00

#### 4A: Indicators and Assessment Tools for ESD

**Chair:** Daniella Tilbury  
**Venue:** Rainbow Room, 5th Floor

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<tr>
<td>13:20</td>
<td>4.A.2</td>
<td>An Introduction to the AtKisson Accelerator Suite of Sustainable Development Learning, Training, Planning and Assessment Tools</td>
<td>Robert D. Steele, AtKisson Group International</td>
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<tr>
<td>13:40</td>
<td>4.A.3</td>
<td>EFD versus EE in Australia: An Analysis of Positions Vacant Advertisements</td>
<td>Joy Hardy, University of New England, Australia</td>
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#### 4B: Innovative Approaches to Teacher Education for Sustainable Development

**Chair:** Atthapol Anunthaworakul  
**Venue:** Queen’s Park 4, 2nd Floor

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<td>13:00</td>
<td>4.B.1</td>
<td>Keeping It Cool! Learning about Climate Change in Thai Schools</td>
<td>Alasdair Lord, British Council Thailand, Thailand</td>
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<td>13:20</td>
<td>4.B.2</td>
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<td>Paulina Pannen</td>
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<td>13:40</td>
<td>4.B.3</td>
<td>Transforming Teachers and Teaching Practices in Afghanistan</td>
<td>Mir Afzal Tajik, Aga Khan University, Pakistan</td>
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#### 4C: Education Partnerships: Collaborative Strategies for the Networking of Academic Institutions for ESD

**Chair:** Shuichi Nakayama  
**Venue:** Queen’s Park 5, 2nd Floor

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<td>13:00</td>
<td>4.C.1</td>
<td>Global Interchange between Tertiary Institutions: Listening to the Other</td>
<td>Ria Hanewald, La Trobe University, Australia</td>
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<td>13:20</td>
<td>4.C.2</td>
<td>Collaboration and Networking: A Key to Sustainable Development</td>
<td>Vijaya Deshmukh, Registrar, NID, India</td>
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<td>13:40</td>
<td>4.C.3</td>
<td>Sustainability Education Working Group in the University of Tokyo</td>
<td>Ayumi Arakawa, University of Tokyo, Japan</td>
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#### 4D: Reform and Policy for ESD

**Chair:** APCEIU  
**Venue:** Queen’s Park 6, 2nd Floor

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<td>13:00</td>
<td>4.D.1</td>
<td>Curriculum Reform: Lessons from China</td>
<td>Daming Feng, East China Normal University, People’s Republic of China</td>
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### 4D: Improving Management, Service, and Participation In Indonesian Decentralized Education System

**Mohammad Abduh, Ministry of National Education, Republic of Indonesia**  

**Time:** 13:20

### 4D: Education for National Development: A Difficult Road Ahead

**Tie Fatt Hee, University of Malaya, Malaysia**  

**Time:** 13:40

### 4E: Curriculum Development for ESD

**Chair:** Pruet Siribanpitak  
**Venue:** Saitip, 3rd Floor

**13:00 4.E.1. Education for Sustainability as a Continuum: A Scoping Study for a Greenhouse Gas Abatement Community Education Programme**  
**J. Roberto Guevara, RMIT University, Australia**

**13:20 4.E.2. Languages for Sustainable Development**  
**Denis Cunningham, Fédération Internationale des Professeurs de Langues Vivantes, Australia**

**13:40 4.E.3. Some Perspectives on Regional Collaboration needed in ESD**  
**Toshio Kobayashi, National Institute of Multimedia Education, Japan**

**14:00 4.E.4. The Implementation of Media Education in Hong Kong’s Secondary Curriculum: Reasons, Means and Impact**  
**C.K. Cheung, University of Hong Kong, People’s Republic of China**

### Concurrent Sessions 5: 15:00 – 17:30

#### 5A: Panel Discussion: UNESCO - IUCN CEC Asia-Pacific DESD Indicators Project: Open Discussion on Draft Guidelines and Project Stage Two

**Chair:** Derek Elias  
**Venue:** Rainbow Room, 5th Floor

**15:00 5.B.1. Framing a Sustainability Curriculum using the Earth Charter Pedagogy: An Eco-systemic Approach to Education for Sustainable Development**  
**Brendan G. Mackey, Professor, Australian National University**

**15:20 5.B.2. A Rhetoric-Practice Gap: The DESD agenda and sustainable schools**  
**Annette Gough, RMIT University, Melbourne, Australia**

**15:40 5.B.3. A Learning Environment for a Sustainable Future**  
**Lynette Daphne Vey, Weiproductions, Australia**

**16:00 5.B.4. Promoting Education for Sustainable Development via a Student-Centred Learning Programme**  
**Ng Khar Thoe, SEAMEO-RECSAM, Malaysia**

**16:20 5.B.5. Content Analysis of Youth Scientific Programme: An Innovative and Integrated Approach For Sustainable Development Among SEAMEO Member Countries**  
**Chona Quezon Sarmiento, SEAMEO-RECSAM, Malaysia**

#### 5B: Innovative Practices for ESD: Experiences from Formal and Non-formal Education

**Chair:** Hayden Montgomerie  
**Venue:** Queen’s Park 4, 2nd Floor

#### 5C: Education for Sustainable Development: Youth Leads the Way

**Chair:** Geoff Haw  
**Venue:** Queen’s Park 5, 2nd Floor

- Kate Brennan
- Eammon Atkinson
- Rainui Tirao
- James Tetuanui
- Patricia Parkinson
- Rovie B. Villa
**SD: Panel Discussion: A Conversation on Capacity Building in ESD**

**Chair:** Molly Lee  
**Venue:** Queen's Park 6, 2nd Floor

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<td>Jay De Leo</td>
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<td>Chan Lean Heng</td>
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<td>Robert Steele</td>
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<td>Victorino Manalo</td>
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**Chair:** Chinnapat Bhumirat  
**Venue:** Saitip, 3rd Floor

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<tr>
<td>15:30</td>
<td>5.E.1</td>
<td>Decentralized Basic Education Towards Better Teaching Performance and Learning Environments</td>
<td>Arief Sadiman</td>
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<td>15:50</td>
<td>5.E.2</td>
<td>Ten Steps to Reach the Global Village</td>
<td>Ikuko Atsumi</td>
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<td>16:10</td>
<td>5.E.3</td>
<td>A Study of Actions, Achievements and Challenges with Reference to School Education in India</td>
<td>L.N. Bhagat and Ashok Oraon, Ranchi University, India</td>
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<td>16:30</td>
<td>5.E.4</td>
<td>A Study on Inclusive Education for Domestic Migrants’ Children in China</td>
<td>Di Wang and Qi Fan</td>
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<td>16:50</td>
<td>5.E.5</td>
<td>Girl-Child Rights</td>
<td>O.R. Ashimolowo, University of Agriculture, Nigeria</td>
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**Programme**

**10th APEID International Conference - Learning Together for Tomorrow: Education for Sustainable Development**

**Programme**

**Venue:** Queen's Park 6, 2nd Floor  
**Venue:** Saitip, 3rd Floor
### Day Three: 8 December 2006

**Concurrent Sessions 6: 8:30 – 10:30**

**6A: Panel Discussion: Catalyst for ESD – An Innovation in Management and Implementation of Asia-Pacific ACCU-UNESCO Programme in ESD-based Modalities and Spirit**

*Hosted by ACCU*

**Chair:** Shibao Tomoko  
**Venue:** Rainbow Room, 5th Floor

- Bernard John Lovegrove
- Ehsanur Rahman
- Nalaka Jayampati Gunawardene
- Ampai Harakunarak
- Kanayathu C. Koshy
- Jose Roberto Q. Guevara
- Kono Masanori
- Shibao Tomoko

**6B: Basic Education: The Role of Teachers and Schools**

**Chair:** To be confirmed  
**Venue:** Panorama 1

- **8.30**  
  6.B.1. The Role of Schools in Achieving Sustainable Development  
  Rebecca Timson, *Backtalk Institute, United States of America*

- **8:50**  
  6.B.2. Exploring Contemporary Conditions and Outlook for Early Childhood Eco-Education in South Korea  
  Younsun Lee, *Shilla University, Republic of Korea*

- **9:10**  
  6.B.3. How to Meet the Demands of the Disadvantaged  
  Li Yawan, *China Central Radio and TV University, People's Republic of China*

- **9:30**  
  6.B.4. Good Governance And Sustainable Development Management Model In Basic Education Schools  
  Apinya Kaewchuen, *Principal, Wat Bangben School, Thailand*

- **9:50**  
  6.B.5. The Malaysian Smart Schools Project: An Innovation to Address Sustainability  
  Eng-Tek Ong, *Universiti Pendidikan Sultan Idris, Malaysia*

**6C: ESD Lens Workshop**

**Chair:** Santosh Khatri and John Fien  
**Venue:** Panorama 2

**6D: Innovative Approaches for All: Tools and Methodologies for Sustainable Development**

**Chair:** Seung Hwan Lee  
**Venue:** Queen's Park 6, 2nd Floor

- **8.30**  
  6.D.1. The Education for Sustainable Development Toolkit  
  Rosalyn McKeown, *University of Tennessee, USA*

- **8:50**  
  6.D.2. Using Enquiry-Based Learning in Higher Education as Curriculum Tool for Educational Development  
  Ian Kaplan, *University of Manchester, UK*

- **9:10**  
  M. Mahruf C. Shohel, *University of Manchester, UK*

- **9:30**  
  David Hodges, *RMIT University, Australia*

- **9:50**  
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<th>Concurrent Sessions 7: 13:00 – 14:30</th>
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<tr>
<td><strong>7A: Information and Communication Technologies in Education 2</strong></td>
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<td><strong>Chair:</strong> Fumihiro Shinohara</td>
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<td><strong>7B: Panel Discussion: Integrating School Reform with Community Development in the Mekong Delta of Viet Nam</strong></td>
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<td><strong>7C: Educating Rural People for Sustainable Development</strong></td>
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<td><em>Hosted by United Nations Food and Agriculture Organization</em></td>
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<td><strong>Chair:</strong> Malcolm Hazelman</td>
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<td><strong>7D: Intercultural Education for Sustainable Development: Striking for Harmony in Diversities</strong></td>
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<td><strong>Chair:</strong> Shibao Tomoko</td>
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ABSTRACTS

Day 1 - Session 1A: ESD in Higher Education
Rainbow Room, 5th Floor

11:30 - 11:50
1.A.1. Higher Education in India and Sustainable Development
Nilima Bhagabati, Secretary ACEAM, Department of Education, Gauhati University, India

Education, including higher education, is a basic necessity for human development. The 21st century will be the century of Knowledge Societies. Youth need to be trained and prepared for such societies. As the educational needs of youth change, the aims and objectives of higher education should evolve accordingly. Higher education has expanded enormously in India since 1947, nevertheless only 7 to 9 per cent of youth are enrolled in higher education today. Access to higher education in India is blocked by factors such as gender inequality, poverty and social status. Even for the few youth who have access to higher education, the education provided by universities does not adequately prepare youth for the job market. A factor contributing to the poor state of higher education includes the lack of clearly defined state and government policies. Where policies exist, they lack continuity and the implementation of education policies is not effective. Taking Gauhati University as an example, a study was conducted to examine the relationship between higher Education and sustainable development. This paper discusses the findings of the study.

11:50 - 12:10
1.A.2. Realizing Sustainable Development in Higher Education through Soft Skills
Maria Salih, Sultan Idris University of Education, Malaysia

Recognizing the importance of human capital for sustainable development, the Malaysian Government is accelerating the development of human capital. According to the Prime Minister, a holistic approach should be taken in developing this asset. This approach not only builds knowledge and skills in the areas of science, technology and entrepreneurship, it also involves forming attitudes, ethics and values that are conducive to sustainable development. It has been observed that incorporating learning of “soft skills” into the education system can contribute to the holistic development of human capital. Consequently, the Public Universities in Malaysia have introduced strategies to teach seven soft skills. This paper discusses the seven soft skills and describes some of the strategies undertaken by the local universities to infuse them into education.

