

**REPUBLIC OF THE MARSHALL ISLANDS  
MINISTRY OF EDUCATION**

**ONE LAPTOP PER CHILD  
PILOT PROJECT**

**(Addendum to the Comprehensive Technology Plan)**

**November 30, 2010**

**REPUBLIC OF THE MARSHALL ISLANDS (RMI)**  
**MINISTRY OF EDUCATION (MOE)**  
**ONE LAPTOP PER CHILD (OLPC) PILOT PROJECT**

**[Addendum to the MOE Comprehensive Technology Plan (MOECTP)]**

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## ACKNOWLEDGEMENTS AND REFERENCES

Much of the information included in this plan comes from One Laptop per Child sources including:

Assessment Overview of One Laptop per Child Projects (Zehra Hirji, Barbara Barry, Robert Fadel, and Shannon Gavin, One Laptop per Child Foundation Learning Group, September 2010.)

Ministry of Education (MOE). (2010). MOE Comprehensive Technology Plan (MOECTP). Majuro, Marshall Islands: MOE.

OLCP Deployment Guide for administrators, educators and project managers (July 2009, David Cavallo and Edgar Ceballos, downloaded from [wiki.laptop.org/go/Deployment\\_Guide](http://wiki.laptop.org/go/Deployment_Guide) on November 15, 2010)

OLPC Oceania: One Laptop per Pacific Child (information downloaded from <http://olpcoceania.blogspot.com> on November 12, 2010)

OLPC Oceania Workbook for Education Officers (June 2010, David Leeming, Leeming International Consulting, Commissioned by International Telecommunication Union.)

Planning for an OLPC Oceania Country Trial in RMI (Jointly prepared by Ian Thomson, Secretariat of Pacific Community and Michael Hutak, OLPC Oceania, November, 2010.)

Supporting OLPC Oceania: A multi-stakeholder partnership (OLPC Foundation and the Secretariat of the Pacific Community. September 2008, downloaded from [http://wiki.laptop.org/go/OLPC\\_Oceania](http://wiki.laptop.org/go/OLPC_Oceania) on Nov 12, 2010))

Technical Assistance to Kosrae Department of Education, FSM: Training of Trainers for Kosrae's One Laptop Per Child Program (June 2010, David Leeming, Honiara, Solomon Islands.)

## I. INTRODUCTION

### A. One Laptop per Child Oceania (OLPC-Oceania)

OLPC is an international non-profit effort to develop and deploy low-cost laptop computers to children in developing nations world wide so that they have increase learning opportunities and become both technologically literate and appropriately participate in the larger world community. OLPC's mission is to "to create educational opportunities for the world's poorest children by providing each child with a rugged, low-cost, low-power, connected laptop with content and software designed for collaborative, joyful, self-empowered learning." OLPC has deployed over 2,000,000 computers in approximately 50 countries, including 12 Pacific Island nations. "Country programs" are coordinated through education agencies but incorporate a high level of involvement of children, parents and families, and communities since the laptops do "belong" to the children.

The OLPC Foundation Learning group recently released the Assessment Overview of OLPC Projects which summarizes the findings of numerous monitoring and evaluation reports from both pilot and full-implementation efforts across the globe. In general it was determined that, although there are currently no in-depth longitudinal assessments of the program. The OLPC efforts have:

- Positively impacted childhood education overall with computers being used both at home and in school.
  - Led to increased student achievement particularly in reading and mathematics but further study is needed in this area.
  - Resulted in increased student engagement in learning both at school and at home.
  - Led to increased access to reading materials and other learning opportunities, particularly through XO's digital library.
  - Led to improvements in student school attendance.
  - Built student's confidence and sense of personal empowerment.
  - Increased parent and community involvement with the school and schooling.
  - Provided the opportunity for MOEs and teachers to develop and share localized materials and resources including first language materials.
  - Been most successful with trainers, teachers, and students have adequate training to fully take advantage of the potential/opportunities the laptops and XO provide.
  - The implementation team and at least one person at each site has the capacity and knowledge to solve "routine" technical challenges that may arise.
  - The greatest impact when "regular" internet access is available.
- (Zehra Hirji et al, 2010)

