

Training Course

Climate Change Education Inside and Outside the Classroom

Hotel Tiéti, Poindimié, New Caledonia
27-30 October, 2014

REPORT ON THE TRAINING COURSE



MINISTRY OF FOREIGN
AFFAIRS OF DENMARK



United Nations
Educational, Scientific and
Cultural Organization



Japan
Fundación Tróica



Background

Between January and May 2013, a training course for secondary school teachers on “Climate Change Education Inside and Outside the Classroom” was developed by Dr Lausanne Olvitt, Senior Lecturer in the Environmental Learning Research Centre, Rhodes University and Dr Gillian Cambers, Co-Director of the Sandwatch Foundation. The preparation of this course was supported by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) through the Section for Small Island Developing States and the Section for Education for Sustainable Development. The course was developed in the context of UNESCO’s Climate Change Intersectoral Platform project “Climate Change Education for Sustainable Development in Africa and Small Island Developing States (SIDS) and Coastal Regions: Building excellence through teacher education”.

The course combines elements from UNESCO’s *Climate Change Education for Sustainable Development Course for Teachers* with the Sandwatch programme’s methodology (measure, analyse, share and take action - MAST) and has been developed specifically for educators in African coastal regions and Small Island Developing States (SIDS). These regions are especially vulnerable to the impacts of climate change and the challenges it raises for the wellbeing of people and the ecosystems on which they depend. The course supports a range of educators, most especially secondary school teachers, but also teacher educators, curriculum developers and community educators, to teach about climate change in ways that reflect the principles of education for sustainable development (ESD).

The objectives of the course are to:

- Stimulate and support the integration of education for sustainable development (ESD) approaches in pre- and in-service teacher education courses, in cross-curricula classroom practice, and in non-formal (community-based) learning programmes.
- Support educators to take local, contextualised action to mitigate and especially to adapt to climate change.

The aims of the course are to:

- Introduce educators to the MAST (measure, analyse, share and take action) application of ESD in the context of climate change.
- Incorporate rigorous scientific knowledge and ethical reflection into climate change adaptation and mitigation approaches and measures in small islands and coastal regions.
- Provide an outline course and supporting documents which educators can use to develop Climate Change ESD programmes, activities or materials specific to their professional and social-ecological context.

This report describes the fourth roll-out of the course dedicated to the Pacific region, which took place at Hotel Hotel Tiéti in Poindimié, New Caledonia from 27 - 30 October 2014. The course has already been piloted for the African region at Rhodes University, Grahamstown, South Africa, from 8-11 October 2013, and at Hotel PestanaTropica, Praia, Santiago, Cape Verde, from 20-23 November 2013, as well as for the Caribbean region at Hotel Bellevue, Boca Chica, Dominican Republic, from 26 – 29 May 2014. After having been piloted in these 3 regions, the course will be finalised and will be made available electronically.

Participants

The 28 participants came mainly from SIDS in the Pacific Ocean, the Maldives in the Indian Ocean, and from New Caledonia and comprised primary, secondary and tertiary level teachers, school principals, teacher trainers, educators and curriculum developers from ministries of education, and community educators from non-governmental organisations (NGOs). The list of participants is presented as Annex 1.

Agenda

The course consists of three modules and was delivered over a four day period. Module 1 presents some local and global perspectives on climate change and its impacts, as well as giving a background to climate change science and ESD. Module 2 introduces the participants to the Sandwatch approach and includes a field trip which allows participants to investigate past changes and future climate change scenarios at a local beach location. Module 3 provides an opportunity for participants to build on the materials and activities presented and develop an educational intervention that they will undertake on return to their home countries. The agenda for the four day course is presented as Annex 2.

Delivery of the Course The course was delivered in English, with documents and power point presentations in English and French. Whispering translation in French was also provided. An article on the course published (in French) in the national newspaper is shown in Annex 5.