Day 1 – Session 1B: Technical Vocational Education
Queens Park 4, 2nd Floor

11:30 - 11:50
1.B.1. Recognising the Prior Learning Experience of TVET Teachers
Don Adams and Donna Hensley, University of Newcastle, Australia

This paper describes a theoretical framework for “Recognition of Prior Learning” (RPL), (informal or non-credentialed learning) for the selection and admission of international applicants to in-country TVET degree programmes at a major University in Australia. The presentation also details the process used within this framework. The theoretical framework for RPL is based on the notion of Kolb’s experiential learning and Mezirow’s critical reflection. In this context, rather than assessing knowledge based on outcomes, assessment focuses on concrete experiences. It has been argued that in any RPL process there is a great scope for error. To achieve assessments that are valid, fair, consistent and reliable it is essential to be able to measure the prior learning against a framework, or a set of competencies. The framework, which includes competencies, is described and this paper discusses the transferability of this type of model to other degree programmes.
11:50 - 12:10
1.B.2. The Learning Factory: An Innovative Model of Vocational Education in Thailand
Nuanjan Puyakoon, Office of the Education Council, Thailand
Pongpan Traimongkolkul, Associate Professor, Kasetsart University, Thailand

This paper presents the findings of a research project which analyzed the congruence between learning-factory philosophy and actual applications in a Thai setting. The research project also constructed a learning-factory model relevant to the Thai context and developed recommendations for the implementation of this model. The study consisted of three main stages: data collection and analysis; construction of a learning factory model; and review of the proposed model by a forum of experts and key persons, followed by adjustment of the model and the development of guidelines for implementation. The finalized learning-factory model consists of four main components: 1) desirable characteristics of the learning factory; 2) development strategies; 3) supporting factors; and 4) sustaining of the learning factory. The proposed model was consistent with the national strategies on vocational education and training, providing strategic measures to meet key problems in vocational training. For effective implementation of the model, the three key mechanisms were emphasized: chief executives of the workplace must recognize the value of building the capacity of personnel and provide ongoing support; educational institutions must instill proactive administrative measures to support effective learning activities in the workplace; and truly educational partnership must be supported by all parties involved.

12:10 – 12:30
1.B.3. Self-Sufficient Schools: Fostering Entrepreneurship to Finance Sustainable Education
Nik Kafka, Teach A Man To Fish, United Kingdom

Universal primary education is one of the eight Millennium Development Goals. However, if governments across the Asian region direct funding priorities towards primary education, where will the funds for post-primary and skills-based education come from? Labour markets in low-income developing countries are typically characterized by a lack of formal sector jobs, so self-employment remains an important means of earning a living and entrepreneurial skills are required. How can traditional vocational education institutions better prepare their students with the entrepreneurial skills needed to succeed in this context? “Self-Sufficient Schools” provide a possible answer to both of these questions. This innovative approach, combining entrepreneurship and vocational education, not only increases the relevance of learning, but through school-based businesses provides both a training ground for students and a source of finance for the school. This paper describes the Self-Sufficient School concept; provides lessons learned, gathered from institutions currently using this approach; and demonstrates how the adoption of this approach might help bridge the gap in funding which currently limits the availability of vocational education in Asia.

Day 1 – Session 1C: Environmental Education
Queen's Park 5, 2nd Floor

11:50 - 12:10
1.C.2 Implementing Environmental Education for Sustainable Development
Phanitda Chenrachasith and Hongtu Chen, Naresuan University, Thailand

Preserving natural resources and minimizing environmental damage is the agenda of both “education for sustainable development” (ESD) and traditional “environmental education”. However, the sustainability movement has stepped beyond the traditional environmental education framework in at least three directions. First, this approach urges the whole society: industry, community, and government to take responsibility for the long-term consequences of their behaviour. Second, the ESD approach emphasizes on the importance of strategic processes in guiding social transformation. Third, it suggests that education is a critical strategic process for preparing a society to develop sustainably. In planning a new environmental education programme, three consecutive projects were conducted at Naresuan University, including (a) a survey on community readiness measured by local stakeholders’ perspectives of the needs for environmental education, (b) an analysis of current educational programmes in universities in Asia in terms of their applicability to achieving
sustainable development, and (c) a review of a recently developed college-level environmental education programme designed to address the sustainability agenda. Reflection on the results of these analyses has led to a recommendation of several basic principles for future efforts to pursue sustainable development through environmental education.

12:30
1.C.4. An Integrated Approach to Sustainable Development: Pacific Island Countries
Jese Verebalavu-Faletoese, University of the South Pacific, Fiji

Although challenges still exist in varying degrees for each Pacific Island Country (PIC), there has been considerable progress made towards achieving universal basic education in PICs. Education is a vital means of raising awareness, and of encouraging practices which are consistent with sustainable development in the PICs. It is necessary to educate resource owners and users on how to sustainably manage their natural resources. NGOs have played an active role in raising awareness about issues relating to sustainable development. And joint efforts have been made by NGOs, academic institutions, community workers and specific government ministries. As a result of education and awareness campaigns relating to the sustainable management of resources, Fiji and Samoa have begun implementing conservation methods to make sustainable use of their coastal and marine resources. Education campaigns have also succeeded in making developers, investors and governments in the Pacific region more aware of the issues. Awareness campaigns have also facilitated greater cooperation between stakeholders and more transparent activities, with benefits for resource owners, communities, and the nation as a whole. This paper discusses how formal and non-formal education can empower stakeholders through raising awareness of how to sustainably manage coastal development in Fiji and Samoa.

Day 1 – Session 1D: Assessing and Understanding Sustainable Development
Queen's Park 6, 2nd Floor

11:30 - 11:50
1.D.1. What do we seek when we seek sustainability of projects?
David W. Chapman, University of Minnesota, United States of America
Ann E. Austin, Michigan State University, United States of America

One of the most perplexing concerns confronting development specialists working in the education sector is the sustainability of externally sponsored project activities and outcomes, once external funding ends. Too often, when international assistance ends, the activities initiated on the ground also die, with little left to show for the effort. A key challenge in assessing sustainability of projects is the diversity of views about what should be sustained. This paper examines four perspectives on sustainability and draws on the authors’ field work in Viet Nam, Uganda, Oman and South Africa to illustrate how one’s view of sustainability can influence project design. The four models are: Economic; Socio-Political; Ecological; and Innovation-Diffusion.

11:50 - 12:10
1.D.2. A Taxonomy of Learning for Sustainable Development
Alan McLean, Universiti Tun Abdul Razak, Malaysia

This paper discusses and develops John Fien's recommendations on pedagogical reform for sustainable development. The author argues that these recommendations reflect an equivocation about the role of the state and a questionable analysis of the processes that underpin both educational reform and collective action for sustainable development. The paper suggests that the longstanding failure to reform education’s hidden curriculum is unlikely to be reversed by the additional considerations amassed by Fien. Instead, schooling is seen as a social phenomenon and Thomas Popkewitz’ political sociology of educational reform is offered as a realistic treatment of some of Fien’s central concerns. The paper draws on Verna Allee’s learning and performance framework. Within this taxonomy, action for sustainable development typically belongs to the performance modes, which she refers to as: union (sustainability), renewing (integrity) and integrating (optimization). The corresponding learning modes are: union (synergistic), wisdom (generative learning) and philosophy (duetero
Learning in these modes implies long time spans and typically involves collective learning by teams, organizations and cultures. The paper’s conclusion is that education for sustainable development requires innovations that address not only the learning capabilities of individuals, but also of teams, organizations and larger social constructs.

12:10 - 12:30
1.D.3. Qualitative Research Approaches for Understanding the Progress of the DESD
Kimiharu To, State University of New York, United States of America

This paper explores some of the theoretical and methodological implications of using qualitative – especially constructivist – research approaches to assess progress on the United Nations Decade of Education for Sustainable Development (DESD). Qualitative research methods are indispensable for understanding the sphere of discursive practices surrounding the DESD in various cultural contexts. The UN Decade for Human Rights Education and the UN Beijing +10 Conferences, as well as current scholarly research are used to make the case for qualitative approaches when dealing with the nature of the DESD, the roles of network NGOs, and the frameworks for programme evaluation.

12:30 - 12:50
Noel Gough, La Trobe University, Australia

In a range of works, French poststructuralist philosopher Gilles Deleuze – often in collaboration with psychoanalyst Félix Guattari – created “geophilosophy”, a new critical language for analysing thinking as flows or movements across space. Concepts such as assemblage, deterritorialisation, lines of flight, nomadology, and rhizomatics refer to spatial relationships and to ways of conceiving ourselves and other objects moving in space. This paper explores some ways in which concepts drawn from Deleuze and Guattari’s geophilosophy might be used to analyse “education for sustainable development” (ESD) in contemporary contexts of globalisation, multiculturalism and international communication networks, with particular reference to translating and interpreting ESD across national, linguistic and cultural borders. Specifically, this paper will use their concept of mots d’ordre (order-words) to analyse selected examples of sustainability discourses in different nations. Within this conceptual framework, the analytic focus is not on what ESD means but on how it works and what it does and produces in specific locations. Elucidating these effects and products provides substance for deliberations on desirable futures for environmental education by, for example, informing decisions about how best to deploy ESD discourses tactically in specific locations to produce desirable (and avoid undesirable) educational effects.

Day 1 – Session 1E: Integrating Values in Education for a Sustainable World
Saitip Room, 3rd Floor

11:30 - 11:50
1.E.1. Living our Values in Education; Principle and Practice
Christopher Drake, Association for Living Values Education International, People's Republic of China

At the heart of sustainable development lies the question of how we relate to our world and humanity, the environment we live in and people around us, our present and future. At the heart of these relationships lie the values that we live by, the choices we make and the attitudes that we express in our daily life and actions. The road to achieving sustainable development is one of many lanes but the foundation of all of the steps we must take is the values that determine how, as individuals and global citizens, we interact with each other and nature. Education must be at the forefront of our multi-faceted work for a sustainable future and it must have human values at its heart and the resulting expression of them as its aim. This paper presents the UNESCO-supported Living Values Education approach and describes how its award-winning materials have been used in teacher-training programmes and classrooms in about 80 countries. It sees values education not as another subject to be imparted to students but rather as a philosophy of education that emphasises the importance of a teaching and learning environment characterized by human values while also offering experiential, empowering and contextually relevant content.
1.10 - 12.10
1.E.2 Re-introducing life-skills education and value clarification in the learning environment
Sven Coppens, Plan West Africa Regional Office, Senegal

The evaluation of educational outcomes is often limited to the levels of numeric and literacy skills the children, youth or adults reach at the end of a learning cycle, and often education is equated with the mere fact that children are enrolled in the educational system. What is often ignored as important outcomes of learning systems is the amount of life-skills gained and values internalized at the end of a specific learning cycle. Life-skills education puts learners in a better position to define and shape their own lives. While numeric and literacy skills are also important, they are tools for self and community development not ends in themselves. The acquisition of life-long learning and life-long quality living skills can enable learners to become proficient in their own life-long development and in enabling their contribution to community life and civil society to foster peace, diversity and positive conflict management. Life-skills education is of particular importance for children and youth growing up in situations of conflict, war and violence. This paper aims to analyze some learning methodologies that have the potential to reduce the prevalence of violence and prevent negative conflict situations. The paper also provides an overview of curricular components of life-skills education and examines some learner-centred methodologies for imparting life-skills education.

12.10 - 12.30
1.E.3 Making Dialogue among Different Religions: An Analysis of Values Education under the Integrated Learning Subject in the Philippines
Hirofumi Nagahama, Graduate School of Human-Environment Studies, Kyushu University, Japan

"Values education" in the Philippines stems from the "People Power Revolution" of 1986, and was implemented in schools as a new integrated learning subject, "Makabayan" (Love for the country), in 2002. It consists of subjects such as social studies, technology and home economics, gymnastics, music and fine arts, and values education, which are taught in Filipino. It is expected that the integration of values education with teaching on other subjects will stimulate students' holistic development. This paper describes how this kind of values education, "Makabayan", affects minority groups with different religious and ethnic backgrounds. The paper also discusses the possibility of using values education to encourage dialogue between religious groups.

12.30 - 12.50
1.E.4 Towards the Reconstruction of a Network of College UNESCO Clubs
Makoto Kobayashi, Tamagawa University, Japan

Since 1968 UNESCO activities at Japanese universities and colleges have been in a state of inertia. Over recent years, however, new movements are emerging concerning UNESCO activities. Themes such as the globalization of higher education and the UNESCO-led "Decade of Education for Sustainable Development" (DESD) are inspiring UNESCO-oriented academic studies and practical engagement in the framework of higher education. As of 1 May 2006, there were 29 UNESCO clubs identified at higher education institutes in Japan, and they are examining the possibility of networking and cooperation. This paper presents an overview the activities of college UNESCO clubs in Japan. The basic character of the students' interests in UNESCO are also described, particularly in relation to World Heritage studies and Education for Sustainable Development – in the context of environmental and intercultural education.
Day 1 – Session 2A: UNESCO National Commission Initiatives for ESD
Rainbow Room, 5th Floor

16:30 - 16:50
2.A.1 Implementation of the DESD in New Zealand
Hayden Montgomerie, Education, Youth and Human Rights, New Zealand National Commission for UNESCO

This paper shares the experiences of the New Zealand National Commission in dealing with the implementation of the UN Decade for Education for Sustainable Development (DESD) within New Zealand. The paper consists of three main parts. First, it describes the New Zealand response to the DESD over the past three years. Second, it explores how Education for Sustainable Development (ESD) can be linked with existing UNESCO Educational Initiatives, such as the Associated Schools Project Network (ASPnet), the World Heritage Education Project (WHE), and Adult Learners Week (ALW). Finally, it examines the role that the New Zealand UNESCO National Commission could play in harnessing UNESCO National Commissions towards achieving the goals of the UN DESD.

