

Teaching Indigenous Knowledge towards Environmental Conservation: A Case Study of Camp Ebiil in Palau

EIU Best Practices 2011 A Case from Palau









Foreword

Faithful to its mandate, the Asia-Pacific Centre of Education for International Understanding (APCEIU) under the auspices of UNESCO has served as a regional centre to promote Education for International Understanding (EIU) towards a Culture of Peace in Asia and the Pacific region since its establishment in 2000.

As educators are faced with great challenges in the fast-shifting world of globalization, APCEIU is well aware of how collective efforts can form a greater force towards a Culture of Peace by learning from one another and from the past. On this account, APCEIU has been publishing the EIU Best Practices in order to provide a platform to share diverse experiences and perspectives among various professionals in the field of education.

The EIU Best Practices aims to promote a Culture of Peace by supporting local initiatives in 47 UNESCO Member States in the region and encouraging innovative EIU practices in different local contexts. The EIU Best Practices Programme advocates the idea of "Learning to Live Together" (LTLT), which encourages participatory learning and critical thinking to develop mutual understanding towards the relationship between selves and others. Thanks to continuous support from the National Commissions for UNESCO in the Asia-Pacific region as well as numerous efforts of EIU practitioners, APCEIU has published and disseminated a number of monographs of distinctive cases over the past five years. This year, five new cases are introduced with series number 22 to 26.

Teaching Indigenous Knowledge towards Environmental Conservation A Case Study of Camp Ebill in Palau Issue number 22 introduces a case about Camp Ebiil from the Republic of Palau. Camp Ebiil is an excellent case of ESD teaching through preservation of cultural and natural heritage. The camp teaches young people to increase their social understanding towards the environment and surrounding through living together in the spirit of EIU.

May this case, among many other best practices in this year's publication continue to spread inspiration to construct further openness, equality and diversity in the Asia-Pacific region and beyond. I also expect that through this endeavor, various EIU Best Practices can be shared among educators, scholars, policy makers and activists who are committed to promoting a Culture of Peace in the region.

December 2011

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Director

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EIU Best Practices is...

APCEIU has been committed to the promotion of a Culture of Peace since its inception, in line with one of the pillars of education "Learning to Live Together." A Culture of Peace has been a key principle at the core of UNESCO's ethical mission. It involves a set of values, attitudes and behaviours that can be taught, developed and improved upon to enhance mutual understanding and conflict resolution. Attaining a Culture of Peace requires transformation of institutional practices, as well as individual values and behaviours in which education plays a crucial role in the process. As a major educational tool aimed at promoting a Culture of Peace, EIU addresses issues related to cultural diversity, globalization and social justice, human rights, peace and sustainable development. It focuses on increasing the capacity of learners to deal with issues of everyday life, to resolve community conflict and to enjoy human, political and civil rights to a greater extent.

APCEIU launched EIU Best Case Studies in 2006 in cooperation with the UNESCO Member States in the region to encourage educators, scholars and activists to implement and share local initiatives on EIU. It is an outreach programme that invites them to share their efforts in promoting education for a Culture of Peace in different social and cultural contexts. Now renamed as EIU Best Practices in order to further encourage the participation of practitioners in the field, the programme seeks to promote and collect innovative practices based on optimal classroom conditions and activities, school climate, community and social atmosphere, and

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Teaching Indigenous Knowledge towards Environmental Conservation A Case Study of Camp Ebill in Palau disseminate them throughout the region.

The programme is conducted through the following steps: 1) Call for Applications: APCEIU sends announcement letters along with application forms and guidelines to the 47 National Commissions for UNESCO, UNESCO field offices, major National Institutes of Education in the region and APCEIU's MOU partners in the region; 2) Screening and Selection: Submitted applications are reviewed by the Screening Committee, composed of experts, who then select the best practices; 3) Field Visit: APCEIU staff undertake field visits to the programme sites of the selected cases to confer the EIU Best Practices awards, conduct field observation and interviews, and provide the selected applicants with the guidelines for the final report; 4) Submission of the Final Reports: Selected applicants submit the final reports to APCEIU based on the guidelines; and 5) Publication and Dissemination: Final reports are published as a monograph series and disseminated throughout Asia and the Pacific region.