Traditional gift giving ceremonies were organized with the local Chiefs as well as with the President of the North Province to welcome and close the workshop.

The training course was opened on 27 October by Ms Khalissa Ikhlef, Associate Climate Specialist, Small Islands Indigenous Knowledge Section, UNESCO. She welcomed the participants and thanked the workshop hosts from the North Province of New Caledonia, who also sponsored part of the workshop.



Traditional gift giving ceremony with the local Chiefs

As part of the course introduction, Gillian Cambers described some of the ongoing climate change education activities ongoing in the Pacific region being led by national governments, regional and international organisations. This course aims to build on these existing and ongoing efforts and to provide a perspective on climate change education both inside and outside the classroom and through the lens of education for sustainable development.

Following this, the participants introduced themselves and outlined their expectations for this course. This was followed by a circle sharing activity during which participants had the opportunity to share their personal experiences and knowledge of climate change.



The circle sharing activity proved a useful way for participants to exchange views on climate change

After the presentations and activities relating to climate change impacts and ESD, there were some interesting discussions about the types of education learners need to cope with climate change. In particular, participants emphasised the need for:

- A holistic approach to climate change education whereby climate change is integrated into all aspects of the curriculum and at all levels. (There was also discussion that this course, while initially designed for secondary school teachers, could be adapted for all levels of teaching).
- Open ended and investigative education
- An ethical and proactive approach to climate justice
- A focus on the school and home environment

Module 1 concluded with presentations and activities on climate change science and distinguishing between adaptation and mitigation.

During the delivery of module 2 the context changed from the global to the local level. After a presentation and activity relating to the Sandwatch approach, participants were informed about past changes in the beach at Poindimié by Mr Patrick Afchain, Engineer in charge of the Coastal Investigation Project for the North Province of New Caledonia. He presented some useful information comparing the beach in 1897 with the beach in 2006. The map/photo comparison showed there had been little change in the size of the beach. This finding was further discussed (and in some cases challenged) by some local residents who came on the morning of 29th October to share with workshop participants their observations over recent decades.

The field trip to Poindimié Beach, adjacent to the Hotel Tiéti, took place on 29th October, and the participants divided into three groups to study different sections of the beach. They then observed and measured different aspects of the beach to gain an insight into past and future changes. On return from the field trip, participants worked in small groups to prepare key statements about how the beach had changed in the past and prepared scenarios and levels of confidence into how the beach might change in the future as a result of climate change.



Field trip activities: Measuring the beach

The third module was presented on the final day of the workshop and after a presentation and discussion contextualising the activities from Modules 1 and 2, participants worked individually with a planning template to prepare a specific educational intervention that would be implemented on their return home. A brief outline of each participant's proposed intervention is presented as Annex 3.

Course Evaluation

At the end of the course, participants completed an evaluation and the results are presented as Annex 4. The questions which related to the organisation, content, relevance and delivery of the course were rated high to very high, between 5 and 7 (the top score being 7) by more than 80% of the participants. In response to the question relating to the participants' competence to implement the education intervention on their return home, 90% of the participants rated the course high to very high (5-7).

Some constructive comments on how the course could be improved are presented below:

- The course could have benefited from “....more demonstration on how you can apply aspects of the course into different areas of education.”
- “The workshop only concentrated on the use of scientific knowledge in relation to climate change. It might be better if another workshop is particularly done in the Pacific on the use of indigenous knowledge in relation to climate change.”
- The sharing of ongoing teaching practices in individual countries “... would have helped us learn from each other create constructive dialogue among the participants.”

