Progress in implementing
Education for Sustainable Consumption

Comparison of three country case studies
Japan, Mexico and Mauritius

29 April 2010
Acknowledgements

This report has been put together by David Chittenden and Victoria W. Thoresen from the Partnership for Education and Research about Responsible Living (PERL)¹. The report is based on individual country case studies researched and written by the people in the case study countries acknowledged below. PERL thanks all contributors for their voluntary time and effort, done in addition to their daily jobs. More in-depth research could have been carried out with additional resources.

The Japanese case study was researched and written by Robert J. Didham of the Institute for Global Environmental Strategies with information provided by Rieko Hanashiro of the University of the Ryukyus; Yoshiaki Takahashi, a Research Fellow at the Economic and Social Research Institute (ESRI), and at the Cabinet Office of Japan; and Satoko Umino of the Japan Environment Association.

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The Mexican case study was researched and written by Mario Ramón Silva Rodriguez of Colectivo Ecologista Jalisco with information provided by Yolanda Quintero Reyes of Ministry of Education in Jalisco; Virginia Castillo from Procuraduría Federal del Consumidor (PROFECO); and Rebeca Contreras of the Education and Training Centre for Sustainable Development (CECADESU, under the Ministry of Environment and Natural Resources Mexico).

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Feedback

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¹ PERL is a partnership of educators, researchers and practitioners from over 100 institutions in more than 40 countries. PERL is developing methods and materials to encourage people to contribute to constructive change through the way they choose to live. See www.perlprojects.org
Summary

Education for Sustainable Consumption (ESC) is a crucial element in providing individuals and societies with the knowledge and skills to create a sustainable future. Implementing ESC is a difficult task requiring the integration of many themes and the coordination and training of many actors. It requires working from where people and countries currently are towards a common goal. There is no one right way to implement ESC but there are a number of recommendations that should be considered – such as those in the road map of the document *Here and Now! Education for Sustainable Consumption: Recommendations and Guidelines*.

The different experiences in implementing ESC in Mauritius, Japan and Mexico have been collected in case studies. In this report, the case studies have been compared against the roadmap of recommendations to implement ESC outlined in *Here and Now!*

Out of the three countries, **Mauritius** is unique in that it has made sustainability an explicit country goal and it is reforming whole sectors, including the education sector. The reform’s progress will be interesting to observe over the coming years as the implementation continues.

**Japan** has a strong foundation for implementing ESC in the three national priorities of education for sustainable development, consumer education and green purchasing.

**Mexico** has been recently undergoing some primary and secondary curriculum reform with much potential for ESC through cross-cutting themes and ESC-related topics. Strong civil society organisations are playing a significant role in SC-related awareness and education and are influencing policy.

All three countries are making progress in implementing ESC through different approaches but all countries also have much more that can be done. Based on the case studies, some critical success factors for implementing ESC have been identified in this report.

International support and collaboration could assist countries in implementing aspects of ESC and it is hoped that the findings are a useful input into international policy discussions. The ability for ESC to prepare knowledgeable, creative and active citizens to deal with the challenges of sustainability should inspire support for a strong ESC theme or programme in the 10-Year Framework of Programmes on Sustainable Consumption and Production.
Purpose

The case studies and this report are primarily intended for government policy and decision-makers to see how other countries are approaching ESC and to encourage them to take steps in their home country.

This report supports the document entitled *Here and Now! Education for Sustainable Consumption: Recommendations and Guidelines*. *Here and Now!* contains a roadmap of recommendations, as well as methods to implement ESC and a core curriculum.

The case study material will be presented at a side-event at the 18th United Nations Commission on Sustainable Development meeting in New York City, 3-14 May 2010. At the meeting, governments, international organisations and major stakeholders will review the progress made in implementing sustainable consumption and production (SCP) and will advance policy proposals to be included in a ‘10-Year Framework of Programmes on Sustainable Consumption and Production’. The process to develop a 10-Year Framework has been supported by the global Marrakech Process on Sustainable Consumption and Production.