OLPC-Oceania coordinates OLPC in the Pacific Island nations. In 2007, the leaders of 22 Pacific nations cited OLPC in the Pacific Island Forum's regional strategic plan, *The Pacific Plan*, and resolved to test the XO in their primary schools and education systems. Under the auspices of the Pacific Plan, the OLPC Foundation and the Secretariat of the Pacific Community are working across the Pacific to support the

deployment of One Laptop per Pacific Child. The pilot studies are underway, and in some cases completed in Nauru, Niue, Solomon Islands, Papua New Guinea and Vanuatu. Since then OLPC projects have been undertaken or are planned in Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, Palau, Samoa, Tokelau, Tonga and Tuvalu. The OLPS efforts had built on the related satellite-based Pacific Rural Internet Connectivity System (RICS) project launched in 2007. RICS which is providing low-cost VSAT satellite broadband Internet in an effort to bridge the digital and communication divide between the urban and rural and remote areas in the Pacific. The four intended outcomes of OPLC – Oceania/SPC effort are:

1. strengthened national education programs for K-6 children;
2. increased access to knowledge, skills, technology and information for children, their families and communities;
3. increased capacity of countries and communities to support basic education and the delivery of better educational outcomes; and,
4. more effective, efficient and accountability region-wide efforts on education for sustainable development.

OLPC-Oceania’s approach to deployment begins with a pilot phase in which partners and stakeholders work together to solve implementation challenges, develop and carry out monitoring and evaluation activities, and gradually scale up as appropriate. During the pilot, OLPC will only reach its full potential if there is: the development of localized digital content, adequate teacher preparation, and network and infrastructure development. Implementation efforts must also be mindful of the fact that bringing new technology and access to the internet into communities must be in partnership and cooperation with the local community. Deployment must take into account the needs and concerns of local populations and integrated with sensitivity. The hope is that access to the XO would be available not just to the child, but the family and the community-opening gateways to accessing knowledge and information.

## **B. RMI MOE’s Decision to Pilot OLPC**

The OLPC Pilot in the RMI follows an October 2010 decision by the President and his cabinet requesting the MOE to conduct an “OLPC trial” and that the pilot be aligned with the “One Computer Lab per School” model. The OLPC model is built upon the five core principles in Table 1.

Table 1: OLPC Five Core Principles (Source: OLCP, 2008)

1. Child ownership. The child is the custodian of the laptop, it is theirs to use at school and at home.
2. Low Ages: XO is designed specifically for children aged 6 to 12.
3. Saturation. XO should be deployed on the basis of One Laptop for EVERY child in a class or a school.
4. Connection. Anything the child does on the XO can be done together with others, as a learning experience.
5. Free and open source. Students and educators can share learning materials in a spirit of free and open collaboration.

Following the decision, MOE ordered 1,000 One Laptop per Child “XO” laptops for distribution in its primary schools as part of its ICT initiative. The OLPC model is built upon five core principles.

As described in the MOECTP, the status of communications and technology across the RMI is as diverse as the geography. Elementary schools in find themselves in differing contexts thus, in order to adequately “test” the feasibility and impact of the OLPC intervention, the MOE will be conducting pilots at three sites: Woja Elementary School (WES) on Majuro Atoll, Jabor Elementary School (JES) on Jaluit Atoll, and Inc Elementary School (IES) on Arno Atoll. WES and JES both are on the power grid while IES is dependent on solar power. WES will have access to high speed Internet access via fiber optic cable, JES will have a less robust Internet access through a Marshall Islands National Telecommunication Authority wireless tower, and at the current time IES is without connectivity. If IES obtains Internet access during the course of the project it will be similar to the connectivity available at JES. This diversity will enable the MOE to gather the data and information to inform decisions regarding the scale up of OLPC after the pilot.