Annex 1
Training Course
Climate change education inside and outside the classroom
Hotel Tiéti, Poindimié, New Caledonia

27-30 October, 2014

	Names	Departure Country	Title / Position	e-mail addresses
Ms	Katherine Tatari MITCHEL	Cook Islands	Teacher - Cross Curricular Delivery Years 7-11, HOD Social Studies and Peu Maori	tatari.mitchell@nukutere.edu.ck
Mr	Orauamai I Te Maki PAIO	Cook Islands	Head of Department of Agriculture and Horticulture	sopaio@oyster.net.ck
Ms	Yolanda JOAB	Federated States of Micronesia	Senior Trainer and Head of Sub-Office at International Organization for Migration-Micronesia (IOM).	yjoab@iom.int
Mr	Mesake RAWAIKELA	Fiji	Education Lecturer	rawaikela_m@usp.ac.fj
Mr	Sumiran Deo PRATAP	Fiji	Principal Education Officer, Suva District	sumiran.pratap@govnet.gov.fj
Ms	Thérésa, Lorenza M'BOUERI	France/New Caledonia	Former Director, Tourism office, New Caledonia	lorenzamboueri@live.fr

Mrs	Ane TEIAUA	Kiribati	Professional Development Coordinator	ane.teiaua@gmail.com
Mr	Teeta KABIRIERA	Kiribati	Curriculum Development Officer for Science, CDRC, Ministry of Education	teetabm@gmail.com
Ms	Aminath MOHAMED	Maldives	Science Curriculum Developer	joo122@hotmail.com
Ms	Hannah LAFITA	Marshall Islands	Director of Curriculum, Instruction and Assessment, Ministry of Education	lafitahannah@gmail.com
Ms	Sharon Dawn KAM	Nauru	Early Curriculum Manager, Education Department	shazkam39@gmail.com
Ms	Maryanne PalemiaDeve TALAGI	Niue	Campus Co-ordinator, USP	talagi_ma@usp.ac.fj
Mr	Tevita Robertson FAKAOSI	Tonga	In Country Coordinator for Tonga, Pacific Centre for Environmental and Sustainable Development, USP	lopeti@gmail.com
Ms	Lorraine Alene TELLEI	Palau	Teacher of Math, Science, Music, Art and Health	orrakl@palaunet.com
Ms	Laumata Pauline MULITALO	Samoa	School Teacher, Biology	avelecoll@lesamoa.net or fasipopo@hotmail.com
Mr	Tamasoalii SAVAISE	Samoa	Teacher and Curriculum Officer	t.saivaise@mesc.gov.ws

Mr	Moses ASITARAU	Solomon Islands	In-Country Project Coordinator (ICC), Pacific Centre at USP for Environment and Sustainable Development and European Union Global Climate Alliance Project	moses.asitarau@usp.ac.fj
Ms	Betty VAVE	Tuvalu	Acting School Supervisor	bettyresture@yahoo.com
Mrs	Elvie TAMATA	Vanuatu	In-service Unit Manager teaching development to teachers.	etamata@vanuatu.gov.vu
Ms	Annette THEOPHILE	Vanuatu	Science Lecturer at Ministry of Education of Vanuatu. Coordinator of second chance training at USP. Curriculum writer in science and health	a.theophile@ifev.edu.vu
Mr	James MELTERES	Vanuatu	National Secondary Curriculum Coordinator at the Ministry of Education	jmelteres@vanuatu.gov.vu
Mrs	Lady POUYE	New Caledonia	Chief, Sustainable Development Department, Province Nord	l.pouye@province-nord.nc
Mr	Ludovic LEVY	New Caledonia	Boarding school educator, Province Nord	ludokasspa@yahoo.fr
Mr	Gilles REISS	New Caledonia	Department of education (PN)	g.reiss@province-nord.nc

Mrs	Audrey HENRY	New Caledonia	Chief training centerTouho (PN)	a.henry@province-nord.nc
Ms	Vanessa MONTAGNAT	New Caledonia	Department of education, government of New Caledonia	vanessa.montagnat@gouv.nc
Mr	Patrick AFCHAIN	New Caledonia	Engineer in charge of Coastal Plan for Province Nord	
Mr	Julien BARRAULT	New Caledonia	Environnemental association (PN)	cie-nord@lagoon.nc
Ms	Khalissa IKHLEF	France	Associate Programme Specialist, Small Islands and Indigenous Knowledge Section, UNESCO	k.ikhlef@unesco.org
Ms	Gillian CAMBERS	Fiji	Co-Director, Sandwatch Foundation	g_cambers@hotmail.com
Ms	Lausanne Laura OLVITT	South Africa	Senior Lecturer, Environmental Learning Research Centre, Rhodes University	L.Olvitt@ru.ac.za