The case studies show that ESC is being implemented in different ways in different countries and that progress can be made from different starting points towards a common goal.

The task of moving our societies to more sustainable consumption and production patterns is urgent and requires all people to be educated and motivated about consumption and lifestyles and sustainability. It is hoped that governments, at the 19th Commission on Sustainable Development meeting in May 2011, will agree to a programme of work on education and particularly on ESC in the 10-Year Framework of Programmes on Sustainable Consumption and Production.

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2 A joint publication of UNEP and the Task Force on Education for Sustainable Consumption led by Italy, developed in cooperation with the UN Decade of Education for Sustainable Development (2005-2014) and Hedmark University College.

3 The Marrakech Process is a global process to support the elaboration of a 10-Year Framework of Programs (10YFP) on sustainable consumption and production, as called for by the WSSD Johannesburg Plan of Action. UNEP and UN DESA are the lead agencies with an active participation of national governments, development agencies, and civil society. See [http://esa.un.org/marrakechprocess/](http://esa.un.org/marrakechprocess/).
Method

What is ESC?

To compare different ways of implementing ESC we first need to know what ESC is. There are many descriptions of ESC and most cover similar aspects. *Here and Now!* describes ESC in the following way:

“Education for Sustainable Consumption (ESC) aims at providing knowledge, values and skills to enable individuals and social groups to become actors of change towards more sustainable ways of living. The objective is to ensure that the basic needs of the global community are met, quality of life for all is improved, inefficient use of resources and environmental degradation are avoided. ESC is therefore about providing citizens with the appropriate information and knowledge on the environmental and social impacts of their daily choices, as well as workable solutions and alternatives. ESC integrates fundamental rights and freedoms including consumers’ rights, and aims at empowering citizens for them to participate in the public debate and economy in an informed and ethical way” (p.11).

ESC is not an end in itself, but rather its aim is to equip individuals and societies with the knowledge and skills to face today’s and tomorrow’s challenges.

Developing the case studies

The individual case studies have been developed by experts in the field of ESC in their own countries. A common set of questions was sent to all countries to ensure a consistent approach to obtaining the basic information.

All the work in the case study countries has been voluntary and in addition to the contributors’ normal work. The case studies were not intended to be an in-depth analysis but rather a brief overview of current initiatives in the context of the different educational, environmental and socio-political histories of each country. The areas covered by each case study therefore vary and depended on the information that was obtained.

Comparing the case studies

The three different approaches to implementing ESC outlined in the country case studies have been matched against the recommendations in *Here and Now!* *Education for Sustainable Consumption: Recommendations and Guidelines*. Some other internationally recognised strategies and documents are also referred to. Putting the case studies together allows some comparison of the different approaches. Some critical success factors for implementing ESC have been identified based on the case studies.
Case study comparisons

The three case study countries have very different histories and current circumstances. They are so different that in many ways they are not really comparable. But by showing a range of different circumstances and approaches, the intention is to show that there many ways to implement ESC.

Country contexts

Some basic information on each case study country is provided in the table below.