Given the favorable and enthusiastic responses from the region, and support from the National Commissions for UNESCO, APCEIU wishes to expand the positive momentum built thus far and further its efforts for the coming years.

APCEIU encourages educators, scholars and activists from the Asia-Pacific region to apply and share their experiences and perspectives. The Centre expects that through the EIU Best Practices, diverse practices of EIU will be widely shared throughout the entire region and beyond, thus contributing towards achieving a Culture of Peace.

Reported by



Ann Kloulechad Singeo is born from Kodep Kloulechad from Ollei Ngerchelong, Sibong Mira from Melekeok. She grew up in Madalaii, Koror, and now resides in Ngerang, Melekeok, with her husband Lyman, and her children, Kamen, Marli, and Kimi in the Republic of Palau.

A graduate from Western Oregon State College, she has worked as an Executive Director for health centers in Palau, as a consultant for U.S. federal IX. She was a board member of the Pacific Island Primary Care Association, a founding member of Ebiil Society and she also served on the board from 2007-2010, and currently serves as the Executive Director.

After serving in the public service sector for many years, she decided to follow her passion and dreams in conservation work based on indigenous knowledge, and left to dedicate her time to working with the board of directors to build and strengthen Ebiil Society as an organization and as an effective grassroots approach to conservation work.

V APCEIU

Teaching Indigenous Knowledge towards Environmental Conservation: A Case Study of Camp Ebill in Palau

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Acknowledgement

Camp Ebiil was created in 2005 in a response to the environmental challenges faced by Palau's natural resources under threat from over harvesting and other unsustainable practices. While governments and environmental protection agencies rush to develop policies and plans to protect the natural resources, the smaller communities struggle to accept this new concept while surviving on the very resources faced by these emerging environmental challenges. In planning and developing of the camps learning objectives, it became clear that many if not all of the indigenous knowledge and practices integrated processes that embraced environmental protection and conservation values and principles. Thus, Camp Ebiil is evolved in this very ideology of teaching environmental protection through cultural practices that respect "mother nature," promoting peaceful actions – a way of life. As the programme was adopted and implemented by the organization and Ngerchelong State, partnership with collaborating agencies developed accordingly. Today, Ebiil family is throughout Palau reaching into the small communities, homes, and individual lives as a nourishing education of indigenous knowledge for environmental protection and sustainable livelihoods.

I would like to take this opportunity and thank the community of Ngerchelong, Ngerchelong State government, our generous camp sponsors especially Palau Conservation Society and Shell Palau who have tirelessly provided support to the camp every year, the partner agencies, Bureau of Arts and Culture, Belau National Museum, The Nature Conservancy, Palau

Teaching Indigenous Knowledge towards Environmental Conservation A Case Study of Camp Ebill in Palau

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International Coral Reef Center, Bureau of Marine Resource, the private donors, the founders of Ebiil Society Inc., and all who have served on the board and as members of Ebiil Society. These are the people responsible for the growth and cultivating of what the organization stands for today, especially the Ollei community who have dedicated their community and individual resources, their prestige knowledge, and their sincere generosity to maintaining the camp every summer for the last seven years. To the everlasting returning camp counselors, who are expected to become parents on day one of the camp, and receive criticism (constructive I hope) from the adult volunteers especially Ann, you are the true champions. For all of you, may the world have more people with your kindness and willingness to give without expectations, so that we may prosper in peace.

To this, I dedicate to Rita Olsudong, who continued to challenge all of us of living up to our true Palauan identify and pride, whom I know is watching over us as we struggle to maintain that threshold of truth.