Annex 2: Agenda



Training Course

Climate change education inside and outside the classroom
Hotel Tiéti, Poindimié, Hotel Tiéti, Poindimié, New Caledonia
27-30 October, 2014

Module 1 Detailed Agenda

Day 1

8.30 - 10.00 Course Orientation

- Welcome and housekeeping
- Group Introductions
- 1.1 Presentation: Course Overview

10.00 - 10.20 Morning Tea

10.20 - 12.30 Climate Change: Local and Global Perspectives

- 1.2 Activity: Circle Sharing
- 1.3 Activity: Some Climate Change Stories
- 1.4 Handout: Climate Change Impact Descriptions for Africa & SIDS

12.30 - 1.30 Lunch

1.30 - 3.30 ESD as a response to climate change in Africa and SIDS

- 1.5 Presentation: ESD as a response to climate change in Africa & SIDS
- 1.6 Handout: An Introduction to Education for Sustainable Development
- 1.7 Handout: Climate Change & Education for Sustainable Development
- 1.8 Handout: The Focus of Climate Change Education
- 1.9 Activity: Educational Approaches

3.30 - 3.45 Afternoon tea

3.45 - 4.30 Future climate change scenarios?

- 1.10 Activity: Future Scenarios

4.30 - 5.00 Wrap-up Day 1, looking ahead to Day 2

Day 2

- 8.30 - 9.00** Group discussion on Day 1 matters
- 9.00 - 10.00** Basic Sciclimat change
- 1.11 Presentation: Climate Change Basics
 - 1.12 Handout: Climate Change Basics
- 10.00 - 10.20** Morning Tea
- 10.20 - 12.30** Climate Change: adaptation, mitigation
- 1.13 Activity: Adaptation or mitigation?
- 12.30 - 1.30** Lunch

End of Module 1

Module 2 Detailed Agenda

Day 2

- 1.30-3.00** Exploring Sandwatch
- 2.1 Presentation: Exploring Sandwatch
 - 2.2 Activity: Exploring Sandwatch Small Group Discussion
- 3.00-4.15** Field Trip Preparations
- 2.3 Notes: Field Trip Logistical Guidelines
 - 2.4 Presentation: Field Trip Preparations (this includes information about the activities to be undertaken during the field trip)
 - 2.5 Activity: Field Trip Preparatory Work
- 7.30-9.00** Evening Activity (Optional)
- Demonstration of Sandwatch International Database
 - Review selected Sandwatch training videos that cover different types of measurements
 - Participants share other beach-related and environmental activities in which they have been involved.

Day 3

- 8.00-2.00pm** Field trip: Travel to/from beach location, complete field activities, picnic lunch
In small groups and at different sections of the beach:
- Observation, record taking, preparation of a group sketch map and discussion of issues at the beach section (~1.5 hours)
 - Conduct the pre-prepared survey of residents/beach users' views of how the beach has changed (~1 hour)
 - Conduct beach width measurements at 3 places along the selected beach length (~30 minutes)
 - Picnic time (~1 hour)
- 2.30-4.30** Reviewing Past Changes& Building Future Scenarios

- 2.6 Presentation: Reviewing Past Changes & Building Future Scenarios
- 2.7 Activity: Reviewing Past Changes & Building Future Scenarios Small Group Discussion

4.30-5.00 Using the Sandwatch International Database

- 2.8 Presentation: Sandwatch International Database
- 2.9 Activity: Using the Database to Enter Field Trip Data