Day 1 – Session 2B: Community Cooperation and Educational Partnerships for ESD
Queen's Park 4, 2nd Floor

16:30 - 16:50
2.B.1. Engaging the Community through Collaborative Teaching to Promote ESD
Shahed Khan, University of Western Sydney, Australia

Culture and technology are seen to be key factors underlying socio-economic development. Internationally, institutions and development agencies are investigating ways to best utilize technology and culture to enhance local economies. There is a growing recognition of the positive role that technology, culture and their various mixes can play in the pursuit of sustainable development. For wise management of resources, planners and policy-makers not only need to take into account environmental factors and prevailing land utilization patterns – but also need to understand the accompanying socio-cultural forces and cultural values. These professionals must be trained to deal with both technology and culture, and their various mixes, in an integrated manner. This paper makes a case for educational systems to adopt “collaborative” forms of teaching, which allow students exposure to real life problems through engagement with communities in real life settings – in addition to receiving theoretical instruction at school. “Collaborative” teaching provides a stimulating environment wherein innovation and creativity are encouraged. The paper also covers the major challenges and opportunities relating to reforming education to focus on sustainable development.

16:50 - 17:10
2.B.2. Action Research Centre for Human and Community Development
Makoto Suemoto, Koji Matsuoka, Atsushi Ito
Graduate School of Cultural Studies and Human Science, Kobe University, Japan

In April 2005, the Faculty of Human Development and the Graduate School of Cultural Studies and Human Science at Kobe University established the Action Research Centre (ARC) for Human and Community Development. ARC is composed of six sections namely: informal education; adult education; health; child and family; social inclusion; gender issues; and education. This academic and community collaborative effort is directed at enhancing human learning and providing policy makers with research evidence, in a range of domains by way of action research. To accomplish its mission, the ARC has established a one-year Masters Degree programme, offering a chance for the experienced practitioners in the relevant fields to build their knowledge. The staff perform practical research in cooperation with faculty researchers in the university and external stakeholders, including non-profit organizations, businesses, and informal groups. The Asia-Pacific region is being confronted with new forms of social, economic and political pressures. This new concept of school and community partnership is a model that we hope to share with the world and this is our vision of education for sustainable development in the 21st century.
17:10 - 17:30

2.B.3. Implications of School-Community Partnerships for Education for Sustainable Development

K. Pushpanadham and Deborah A Rath, Assumption University, Thailand

The school-community partnership is an important point for discussion, especially with regards to achieving the goals of Educational for Sustainable Development. It is increasingly evident that schools and communities should work closely with each other in order to meet their mutual goals and to accomplish high quality educational results. Indeed, for many schools to succeed with their educational missions, they must have the support of community resources such as family members, neighbourhood leaders, business groups, religious institutions, community-based organizations, and local government. However, it is challenging to establish appropriate and effective collaboration. This paper describes the intricacies involved in establishing partnerships, highlighting specific examples, and proposes multi-dimensional strategies for extending co-operation. The paper also discusses the implications of partnerships for teacher-education programmes and community education and empowerment programmes.

Day 1 – Session 2C: Reorienting Teacher Education to Address Sustainability

Queen’s Park 5, 2nd Floor

16:30 - 16:50

2.C.1. Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability

Rosalyn McKeown, University of Tennessee, United States of America

In 1998, the United Nations Commission on Sustainable Development work programme on ESD called for UNESCO to develop guidelines for reorienting teacher training to address sustainability. This responsibility was passed to the UNITWIN/UNESCO Chair at York University in Toronto, Canada. The UNESCO Chair established an International Network of 30 teacher-education institutions from 28 countries willing to change curricula, programmes, practices, and policies to address the issue of sustainable development in locally-relevant and culturally-appropriate ways. Starting in 2000, participants kept track of their efforts in journals, chronicling successes and failures. The work of the International Network was synthesized in “Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability” published by UNESCO. This paper discusses that publication and the recommendations it makes.

16:50 - 17:10

2.C.2. Capacity Building for ESD: Implications for Teacher Education and Training

Chan Lean Heng, Universiti Sains Malaysia

Education and teachers are key drivers for the attainment of sustainable development. The principles of sustainable development foster the creation of a society where there is mutual respect and responsibility, equity and equality in all dimensions of economic, socio-cultural, physical, environmental and political life. Teachers play a critical role in informing and facilitating trans-disciplinary understandings, values, perspectives, commitment and practice of sustainable development. However teachers themselves need to be equipped with the perspectives, knowledge, skills and values of sustainable development before they can orientate their students. This paper explores the discourse and scope of sustainable development, especially the social aspects which tend to be neglected in school curricula relative to the environmental aspects. The paper then delineates the implications for teacher education and training. In particular, this paper reviews the current instructional pedagogies of teacher educator institutions and proposes an education methodology. As an illustration, a training module using the guidelines of the proposed methodology will be outlined and past experiences using this methodology will be described.
17:10 - 17:30
2.C.3. Education for Sustainable Development: Experiences from Chulalongkorn University, Thailand
Athapol Anunthavorasakul, Chulalongkorn University, Thailand

The Faculty of Education of Chulalongkorn University has several courses and programmes for undergraduate and graduate students related to the concepts of Sustainable Development (SD) and Education for Sustainable Development (ESD). At the present time, the Faculty offers eight ESD courses in the pre-service teacher education curriculum. In each course, we select and integrate knowledge, attitudes and skills from various disciplines, and offer courses such as Education and Society, Society and Education for Sustainability, Environmental Education, Man and Environment, Peace Education, and Teacher and Community Development. In addition, another eight courses have integrated the concepts of ESD into some parts of their content. Furthermore, courses such as Education in the Future Society (for 20 Masters Programmes in education), Critical Analysis in Education, and Education for Sustainable Development (for 11 Doctoral programmes in education) have been developed as required core courses for all graduate Education programmes.

17:30 - 17:50
2.C.4. Reorienting Teacher Education for Sustainable Development
Taruna Choudhery Dhall, Kurukshetra University, India

In Indian spiritual philosophy there is the belief that God created human beings for a purpose: to live; to help others live and to provide what we can for future generations. However these values are being weakened in society today. In recent years globalization and other changes have exposed humans to previously unimagined consumption patterns, fostering greed and resulting in the erosion of values. This scenario has prompted us to explore possibilities of putting in place an education system that aims at individual development in harmony with nature and society. Education, with its inherent capacity to influence the current and future generations, can be mediated through competent teachers. A study of a pre-service teacher education programme in northern India revealed that the design of the curriculum primarily caters to the development of knowledge (about content) and teaching skills. This teacher education programme is apparently deficient in the development of feelings about self and others. This calls for reorienting teacher education programmes in a manner that they create awareness among teacher trainees about the need for interpersonal values and empathy. Teachers trained in such a manner can effectively play their role, not only in cultivating human values but also in preventing the erosion of these values, and move towards the harmonization of humans, nature and society.

Day 1 – Session 2D: Education for Sustainable Agricultural Innovations and Practices
Queen’s Park 6, 2nd Floor

16:30 - 16:50
2.D.1. Overview of the University of Tsukuba Seminars on Agricultural Education
Hideo Hasegawa, DeMar Taylor, Yoshihiko Sekozawa, Mizuki Matsuoka, Tsuyoshi Honma, Tomonari Yamamoto, Atsuhi Tajima and Haruyuki Mochida
University of Tsukuba, Japan

The Agricultural and Forestry Research Centre at the University of Tsukuba, was nominated by UNESCO as an Associated Centre of APEID in the field of vocational and technical education, and has organized the Tsukuba Asian Seminar on Agricultural Education (TASAE) annually since 1979. The themes of TASAE seminars have been as follows: "Agricultural Education at the Secondary Level in Asia" (2nd cycle), "The Strategies for Innovation of Agricultural Education in Asian Countries" (3rd cycle), "Education and Research for Higher Agricultural Productivity Conserving Nature and Agro ecosystem in Asian and Pacific Countries"(4th cycle), "Education and Research for Sustainable Development of Agriculture and Conserving Nature and Agro ecosystem in Asian and Pacific Countries" (5th cycle), "Innovative Strategies for Linking Agricultural and Environmental Education in Asian-Pacific countries for the 21st century" (6th cycle), "The Utilization and Conservation Techniques of
Water resources for Human Survival and Bioproduction Environment considering Sustainable development, and the role of Agro-environmental Education” (7th cycle). The Seminars have been attended by participants from across Asia, including around 350 participants from South-East Asian countries, making the seminars a channel for a powerful network.

16:50 - 17:10
2.D.2. Education for Sustainable Development of Agriculture and Animal Husbandry in Asia and the Pacific: Role of OASERD
J. Takahashi and S. Ishii, Obihiro University of Agriculture and Veterinary Medicine, Japan

The Obihiro University of Agriculture and Veterinary Medicine became an Associated Centre of APEID in July 1979. The Obihiro Asia-Pacific Seminar on Education for Rural Development (OASERD) has been held every year with the aim of contributing to the improvement of education on rural development in the Asia-Pacific region. In the 7th stage, from 2001, OASERD focused on global environmental issues and education for sustainable development of agricultural sectors in the rural areas of the Asia-Pacific region. The seminar relating to environmental issues in the Asia-Pacific region held during the 7th stage was titled “Prevention of global warming and education on agricultural and dairy farming technologies and rural development”. Sharing information, knowledge and technologies is a key to constructing network in the regions. The necessity of education for sustainable development was clearly revealed by the different approaches presented from different countries in the OASERD seminars.

17:10 - 17:30
2.D.3. Agricultural Education for Sustainable Development; Today’s Need, Tomorrow’s Bullion
Farhad Lashgarara, Student, Agricultural Extension and Education, Islamic Azad University, Iran

Agricultural education for sustainable development is today’s need and tomorrow’s bullion because education in general, and agricultural education in particular, is essential for sustainable development. Nowadays the majority of the world’s countries, especially “third-world” countries, face environmental problems. Damage to natural resources has consequences for food security. In this context, agricultural education institutions have an important role to play in the conservation of natural resources. This paper investigates the role of agricultural education in the preservation of natural resources, in the context of sustainable development. Using systematic approaches, this paper examines the structure and programmes of agricultural education institutions, and looks at how the integration of modern and indigenous knowledge can support environmental conservation programmes.

Day 2 – Session 3C: Innovative Initiatives at Educational Institutions: Leadership and Teacher Training for ESD
Queen’s Park 5, 2nd Floor

8.30 – 8.50
3.C.1 Sustainable Development in the Context of Globalization: Challenges and Prospects for Education and Training
Elwyn Thomas, Institute of Education, University of Huddersfield, United Kingdom

In the face of globalization, and recognizing the need for countries to develop sustainably, major shifts are required in education. The thesis of this paper is that learning and the nature of knowledge need to be brought into line with sustainable development, so that education and training is made more creative, relevant and, above all, adaptive. The paper will also argue that existing ways of educating students will have to change in terms of the curriculum, instruction, assessment and time spent in full-time study. Education and training should no longer be seen as a strictly institutional concern, but one in which the wider community, including the world of work, is closely involved. This is likely to prompt measures for lifelong education, emphasizing the ongoing nature of career development. This paper will also discuss new ways of conceiving and operationalizing learning and teaching in the context of curriculum change, pedagogy and training. The main focus will be on
teacher education as part of higher education, and will discuss developments taking place in the Asia-Pacific region and in the United Kingdom. The paper will also put forward a model, based on research in the field of knowledge cultures. It is hoped that the model could be integral to any future plans for education and training for teacher educators, as part of an effective strategy for achieving sustainable development.

8.50 – 9.10

3.C.2 Curriculum Greening Initiatives: Faculty Perspectives in the Teacher Education Programme at Universiti Sains Malaysia
Sharifah Norhaidah Syed Idros, School of Educational Studies, Universiti Sains Malaysia

We are now in the second year of the United Nations Decade of Education for Sustainable Development and Universiti Sains Malaysia has been appointed as a Regional Centre of Expertise for Sustainable Development (SD). By realigning to the SD vision, the School of Educational Studies will play an integral role in furthering the sustainability agenda. In order to assess the School of Educational Studies’ progress in achieving SD goals, a baseline survey was conducted to elicit viewpoints from faculty members regarding factors that might facilitate or inhibit moves to incorporate sustainability issues at both the personal and institutional levels. This paper argues that in order to institutionalize education for sustainable development in the Teacher Education programme, these drivers and inhibitors need to be acknowledged and addressed before an effective curriculum can be charted out.

9.10 – 9.30

3.C.3 Achieving the Goals of the UN Decade for Sustainable Development: Educational Leadership for Sustainable Futures
G.J. Cairnduff and W. Chaiyabang

Educators face major challenges in trying to sustain educational improvement over time, and in spreading improvements beyond individual schools, throughout whole systems and communities. To succeed in a changing and complex world, school communities need to grow, develop, deal with and take charge of change so they can create a future of their own choosing and prepare students to play their own roles as effective agents of change. Leadership of schools cannot just be left to individuals. Research has shown that in order to ensure deep, broad, and long lasting reforms of the type required to achieve the vision expressed by the UN Decade for Sustainable Development, sustainable leadership of schools must be a priority. This paper will argue that there is an inextricable link between the sustainability of leadership in educational institutions and the success of sustainable development in the communities served by those institutions. The concept of leadership sustainability and its importance in the educational setting, particularly in relation to sustainable development, will be discussed and illustrated with a case of study of a small school in eastern Thailand.