Teaching Indigenous Knowledge towards Environmental Conservation. A Case Study of Camp Ebiil in Palau

Table of Contents

- Foreword / i
- EIU Best Practices is / iii
- Reported by / ∨
- Contributors / vii
- Acknowledgement / ix
- 1. Introduction / 1
 - 1.1 Background / 1
 - 1.2 Introduction to Camp Ebiil / 2
 - 1.3 Rationale / 4
- 2. Camp Ebiil: Programme Description / 7
 - 2.1 Goals and Objectives / 7
 - 2.2 Target Participants / 8
 - 2.3 Conceptual Framework of the Programme / 8
 - 2.4 Pedagogy and Teaching Methods / 10
 - 2.5 Programme Activities / 11
- 3. Palauan Values and EIU / 17
 - 3.1 Palauan Values and Principles in Camp Ebiil / 17
 - 3.2 Palauan Values and EIU / 18

- 4. Programme Significance / 19
 - 4.1 Impact to the Community / 19
 - 4.2 Evaluation and Critical Reflection / 21
 - 4.3 Programme Achievements & Recognition / 22
 - 4.4 Future Plans / 23
- 5. Conclusion / 24

■ Appendix

- 1. Camp Ebiil Evaluation Form / 27
- 2. Evaluation Indicators / 28
- 3. Media Coverage / 29
- 4. References / 31

1. Introduction

1.1 Background

The Micronesia Challenge Declaration signed by five Pacific countries¹⁾ in 2006 called for the conservation of at least 30% of near-shore marine resources and 20% of forest resources important to the continuation of their tradition, culture and livelihood. Following this declaration, Palau has continued to develop its environmental laws to lead regional conservation efforts, making it the first island country to reach beyond the expected goals of Micronesian Challenge.

Although conservation efforts continue to grow, environmental concerns also continue to escalate hand-in-hand with modern lifestyles. Consequently, conservation programmes and agencies continue to conduct new studies to identify effective strategies in protecting the natural environment, one of them being community empowerment in conservation planning and implementation. This is where Ebiil Society comes in to identify the traditional values and principles of conservation weaved into the very fibers of Palauan society based on the indigenous knowledge. Such knowledge is nature based and incorporates the protective practices mindful of nature.

The Republic of Palau is an island archipelago of more than 300 islands

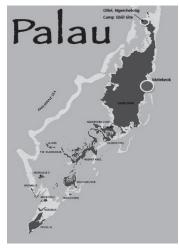
The five countries were: Republic of Palau, Republic of the Marshall Islands, Federated States of Micronesia, Commonwealth of the Marianas, and Guam. http://themicronesiachallenge.org

Teaching Indigenous Knowledge towards Environmental Conservation A Case Study of Camp Ebill in Palau

2

located in the Northern Pacific. It spreads over 325 miles over the Pacific Ocean with a total land area of 196 square miles. Babeldaob is the biggest island comprising 78% of Palau's total land mass.²⁾

Among Palau's many protected areas, Ngarchelong State has one marine conservation site called the Ebiil Channel. Ebiil Channel conservation site is a protected area that provides a sanctuary for over 60 species of fish



▲ Map of Palau indicating Ebiil Site

and over 200 species of corals important to the Palauan culture and marine diversity. As the initial conservation law for Ebiil channel came to an end in 2004, community members of Ngarchelong came together to advocate for the continuity of a permanent conservation site. This group later on became the foundation of Ebiil Society.

Ebiil Society was established in 2005 as a nonprofit organization. It is governed by a Board of Directors with seven elected members and administered by a Program Director. The organization's main goal is to promote environmental protection and proper management of natural resources using indigenous knowledge. Ebiil Society provides community-based education through cultural experiences that holistically promote and protect the ecosystem and nature. This very concept led to the creation of Camp Ebiil in the community of Ollei, Ngarchelong, a small rural community with population of less than 200 people.

1.2 Introduction to Camp Ebiil

Sharon Sakuma, Palau 2007 Business Opportunities Report, Pacific Islands Trade and Investment Commission and Asian Development Bank, 2007, p.5.

Camp Ebiil was originally designed to provide a strategic approach to the conservation of the environment through education of ethnic knowledge on nature and culture. The community's effort in providing a participatory learning medium for young people has consistently drawn large interest from parents eager to enroll their children every year in the last 7 years.