### C. The OLPC Pilot and the MOECTP

Although there are many differences in both philosophy and approach between OLPC and those presented in the MOECTP, the two share a similar vision of using ICT to enhance teaching and learning, expanding the world young people have access to, and preparing them for success in a 21<sup>st</sup> Century world.

OLPC clearly has a strong potential to contribute to the MOE attaining the first two goals of its MOECTP and will need the support described in Goal 5 in RMI’s elementary schools. OLPC focuses on children ages 6 to 12 and will therefore not impact on secondary schools.

Table 2. MOECTP Goals

Goal 1. <u>Students</u> : All students in the RMI are technologically literate.
Goal 2. <u>Teachers</u> : All teachers in the RMI are technologically literate and have the knowledge and skills necessary use technology to broaden and enrich the learning experiences of their students as well as to further their own learning.
Goal 3. <u>School Leaders</u> : All school leaders are technologically literate and have the knowledge and skills to lead efforts to enhance teaching and learning through the effective use of the “best-available” technologies and increase management efficiencies.
Goal 4. <u>Ministry of Education Staff</u> : All staff at the Ministry Headquarters (MOE HQ) are technologically literate and have the knowledge and skills needed to use technology in the course carrying out their job functions.
Goal 5. <u>Ministry of Education: Overall</u> : The Ministry reflects a 21 <sup>st</sup> Century organization and supports its schools in providing a technology-enhanced management, teaching and learning.

Source: MOECTP, 2010

A general comparison between OLCP and the MOECTP is presented in Table 3.

Table 3. Comparison of the NOECTP and OLPC

<b>MOECTP</b>	<b>OLPC</b>
Philosophically reflects a more centralized structure and approach although there is room for “individually” and “grass roots”/”bottom up” innovation and development	Philosophically a “grass roots” effort of development, collaboration, and sharing of resources across communities.
The MOECTP calls for the development of standards based on ISTE’s NETS and various UNESCO documents. The same documents underlie OLPC training and student learning experiences	
Computer lab and classroom focused learning experiences	“Child” focused computer utilization
<b>MOECTP</b>	<b>OLPC</b>
Standardized systems based on proprietary systems and software which are more easily managed and would be consistent across the MOE system K-12	Open source software which is usually less robust but provides much greater flexibility in making adaptations such as “local language” keyboards
System based on thin client technology based on server-based applications and resources.	System based on networked but largely independent low-power laptops.
Both require the active involvement of the MOE Headquarters in leading and coordinating the effort, developing materials, leading training, and supporting school implementation	
Calls for the formation of teacher learning communities and recommends student collaborative learning	Requires teacher learning communities and sharing of resources a part of design/ability to be successful and student collaborative learning is embedded
When fully implemented, technology will be largely school-based with families and communities invited to the school to “participate”. This brings strengths and challenges.	When fully implemented, technology will be with the child in the home and community. This brings strengths and challenges.
Both call for monitoring and robust formative and summative evaluation	

It seems that a likely scenario for OLPC schools within the “MOECTP picture” would continue to have a small set of desktop computers with the “standard” set of MOE operating systems and applications particularly for data collection and report and participation in some training and professional development opportunities.

The OLPC Pilot will not have any significant “negative” impact on the implementation of the MOECTP. The “organizational learning” as well as school-based outcomes are likely to inform and benefit teaching and learning as well as implementation process. Spring, 2011 will be a key decision point in many ways since that summer provides the opportunity for scaling up training and implementation efforts in the schools. To the extent possible the OLPC Pilot should be well underway and, at least initial, monitoring and evaluation data be available to inform those decisions.