9.30 – 9.50

Suseela Malakolunthu, University of Malaya, Malaysia

Malaysia is a nation diverse in its ethnicity, culture, language, and religion. In such a multicultural setting, education is seen as a viable avenue for promoting racial coexistence and cultural pluralism. The Malaysian Government, realizing the importance of schools as a neutral ground for bringing together the children of different ethnicities and languages, established “Vision Schools” that would house all of the three major medium-elementary schools (Malay, Chinese, and Tamil) in the same compound, sharing facilities and events. But this over simplistic notion of the concept of multiculturalism and the ways to go about in achieving the goals of racial integration and unity seems to be problematic. This paper, based on a case study of a particular “Vision School”, emphasizes that the goal of racial integration cannot be attained merely by following a standardized curriculum or by sharing common facilities. It takes strong school leadership, anchored on the ideals and processes of multiculturalism. In other words, it needs culturally responsive leadership that is competent and proficient in creating, managing and sustaining a culturally responsive teaching-learning community and environment. The paper also provides a model that identifies the leadership prerequisites to act as “culturally competent and proficient leaders” to lead “Vision Schools” towards the successful practice of multicultural education, celebrating cultural diversity and equal opportunity for all.
9.50 – 10.10
3.C.5. Education for Sustainable Development: The South Australian Initiative
Sue Coad and Owen Secombe, APNIEVE, Australia

According to the United Nations International Implementation Scheme prepared in January 2005, “the basic vision of the Decade of Education for Sustainable Development (DESD) is a world where everyone has the opportunity to benefit from education and learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation”. ESD is most effectively achieved through a whole-school approach that is learner and community centred, integrates all levels and areas of curriculum and school management, and is committed to developing and embedding a values-driven sustainability culture and ethos. The South Australian Sustainable School Initiative (a partnership between the Education Department and the Department for Environment and Heritage) has developed a model which demonstrates this approach and relates to all five objectives of the DESD. This paper describes the SA model and explains its background, development and implementation and evaluation strategies. An example of the way one school has moved from a strong environmental education focus into sustainable schooling will also be presented.

Day 2 – Session 3D: Information and Communication Technologies 1
Queen’s Park 6, 2nd Floor

8.30 – 8.50
Fumihiko Shinohara, Tokyo Gakugei University, Japan

The Japanese education system has developed strongly due to factors such as the importance that the Japanese people place on education. Education has been a driving force for the development of the nation. The goal of basic education in Japan is identified as ‘competence for a positive life’. This would be measured by, firstly, the ability of a student to learn how to learn, to be able to think, judge and act independently, and to solve specific problems; and, secondly, by factors such as self-control, the ability to collaborate with others, qualities of consideration and sensitivity; and the ability to manage one’s own physical well-being and live an active life. This paper will introduce the key problems and issues in the present Japanese basic education system and will highlight the potential that the use of ICT offers for coping in information-oriented and knowledge-based societies. The paper will also describe innovative practices carried out in teacher training institutions, aiming at enhancing the quality of education through Pedagogy-ICT integration and through following the principles of Education for Sustainable Development.

Day 2 – Session 3E: Consumer Behaviour: Changes through the Private Sector and Media for ESD
Saitip Room, 3rd Floor

8.50 – 9.10
3.E.1 Expanding the Scope of Education for Sustainable Development among Employees of Organizations Implementing the Environmental Management System
Nik Ramli bin Nik Abdul Rashid, University Teknologi Mara, Malaysia

Discussion concerning education for sustainable development (ESD) should not be limited to classroom experiences. ESD can also be implemented by business organizations, for example by businesses promoting positive environmental norms among their own employees. This paper describes a study which hypothesizes that the development of a feeling of high involvement among employees of organizations implementing an Environmental Management System (EMS) could result in a “spillover effect”, in which employees demonstrate environmentally responsible behaviour in other domains, for example, a preference for environment-friendly products. The study was carried out by means of a survey involving 526 employees from 56 ISO14001-certified organizations, from various sectors, including manufacturing, services, plantations and petrol-chemicals. One major conclusion of the study was that organizations should extend their efforts in heightening their employees’ involvement with EMS since it was found that it contributed positively to other environmentally-friendly behaviour (ERB). In addition, all findings of the study lend support to previous studies of ERB phenomena.
9.10 – 9.30
John Langer, Victoria University, Australia

In Roger Silverstone's book titled, “Why Study the Media?”, Silverstone addresses his own question by saying “… our media are ubiquitous … We have come to depend on media … for pleasures and information, for comfort and security, for some sense of the continuities of experience and from time to time also for the intensities of experience”. Thais now swim in an ocean of media, and contemporary experience in Thailand is inextricably connected to media culture. This culture however is rarely value-neutral and without consequence. Increasingly, in the Thai context, media presence and media representation have been locked in step with life styles, outlooks and aspirations, the “intensities” of which are derived from an ideology of consumerism, the growth of individualization and the emergence of what Guy Dubord calls “the society of the spectacle”. This paper will argue that in order for an agenda of sustainable development to be framed, connections between media culture and contemporary experience need to be explored and unpacked in educational programmes developed specifically to promote media literacy. Some approaches to media literacy will be presented, and it will be suggested that, historically and socially, Thailand may be entering an era of development and self-reflection from which such an agenda can emerge.

9.10 – 9.30
3.E.3 Education for Sustainable Development: Private Sector Engagement
Richard Welford, CSR Asia and University of Hong Kong
Zinaida Fadeeva, Institute of Advanced Studies, United Nations University

Recognizing the importance of identifying strategic points for engagement in order to strengthen the connection between the Decade of Education for Sustainable Development (DESD) movement and the private sector, this paper highlights several approaches and initiatives that could be of interest for the DESD. This paper identifies a number of initiatives taking place in the private sector in relation to education and sustainable development. Companies from various sectors carry out initiatives in the area of education and capacity building for the environment, human rights, health, community development and others. However, while these initiatives cover some of the issues attributed to the broader agenda of sustainable development, very few of them could be classified as fully-fledged education for sustainable development (ESD) initiatives. Many of the initiatives have a strategic fit with the interests of the businesses involved. A study of educational initiatives from seven industrial sectors (power and fuel, automotive, apparel and footwear, electronics, information and broadcasting, banking and construction) was made and this paper provides suggestions regarding future educational initiatives in the analyzed sectors.

Day 2 – Session 4A: Indicators and Assessment Tools for ESD
Rainbow Room, 5th Floor

13:00 – 13:20
Andy Johnston, Forum for the Future, United Kingdom

A debate on education for sustainable development has begun and the challenge is to be clearer about what “good” looks like in terms of the outcome or general direction. Indicators can have three main functions: to measure progress, to communicate and to reward effort. This paper studies indicator sets used by higher education, such as GRI, EFQM, BITC and HEPSRT, and assesses their ability to drive organizational change and curriculum innovation. This paper argues that while uniform indicator sets are useful, only those generated within the organization are capable of producing real change. This paper reminds that indicators need to be robust and SMART, and recommends that indicators be internally generated, be easy to communicate and reward creativity, so as to give real confidence and point the way to sustainable development. The paper concludes that sustainable development in higher education is an organizational change challenge and that while indicators are an essential part of any change strategy, they are not a substitute for a strategy.
13:20 – 13:40

4.A.2 An Introduction to the AtKisson Accelerator Suite of Sustainable Development Learning, Training, Planning and Assessment Tools
Robert D. Steele, Associate and Senior Trainer, AtKisson Group International

The challenge that we all face right now is “how to make sustainable development mean something in practice?” The “AtKisson Accelerator” is a suite of tools that aims to help address that challenge. It is a toolkit for supporting and facilitating sustainable development initiatives of all kinds, that has been developed over a period of 16 years through “real-time” use by organizations around the world. Like a physical toolbox, it contains separate tools that can be used for different sustainability related tasks. The primary tools include: Compass, which is the overall name for a family of tools used for framing, defining, assessing and measuring progress towards sustainability; Pyramid, a versatile group-process tool that can be used for introducing sustainable development or for planning workshops for creating new initiatives, and as a multi-stakeholder process for building consensus around a specific course or action; Amoeba, a set of tools for accelerating innovation, planning for change and building competence in the art of change agentry. This suite of tools has been packaged together under the name Accelerator because we believe that using them will speed up progress towards genuine sustainability.

13:40 – 14:00

Joy Hardy, University of New England, Australia

This paper describes a study that examined the discursive construction of Education for Sustainable Development (ESD) and Environmental Education (EE) in Australia through “positions vacant” advertisements. The study involved content analysis and critical discourse analysis of advertisements registered with online Australian recruitment agencies. The content analysis revealed significant differences between the terms and conditions of positions designated as ESD compared with EE. Further, critical discourse analysis was used to explicate the power relationships into which prospective employees were being positioned. The findings indicate that EE positions in the sample are often precarious, poorly paid and disempowering, whereas positions in ESD are more secure, more highly paid, empowering and, in many cases, offer career advancement. This paper will provide an overview of the content analysis findings and demonstrate the use of critical discourse in the explication of the power relationships inscribed in ESD and EE advertisements.

Day 2 – Session 4B: Innovative Approaches to Teacher Education for SD
Queen’s Park 4, 2nd Floor

13.00 – 13.20

4.B.1. Keeping It Cool! Learning about Climate Change in Thai Schools
Alasdair Lord, Richard Dawson and Penrapee Ram-Indra, British Council Thailand

“Keeping it Cool: A Teachers Guide to Climate Change” is part of British Council Thailand’s commitment to Education for Sustainable Development, with the focus on enabling young people to make better decisions about climate change. It is co-produced by the Field Studies Council (UK) and the National Science Museum, and aims to give Thai science teachers user-friendly and practical resources for use in empowering students to both learn about and take action on climate change. It differs from similar packs in that, whilst still examining individual choices, it also examines change at the systemic level and how significant changes often require a change of thinking. This reflects a refocusing of thinking from the individual to the system. The pack consists of the Teacher’s handbook on climate change and a series of five posters on climate change. The “Activities and Resources” section of the handbook cover a wide range of activities, including surveys, role plays, experiments and creating posters or displays. This broad range of activities allows for varying timeframes and also acknowledges different learning styles.
13.40 – 14.00

**4.B.3. Transforming Teachers and Teaching Practices in Afghanistan**  
*Mir Afzal Tajik, Aga Khan University, Pakistan*

After more than two decades of war the Afghan education system has completely collapsed. During the wars, schools were either bombed or turned into prisons; teachers and students either left the country or were forced to join armies; and libraries were burned down. Now that peace has come to Afghanistan, the rebuilding of the education system has started. The Government of Afghanistan has given significant priority to education, which is crucial for national development. There are country-wide efforts for reconstruction of the education system, including developing infrastructure of schools, recruiting and developing professional teachers, and designing and reforming the curriculum. This paper discusses the collaborative efforts being made by the Aga Khan University – Institute for Educational Development (AKU-IED) AKU-IED, the German Government, and the Afghan Ministry of Education to transform teachers and teaching practices through the introduction of non-traditional and innovative teaching methods in Afghan schools. The paper also analyzes the achievements made, the challenges faced, and the lessons learned through these collaborative efforts.

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**Day 2 – Session 4C: Educational Partnerships: Academic Institutions**  
Queen’s Park 5, 2nd Floor

13.00 – 13.20

**4.C.1. Global Interchange between Tertiary Institutions: Listening to the Other**  
*Ria Hanewald, Lloyd Holliday and Howard Nicholas, La Trobe University, Australia*

This paper explores the sustainability of relationships between one Australian university, La Trobe, and its Asian partner universities. The case study exemplifies how personal and cultural differences manifest themselves in the academic and administrative dealings between tertiary institutions and leads to a process whereby each partner is reshaped by the dialogue in a reflective process such that the process promotes the development of education systems and leads to improved outcomes. The data collected in the study reveal the values and behaviour of individuals and how they are grounded in varied cultural mindsets and practices. These culturally developed preferences for thinking and working underpin the expectations and interpretations of events and intentions. Examples reveal how working collaboratively over some ten years required awareness of these cultural differences combined with well developed skills to handle cross-cultural interactions, and how solutions required incorporation of perspectives from ‘the other’. The paper also explores specific examples of events that were interpreted differently and suggests that one of the key factors that contributed to the successful resolution of differences was the willingness of the partners to listen to, and learn from, one another as the relationship evolved.