The initial concept of the camp was to develop ethnic pride through indigenous knowledge training that promotes respect and peaceful interaction with nature. The camp provides environmental awareness training with traditional knowledge holders as teachers and science experts from partner agencies. Partner agencies include organizations such as Palau International Coral Reef Center, Palau Conservation Society, Bureau of Arts and Culture, The Nature Conservancy, Belau National Museum, Bureau of Marine Resources, and various private donors. These partners have consistently supported the camp through technical and financial assistance since Camp Ebiil's foundation.

Camp Ebiil promotes community-based education by applying the traditional concept of educating the young. The camp requires participants to live in a "Bai", a traditional community center to live and learn from the community experts as teachers. The Board of Directors and general members of Ebiil Society volunteer during the camp by sharing their expertise and taking care of logistics. The camp is sustained through community volunteering and donations based on the common belief that successful children are results of strong community ties.

It is Ebiil Society's belief that knowledge and appreciation of one's roots increases a sense of ethnic pride that will promote protection of one's identity and heritage. The program's goal is to plant the seeds of knowledge to bring forth the Palauan wisdom "*llomes el reng*" – "light in the heart."

Ebiil Society believes that children who are familiar with their environment, history, and culture will have a stronger ethnic pride and will bear a more

Teaching Indigenous Knowledge towards Environmental Conservation A Case Study of Camp Ebiil in Palau

4 APCE positive self-image and confidence. The organization strives to bring this sense into all the activities conducted in Camp Ebiil. Integrated into the cultural studies are Palauan values and virtues of compassion, respect of Mother Earth, respect to life, acceptance and adaptation, and peaceful negotiations.

Palauan philosophy says that "a child to a home is as they are to the society". This saying translates the Palauan idea that children will learn from inside and outside of their home. Thus, the adults in the society must treat the children as their own and provide them with guidance as to what is right or wrong. This philosophy is also known as "a village raising a child".

Communal society is challenged by the introduction of centralized schools and the emergence of individualism, which contributed to the fading of cultural values and practices. In the end, it effected in the weakening of ethnic pride. For instance, when an adult saw a young person doing a wrong conduct, they tend to look away instead of reprimanding the child and informing the parents.

1.3 Rationale

Development in Palau has brought many modern conveniences, such as faster transportation, advanced fishing tools and techniques, and many others. Unfortunately, the same factors that have improved living standards for Palauan have also become a threat to the ecosystem. For example, fishermen can go fishing further out in the ocean, haul in more fish, and have the capacity to preserve it longer. But these technological advances also have negative impact on Palau's scarce natural resources. The traditional management of communal resources that promotes well-balanced harvesting is being replaced by uncontrolled and destructive lifestyles. The traditional practices on environmental protection were safeguarded in communal laws and taught within homes and society. A sense of responsibility was taught as guiding principle for any type of harvesting. Penalties were enacted against environmental destruction, which ranged

from individual fines to families and clans, and even exile from society.

Today's environmental threats have become numerous and aggressive. Some of the problems are overfishing and harvesting for commercial purposes, land degradation, and use of fertilizers and pesticides. Furthermore, there is a lack of consistency in integrating environmental education into school curriculum or societal structure. One way to address these issues is through education and regulation. Although there are existing environmental laws, oftentimes they are not translated into action and the environment continues to be threatened by lack of awareness and absence of regulation enforcement.

The conservation efforts should focus on young people as they are the future bearers of the world's resources. At the same time, by teaching young people about the environment, it can also assist in nurturing the development of young Palauan who are faced with many challenges and lack a social support system. A large risk to the lives of Palauan youth is alcohol abuse. Palau is known for its high volume of alcohol import per capita. Alcoholism disrupts many young people's lives and promotes destructive and violent behaviors in society. Palau is marked by low educational attainment, a large number of alcohol-related injuries, and low socio-economic power. The table below shows some of the indicators of social issues in Palauan youth.