<table>
<thead>
<tr>
<th></th>
<th>Japan</th>
<th>Mauritius</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Region</strong></td>
<td>East Asia</td>
<td>Sub-Saharan Africa</td>
<td>Central America</td>
</tr>
<tr>
<td><strong>Population</strong></td>
<td>127,380,000</td>
<td>1,288,000</td>
<td>111,211,789</td>
</tr>
<tr>
<td><strong>Land size</strong></td>
<td>377,944 km²</td>
<td>2,040 km²</td>
<td>1,972,550 km²</td>
</tr>
<tr>
<td><strong>Government</strong></td>
<td>Parliamentary democracy with constitutional monarchy</td>
<td>Parliamentary republic</td>
<td>Federal presidential republic, Congress with upper and lower houses</td>
</tr>
<tr>
<td><strong>GDP (nominal)</strong></td>
<td>2008 estimate</td>
<td>2009 estimate</td>
<td>2009 estimate</td>
</tr>
<tr>
<td>- Total</td>
<td>$4.910 trillion</td>
<td>$9.156 billion</td>
<td>$1.143 trillion</td>
</tr>
<tr>
<td>- Per capita</td>
<td>$38,457</td>
<td>$7,109</td>
<td>$10,212</td>
</tr>
<tr>
<td><strong>World bank category</strong></td>
<td>High income</td>
<td>Upper middle income</td>
<td>Upper middle income</td>
</tr>
<tr>
<td><strong>Human development index (HDI)</strong></td>
<td>0.960 (very high)</td>
<td>0.804 (high)</td>
<td>0.854 (high)</td>
</tr>
</tbody>
</table>

Here and Now! and other international strategies and documents

Why have the recommendations in Here and Now! been chosen as the reference point for the case studies? Here and Now! has been jointly developed by UNEP Division of Technology, Industry and Economics with the Marrakech Process Task Force on Education for Sustainable Consumption led by Italy, and reviewed by a range of experts in the fields of education, consumer citizenship, and sustainable consumption (see the acknowledgements section of Here and Now! for the contributions).

Here and Now! is also consistent with other relevant international strategies and documents, of which some examples are below.

- In December 2002, the United Nations General Assembly adopted resolution 57/254 to put in place a United Nations Decade for Education for Sustainable Development (DESD), spanning from 2005 to 2014, and designated UNESCO to lead the Decade. Education for Sustainable Development supports five fundamental types of learning to provide quality education and foster sustainable human development – learning to know, learning to be, learning to live

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4 Wikipedia

together, learning to do and learning to transform oneself and society. ESC can therefore be seen to be part of education for sustainable development.

The Decade breaks down the traditional educational scheme and promotes:

- Interdisciplinary and holistic learning rather than subject-based learning
- Values-based learning
- Critical thinking rather than memorising
- Multi-method approaches: word, art, drama, debate, etc.
- Participatory decision-making
- Locally relevant information, rather than national.


**Country case study comparison against Here and Now! recommendations**

The information obtained from each case study country has been matched against the *Here and Now!* recommendations for comparison below.