End of Module 2

Module 3 Detailed Agenda

Day 4

8.30 - 10.00 Preparing a classroom activity

- 3.1 Presentation: Lesson Planning for Climate Change
- 3.2 Handout: Case Studies of Classroom-based Climate Change and Environmental Interventions

10.00 - 10.20 Morning Tea

10.20 - 11.00 Choosing an Educational Intervention

- 3.3 Activity: Choosing an Environmental Intervention

11.00 – 12.00 Developing your educational intervention

- 3.4 Activity: Developing your education intervention
- 3.5 Handout: Planning template

12.00 - 1.00 Lunch

1.00 - 3.30 Developing your educational intervention continued

- 3.6 Handout: Guidelines for Post – Course Feedback

3.30 - 3.45 Evaluation

3.45 –4.00 Closing

End of Module 3



Annex 3 Summary of Proposed Education Interventions

Country	Participants	Nature of the Planned Intervention
Cook Islands	Katherine Tatari MITCHEL	Use the Sandwatch approach with high school years 7-11 to understand more about waste management on beaches
Cook Islands	Orauamai I Te Maki PAIO	With Form 7 students to study the water quality and riparian strip along the waterways
Federated States of Micronesia	Yolanda JOAB	Prepare 5 lessons to review pattern of landslides in Kosrae, read landslide comic, review climate change rainfall projections, field trip and conduct mini-landslide experiment
Fiji	Mesake RAWAIKELA	Integrate aspects of the CCESD workshop into teacher training (This will depend on the new curriculum which is at present being reviewed by the Ministry of Education).
Fiji	Sumiran Deo PRATAP	Hold a workshop with curriculum development unit officers to integrate climate change into all aspects of the curriculum and not just the one or two being used now,
Kiribati	Ane TEIAUA	Teacher Professional Development training on ESD (including the Sandwatch approach) as a response to climate change.
Kiribati	Teeta KABIRIERA	Hold a 1-2 day workshop with curriculum developers for years 5-6 to include elements of climate change and coastal erosion in curriculum materials (in a framework of ESD and Sandwatch)
Maldives	Aminath MOHAMED	Prepare a unit plan on the environment for grade 3 teachers which teachers can use to teach topics like beach habitats and beach erosion in a practical manner adopting the pedagogical dimensions in the national curriculum.
Marshall Islands	Hannah LAFITA	Meet with Curriculum Science Specialist to organise a 2-days workshop with the primary school science teachers to introduce and practice the Sandwatch (MAST) approach
Nauru	Sharon Dawn KAM	Together with curriculum teachers at primary and secondary levels make a presentation on the Sandwatch MAST approach.
Niue	Maryanne PalemiaDeve TALAGI	Work with a community to help them prepare for and recover from the impacts of a natural disaster, e.g. cyclone and drought.
Tonga	Tevita Robertson FAKAOSI	Train community trainers on the MAST approach to be responsible citizens in relation to waste management and climate change
Palau	Lorraine Alene	Scientific experiment on ocean acidification with primary school class.