Table 1. Palauan Youth Social Indicator

Education Level	Actual number	Percentage in populations 18 years and older (18>)	Source
With training at Palau Community College	1,225	8.6% of total 18 yrs >	
Bachelor's Degree	915	6% of total 18yrs>	Palau Census 2005 Office of Planning & Statistics
Graduate/Professional Degree	242	1.7% of total 18yrs >	

Teaching Indigenous Knowledge towards Environmental Conservation A Case Study of Camp Ebill in Palau

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Injuries and Alcohol prevalence in High School Students				
Alcohol & youth risk behavior	Prevalence Rate	Three yrs running average	Source	
Minors cited for underage drinking	69.3%	5% of the 14-20 yrs of age	Bureau of Public Safety 2005-2007 report	
Students who rode in vehicle w/driver under alcohol influence w/in the last 30 days	50.7 %	50% for the last three years		
Students driving under the influence of alcohol for the past 30 days	17.8%	16.2% in last three yrs	2009 Youth Risk Behavior Survey (YRBS) Survey conducted in Palau High School only	
Students having at least 1 drink for the past 30 days	43.7%	40% in the last three yrs		
Accidents are the leading cause of	UNICEF-Palau Situation Analysis 2008			

As shown in the table above, only 8.6% of those over 18 years of age seek educational training at the local Palau Community College while an even smaller number of 6% is obtaining a four year college degree, and only 1.7% with graduate or professional degree. At the same time the risks in Palau's youth associated with early alcohol consumption is demonstrated in the statistical data from the police department and the Youth Risk Behavior Survey conducted in Palau High School every three years. A survey held by the Youth Risk Behavior Survey (YRBS) in 2009 shows that injuries and alcohol prevalence in high school students prove to be high in Palau. A survey on the number of students having ridden a vehicle in the past 30 days from at the time the survey was conducted showed that more than half of the students did. This is the present social problem that Palau is facing right now. Through encouraging participation in Camp Ebiil, the Ebiil Society is determined to show the young people the Palauan values and to have strong foundation in it so they can become a bright and leading

generation of the future of Palau.

Twenty young people were interviewed in 2010 regarding their participation in culture and societal functions. The result shows that most of their cultural participation took place during their younger years within families and clan functions. But as they entered high school their participation decreased and they grew out of touch with their cultural background. Camp Ebiil provides a way for this age group to be reacquainted with their cultural heritage. The camp also helps young people to face the emerging social challenges and develop understanding on the interconnectedness to earth and life. In the long term, Camp Ebiil expects the young generation to become responsible adult decision makers who will lead the future of Palau.

2. Camp Ebiil: Programme Description

2.1 Goals and Objectives

The general aim of the camp is to promote environmental protection and to educate Palau's young generation about their natural and cultural heritage. It also aims to pass on the indigenous knowledge to young people, which in the process will strengthens their ethnic pride by building strong identity as Palauan. The table below outlines detailed goals and objectives of the camp.

Table 2. Goals and Objectives of Camp Ebiil

Goals	Objectives	
To increase ethnic pride	Conduct teachings of nature and culture	
amongst young people	Pass-on indigenous knowledge	
	Revive the traditional sense of a community raising a child	
To increase youth resilience in participants	Provide opportunities of life skills building	
	Educate positive youth behavior to protect the environment	

Teaching Indigenous Knowledge towards Environmental Conservation A Case Study of Camp Ebiil in Palau

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2.2. Target Participants

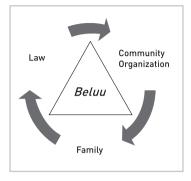
Camp Ebiil has become one of the largest supported activities in the area. It has given many youths around Ngarchelong a positive learning experience. The programme had started by targeting youth participants from Ngarchelong, but soon became a national program with participants from all over Palau. Recently, the camp has also grown international by accepting students from Tazukayama University in Japan. The number of participants varies from the largest group at 57 to the smallest group at 33.

Camp participants are divided into two age groups: the "experience camp" targets those between 11-14 years old, and the "research camp" for those between 15-24 years old. The "experience camp" provides younger participants with a chance to take part in fun activities and learning experience in culture and nature. The "research camp" engage participants in basic research on specific learning targets of each camp. The information gathered is used to further justify the indigenous knowledge and ideology behind the practices and as support teaching materials for the camp as a whole. Such format has been going on for two years since 2010. Previously, the camp only had an experience camp where all participants partake in the same activity, with older participants acting as counselors to the younger participants.