<table>
<thead>
<tr>
<th>Here and Now! recommendation</th>
<th>Japan</th>
<th>Mauritius</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ensure that education institutions reflect in their daily management the priorities given to sustainable development</td>
<td>All government agencies, including schools, are required to follow national green purchasing guidelines.</td>
<td>Ministry of Education, Culture and Human Resources works with other ministries, NGOs, and the private sector on school-based projects such as the ‘Green School Project’, ‘School Footprint Initiative’</td>
<td>The Education and Training Centre for Sustainable Development (CECADESU, under the Ministry of Environment and Natural Resources) currently have a project called “Clean Schools” that seeks to promote good solid waste management within schools. In conjunction, a sustainable consumption workshop aimed at teachers and students is offered, but is not mandatory. Schools need to approach one of the 32 CECADESU offices in the country to request assistance.</td>
</tr>
<tr>
<td>Here and Now! recommendation</td>
<td>Japan</td>
<td>Mauritius</td>
<td>Mexico</td>
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<td>2. <strong>Include</strong> themes, topics, modules, courses and degrees about education for sustainable consumption in established curriculum</td>
<td>ESC topics are integrated in Home Economics education which is compulsory from elementary to senior high school. The textbook is ‘Home Economics’ (Tokyosyoseki 2009). Topic examples are ‘simple life’ and ‘consumer view is needed for producers’. New curriculum guidelines (2009 – 2013) emphasise ‘sustainable society’ and ‘sustainable lifestyle’ in current subjects.</td>
<td>Education and Communication for Sustainable Lifestyles (ECSL) is included as a ‘cross cutting issue’ in the National Curriculum Framework for secondary schools. Curriculum writers are encouraged to include the issue in different subject areas and learning domains. In addition, a national unit was established in 2009 to monitor the implementation of co- and extra-curricular activities in schools (SPC examples are waste disposal, composting, energy saving, fast food). Schools must spend at least 120 minutes per week of teaching time on these co- and extra-curricular activities.</td>
<td>Recent curricular reform (primary 2006 and secondary 2009) states the topics to be addressed in more than one subject, including environmental and consumer education. Some ESC related topics are included as cross-cutting themes (primary and secondary curricula) such as environmental, gender equity, consumer, peace and financial education. States can also develop some content, and Jalisco offers an optional subject called ‘sustainable lifestyles’.</td>
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<tr>
<td>3. <strong>Encourage</strong> research in education for sustainable consumption-related areas</td>
<td>A new Consumer Affairs Agency was launched 1 September 2009. While information on consumer injury and complaints is collected, it is unclear how much research they promote and particularly research on ESC.</td>
<td>Once the curriculum is fully embedded in schools, the teacher training institute (Mauritius Institute of Education) will carry out research in the field of SCP as is being done for new fields of study like ESD. There will also be links made with regional institutions.</td>
<td>The case study material does not mention an explicit role for educational research, particularly for issues related to ESC in the formal curriculum.</td>
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<tr>
<td>4. <strong>Strengthen</strong> connections between researchers, lecturers, teacher trainers and socio-economic actors and stakeholders</td>
<td>There is some limited connection between researchers, teachers and socio-economic actors. A number of forums exist including a recently launched Multi-stakeholder Forum on Social Responsibility for a Sustainable Future to enable more collaborative governance. Initial proposals include work on ‘consumer citizenship education’. Other forums focus on environmental leadership development (ELIAS, EcoLeaD). It is unclear if these forums will address connections between researchers, lecturers, and teacher trainers, but universities are involved.</td>
<td>The National Programme and Action Plan and the National Curriculum Framework have been developed through extensive consultation. The Steering Committee to implement ECSL includes academics, teacher-trainers, and policy makers. Guidelines to write the curriculum have been developed and tested with further training to continue.</td>
<td>The ministries of Environment and Economy are both responsible for some education through their Sectoral Programmes. There appears to be little connection between this voluntary education and the compulsory education run from the Ministry of Education. There are some examples of good connections at the state level. For example, in Puebla, a yearly event based on consumer rights brings together government agencies, civil society organisations and universities. In 2010, 50,000 people were reached through week long activities.</td>
</tr>
<tr>
<td>Here and Now! recommendation</td>
<td>Japan</td>
<td>Mauritius</td>
<td>Mexico</td>
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<tr>
<td>5. <em>Enhance</em> cooperation between professionals from diverse disciplines in order to develop integrated approaches to education for sustainable consumption</td>
<td>Some cooperation has been established between educators in environmental science and consumer affairs. Also collaborations through forums (4 above).</td>
<td>The national vision ‘Maurice Ile Durable’ (Sustainable Mauritius) aligns with the SCP Action Plan and cross cutting educational themes (such as ECSL) in the curriculum. A consultative process used to form policy, then teaching and learning resource materials, and in training.</td>
<td>Apart from the curriculum reform (2 above) which has cross cutting themes and topics to be addressed in more than one subject, there do not appear to be mechanisms to enhance cooperation. Also see 4 above. Voluntary initiatives occur at the state level such as the Interdisciplinary Programme on the Environment at University Iberoamericana, including civil society groups and the Consumer Protection agency.</td>
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<tr>
<td>6. <em>Facilitate</em> teaching and teacher-training which strengthens global, future-oriented, constructive perspectives within education for sustainable consumption</td>
<td>Currently, the subjects under the Teacher Licence law for Home Economics do not include ESC topics - even though some are included in the Home Economics textbook.</td>
<td>The teacher training institute (Mauritius Institute of Education) is in the Steering Committee to implement the ESCL Action Plan. Once the curriculum is fully embedded in schools, modules on SCP will be included in the pre-service and in-service teacher-training programs. The training methods planned are face-to-face, webcasting and videos.</td>
<td>The case study material does not specifically mention teacher training for the formal curriculum. The recent primary and secondary curriculum reform may result in further training. The Education and Training Centre for Sustainable Development (CECADESU) supports schools (with materials, tools, training etc.) in both environmental and basic education but nothing is mandatory.</td>
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</tbody>
</table>
| 7. *Reward* creative, critical, innovative thinking related to education for sustainable consumption | Currently, the educational content is mandated but the method of teaching is not. However, there does not appear to be any explicit reward for creativity. | Teachers adopt the participatory and experiential method of teaching based on a variety of pedagogical approaches:  
- project work  
- field trips  
- debates  
- role play/drama  
- songs/stories/poems  
- simulation  
- group activities  
- initiation to community service. | Much of the content of the formal curriculum is mandated but it does not appear that teaching methods are. |
| 8. *Ensure* that education for sustainable consumption respects the importance of indigenous knowledge and recognizes alternative lifestyles | Some of the topics in the Home Economics text book include different ways of living such as ‘simple life’ and ‘slow and local foods’. | The content of the ESCL program encompasses indigenous knowledge and is being integrated into instructional materials. Some examples are the importance of traditional eating habits, medicines and herbal cure. Endemic gardens are being introduced in schools encouraging the revival of traditional fruits and vegetables. | The skills envisaged for school graduates include such aspects as ‘coexistence’ as well as intercultural ways of living together and diversity. However, there does not appear to be an explicit focus on indigenous knowledge. |
Here and Now!  recommendation