## II. RMI Ministry of Education One Laptop per Child Pilot Deployment and Implementation Plan

OLPC-Oceania and SPC have developed a wide variety of resources to support the effective implementation of OLPC in the Pacific Island nations. In addition they have successful experience in a number of countries. The resources include:

Deployment Guide for Administrators, Educators and Project Managers  
([http://wiki.laptop.org/go/Deployment\\_Guide](http://wiki.laptop.org/go/Deployment_Guide))

OLPC Oceania Workbook for Education Officers (<http://www.box.net/shared/72pjtafg63>)

Technical Assistance to Kosrae Department of Education (<http://www.box.net/shared/1lnx51e14l>)

OLPC Learning Guide (<http://www.box.net/keydox/1/34399072/331454096>)

Guide to Installing the Pacific XS School Server (<http://www.box.net/shared/nj7y91uh5j>)

It is suggested that the MOE work with OLPC-Oceania and SPC to design the plan for initial implementation and follow-up support during the trial. The appendices contain sections from the SPC-developed implementation plan for Kosrae, *OLPC Oceania Workbook for Education Officers* and *Technical Assistance to Kosrae Department of Education* (Leeming, 2010) which provide a deeper understanding of the implantation process. RMI MOE and OLPC-Oceania will use this as the basis for developing a plan to fit the context, purposes, and timelines of the RMI MOE.

It should be noted here that the coordination and oversight team, support teams, materials development group necessary for OLPC implementation are incorporated in the MOECTP. The role of community outreach and parent trainer will need to be added to the school training tam in the MOECTP.

## III. Monitoring and Evaluation

This is a pilot of OLPC is several different contexts (saturation model in two sites and a OPLC-lab hybrid in two others) to determine its viability as the “backbone” of the elementary technology effort in RMI. The significance of the decisions that will occur as a result of the trial require a thorough evaluation.

The monitoring and evaluation will meet the criteria for monitoring and evaluation laid out in the MOECTP. This means it will involve a variety of strategies including: teacher and student portfolios, teacher and school leader journals, site visits to implementation sites, classroom observations, school and role-alike focus groups, and, ultimately, student achievement data documenting the impact of OLPC enhanced teaching and learning. Typical questions will include:

- As a teacher, how has your teaching changed as a result of your school’s OLPC involvement? What are your students doing differently?
- As a student, how have taken advantage of your school’s OLPC involvement? What were you able to accomplish that you may not have done in the past?

- As a school leader, in what ways has your school's OLPC involvement impacted on your ability to carry out your work? What have you done to be a proactive leader in the ICT effort on your campus?
- Are there significant differences in student achievement in schools involved in the OLPC effort?

In order to keep expenses reasonable while still having the unbiased perspective of an external individual/agency the monitoring and formative evaluation will be conducted by the MOE “internally” and an external final review and evaluation. The MOE, OLPC and the external evaluator work together from the outset. The development of a strong evaluation plan and the tools to carry it out will be one of the first activities as the plan is carried out. The *Evaluation of One Laptop Per Child (OLPC) Trial project in the Solomon Islands* conducted by the Australian Council for Educational Research for the Solomon Islands Ministry of Education (March, 2010) could serve as a model.

## Appendix A: Kosrae Planning and Training Tools

Table 4: Kosrae Pre-Deployment/Implementation Planning Timeline (Leeming, 2010)