Country	Participants	Nature of the Planned Intervention
	TELLEI	
Samoa	Laumata Pauline MULITALO	Work with science department teachers so that they have a better understanding of climate change
Samoa	Tamasoalii SAVAISE	Train science and geography teaches and year 9 students on the Sandwatch (MAST) approach
Solomon Islands	Moses ASITARAU	Train community trainers on the MAST approach to be responsible citizens in relation to waste management
Tuvalu	Betty VAVE	At a workshop for school leaders and teachers in January 2015, for years 7-13, improve lesson planning relating to climate change including scientific basics, field trip, identification of a topic, and preparation of a lesson plan
Vanuatu	Elvie TAMATA	Integrate aspects of ESD into the teacher training course for Year 1.
Vanuatu	Annette THEOPHILE	Work with 3 rd year science trainees to collect traditional knowledge relating to climate change in their villages and to relate scientific knowledge with traditional knowledge
Vanuatu	James MELTERES	With teachers and curriculum writers integrate aspects of the CCESD course to achieve better learning
New Caledonia	Audrey HENRY	Start a Sandwatch programme on one beach and as the “taking action” take erosion measurements and plant mangroves behind the beach
New Caledonia	Vanessa MONTAGNAT	One week training for teachers using an investigative approach and the MAST approach, and incorporating ridge to reef concepts, in July 2015. Initial activity will be to meet with colleagues and give a presentation.
New Caledonia	Gilles REISS, with several other participants	Several of the New Caledonian participants proposed to collaborate to hold field classes in the North Province, mainly the Koumac islets, to i) use investigative MAST approach with different habitats from the coral reef to the forest, and ii) develop targeted pedagogical tools by combining this CCESD course with Agenda 21 to further raise awareness and train teachers and NGOs on climate change adaptation and the principal of sustainable development

Annex 4 Course Evaluation

Twenty-five (25) participants completed the evaluation form.

The course was well structured	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The course was poorly structured
--------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	----------------------------------

6 people gave the highest rating of 7
 6 people rated 6
 4 people rated 5
 3 people rated 4
 5 people rated 3
 1 person rated 2

The activities gave me the confidence that I can apply the knowledge in my work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The activities did not give me confidence that I can apply the knowledge in my work
---	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	---

5 people gave the highest rating of 7
 11 people rated 6
 5 people rated 5
 2 people rated 4
 2 people rated 3

I found the Sandwatch Manual useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I did not find the Sandwatch Manual useful
-------------------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

13 people gave the highest rating of 7
 5 people rated 6
 6 people rated 5
 1 person rated 4

I learnt things that will be useful to my classroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I did not learn things that will be useful to my classroom
---	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

9 people gave the highest rating of 7
 9 people rated 6
 4 people rated 5
 1 person rated 4
 (2 people left this question blank)

The facilitators made the material enjoyable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The facilitators did not make the material enjoyable
--	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

5 people gave the highest rating of 7
 8 people rated 6
 5 people rated 5
 7 rated 4

I am confident that I can implement the activity I planned in Module 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I am not confident that I implement the activity I planned in Module 3
--	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

12 people gave the highest rating of 7
 7 people rated 6
 5 people rated 5
 1 person rated 4

I would recommend this course to my colleagues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I would not recommend this course to my colleagues
--	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--

13 people gave the highest rating of 7
 6 people rated 6
 4 people rated 5
 1 person rated 4
 1 person rated 3


Do you have any further comments or feedback about any aspects of the training?-

- Financial welfare of participants be improved next time
- Thank you!!
- Completing three modules in four days is too short. No too much time for questioning. Please next time, have this kind of training for 2 weeks. Thank you.
- Use of adult learning principles. More demonstration on how you can apply aspect of the course into different areas of Education.
- Lausanne has been great with her presentation considering her lack of knowledge of Pacific Island states.
- We needed more time on some activities but due to time constraints things seemed to be in a rush.
- Incidental allowances should be paid to participants prior to their departure from countries. Some of us stopped for transit for more than 5 hours but didn't have anything to eat because of lack of cash.
- The sharing of what we do at our place could be shared a bit more so we can learn from each other. The strategies that we follow so it will help the participants to communicate and it will create dialogue constructive dialogue among the participants. The facilitators were good in general, enjoyed the workshop. Thank you.
- Copies of notes and presentations could be given on a flash/USB. Everything is fine/flexible and not too stressful to participants. Keep up the good work.
- It would be much better if the workshop also covers the use of indigenous knowledge in relation to climate change so that participants can share all these knowledge to their various communities. The workshop only concentrated on the use of scientific knowledge in relation to climate change. It might be better if another workshop is particularly done in the Pacific on the use of indigenous knowledge in relation to climate change.
- Translation takes up time.
- Sandwatch can be translated into waterwatch/coastal watch.
- Welfare issues (funding) could have been better.
- A difficult area with language/currency/communication problems. Better logistics should have been provided.