<table>
<thead>
<tr>
<th>9. Foster  intergenerational learning as an integrated aspect of education for sustainable consumption</th>
<th>Japan</th>
<th>Mauritius</th>
<th>Mexico</th>
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<tbody>
<tr>
<td>The voluntary ‘Junior-Eco Clubs’ (see 10. below) involve knowledgeable adult assistants from outside the schools.</td>
<td>In some projects, school children sensitis community members (fisher folks, farmers, consumers) on issues such as fish depletion through indiscriminate fishing, composting methods compared to the use of biocides, and domestic energy-saving.</td>
<td>One of the ‘graduate profile’ skills to be obtained through the formal curriculum is ‘skills for lifelong learning’. Out of school activities and events appear to involve a wider age range of people working and learning together than in the formal curriculum and classroom settings.</td>
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</table>

| 10. Provide opportunities for practical application of theoretical study through social involvement and community service | Voluntary ‘Junior-Eco Club’ activities for elementary and junior high students and adult assistants. Largely environmental activities and not connected to the curriculum. Local governments and private enterprises can be involved. | Teaching methods include field trips, initiation to community service, group activities and project work (7 above). Some school-based projects (1 above) involve actors and organisations beyond the school. | In Mexico, the consumer organisations and civil society groups have been working together in carrying out voluntary education and have been successful in influencing policy in a number of areas. But it does not appear that schools provide this opportunity. |

**Brief summary of country approaches to implementing ESC**

**Japan**

Japan is building on a solid foundation of three national level directions to develop and practice ESC. Firstly, Japan is a strong proponent of Education for Sustainable Development (ESD) and the UN Decade of Education for Sustainable Development (UNDESD) 2005-2014. Secondly, green purchasing by government agencies including schools is mandatory, and thirdly, consumer education has a long history in Japan and is mandated as part of the national school curriculum. ESC is addressed as subtopics of these three themes: ESD, green purchasing and consumer education.

**Mauritius**

Mauritius is implementing an extensive reform including of the educational system. Elements of the reform include a country vision based on sustainability, a SCP Action Plan, a new curriculum framework including the cross cutting issue of Education and Communication for Sustainable Lifestyles, new teaching and learning materials, and new training. The approach is consultative and interdisciplinary. Many initiatives are intended but it is too early to see their effectiveness.