13.20 – 13.40

**4.C.2. Collaboration and Networking – A Key to Sustainable Development**  
*Vijaya Deshmukh, NID, India*

Academic Institutions need to abandon traditions of academic isolation and become active in innovative teaching, research and outreach. Collaborative strategies should also be explored. Inter-institutional alliances offer a means to capitalize on each institution’s strengths and to reduce costs involved in the duplication of effort. It is important to build platforms for sharing information and experiences and to promote dialogue among stakeholders. Computer-based collaboration and networking strategies can be useful in this area. This paper outlines the necessity of networking and alliances of similar educational institutions in order to re-orient education towards sustainable development, and to design integrated curricula and deliver effective programmes. This paper highlights the factors for building sustainable collaboration and acknowledges the initiatives of some organizations in this regard. The requirement of innovative leadership and institutional reforms is discussed. And the need for stakeholders, including educators, researchers, students, parents, employers, social activists, media and government, to be involved in helping to formulate educational policy and programmes, is emphasized.
13.40 – 14.00
4.C.3 Sustainability Education Working Group in the University of Tokyo
Ayumi Arakawa, Genki Moriyama and Tamai Akihiro, University of Tokyo, Japan

This paper describes the goals and activities of the “Sustainability Education Working Group”. This group is made up of postgraduate and undergraduate students from various subject areas. The group aims to promote interdisciplinary communication and to contribute to ESD through various activities. Activities undertaken include holding study meetings to promote interdisciplinary communication and to compare studies; developing educational material that many people would be interested in, based on documentaries and mainstream movies; convening workshops and exhibits during the university’s festival so as to raise awareness of sustainability issues; dispatching observers to meetings related to ESD to collect information and current ideas which can be shared with the group members, and to network and collaborate with other actors in the field of “sustainability education”.

Day 2 – Session 4D: Reform and Policy for ESD
Queen's Park 6, 2nd Floor

13.00 – 13.20
4.D.1 Curriculum Reform: Lessons from China
Daming Feng, East China Normal University, People's Republic of China

The most recent curriculum reform in China is a fundamental and systematic change based on a policy framework. After describing the framework, this paper will discuss the progress and problems associated with the curriculum reform being implemented in 38 pilot districts of China's 27 provinces. The paper argues that the foremost challenges involved in China's curriculum reform include such things as the dilemma resulting from the conflict between western and traditional Chinese culture. The most critical issue in achieving the goals and objectives of the curriculum reform is how to identify the causational factors behind the problems and how to create effective solutions. In this sense, the next stage of China's curriculum reform of basic education largely relies on support from empirical research.

13.20 – 13.40
4.D.2 Improving Management, Service, and Participation In Indonesian Decentralized Education System
Didik Suhardi, Agus Haryanto and Mohammad Abduh, Ministry of Education, Republic of Indonesia

Following the 1998 economic crisis, the Indonesian Government enacted law no.22/1999 which ushered in the decentralization era. Soon after decentralization was implemented, the structure and authority of each government level was reformatted. Since the enactment of the 1999 reforms, additional measures have been promulgated aimed at improving the quality of education and local participation in educational decision making. If a further reform of education, based on concepts such as “education for sustainable development” (ESD), is to be introduced and implemented throughout the entire Indonesian decentralized education system, it is important to ensure that management capacity, district office service quality, and community participation are improved accordingly. In addition, effective policies and institutional change are necessary. If this is not done, concepts such as ESD will remain merely a theoretical discourse among a few interested scholars. Implementing educational reform and promoting education for sustainable development involves a number of challenges. This paper explores these challenges and describes how they are addressed by members of the Indonesian Ministry of National Education.

13.40 – 14.00
4.D.3 Education for National Development: A Difficult Road Ahead
Tie Fatt Hee, University of Malaya, Malaysia

The Malaysian Education Act of 1996 states that the purpose of education is to equip individuals with a command of the knowledge, skills, and values that are prerequisites in a highly competitive global economy. Education is recognized as an important tool to achieve sustainable development. It is deemed significant as it
is a means by which to achieve the nation's vision of a fully developed nation. However, recent developments indicate that the education system is not entirely effective in achieving the stated aims. There are a number of challenges and obstacles to be overcome. This paper examines the difficulties that are encountered and suggests some possible alternatives.

Day 2 – Session 4E: Curriculum Development for ESD
Saitip Room, 3rd Floor

13.00 – 13.20
Jane Sayers, Environment Victoria, Australia
J. Roberto Guevara, RMIT University, Australia

In 2005 a community scoping project was conducted in the Western Port region of Victoria, Australia, to identify opportunities for energy and greenhouse-gas-abatement education programmes. As a part of this process, a “Continuum of Education Strategies” was developed to assist community workers who did not have teaching backgrounds to identify the learning possibilities within community engagement initiatives they were conducting. Adapted from a framework developed by Fien, Scott and Tilbury for WWF in 2001, the Continuum provides a framework for thinking about community education as a process that can progress from information dissemination to communication and dialogue; and from there to individual learning and action and then to community capacity building. The power of viewing community education as a continuum is it allows community workers to engage with people at differing stages of knowledge and awareness of greenhouse issues, and enable them to progress from receiving information to making links between their environmental and economic interests, and eventually to being more actively involved in community activities around greenhouse gas issues. The strategy provides for learning to take place not only on a cognitive level, but also on an attitudinal, values-oriented level and on a practical, action-oriented level. This paper describes the continuum and argues that it can be useful in informing the practice of education for sustainability.

13.20 – 13.40
4.E.2. Languages for Sustainable Development
Denis Cunningham, Fédération Internationale des Professeurs de Langues Vivantes, Australia

Linguistic wealth across the globe is threatened by a shift towards English as an international lingua franca and towards other languages perceived to be of prestige. Such language choice is evident in the areas of policy and practice in society. This challenge facing languages in Europe and globally is reflected by moves to limit the range of languages on offer in schools, as language death emerges as a threat in society and education. We believe that all languages are valuable and should be promoted in a multilingual world. Solutions are readily available, with some models being proposed for linguistic diversity in society and education. Specific reference is made to the philosophy and operations of the Fédération Internationale des Professeurs de Langues Vivantes (FIPLV). These priorities are continued in a series of recommendations for ensuring linguistic diversity at the global level and a cautionary note against believing one language is enough to ensure sustainable development in education and society.

13.40 – 14.00
4.E.3 Some Perspectives on Regional Collaboration needed in ESD
Toshio Kobayashi, National Institute of Multimedia Education, Japan
Lim Cher Ping, Edith Cowan University, Australia

Education for Sustainable Development (ESD) is an emerging issue, especially in the developing parts of the world, along with Education for All (EFA). EFA deals with provision of opportunity for education, while the initiatives and measures in ESD are more general. ESD involves addressing a number of issues, such as cultural hegemony, gender inequality, degeneration of local languages and proper use of technology. In this paper the issues surrounding ESD are clarified and concrete items to tackle are identified and prioritized. Some perspectives are introduced which deal with ESD, and a practical scheme is described. This scheme is to be implemented through a collaborative effort by academic institutions, local governments and private entrepreneurs in the Asia-Pacific region.
14.00 – 14.20

4.E.4 The Implementation of Media Education in Hong Kong’s Secondary Curriculum: Reasons, Means and Impact
C.K. Cheung, University of Hong Kong, China

The strength of the influence of today’s media is well documented. In 1995 Kellner stated that a “media culture has emerged in which images, sounds, and spectacles help produce the fabric of everyday life, dominating leisure time, shaping political views and social behaviour”. A decade later, there are more types of information and entertainment, many more interactive modes for consuming mass media’s message, and a more interconnected global village than ever before. Studies show that many students spend much of their time watching, listening, and interacting with media. The situation is similar in Hong Kong. In view of this, the call for the inclusion of media education in the school curriculum is opportune. Such curricula have been adopted successfully in countries such as Canada, Australia and the United Kingdom. With the proposal of curriculum reforms in year 2000, which emphasized “key learning areas” instead of traditional subjects, new curricular spaces are opening up for media education. A 2004 study noted that many schools claim to have already adopted media education in lessons. It is worth studying the reasons why these schools have decided to do so, how they have implemented media education, and the impact that media education has on students, especially in terms of the nine generic skills emphasized in the recent curriculum reform.

Day 2 – Session 5B: Innovative Practices
Queen’s Park 4, 2nd Floor

15.20 – 15.40

5.B.2 A Rhetoric-Practice Gap: The DESD Agenda and Sustainable Schools
Annette Gough, RMIT University, Australia

The United Nations Decade of Education for Sustainable Development (DESD) began on 1 January 2005. Implementing ESD in schools involves approaches to teaching and learning that integrate goals for conservation, social justice, appropriate development and democracy into a vision of personal and social change. It also involves developing the kinds of civic virtues and skills that can empower all citizens and, through them, our social institutions, to bring about changes in the transition to a sustainable future. The “Sustainable Schools” programme in Victoria, Australia, is concerned with developing learning environments and learning experiences that will enable students to work towards having a good quality of life. The experiences of schools in the programme provide some guidance on how to implement ESD. This paper discusses findings from a recent evaluation of the experiences of six “Sustainable Schools” in terms of their achievement of educational, environmental, economic and social indicators of quality education. It also examines the feasibility and desirability of any one programme being able to incorporate all aspects of ESD.

15.40 – 16.00

5.B.3 A Learning Environment for a Sustainable Future
Lynette Daphne Vey, Weiproductions, Australia

This paper describes the concept of an “Exploratory Learning Environment”, an approach which links learning and assessment. The philosophy of the Exploratory Learning Environment approach can be described as promoting learning through experience, inquiry, experimentation and critical reflection. Using this approach, teachers reduce the grip they hold on the learning and assessment processes and they adopt the role of a facilitator of the students’ learning process. This approach focuses on developing students’ critical thinking skills, and assessment comes from students’ own evaluation. By linking academic and other forms of knowledge, the assessment process become a meaningful tool to students and can enhance the learning process. This approach is very different from traditional teaching practices where the learning process can be restricted by assessment.
16.00 – 16.20
5.B.4 Promoting Education for Sustainable Development via a Student-Centred Learning Programme
Ng Khar Thoe, Chona Quezon Sarmiento, Cheah Ui Hock and Wahyudi, SEAMEO-RECSAM, Malaysia

The “Search for SEAMEO Young Scientists” (SSYS) Congress organized biennially by RECSAM is a platform for exchange of experiences and ideas among young researchers in the region. This paper explores the concept of Education for Sustainable Development (ESD) and reports findings from evaluative studies on 4th (2004) and 5th (2006) SSYS congresses that incorporated “Sustainable Development” as themes. In this paper, the responses by SSYS delegates to evaluation questionnaires regarding changes in their teaching and learning are examined. Content analysis was also done on selected problem-based investigative projects to illuminate how students in the Community of Practice (CoP) were guided by more knowledgeable others (MKO) in developing projects which reflected the philosophy of the “Decade of Education for Sustainable Development”. The findings revealed that student delegates hold positive views of the impact of the SSYS Congress. They reported “enhanced awareness of the interrelationship among Science, Technology, Environment, Society (STES) and feelings of competence to conduct investigations”. This paper also discusses and recommends follow-up actions on research ideas initiated by the young scientists.

16.20 – 16.40
5.B.5. Content Analysis of Youth Scientific Programme: An Innovative and Integrated Approach for Sustainable Development Among SEAMEO Member Countries
Chona Quezon Sarmiento, Ng Khar Thoe, Cheah Ui Hock and Wahyudi, SEAMEO-RECSAM, Malaysia

The “Search for SEAMEO Young Scientists” (SSYS) Congress is a youth programme which highlights the innovative and integrated approach of RECSAM as a Regional Centre for Expertise (RCE) in Science and Mathematics Education. This paper presents two areas of interest. Firstly, it analyses the nature of the young scientist projects to showcase examples of transformative science education for sustainable development. Secondly, the paper describes a content analysis of the projects. The analysis was grounded on the three pillars for Sustainable Development (ESD), a framework to evaluate SSYS congresses over the past ten years. The paper also examines how training can be implemented to generate understanding about sustainability, and to develop the knowledge, skills, perspectives and values needed by youth in making decisions to improve the quality of life. The paper also discusses the limitations of the methodology and data.

Day 2 – Session 5E: Basic Education: Approaches from Around the World
Saitip, 3rd Floor

15.50 – 16.10
5.E.2. Ten Steps to Reach the Global Village
Ikuko Atsumi, Multicultural Playing Field, United States of America

The main objective of “Global Education is to provide children with opportunities to develop a “global mind” through experiencing the reality of the world, learning about human heritage, and creating a “new world” using their imagination and creative energy. The “MultiCultural Playing Field” (MPF) has created a Learning Kit titled, “Ten Steps to Reach the Global Village”. This Kit uses an integrated education method to enable children to gain a multicultural understanding of the world and takes children on an imaginary journey to the Global Village. The Kit includes a Learning Map, a Teaching Guide CD-ROM, an Activity Book, and a Teaching Manual. MPF’s integrated method matches the aims of ESD by teaching children to understand cultural and religious differences and to realize the insignificance of petty problems compared to human suffering and global-scale tragedies. This paper describes the Kit and proposes creating a globally standardized test that measures a person’s degree of “global mindedness”, with the score indicating an individual’s power to contribute to the prevention of human-made disasters such as wars, terrorism and environmental destruction.
16.10 – 16.30
5.E.3. A Study of Actions, Achievements and Challenges with reference to School Education in India
L.N. Bhagat, and Ashok Oraon
Ranchi University, India

This paper describes a study of the present status of school education in India in terms of actions and achievements for the year 2004-2005. The study was based on comprehensive state-wise secondary data, and examined the state of school education in terms of access, equity and quality. The study also looked into the interrelations between education and other indicators. The data reveal inequality in access to education, with schools concentrated mainly in urban areas. An analysis of the data also revealed that basic educational resources and infrastructure, such as number of classrooms; teachers; playgrounds; health and sanitation facilities; electricity and computers, do not serve to attract enrolments in schools (particularly in rural India). High drop-out rates and repetition of classes are also indicated by the data. The study indicates a need for the development of a better system of school education, one that is flexible enough to significantly contribute to universalisation of elementary education.