- I found that in the same way doctors make the worst patients, that teachers/educators make the worst students. I felt that sometimes the facilitators lost control and some parts weren't well planned for or organized such as when dialogue needed to be translated from English to French or vice versa. Wanted to learn more science about climate change rather than just the basics.
- I was looking forward to learning all of Sandwatch (cause it's new) including use database but I learnt from other participants that we did skipped other activities concerning Sandwatch. Plus the language thing (French → English) was a turn off and very frustrating especially when I wanted to learn more about the database and Sandwatch.
- Need at least one day before the workshop and after the workshop for health reasons.
- The arrangement for the workshop needs improvement. There should have been more groundwork conducted prior to the training in the Pacific islands. Per diems were always paid to participants whenever there is such a workshop. The food was poorly arranged, there should have been better option available.
- The travelling arrangements could have been done better by allowing time for participants to rest before the training and after the training. Resource materials could be better prepared before the workshop with hard copies and soft copies for participants.
- Thoroughly enjoyed the introduction of the workshop. Group work activities were enjoyable, learning from each other. Other than other hiccups (travelling expenses) it was well-implemented and facilitated. Merci beaucoup!

FRENCH:

- Besoin de traduction simultanée plus efficace. *{Need more efficient simultaneous translation}*.
- pb de Traduction/ Anglais/Francais.
- C'était dommage que l'on n'ait pas eu de traduction simultanée en Français. *{It was a pity that we have not had simultaneous translation in French}*
- C'était vraiment dommage d'avoir compris la moitié des choses à cause du langage (Anglais). C'était pratiquement impossible d'échanger des idées avec nos voisins du Pacifique. *{It was a shame I understand half the things because of the language (English). It was virtually impossible to exchange the ideas with our Pacific neighbours.}*
- Faire plus de Terrain/ possibilité d'approfondir la théorie.

<p>La phrase</p> <p>« Après la consultation des entreprises, les travaux vont durer huit à douze mois. »</p> <p>Alphonse Poinine, maire de Touho, à propos des travaux de l'ancien dépôt prévus pour fin 2015. Page 22</p>	<p>Le chiffre</p> <p>20</p> <p>C'est l'âge du Cemaïd, à Lifou. L'anniversaire sera fêté demain. Page 25</p>	<p>Koné</p> <p>A flot pour la régate des touques</p> <p>Page 23</p>	
---	---	---	---

Brousse et îles

■ **Poindimié.** Des outils pour aborder le thème du changement climatique à l'école

Un climat d'études

La Section des petites îles et des savoirs autochtones de l'Unesco organise cette semaine une formation sur l'adaptation au changement climatique, en partenariat avec la province Nord. Treize pays au total y participent.



La formation comporte des parties théoriques en salle à l'hôtel Tiéti, mais aussi des moments de mise en pratique de la méthode Sandwatch, sur la plage de Tiéti.

Une trentaine de participants de treize pays suivent actuellement une formation sur l'adaptation au changement climatique. Ils sont principalement en exercice de responsabilité dans le secteur éducatif, du développement durable, ou enseignants. Parmi eux, se trouvent huit personnes de Nouvelle-Calédonie : six agents de la province Nord, une représentante de la Denc* et un du CIE**.

Cette formation de quatre jours est assurée par deux expertes : les docteurs Lausanne Olivett, professeure d'université en Afrique du Sud, et Gillian Cambers, directrice de la Fondation Sandwatch, en poste au département du changement climatique à la CPS à Suva.