**Mexico**

Mexico has recently been undergoing some curriculum reform for primary and secondary levels. New curricula include ESC-related cross-cutting themes to be addressed in more than one subject. States in Mexico can develop some teaching content and offer some voluntary courses, for instance in ‘sustainable lifestyles’. Consumer and civil society organisations are undertaking some ESC and have had some success in getting policy and legislative change on consumer and equality issues. Annual public events are successful in raising awareness and education, and while they are often
initiated by civil society organisations they draw collaboration from government agencies and universities.

**Critical success factors identified to implement ESC**

Each case study highlights some important factors to implement ESC in their own country. The comparison in this report shows that the progress towards implementing some of the Here and Now! recommendations is less well developed than for others. These factors have been collated below, grouped under three themes.

**National level and institutional factors**

- A strong national vision for a sustainable future based on life quality, and the alignment of national priorities and subsequent strategies, action plans and educational topics
- Ensuring mechanisms to enable institutions, sectors and disciplines to collaborate and integrate materials and activities in schools
- Social and physical infrastructure options need to be available for education to result in behaviour change
- ESC needs to be as rapidly changing as the world is, so up-to-date research supporting ESC is required.

**Civil society factors**

- Practical projects both in and outside of schools, should involve other societal actors and organisations to support the teaching topics in schools
- Considerable ESC-related knowledge and expertise resides in the community and in civil society organisations, and should be harnessed.

**Teaching and school factors**

- Having the ESC-related topics in the curriculum examinable, so that they remain important for both teachers and students
- Having teachers trained in the ESC-related topics
- ESC materials need to be developed and available, including in text books that are ideally both compulsory and free
- ESC-related topics should be presented in teaching and learning materials in ways that are of direct concern to students and relevant to their daily lives
- A variety of pedagogical approaches is required to add to the interest of students and to the effectiveness of the teaching
• Delivering ESC requires going beyond traditional environmental and consumer protection concerns

• Delivering ESC requires going beyond traditional awareness raising and information provision.
Conclusion

The comparison shows that despite very different country histories and circumstances all three countries are making progress in implementing ESC. Most of the *Here and Now!* recommendations are being carried out in some way. The approaches taken vary, whether looking at national and sub-national government priorities and policies, curriculum development, teaching materials and methods, training, or the involvement of civil society and academic organisations.

The case study authors have all made observations about the barriers currently being faced, lessons learned from experience and in some cases they have made suggestions for the future. This report identifies some critical success factors for implementation and they align with the recommendations made in *Here and Now!* Despite the progress being made, there is significant work to do to implement ESC as an essential element for a sustainable future.

This brief analysis shows that implementing ESC is a challenge for countries. Policy and decision-makers in countries that are working on implementing ESC can find inspiration and expertise in other countries that are going through similar experiences. There is scope for international collaboration and support to assist countries in implementing ESC, and a strong ESC theme or programme in the 10-Year Framework of Programmes on Sustainable Consumption and Production would give strength to the international policy process.

It is in this spirit of learning and collaboration that the authors of the individual case studies have offered their contact details to be published in this report. Please get in touch with them if you have any questions regarding their countries.

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References

Note: The references used in each country case study are in the respective case studies. The references used in this document are listed below.

EcoLeaD - Environmental Consortium for Leadership Development. See www.eco-lead.jp

ELIAS, Environmental Leadership Initiatives for Asian Sustainability. See www.env.go.jp/policy/edu/asia

Marrakech Process. See http://esa.un.org/marrakechprocess/


PERL. Partnership for Education and Research about Responsible Living. See www.perlprojects.org

Task Force on Education for Sustainable Consumption led by Italy. See www.unepetc.org/scp/marrakech/taskforces/education.htm