16.30 – 16.50
5.E.4 A Study on Inclusive Education for Domestic Migrants’ Children in China
Di Wang, Hangzhou Teachers’ College, People’s Republic of China
Qi Fan, Mingzhu Education, Hangzhou, People’s Republic of China

Since economic reform began in China, domestic migration has been phenomenal. The education of migrants’ children has thus become a challenge for the national education system. The Chinese government and a range of organizations and communities have made substantial efforts to improve the situation and many basic problems have been solved. However, other issues still demand attention, such as how to supply those children with access to high quality education and how to meet their special needs regarding their non-local backgrounds. This paper describes recent studies on the inclusive education of domestic migrants’ children and discusses a programme implemented in six schools (both primary and secondary schools) in Hangzhou, China. This programme introduced the subject “social working skills” into schools as part of efforts to educate children for sustainable development.

Day 2 – Session 5E: Basic Education: Approaches from Around the World
Saitip, 3rd Floor

16.50 – 17.10
5.E.5 Girl-Child Rights
O.R. Ashimolowo, University of Agriculture, Nigeria

In traditional society, women are regarded as the property of their husbands, rather than as individuals with distinct rights. The status of women is reinforced by the patriarchal social order. As a result of this social order, women experience restrictions in cultural, social and recreational activities. The rural areas are worse than urban areas as far as survival and development rights of women and girls are concerned. This paper describes the results of a study of the societal perception of girl-child rights and her level of empowerment. The results of the study indicate that societal perception of girl-child’s right affects her level of empowerment vis-à-vis equal right to health provision, inheritance, and involvement in decision making. The study found that there is a significant relationship between societal perceptions of girls having equal rights to education and the girl-child’s level of empowerment. And a significant relationship was found to exist between the girl-child level of empowerment and equal rights to health care, nutrition and inheritance.
Day 3 – Session 6B: Basic Education: The Role of Teachers and Schools
Panorama 1

8.30 – 8.50
6.B.1 The Role of Schools in Achieving Sustainable Development
Rebecca Timson, Backtalk Institute, United States of America

This paper will examine the role of schools in achieving sustainable development and will include case studies from field work in Asia. The paper will first discuss the lessons learned about the important role of schools in the development of a wider community education programme, and will examine opportunities for members of the wider community to enrich the school curriculum through sharing of their expertise. In addition, the paper will discuss opportunities for regional and international collaboration on (grant-funded) projects connected with the goals of the UN Decade of Education for Sustainable Development; and examine suitable grant opportunities for this kind of collaboration. Important research findings include information about the value of sustainability projects in improving student achievement, building community support for secondary education, and improving rural economics.

8.50 – 9.10
6.B.2 Exploring Contemporary Conditions and Outlook for Early Childhood Eco-Education in Korea
YounSun Lee, Shilla University, Republic of Korea
HeeSoog Jo, Busan National University, Republic of Korea
SunMi Park, Busan Info-Tech College, Republic of Korea

This paper describes an Early Childhood Education educational paradigm, “Early Childhood Eco-Education”, which emphasizes harmony between nature and human beings for a sustainable society. Following a review of the broad Early Childhood Eco-Education debate and exploring kindergarten teachers’ awareness of Eco-Education in the Republic of Korea, the paper summarizes the condition of this programme and describes the outlook for the future. The review was conducted using an open questionnaire which was given to 300 teachers. The results indicate that teachers strongly feel that this programme is important in addressing environmental and educational problems. However, they believe that to apply this programme to kindergarten children, parents, teachers and administers need to also take eco-related courses and training. This paper concludes that teachers have a high interest in Early Childhood Eco-Education and recommends that this programme should construct practical programmes for teachers and children.

9.10 – 9.30
6.B.3. How to Meet the Demands of the Disadvantaged
Yu Yunxiu and Li Yawan, China Central Radio and TV University, People’s Republic of China

Distance education has played a very important role in increasing the knowledge and skills of those who are disadvantaged by their distance from learning institutions, income-level, and other factors. Distance education has changed passive factors into positive action. This paper describes how distance education can create opportunities and provide flexible and convenient ways for adult learners to gain access to education, providing examples from the Open and Distance Learning (ODL) programmes developed by the China Central Radio and TV University (CCRTVU). These programmes have enabled large groups of people to change their attitudes towards life, to see their personal value and to allow them to participate fully in society. This paper examines why, how, and where to offer such programmes. The paper concludes by saying that with extensive use of ICT in the field of distance learning, greater numbers of potential learners can be reached. This wider access to education will contribute to the sustainable development of the country as a whole.
Day 3 – Session 6B: Basic Education: The Role of Teachers and Schools
Panorama 1

9.30 – 9.50
6.B.4 A Good Governance and Sustainable Development Management Model for Basic Education Schools
Apinya Kaewchuen, Wat Bangben School, Thailand

This paper describes a research project which aimed to develop a model of good governance and management in basic education schools of Thailand. The process involved first examining two best-practice schools, using in-depth interview techniques and other methods, and then creating a model of good governance, through analysis of the research data. This model was then reviewed by a focus group made up of eight basic education experts. The results of the project reveal that basic education schools should cover four areas of school management: academic management, personnel management, budget management, and general management. In addition, basic education schools need to be managed on the basis of good governance principles, including the rule of law, ethical values, responsibility, transparency, participation and accountability, and on the basis of sustainable development principles, which emphasize the development of both the behavioral and intellectual abilities of students.

9.50 – 10.10
6.B.5 The Malaysian Smart Schools Project: An Innovation to Address Sustainability
Eng-Tek Ong, Universiti Pendidikan Sultan Idris, Malaysia

One of the seven flagship applications that are part of the Malaysia’s Multimedia Super Corridor (MSC) Initiative, includes the “Smart Schools” project. This paper discusses the evolution of Malaysia’s “Vision 2020”, which established the needs and context for the Smart Schools initiative. It then reviews the framework of the Malaysian Smart School model, looking at the various meanings, attributes and features of the concept of Smart Schools and comparing them with Perkins’ (1995) notion of Smart Schools. This paper then describes a study of the grassroots implementation of the project, from the students' perspective, examining, in particular, “smart” science teaching and learning. The paper highlights results of this study, pointing out, for example, that girls rated their science learning experience appreciably higher than did boys. The gender differences identified in the study are used as a springboard for discussion of the implications for tomorrow’s education for sustainability within the context of the Smart Schools project.

Day 3 – Session 6C: ESD Lens Workshop
Panorama 2, 3rd Floor

8.30 – 8.50
6.C. ESD Lens Workshop
Santosh Khatri and John Fien

This Workshop provides an opportunity for education officers and teachers to contribute to the development of an ESD Lens. UNESCO is developing an ESD Lens to assist the Member States and stakeholders in integrating ESD perspectives into existing educational policies, strategies, plans and programmes. The ESD Lens will be one of the key tools for policy makers, planners, education officers, teachers and the ESD practitioners to review education policies, programmes, and practices to see how ESD can be more effectively integrated. The workshop will explore the “lens” metaphor and suggest key questions to be addressed. It will involve active participation in the review and improvement the ESD Lens currently being developed by UNESCO. The final ESD Lens will be published and made available in 2007.
Day 3 – Session 6D: Innovative Approaches for All: Tools and Methodologies for Sustainable Development
Salitip, 3rd Floor

8.30 – 8.50
6.D.1 The Education for Sustainable Development Toolkit
Rosalyn Rae McKeown, University of Tennessee, United States of America

The Education for Sustainable Development Toolkit is an easy-to-use manual for beginning the process of combining education and sustainability. The Toolkit is based on the idea that communities and educational systems need to dovetail their efforts to reach community sustainability goals. This paper describes the seven major components of the ESD Toolkit and discusses how the Toolkit can help schools and communities develop a process to implement locally-relevant and culturally-appropriate education.

8.50 – 9.10
6.D.2 Using Enquiry-Based Learning in Higher Education as Curriculum Tool for Educational Development
Ian Kaplan and Susie Miles, University of Manchester, United Kingdom

This paper discusses a course recently piloted at the University of Manchester which used enquiry-based learning (EBL) as teaching method. EBL is a curriculum innovation which can contribute to educational development as it encourages democratic and student-centred teaching and learning. Supported by the University’s Centre for Excellence in Enquiry-Based Learning (CEEBL), the course was offered to Masters and PhD students. The pilot course was in “Participatory Photography”, in which participants represented their perspectives by taking, analyzing and sharing photographs. During the course, students explored the use of images as a qualitative research tool while considering their own socio-cultural perspectives on social and educational inclusion. A diverse group of students attended the course and the group was involved in devising criteria for assessment. Participatory Photography provided an accessible means (not dependent on traditional literacy) of engaging with various stakeholder groups and sharing perspectives cross culturally. Students have since used Participatory Photography in working with children and young people in the UK and in development education contexts, such as with students in non-formal education settings in Bangladesh.

9.10 – 9.30
M. Mahruf C. Shohel and Andrew J. Howes, University of Manchester, United Kingdom

Education is a life-long process for the betterment of human well-being. However, many children have no chance to even attend primary school. Dropout and failure rates are alarming; many students leave school semi-literate, soon to relapse into illiteracy. Since the 1960s, non-formal education has comprised a wide spectrum of educational and training activities organized outside the formal school system. Innovative learning methods developed in non-formal education settings aim to develop practical skills, including skills relating to health, sanitation, literacy which can be applied in real life situations. The non-formal sector thus increases pressure for change in the wider education system. The traditional formal education paradigm, aimed at creating human capital for economic growth, is increasingly at odds with the concept of education for sustainability. This paper draws on a three-year empirical study of young people at the point of transition from non-formal to formal education and describes a framework for analyzing how the non-formal education paradigm could usefully and realistically encourage education for sustainable development in the formal system.

9.30 – 9.50
6.D.4 Facilitating Educational Development: The RMIT Research by Project Programme
David Hodges and Bill Vistarini, RMIT University, Australia

One of the greatest challenges for sustainable development is the forging of learning partnerships and creating practical, contextual knowledge. RMIT University’s “Research By Project” is an innovative post graduate research programme that is based on notions of practical knowledge and the application of this knowledge in a particular context. The “Research By Project” has three aims: a more knowledgeable and skilled practitioner;
a contribution to professional and scholarly knowledge; and a change in practice or body of work. These knowledge objectives are practical and trans-disciplinary. This paper explores the challenges of undertaking workplace-based postgraduate research in the context of educational decentralization and capacity building. This paper also looks at issues associated with managing research within the context of a complex and dynamic workplace environment - a world that is characterized by change and shifting priorities. Managing these disruptions requires flexibility and creativity from both students and supervisors.

9.50 – 10.10

6.D.5 Research into the ESD-awareness of Staff of Peking University and the University of Tokyo
Zunyan Liu, The University of Tokyo, Japan
Akihiro Tamai and Li Zhao, Department of Human Environmental Sciences, Ochanomizu University, Japan

This paper describes a study into the ESD-awareness of staff from Peking University (PKU) and the University of Tokyo (UT). Recognizing the importance of “Education for Sustainable Development” for the future, it was decided to examine four groups of Chinese and Japanese scholars, in terms of their educational background, their environmental awareness and their knowledge about ESD. The groups of scholars were given a questionnaire with three main parts. The first part investigated awareness of environmental issues, the second part examined action for environmental protection and the third examined knowledge about ESD. The study found that there is currently not enough experience at higher-education levels in China or in Japan. This paper suggests that there is a need to improve the situation and to develop some useful tools concerning ESD for use both within general and professional education.

Day 3 – Session 7A: Information and Communication Technologies 2
Rainbow Room, 5th Floor

13.00 – 13.20

7.A.1 Using the Internet for Participatory Educational Development in Uzbekistan
Ari Katz, IREX

This paper reviews practices introduced by IREX and UNDP in implementing the “Global Connections and Exchange” (GC) programme in Uzbekistan (www.connect.uz), which involved establishing 60 school Internet centres. Two models developed by the programme serve as best-practice for technology-enhanced education. One of the two models was a system through which teachers submitted interactive lesson plans online and received expert feedback. The creators of the best lesson plans were rewarded monthly with stipends towards training their colleagues, who then submitted their own lesson plans. All submissions were filed in an e-library, now cataloguing more than 1000 lesson plans. These lesson plans are freely available and form the foundation for long-term adoption of modern teaching practices. The second model was established with the aim of ensuring that the schools Internet centres were sustainable. The GC programme engaged parent committees of schools to provide funds for centre maintenance. Funds are recorded using an online mechanism, publicly documenting on the school website totals contributed and spent. This online recording system increases transparency, support and confidence in the effort.