Action	Responsibility	Timing / comments
Identification of the OLPC Core Team	MOE	December 2010
Training team start regular meetings and can organize the follow:	Training team	ASAP
• Finalize schedule for this action list		By end July
• Develop evaluation plan (including indicators from the ISTE NETS)		By end August
• Training for Administrators (senior officers, principals and vice-principals) mainly awareness, NETS-A, SOAS demos		August. One day workshop.
• Publicity (letters to parents, parents/community meetings, radio broadcasts)		August or September, not too soon before the first deployment
• Awareness training for the first school (the “pilot”, probably SES), organize a school-community committee		August. One or two afternoons after school.
• Translating the OS		In own time, progressively
Procure charging racks or construct charging cabinets for each classroom	ICT	ASAP. MOE needs to decide whether to procure the racks as the lead time is long. Otherwise, locally constructed solution.
Procure server, wireless access points, POE switches	ICT	Needed by end August.
Download the full activity set and prepare flash drives to install the additional activities	ICT	By end August
Configure and test server	ICT	Before deployment in September
Install server and wireless network	ICT	Before deployment in September
Prepare the laptops for the deployment at the first school (the “pilot”, probably SES). Prepare parent’s agreements, printed materials, etc.	ICT	Before deployment in September. Can be time consuming
Deployment week at first school (assuming 4 grades + teachers, approx 100 students and teachers)	Training Team	Over 1-2 weeks depending on whether the full days can be used or only afternoons
• Teacher training		Most of the days available will focus on teacher training
• Student training		Second half of the training will incorporate students training
• Parents briefing and training		In groups of 10-15 invited on selected evenings
• Community meeting		One evening/suitable occasion
• Official launch and handover of laptops		Last day. Parents sign the parent’s agreements
• Teachers’ self-support procedures in place		By end of training
• Monitoring and technical support activated		By end of training

Table 5: Kosrae Action Plan for Deployment/Implementation (Leeming, 2010)

Action	Responsibility	Timing / comments
Review and finalize deployment plan (and make changes if appropriate)	MOE	ASAP
Training team start regular meetings and can organize the follow:	Training team	ASAP
• Finalize schedule for this action list		By end July
• Develop evaluation plan (including indicators from the ISTE NETS) with advice from OLPC TWG, COMFSC, etc		By end August
• Training for Administrators (senior officers, principals and vice-principals) mainly awareness, NETS-A, SOAS demos		August. One day workshop.
• Publicity (letters to parents, parents/community meetings, radio broadcasts)		August or September, not too soon before the first deployment
• Awareness training for the first school (the “pilot”, probably SES), organize a school-community committee		August. One or two afternoons after school.
• Translating the OS		In own time, progressively
Procure charging racks or construct locally made charging cabinets for each classroom	ICT	ASAP. MOE needs to decide whether to procure the racks as the lead time is long. Otherwise, locally constructed solution.
Procure server, wireless access points, POE switches	ICT	Needed by end August.
Download the full activity set and prepare flash drives to install the additional activities and Flash	ICT	By end August
Configure and test server	ICT	Before deployment in September
Install server and wireless network	ICT	Before deployment in September
Prepare the laptops for the deployment at the first school (the “pilot”, probably SES). Prepare parent’s agreements, printed materials, etc.	ICT	Before deployment in September. Can be time consuming
Deployment week at first school (assuming 4 grades + teachers, approx 100 students and teachers)	Training Team	Over 1-2 weeks depending on whether the full days can be used or only afternoons
• Teacher training		Most of the days available will focus on teacher training
• Student training		Second half of the training will incorporate students training
• Parents briefing and training		In groups of 10-15 invited on selected evenings
• Community meeting		One evening/suitable occasion
• Official launch and handover of laptops		Last day. Parents sign the parent’s agreements
• Teachers’ self-support procedures in place		By end of training

<b>Action</b>	<b>Responsibility</b>	<b>Timing / comments</b>
• Monitoring and technical support activated		By end of training
Review deployment and refine planning for the remaining schools	MOE / Training Team	1-2 weeks after the deployment
Review performance of server / wireless networking and revise design if necessary	ICT	2 weeks after the deployment. ICT will have been closely monitoring for that period.
Procure equipment for remaining schools	ICT	After the review above
Deployment at remaining schools – will depend on lessons learned from the first site	Teams	A decision needs to be made based on the review of the first deployment, whether to do the two remaining sites each school separately or concurrently.
Evaluate progress	MOE / Training Team	Results will feed into scale-up decision
Planning commenced for possible scale-up and ongoing maintenance of the program	MOE / Training Team	After review of the above