All participants live with community volunteers for at least 10 days at the "Bai," a traditional community meeting house. During the camp, older participants (counselors) are given the responsibility for overseeing the daily welfare of the younger campers. Adult community volunteers are also present to monitor the quality of the camp and ensure safety for all the children.

2.3 Conceptual Framework of the Programme

The Palauan theory of teaching and learning can be illustrated through the following figure.



- ▲ Traditional Societal Structure of Palau
 - "Inguk!" (triangle) represents 3 cornerstones which is a traditional ideology that emphasizes balance
 - "Beluu" means a complete society with a political system and natural resources that can be depended on.

Beluu (society) is at the center, wrapping all aspects of community life, such as the family, the community organizations, and the law. Societal norms consolidated in the Palauan society are adopted as law to protect and safeguard its practice. These societal norms, or the law, is taught at home to the young and is put into practice by community organizations which is referred as "community as school". Ebiil Society is part of the community organization that plays the role of transmitting the values into practical use.

Based on the above Palauan traditional structure, a framework is adopted and used to provide the logic behind the camp's initiative. Beluu, which is the triangle at the center, is balanced by its three cornerstones: "the family," "the law," and "community organizations." The traditional system of Palauan society puts the responsibility of protecting a Beluu and all that belongs to it on everyone in the society.

Every societal decision must be recognized by all members of the society so that the policy measures have a common agreement on which they will be implemented. Once a policy is formulated and accepted as policy, the three cornerstones will interact to implement the policy. The Law creates the guidelines to protect what is valued, the Family raises the child to respect and observe the law, and the Community Organizations apply the principles through community projects, industry, or life skills instruction. Thus the three cornerstones work together to reinforce the same ideology.

Teaching Indigenous Knowledge towards Environmental Conservation. A Case Study of Camp Ebill in Palau

10 APCEIU Ebiil Society promotes community learning by influencing and building the characters of young people to have compassion and awareness to the world around them. Ebiil Society plays the role "community as a school" by reinforcing the cultural values taught in families and reflected in the laws.

2.4 Pedagogy and Teaching Methods

The camp used different training methods such as storytelling, history learning, chanting, lecture (in the Bai or in the field), demonstration, observation, and direct exercise. The training is based on Palauan epistemology with holistic approach of teaching and learning. The traditional experts and knowledge holders in the communities play the role of teachers, and scientific/technical experts are brought in to reemphasize and support the traditional epistemology. The teachers are recruited from the local community, and they directly design lessons plans to be undertaken during the camp. The theories are reviewed during discussions in the Bai, and put into practice in the field through fishing, designing and constructing, cultivating and harvesting. The effectiveness of the training is evaluated through sets of standard evaluations for the specific learning target.

For instance, in the fishing training, participants learn about the lunar cycles and its relationship to tide calculations, fish spawning, weather, and current. In addition, they also learn star navigation, traditional emergency signals, trade winds and its relationship to fish behavior, safety navigation, conservation practices, and fishing techniques for different types of reefs. This is an example of one area of study conducted at the camp.

While residing in the Bai the children are also given the opportunity to be independent and be responsible towards other people and the community as a whole. The picture displayed here is an example of Bai Melekeong, which is what a traditional Bai looks like. The Bai in which the children live is an adopted model and not similar to the picture displayed.

The community is able to maintain harmony amongst the various age groups and social sectors by reinforcing a societal structure that builds strong communities. The children learn important indigenous practices that incorporate compassion, respect for life, and responsible management of natural resources.

The same concept is applied in Camp Ebiil where younger children learn to respect the older ones while the older



▲ Bai Melekeong

ones learn to take care of the younger ones. Here they learn discipline, team work, and individual expressions. The daily tasks include maintaining the facility, harvesting, fishing, farming, and cooking. Children take lessons that incorporate the Palauan sensitivity and compassion to "Mother Earth". Among the subjects are marine science, forest ecology, water usage, proper use and management, climate and seasons, culture and history, and restoration projects.