13.20 – 13.40

7.A.2 Different Cultures Make Very Different Use of ICT: Two Case Studies on the Integration of ICT into Teacher Education.
Bart Cornille, Flemish Office for Development Cooperation and Technical Assistance, Viet Nam

Much can be learned from teacher training institutions in well-to-do Western countries that efficiently and effectively utilize ICT in teaching and learning, management and administration. But it is not always possible to implement the same practices in classrooms where the culture, infrastructure and other factors are completely different. This paper suggests that it is important to consider how learning environments differ in terms of culture and to examine how the needs of teachers and students may differ from country to country. Action research in two projects of the Flemish Office for Development Cooperation and Technical Assistance (VVOB) in Kenya and Viet Nam indicates that teachers in different societies use ICT in different ways. This paper shows how we can adjust to differing needs, while still ensuring that basic ICT concepts and active learning methodologies are utilized.
Day 3 – Session 7B: Panel Discussion: Integrating School Reform with Community Development in the Mekong Delta of Viet Nam

Panorama 1

13.00 – 14.30

7.B Panel Discussion: Integrating School Reform with Community Development in the Mekong Delta of Viet Nam

This panel utilizes the results of a five-year project which integrated school reform with community development in the poorest province in the Mekong Delta of Viet Nam. In addition to improving household income, this project improved basic education, promoted civic engagement and created new collaborative relationships among community, education, business and governmental agencies. The four papers presented by this panel address the following questions. In what ways can schools contribute to community development in the Vietnamese context? What conditions make possible such contributions? What kinds of technical support are needed to promote teacher change and community development?

7.B.1 What the Project Components Are and How They Fit Together
Christopher Wheeler, Michigan State University, United States of America

The challenges involved in linking schools to community development in Viet Nam are significant. The education system of Viet Nam is highly centralized with a packed curriculum that encourages a focus on content coverage and factual recall. A high-stakes testing system at each level of schooling, coupled with parental concern that students do well on such tests, further reinforces this focus. In addition, there is a substantial gap separating schools from their surrounding communities. This paper argues that reform at the school level should go hand-in-hand with projects that address the problems that communities face. The paper describes the process used to initiate teacher change within schools, how this process is connected with summer activities that address local community development needs, and how these activities can then be brought back to the school in a variety of ways. It examines some of the outcomes of the project in promoting teacher change and improved household income and it concludes with a discussion of challenges facing this project.

7.B.2 Teacher Change: The Key Role of a Support System.
Bui Lan Chi and Ho Thi Thu Ho, Cantho University, Viet Nam

Recognizing that one-shot training sessions and new materials are often not effective in the long term, this project has introduced an innovative teacher support system that has helped all teachers in the project change their teaching practices. This paper describes a number of components of this support system and focuses on the follow-up support at the classroom level in the areas of content and pedagogy. The paper also examines the role and function of ‘support team’ teachers (at least one per building) as they assist colleagues in trying new classroom pedagogical practices and using the school grounds for learning activities. In addition, the paper discusses the key role of Cantho University Faculty members in providing support to help teachers understand and teach central concepts in the curriculum. Finally, the paper reports on what changes in teaching and learning have been brought about by the project.

7.B.3 School-Initiated Summer Projects to Address Community Problems
Phung Thi Nguyet-Hong, Cantho University, Viet Nam

School-initiated projects during the summer vacation months have proved to be effective ways of linking schools to community development. This paper describes two summer projects: composting to enhance the growing of market vegetables and household monitoring to reduce the incidence of dengue fever. Both projects addressed significant community development issues: the need to replenish nutrients in areas where the soil is easily depleted and the prevention of dengue fever. Both projects drew on what schools do best: application of academic knowledge and techniques to local problems. Both of the projects began at the school and were then adopted by local community organizations (the Women’s Union and the Farmers’ Union). And both projects led to closer collaboration by the school with provincial offices and local administration. The paper also describes the implications for sustained school involvement in such projects during the school year.
7.B.4 Issues, Dilemmas, Challenges and Lessons Learned in Linking Schools to Community Development
Phung Thi Nguyet-Hong, Bui Lan Chi, Ho Thi Thu Ho, Cantho University, Viet Nam
Christopher Wheeler, Michigan State University, United States of America

Efforts to link schools to community development have proven difficult to accomplish in many countries. This paper examines the challenges the project has faced in accomplishing this goal. This paper also addresses questions such as: How does the curriculum limit such possibilities? If summer activities are one way to address this problem, how can they be integrated into the school during the year? What role do principals, district officials and provincial officials play in creating conditions for success or failure? What are some of the personal issues that affect implementation? What are some of the difficulties of providing adequate technical support for teachers and community projects that affect a project like this? Can such a complicated project continue to expand? And can it become sustainable?

Day 3 – Session 7C: Educating Rural People for Sustainable Development
Panorama 2

13.00 – 13.20
7.C.1 School and Community Farmland Biodiversity Conservation
Marut Jatiket and Kevin Kamp, Thai Education Foundation, Thailand

Over sixty percent of Thailand’s population is engaged in livelihoods relating to farming, and market-oriented production, including for export, is a major emphasis in the agriculture sector. At the same time, the livelihood security of farmers is heavily dependent upon a diverse number of naturally-occurring (non-farmed) species of animals and plants on their farmlands. Thai farming communities utilize these resources for food, sources of income, household and farm materials, medicine, social and cultural activities, natural crop protection and for creating a pleasant living environment. Unfortunately, degradation of farmland biodiversity is occurring at an alarming rate because of unsustainable local land use and cultivation practices, such as heavy use of toxic chemicals, over-exploitation of some species, destructive harvesting practices, burning, and overuse of water resources. While farmers understand the value of these resources and recognize that biodiversity of the farmlands is decreasing, there is an absence of local community-wide initiatives and local leadership needed to reverse this trend. The Thai Education Foundation has been implementing a project in cooperation with some 50 schools in four provinces of Thailand to create community awareness on the importance of the farmland bio-diversities and to conserve species that are important to farmers’ livelihoods. This project has received much interest and support from communities, governments and international agencies. This paper describes the project and its outcomes.

13.20 – 13.40
7.C.2. ODL for Agricultural Development and Rural Poverty Reduction: A Comparative Analysis of Innovation and Best Practice in Asia and the Pacific
Scott McLean, University of Calgary, Canada
Malcolm Hazelman, Food and Agriculture Organization, Regional Office for Asia and the Pacific
Alexander G. Flor, University of the Philippines Open University, Philippines

This paper describes a project which was implemented with the aim of understanding and improving the application of open and distance learning (ODL) strategies, to address the challenges of agricultural development and rural poverty reduction. This project studied five institutions in the Asia-Pacific region and documented innovative and exemplary practices in ODL for agricultural development and rural poverty reduction. The five case studies were analyzed using a framework developed by the Food and Agriculture Organization for the conduct of distance learning projects on agriculture and rural development.
13.40 – 14.00
7.C.3 Development of the Agricultural ESD program at Agricultural and Forestry Research Centre of the University of Tsukuba
Atsuhi Tajima, Hideo Hasegawa, DeMar Taylor, Yoshihiko Sekozawa, Mizuki Matsuoka, Tsuyoshi Homma, Tomonari Yamamoto and Haruyuki Mochida
Agricultural and Forestry Research Centre, University of Tsukuba, Japan

Development of an education and research programme on sustainable food production is extremely important for the future generations. The Agricultural and Forestry Research Centre at the University of Tsukuba (AFRC-UT) has been conducting research and education programmes on low-input sustainable agricultural production and is now committed to developing Agricultural ESD (Ag-ESD) programmes. This paper describes the activities of AFRC-UT in this area and the core Ag-ESD programmes at AFRC-UT.

Day 3 – Session 7D: Intercultural Education for Sustainable Development
Saitip, 3rd Floor

13.00 – 13.20
7.D.1 Indigenous Education in the Philippines: A Case Study of the Sagu-Ilaw School of Indigenous Knowledge and Traditions
Ricarte B. Abejuela III, Bukidnon State College, Philippines

Indigenous education in the Philippines is a recent phenomenon, starting only in the past decade. Legislation supporting indigenous peoples rights and giving legitimacy to establishing indigenous schools were only established in the last eight years. In recent years, the Asian Council for People's Culture has assisted the different indigenous tribes in the country in setting up Schools for Indigenous Knowledge and Traditions (SIKAT). The SIKAT programme envisions a system at par with mainstream education, founded on the ways of life, traditions and culture of indigenous peoples. This paper takes a closer look at one of the SIKAT Schools – the Sagu-Ilaw SIKAT of the Bukidnon Tribe in Northern Mindanao. Sagu-Ilaw was set up in 2002 with the assistance of ACPC. The school has survived for four years so far, despite the perennial problem of funding. It was designed as a teacher-training school whose students teach the tribe's children in their respective communities. Recent linkages with the Department of Education have led to conflict over control of the school, leading the tribe to fear for the continued loss of their identity. Other linkages are currently being established for the survival and further development of the school.

13.20 – 13.40
7.D.2 Education in Multiethnic Societies: Mechanisms and Challenges
Hamoon Khelghat-Doost, Universiti Sains Malaysia, Malaysia

Education is undoubtedly one of the most important key factors in the process of achieving sustainable development in every society. Education plays a particularly important role in multi-ethnic and multicultural societies. However, because of the diverse nature of multi-ethnic societies, designing and applying an educational pattern which can answer the needs of each minority, and promote tolerance and respect, is a challenging task. This paper examines and analyzes some of the mechanisms (such as curriculum design, activities, structures) which need to be addressed in the educational system of a multi-ethnic societies, together with challenges faced. The paper refers to the case study of “Vision Schools” (Sekolah Wawasan) in Malaysia. Vision Schools are primary schools which have the aim of bringing children together without regard for race or religion, with the aim of fostering solidarity, integration and respect among the students.
13.40 – 14.00
Joel Edward Bacha, Kanda University of International Studies, Japan

Language is a key for communication, a foundation of culture and a fundamental part of learning. Through language education students have the potential to learn about different values and see the world from new perspectives. This paper describes a university-level English language curriculum that incorporates ESD-related content into second language learning. The curriculum aims to build students’ language skills as they learn about topics related to sustainable development (SD), including culture, religion, international affairs, globalization and the environment. The curriculum promotes SD by encouraging respect for personal and cultural values, raising awareness of global perspectives, and developing students’ critical and systemic thinking skills, all of which are essential for achieving sustainable development. The paper also provides suggestions for adapting ESD-related content for use in second language learning in primary and secondary schools. Specific methodology is also highlighted which transcends subject matter and can be used to promote SD in other academic subjects. In conclusion, the paper outlines the challenges and lessons learned in gaining departmental support for an ESD-related curriculum.

14.00 – 14.20
7.D.4 Globo Sapiens – Waste of Time or Work in Progress?
Patricia Kelly, University of Canberra, Australia

Use of “Reflective Journals” is a core strategy being adopted at the University of Canberra to support first year engineering students on their journey to becoming critically reflective, responsible, wise global citizens: “globo sapiens”. Research into attitudes shows that 65% of students were “Accepters” (willing to change), 25% were “Converts” from regarding the notion as a “waste of time” to seeing it as beneficial and useful, and 10% were “Resisters” all the way. A learning process was involved in coming to understand some reasons behind this resistance and responding more effectively. Analysis of guided interviews explained how and why particular students resisted or reconstructed their worlds when challenged. Positive, values-based outcomes emerged as “got respect”, “got insight”, “got inspired”, “got courage” and “got transformation”. This study has international relevance because it was based in large, socially and culturally diverse student cohorts who did not choose to study a sustainability-based subject. If all Higher Education institutions take the UN Decade of Sustainable Development seriously, they are likely to encounter similar rates of resistance and may benefit from the findings of this study when adopting strategies for understanding this resistance.
KEYNOTE SPEAKERS

Sheldon Shaeffer
Director, UNESCO Regional Bureau for Education, Bangkok, Thailand

Sheldon Shaeffer is currently Director of UNESCO’s Asia and Pacific Regional Bureau for Education, located in Bangkok. A citizen of Canada, he was educated in history (BA), anthropology (MA), and comparative international education (PhD) at Stanford University. He has taught, done research, and worked in development programmes in Southeast Asia for over 15 years – as a high school teacher in Malaysia, an anthropologist and an education programme officer for the Ford Foundation in Indonesia, and the regional education advisor for UNICEF in Bangkok. He was also the Director of Education and Population Programmes for the International Development Research Centre in Canada for 10 years and later was a senior research fellow at the International Institute for Educational Planning (in UNESCO) in Paris. Before moving back to Bangkok three years ago, he was chief of UNICEF’s Global Education programme in New York.