Table 6: Kosrae On-Going Training Plan (Leeming, 2010)

Trainees	Training Curriculum	Training format	Timing / duration	Indicators to evaluate training	Other inputs and resources
Trainers Team	Workshop 1 Training of Trainers • Level 1 – Principles and basic operation • Level 2 – Using the laptops • Level 3 - Teaching & Learning with the XO	Training Mission, DL	June 28 – July 2, 2010	Confident in ability to train teachers in: • Awareness of the basic theories and principles (of OLPC within the context of ICT for Education). • Basic operation of the laptop • Networking: connecting to simple mesh and school server • Connecting to a wireless access point for Internet access • Sharing and inviting activities • Browsing the school server content • Using the journal to save, name, locate, copy and erase work • Copying work to/from a flash drive • Uploading and downloading to/from the school server • Using the main set of commonly used activities • Creating teaching (and admin) resources using laptops • Simple approaches to lesson planning using laptops	Workbook, DVD SOAS
	Self-training “Trainers OLPC Club” • Consolidation of skills • Practice using SOAS • Sharing of ideas • Planning for training and deployment • Translating, WikiEducator • Creating content, formats • Monitoring & evaluation	Self-training with peer support Regular meetings of the training team and ICT officers DL to assist via email support forum	Starting July 2010, weekly or fortnightly Could be after normal duties	• Skills retained • Access to Sugar on a Stick • Transfer of ideas and consolidation of skills • Regular communication and advice received via email • Draft plans developed and agreed o Training plan (this one) o Technical (action) plan for deployments o Monitoring and evaluation plan • Able to create server/XO resources & convert formats o Text: PDF, HTML, ODT o Multimedia: OGG, FLV, JPG o Sugar: Existing activities such as eToys, Memorise • Accounts created in Google Group • Accounts created on WikiEducator; online tutorials completed and user page created. Able to create simple pages for collaborative development of educational resources (lesson plans etc) • Accounts created on Sugar translate page for Kosrae. Able to participate in translating the OS and activities into Kosrae • Able to train teachers and inspectors in the agreed monitoring and evaluation procedures	SOAS installed on flashdrives for all trainers Draft plans from David Leeming’s report UNESCO Information Literacy Primer (on resource DVD) MOE provides some curric materials Evaluation plan drafted (the NETS-T and NETS-S provide very useful indicators)

<b>Trainees</b>	<b>Training Curriculum</b>	<b>Training format</b>	<b>Timing / duration</b>	<b>Indicators to evaluate training</b>	<b>Other inputs and resources</b>
	Option: Advanced ICT training (could include wider group of teachers)	Face to face, external facilitator	Optional, 1 week	• Information Literacy (UNESCO module). (1 day) • WikiEducator training (Learning4Content format). (2 days) • Content formats and authoring (2 days)	
Teachers	Preliminary training • Level 1 Awareness and Basic operation of XO's o OLPC Awareness o Principles o Community participation o Minimum skill set XO's • Awareness of the alignment between OLPC and the ISTE NETS standards	Trainers team, school based	2 days per school	Teachers introduced to the laptops. Teacher then keep their laptops and can consolidate their skills. • Teachers aware of OLPC principles, community and parents participation, potential impacts on teaching and learning, and background to OLPC • Teachers trained in basic operation, functions and Activities • Clear goals established for teaching and learning with OLPC, linked to NETS	ISTE NETS National Educational Technology Standards and Performance Indicators for Teachers and students
	Deployment training • Level 2 and 3 • M & E • ICT – server and wireless • COP • Alignment with NETS	Trainers team and ICT officers, school based	1 week per school. See deployment (technical) plan	Technical proficiency developed More advanced technical training with teachers training students as part of their own training. Technical teachers trained to maintain server and laptops. • Lesson planning with OLPC aligned to NETS Simple attainable goals for introducing the laptops into lessons, aligned with curriculum objectives and NETS indicators (for instance lesson plans referring to both) • Teacher support and monitoring system Teacher's self-help groups (Teacher's OLPC clubs) established to provide peer support. M & E procedures introduced, such as keeping of log books/diaries and setting targets aligned with NETS for classroom use.	NETS-T and NETS-S Appropriate Child Online Protection policies identified/developed (OLPCTWG can assist) Developing the detailed training curriculum will be a collaborative effort with advice from partners such as COMFSM and OLPC-TWG Workbook chapter on teacher training and curriculum integration
	School-based self-help training • Teachers share ideas and experiences, identify issues and problems	Teacher's OLPC meetings in each school	Weekly meeting (1 hour min)	Teacher's self-support meetings taking place, diaries being kept, targets achieved. Support being given from MOE-ICT and training team as needed	