Inquiétude. Elle vise à aider les enseignants à aborder le thème du changement climatique à l'intérieur et à

l'extérieur des salles de classe. « Elle apporte un cadre conceptuel à l'éducation au changement climatique en vue du développement durable, avec des exercices pratiques qui peuvent avoir lieu en classe et à l'exté-

« C'est intéressant de voir ce que propose l'Unesco comme outils pédagogiques sur ces thématiques. »

rieur, explique Khelissa Ikhef, spécialiste de programme à la section de l'Unesco concernée. Cette formation appréhende l'impact global aussi bien que local du changement climatique. Elle est tournée vers l'action et s'appuie sur l'approche Sandwatch-MAST (mesurer, analyser, partager agir, NDLR) qui concerne le littoral. « Mon travail est de former les ensei-

gnants. Indique Betty Vava, du département de l'éducation de Tuvalu. Je vais transmettre ce que j'apprends ici en l'intégrant dans les programmes scolaires. Notre archipel est déjà très impacté par le changement climatique.

Quand il y a des marées hautes, l'eau remonte au milieu des routes. »

A ce rythme, selon elle, « les Tuvalu n'existeront plus dans un peu plus de cinquante ans. »

« Nous sommes déjà des réfugiés climatiques. Beaucoup d'habitants ont déjà émigré en Nouvelle-Zélande et on s'inquiète de savoir dans quel pays on va aller. »

Vanessa Montagnat, conseillère pédagogique en charge de l'enseignement des sciences à la Denc, a été invitée par la province Nord à participer à la formation. « Je

suis très satisfaite de cette formation. Tout d'abord pour réactualiser les connaissances scientifiques sur le changement climatique et pour pouvoir échanger sur les préoccupations des petits pays insulaires du Pacifique. »

Echanges. Les programmes scolaires relèvent de la compétence de la Denc. Il s'agit donc forcément d'une préoccupation pour sa représentante, Vanessa Montagnat : « C'est intéressant de voir ce que propose l'Unesco comme outils pédagogiques sur ces thématiques. Les outils présentés sont surtout pour le secondaire, il va falloir essayer de les adapter au primaire. Ensuite, on va découvrir une méthode sur le terrain appelée Sandwatch [surveillance des plages, NDLR]. Là aussi, il faudra voir s'il y a possibilité de la transposer au primaire. Il est aussi intéressant de discuter avec

les personnes du secteur éducatif des autres pays insulaires. De voir comment eux ont réussi à intégrer cette démarche d'éducation au développement durable dans leurs programmes scolaires. »

Enfin, Julien Barrault, responsable du CIE dans le Nord, relève : « C'est intéressant au niveau des échanges avec les autres pays du Pacifique par rapport à cette problématique du réchauffement. On peut voir que c'est vraiment significatif dans certaines îles, ça a vraiment des impacts importants de déplacement de population. Ce n'est pas nouveau, mais ce sont des gens qui le vivent. Après, notre objectif, va être de voir la façon de retransmettre tout ça, plutôt au niveau collège. »

Xavier Heyraud

*Denc: Direction de l'enseignement de la Nouvelle-Calédonie

** CIE: Centre d'initiation à l'environnement

■ Le chiffre

13

C'est le nombre de pays insulaires du Pacifique et de l'océan Indien représentés à cette formation : Palaos, Kiribati, Vanuatu, Îles Marshall, Tuvalu, États fédérés de Micronésie, Salomon, Nauru, Fidji, Îles Cook, Niue, Nouvelle-Calédonie et les Maldives.

Trois objectifs pour la formation

– Offrir un plan de formation et de la documentation que les enseignants peuvent utiliser pour développer des programmes d'éducation au changement climatique en vue du développement durable, des activités ou des supports adaptés à leur contexte professionnel et socioécologique.

– Introduire des connaissances scientifiques solides, des connaissances locales et une réflexion éthique à l'éducation au changement climatique qui peuvent être adoptées pour les petites îles et les régions côtières.

– Présenter aux enseignants les pédagogies MAST (mesurer, analyser, partager, agir) et autres méthodologies tournées vers l'action, afin qu'ils puissent enseigner le changement climatique et d'environnement littoral.