H.E. Wichit Srisa-an
Minister of Education, Thailand

Wichit Srisa-an is the Minister of Education, Royal Thai Government, Thailand. Dr Srisa-an is also currently the President (Founding) of the Thai Cooperative Education Association and holds numerous council positions, including Committee Member of the Rangsit University Council, Adviser for the Office for National Education Standards and Quality Assessment, and Committee Member of the Siam University Council. Dr Srisa-an’s political career stretches back to 1988 and he has served in the Public Service since 1978. He has degrees in Arts and Education from Chulalongkorn University, and a Masters and a PhD in Education Administration from the University of Minnesota, United States. Dr Srisa-an also has Honorary Doctorates from universities in Thailand, Hong Kong, India and the United Kingdom. He has published widely, including five research studies on higher education, ten education textbooks and over 60 journal articles on education. Dr Srisa-an has also been awarded many decorations, including the Knight Grand Cordon (Special Class) of the Most Exalted Order of the White Elephant; the Knight Grand Cordon (Special Class) of the Most Noble Order of the Crown of Thailand; the Knight Grand Commander (Second Class, Higher Grade) of the Most Illustrious Order of Chula Chom Klao; and the Grand Decoration of Honour in Gold with Star (Republic of Austria).

Victor Ordonez
Senior Education Fellow, East-West Center, United States of America

Victor Ordonez is a Consultant in the field of Education and is a Senior Education Fellow at the East-West Center in Hawaii, where he has been involved in formulating a new programme in Educational Leadership – based on collaborative sessions on new education paradigms for rapidly changing, interdependent societies. Formerly with UNESCO, he was Director of the Basic Education division in Paris, and then Director of its Principal Regional Office for the Asia-Pacific in Bangkok. Prior to this, he was in the academe (Visiting Professor at UCLA; Dean of the Graduate Schools of Education and Business at De La Salle University in Manila, etc.) and in the Philippine Government (Undersecretary of the Department of Education, Culture and Sports; Chair of the Presidential Commission on Education Reform, etc.) Dr. Ordonez has seven academic degrees, including a PhD in Oriental Philosophy from the University of Santo Tomas.
John Fien
*Innovation Professor of Sustainability, RMIT University, Australia*

John Fien is currently a Professor at RMIT University where he is responsible for facilitating the development of teaching and research to further the social change processes that underlie sustainable development. A member of the Australian National Commission for UNESCO, John was a resource person for UNEP and UNESCO in Education for Sustainable Development at the Commission for Sustainable Development in New York and at the World Summit on Sustainable Development. In addition, John was the Director of the Young People and the Environment project that analyzed the environmental knowledge and values of young people in the Asia-Pacific region. He has also contributed to a number of publications in the field of Education for Sustainable Development and has been a co-editor on IUCN and UNESCO publications. John also wrote and designed the UNESCO multimedia teacher education program, “Teaching and Learning for a Sustainable Future”. His work in the values and action outcomes of education have led to projects on sustainable consumption education for OECD, conservation education for WWF-International and WWF-USA, and sustainable development education for the University of Peace.

Shuichi Nakayama
*Professor, Hiroshima University of Economics, Japan*

Shuichi Nakayama is a Professor Emeritus of Hiroshima University, and is currently a Professor at the Hiroshima University of Economics in Japan. He is also the Chair of the Education Sub-Committee, Japanese National Commission for UNESCO. In 2004 he worked as a consultant at the UNESCO Bangkok office, conducting a Situational Analysis of ESD in the Asia-Pacific region. Shuichi was the Director of the Institute of Peace Science at Hiroshima University from 2002 to 2003, and was Professor of Geography and Curriculum Development at Hiroshima University from 1995 to 2003. He received his Ph.D. in Geography from Banaras Hindu University, India, in 1972, and his Doctor of Literature in Human Geography from Hiroshima University in 1978. He has published many articles and books in Human Geography, especially in the field of regional development of India. At the same time, he has devoted himself to the research field in geography curriculum development. He was a senior research fellow at the Global Education Centre of the University of Minnesota, USA (1987-88) under the Fulbright programme, under which he conducted research on the renaissance movement of geography education in the United States.

Du Yue
*Du Yue, Deputy Secretary-General, National Commission of the People's Republic of China for UNESCO*

Du Yue is the Deputy Secretary-General of the National Commission of the People's Republic of China for UNESCO. He has been engaged in education and its international exchanges since 1986. Du Yue joined the National Commission as Deputy Director before being appointed as Deputy Secretary-General, and is the Permanent Delegate to UNESCO in charge of education. Du Yue is also a Member of the Board for several education associations, including the China Association of Adult Education and the China Association for International Exchanges in Education. In addition, he is the Deputy President of the China Association of Physical Education for Undergraduates, and is the Secretary-General of the National Federation of UNESCO Clubs and Associations in the People's Republic of China. Du Yue has participated as a speaker in over 30 significant events on education, including the UNESCO IBE World Conferences, the World Conference on Higher Education, International Conferences on Adult Education, and international conferences on TVET, Education for All, and education in the E9 countries. Du Yue has a Masters degree in International Law from Beijing University and studied Phd courses in Politics at the Université Paris V in France.
Shyamala K. Mani  
National Coordinator, WMI, Centre for Environment Education, India

Shyamala Mani is the National Coordinator of the Waste and Resource Management Initiatives (WMI) at the Centre for Environment Education (CEE) in New Delhi, India. She has been with the CEE in Delhi since 1987. Shyamala promotes environmental awareness among the general public and decision makers, seeking to influence them for planning and achieving a better quality of life for all. Between 1994 and 2001 Shyamala was the Coordinator (Delhi Branch) She started CEE’s first regional office for southern India in 1988 and was the Coordinator of the same at Bangalore (1988-1994). Shyamala is also a Waste Management Consultant and has recently worked on projects funded by USAID and the World Bank Institute, in 11 states of India. In 2006, Shyamala was appointed a member of Regional Advisory Committee of International Water Management Institute (IWMI) for South Asia, and in 2005 was appointed a member of the National Steering Committee on Control of POPs and Mercury. Shyamala has presented papers at numerous conferences in Asia and the Americas, including country papers on Environmental Education. Shyamala has degrees in Science and Education and received her PhD in Environmental Sciences from Jawaharlal Nehru University in 2003.

Samuel Lee  
Secretary-General, Korean National Commission for UNESCO

As a well-known philosopher and professor, Samuel Lee has dedicated himself to studies and activities for peace, unification, social development and resolving of religious conflicts. He received his Ph.D. in Social Science at the University of Gottingen, Germany, and taught philosophy at Soong Sil University in the Republic of Korea for over 20 years. After his return from Harvard University Divinity School, USA where he was a visiting scholar, Samuel Lee was appointed as the first Director of the Asia-Pacific Centre of Education for International Understanding (APCEIU), where he remained from 2000 to 2004. During that period, he created the annual teacher training programmes for education for international understanding in the Asia-Pacific region. Since his appointment to Secretary-General of the Korean National Commission for UNESCO in 2004, Samuel Lee has concentrated on raising public awareness of ESD both at the national and regional levels. He is currently a member of the Presidential Commission on Sustainable Development in the Republic of Korea. He is the elected President of the Korean Philosophical Association for 2007-2008, which will host the World Philosophy Congress in 2008 in Seoul. He has authored several books, including “Philosophy of Peace and Praxis of Unification”, along with various papers on relations of ethics and social development.

Surendra Shrestha  
Director, UNEP Regional Office for Asia and the Pacific, Bangkok, Thailand

Surendra Shrestha is the Director of the United Nations Environment Programme (UNEP) Regional Office for Asia and Pacific, in Bangkok. Surendra joined the Regional UNEP office in 1993 and has been in his current position since February 2003. In his current role he has been instrumental in formulating, developing and implementing UNEP’s strategy for the Asia-Pacific region. In recent years Surendra has led multi-disciplinary teams in the areas of assessment, policy development and multilateral agreements. Prior to his appointment as Regional Director, Surendra served as Regional Coordinator of UNEP’s Environment Assessment Programme for Asia and the Pacific (EAP.AP). He played a key role in expanding EAP.AP, including establishing national and regional training centres and a network for environmental information. Before joining UNEP, Surendra held senior positions at the Asian Institute of Technology (AIT), Bangkok, and the International Centre for Integrated Mountain Development (ICIMOD), Kathmandu. Surendra continues to give lectures and serves on Graduate Student Dissertation Committees at AIT. He has significant experience in the corporate sector, having completed internships with companies such as IBM and Honeywell (in the United States); Siemens (in Germany) and ICL (in the UK). Surendra graduated from Keele University, United Kingdom, with a degree in Economics and Computer Science and completed his postgraduate studies at AIT.
Konai Helu Thaman
Professor of Pacific Education, University of the South Pacific, Fiji

Konai Thaman holds a Personal Chair in Pacific Education and Culture from the University of the South Pacific in Suva, Fiji. She is a Tongan national and has worked at USP since 1974. She has a BA in Geography from the University of Auckland, New Zealand; an M.A. in International Education from the University of California at Santa Barbara, USA; and a PhD in Education from USP. Her doctoral thesis, titled ‘Ako and Faiako: Cultural Values, Educational Ideas and Teachers’ Role Perceptions in Tonga’ was based on studies of the relationships between cultural values and educational ideas and how these were reflected in teachers' perceptions of their professional role. Konai has conducted research, consultancies and published widely in the areas of teacher education, curriculum development and culture and education and has held senior administrative positions at USP, including Director of the Institute of Education, Pro Vice Chancellor and Acting Deputy Vice Chancellor. Konai is a member of several international and professional organizations. She is also a widely published poet – five collections of her poetry have been published.

Dieter Gross
Senior Consultant for Sustainable Future Instruction, Association of German School Geographers, Germany

For more than thirty years Dieter Gross was a teacher trainer, school book author, curriculum designer, and a teacher at a Grammar School in Berlin. He is currently a Senior Consultant for Sustainable Future Instructions (SFI) and a Representative for ESF in the Association of German School Geographers (VDSG e.V.). In 1992 he led an international research and development project on how to implement Environment Education and ESD in curricula. Within this project he used a tool for designing a Sustainable Development (SD) curriculum. His approach has been welcomed for being hands-on and simple to use in the classroom. Recognizing the urgent need worldwide to reform school curricula so as to enable students to have an understanding of sustainability and its relationships, Dieter supports the empowerment of teachers – enabling them to design SD curricula by themselves, based on real-life situations and decision-making structures. Dieter first demonstrated this approach at the GLOBE workshop in Boulder, USA, in 1994. Thereafter he has given numerous lectures dealing with the question of how to implement the principle of sustainability in curricula. Since 2004 Dieter has led a project within the activities of the ‘German Year in Japan 2005/06 – ESD Curriculum Development project’. Within this project German and Japanese teachers exchanged their ideas on implementing SD in education and on designing curricula.

Victorino Manalo
Consultant, Cultural Tourism Specialist, Philippines

Victorino Manalo has just ended his term as the Director of the Metropolitan Museum of Manila in the Philippines where he managed the contemporary arts programme of the museum. He has worked with the Museum since 2001 and during that time has pioneered an Arts and Community Development programme in Bohol province; Developed programmes in Cultural Tourism, Crafts Revitalization and Youth Cultural Education and Creative Industries Development. Prior to joining the Museum, Victorino was the President of the Tahanan Shop, Inc. (1995-2001). This role involved conceptualizing and managing a lifestyle store showcasing craft products. During this time Victorino managed linkages with crafts producers throughout Southeast Asia and managed creative product development programmes, particularly with bamboo craft producers. From 1999 to 2002, Victorino was a Commissioner with the Philippines National Commission to UNESCO. During this period he organized and designed workshops in the Philippines to promote the UNESCO World Heritage in Young Hands Education Kit and facilitated the UNESCO Arts in Heritage Education Workshop held in Vigan in 2001. Victorino graduated
from the University of the Philippines in 1982 with a B.A. in Humanities and in 1985 received his M.A. in International Affairs from Columbia University. Victorino is also an award-winning short story and essay writer, with Awards from Free Press Literary Awards and Don Carlos Palanca Awards for Literature.

Sombath Somphone
Director, Participatory Development Training Centre, Lao PDR

Sombath Somphone's early life took place amidst uncertainty and turbulence as Laos was swept into the Indochina War. He eventually escaped this by winning a scholarship to the University of Hawaii, where he earned degrees in education and agriculture. In 1980 Sombath returned to Laos and that same year helped launch the Rice-Based Integrated Farm System project, to help Laotian farmers achieve food security. The ensuing years exposed him intimately to the world of rural Laos and to the complex obstacles awaiting development workers in its remote scattered villages. Drawing on these lessons, Sombath founded PADETC in 1996 to foster sustainable, equitable, and self-reliant development in Lao PDR. Sombath has led it to emphasize eco-friendly technologies and micro-enterprises and to enhance education by introducing fuel-efficient stoves, promoting locally-produced organic fertilizer, devising new processing techniques and marketing strategies for small businesses, initiating garbage recycling in the capital city, and organizing extra curricular programmes for the youth. In 2005, Sombath received the prestigious Ramon Magsaysay Award for Community Leadership from the Government of the Philippines and the Ramon Magsaysay Foundation, in recognition of his efforts to promote sustainable development in Lao PDR.