<b>Trainees</b>	<b>Training Curriculum</b>	<b>Training format</b>	<b>Timing / duration</b>	<b>Indicators to evaluate training</b>	<b>Other inputs and resources</b>
	Follow up training 1 – Level 3 Refresher training to be given periodically (maybe twice a year)	Trainers team	After 2-3 months (1 week per school)	Refresher training focusing on • Refreshing/updating technical skills • Review and reflection on teacher’s experiences • Identifying best practice (resources, methods, lesson plans) • Correcting deviations from educational objectives	Monitoring data from teacher’s OLPC diaries, minutes from teacher OLPC club meetings, lesson plans used by teachers, etc
	Teacher Education	Incorporated into institutional teacher training		OLPC training incorporated into Technology component of teacher training (which should already be aligned with NETS)	
Students	Basic operation and activities. Training requires low trainer-student ratio. Focus on showing the students some Activities, and how to share/collaborate and have plenty of free time for them to experiment assisted by the trainers	Trainers team with the teachers of each school Parents can also be invited	During “deployment week” immediately before official launching/hand over	At this stage the students will need to understand • Basic skills • They own their laptops but their family can use them too • The laptops are a tool for learning • They must look after their laptops, keep them away from small children, etc, and keep charged for school • Refer to Workbook for some risk aversion (i.e. tell students not to pick the keys off the keyboard, keep dry, etc)	NETS-S (However, the students will be guided towards achieving the NETS-S objectives, both by teachers and curriculum development) Also refer to Workbook Chapter on Students Training
Parents	• Level 1 – Basic operation + intro to activities • How to engage with students learning • How to improve engagement with school • Risks and strategies	Trainers and teachers at the school during deployment week.	During deployment week, in evenings, or “open day”	Parents • Understand the “rules” or principles of OLPC • Feel involved in the project and have simple laptops skills so as to be able to follow what their students are doing • Understand the parents agreement	Workbook, chapter on Parent’s Training and Community participation
Administration Principals (and VPs)	• Principles, potential impacts and challenges • How NETS-A aligns with the OLPC program • Improving administrative efficiency • Understanding total costs • Monitoring and Evaluation • Risks and strategies • Laptop and server skills training	Trainers team ICT Officers Working with senior MOE officers	Before the deployments August would be a good time This merits a workshop approach Can be broken down into a few separate trainings	Administrators (Senior MOE officers including key departments such as curriculum development, ICT, teacher training, inspectors/supervisors, planning), Principals (Head Teachers) and deputies (V-Principals) • Understand the OLPC principals, theory, and background • Each understand their roles, and generally, as leaders and facilitators for the transformations the ICT can bring to education • Take ownership of, and refine the planning for the OLPC country program	TEST-A for Administrators Workbook Resources from the DVD (slideshow, Solomon Islands Evaluation etc) David Leeming’s report with total costs, action plan, etc

<b>Trainees</b>	<b>Training Curriculum</b>	<b>Training format</b>	<b>Timing / duration</b>	<b>Indicators to evaluate training</b>	<b>Other inputs and resources</b>
Community	<ul style="list-style-type: none"> <li>• Awareness</li> <li>• How to participate</li> <li>• Risks and strategies</li> </ul>	Trainers and teachers	Community meetings and briefings Publicity (radio interviews, etc) Open days	Community <ul style="list-style-type: none"> <li>• Are informed about the program</li> <li>• Understand the 5 core principles</li> <li>• Are represented in the program via school meetings, monitoring surveys, etc</li> <li>• Have a way of making their opinions and concerns heard and are able to stay informed and be able to seek information and clarifications etc.</li> </ul>	Refer to workbook, Guidelines for Community Participation
ICT	Major training <ul style="list-style-type: none"> <li>• Moodle administration</li> <li>• Linux administration</li> <li>• Programming for Sugar</li> <li>• “Informal” training</li> <li>• Advanced user of the XO and server</li> <li>• Formatting and authoring content (text and multimedia)</li> <li>• Advanced server configuration, such as access policies / management for schools, backup and maintenance</li> <li>• Wireless networking</li> </ul>	Regional/Int’l training opportunities: The OLPC-TWG can assist in identifying appropriate training opportunities, i.e. <ul style="list-style-type: none"> <li>• SPC</li> <li>• UNESCO</li> <li>• ISOC</li> <li>• COMFSM</li> </ul> OLPC Informal online training (David assisting Joe via email etc) Community-based online training (the OLPC and Sugar email support forums)	As available Informally via email, mentoring, self learning etc	<ul style="list-style-type: none"> <li>• The ICT officer are empowered to improve their own skills and knowledge to support the program</li> <li>• Specific technical training given to enable full potential of the technology to be realised</li> <li>• A sustainable pool of ICT skills can be retained in Kosrae (i.e. staff turnover risks averted through procedural skills transfer etc)</li> </ul>	

## **Appendix B. Principles for the deploying the XO laptop in communities**

- The XO Laptop should be deployed through a process of community consultation; should only proceed with assent of the entire community, taking account of their needs and concerns; and should be fully integrated into existing systems and tools
- Without compromising child ownership or education, access to the XO Laptop should be available not just for the child, but the family and the community
- Communities should develop their own principles and guidance for coordinating communal use of the XO Laptop
- Where appropriate, children should be included and encouraged to actively participate in using the technology for whole-of-community actions and projects
- The technology should be available to contribute to community efforts and solve community problems and not be leveraged for private personal profit or commercial gain
- Knowledge and data generated with the laptop is in the public domain, and needs to be freely available and shared
- Without discouraging community-level market activity which support sustainability – such as microfinance, technical services, spare parts repairs and maintenance – communities should put in place disincentives to the emergence of a secondary commercial market for the XO.
- Communities should share local knowledge, best practices and lessons learned with like communities and within their sub-regional, national and regional contexts.
- Deployment should, wherever possible, proceed in alignment and harmony with existing regional and national efforts on education for sustainable development, and should be designed to strengthen and enhance those efforts.
- An "end of life" program should be put in place to recover derelict laptops to avoid environmental damage and hazard.
- An Internet Appropriate Use/Safety program should be established.

Source: OLPC-Oceania

### Appendix C. Estimated Costs

(Based on figures for Kosrae; Leeming, 2010)

Item	Price including shipping (approx) USD	Number needed
Laptops G5-G8	\$220 each	varies
Laptops G1-4 and remaining teachers	\$220 each	varies
Laptops teacher	\$200 each	One for each teacher whose class is using OLPC
Racks and XOP (G5-8)	\$10 per laptop	varies
Servers	\$1000	Usually 1 per school
Wireless APs	\$100	3 to 8 per school (depends on campus size)
POE switches	\$200	Approximately 3 per school
Network misc (cables, backup, UPS,etc)	\$1000	Per school
Local training and technical support	\$10,000	1
Training workshops (international)	\$10,000	1