2.5 Programme Activities

For the first five years of Camp Ebiil, the activities varied every year depending on the subject raised in each camp. Below is a list of learning areas given at Camp Ebiil, along with the activities conducted for the corresponding area and the objectives expected out of camp participants. After the camp ends, participants are evaluated based on their ability to apply the knowledge they have learned.

³⁾ A few of this model exist around Palau in four different villages. Most of the structures have been replaced with concrete buildings lacking any of the indigenous art and motives that is expressed as part of the structure. During the earlier days of Palau before the German colonizers in the early 1900s, young people particularly men took residence in Bai where they lived and learned of the political and societal structures, life skills, and as apprentices to individual experts. The practice was eventually replaced as the foreign ruling countries demanded for local participation of labor intensive industries that took away from the traditional practices. Current use for the Bai is mostly as community activity centers or town meeting halls.

LEARNING AREAS	ACTIVITIES	OBJECTIVE
Marine Biology	Survey of reef sanctuary and coastal areas, fishery monitoring	Understanding biodiversity, reef protection, conservation practices, responsibility to nature and culture, respect and appreciation to ancestral knowledge and earth
Traditional art and expressions	Carving, weaving, plant dying, earth painting, chanting, dancing, singing	Learning endemic plants and habitat, oral history and geography, types of soil, creativity, artistic expressions, responsibility to nature and culture, respect and appreciation to ancestral knowledge and earth
Archeological Studies	Identifying historical site, limited excavation, limited testing and practice of indigenous knowledge	Understanding oral history and geography, types of soil, identification of cultural artifacts, indigenous knowledge, respect and appreciationto ancestral knowledge and earth
Natural Science	Studying about insects and birds, watershed identification and observation, identifying traditional medicinal plants	Identifying endemic plants and animals and their habitat, understanding ecosystems and itsthreats, biodiversity, identification of cultural properties and indigenous knowledge associated,respect and appreciation to ancestral knowledge and earth
Traditional emergency preparedness	Performing "klekat" (traditional smoke signals made on stoneplatforms that corresponds to individual reefs), making traditional life-jackets, identifying natural treatment for skin irritation, cuts and burn, weather predictions, star navigation, understanding water and wind currents, understanding seasons and expectations	Knowledge of the Northern Lagoon and the various ridge and reef names, survival skills, natural environment awareness, inner connectedness with Mother Earth, respect and appreciation to ancestral knowledge and earth
Engineering	Restoring stone platform structure (Dock), village planning and zoning study, various stone platforms and cultural utilization study	Identifying types of rocks and utilization, planning, designing, mathematical calculations, indigenous structuring methods, oral history and geography, respect and appreciation to ancestral knowledge and earth

Architecture	Designing and structuring an indigenous Palauan house	Recognizing various construction of trees- habitats and environmental threats, lunar cycle, tide predictions, safety measures, environmental protection practices as part of trees harvesting, planning, designing, building, inner connectedness with Mother Earth, awareness of earth energy flow, respect and appreciation to ancestral knowledge and earth
Mesci Epistemology (Taro Fields)	Doing field research and actual cultivation, harvesting and food preparation	Understanding oral history and geography, understanding biodiversity, understanding watershed, ecosystems and protection from threats, plants, animals and their habitats, taro plant variety, cultivation techniques and management, plant disease treatment and management, irrigation system design and maintenance, arts and expressions associated, traditional medicine from taro fields, earth nutritional contents of taro,organic fertilizers and application process, design, structuring, and property names, clan and lineages relationships, respect and appreciation to ancestral knowledge
Fishing epistemology	Learning about star navigation, flow of current, lunar cycles-tide prediction, and expected fish behavior, seasons and expected change, designing and making of fishing tools, application of different fishing techniques, fishery monitoring, emergency preparedness, reef identification and mapping	Understanding biodiversity, understanding and respecting Mother Earth's energy, inner connectedness with nature, life skills, proper harvesting techniques, conservation methods and application, survival skills, data gathering and basic research knowledge, oral history and geography, knowledge of the reef, respect and appreciation to ancestral knowledge and earth

By providing a medium of interaction where the community comes together to teach and care for the young people, Camp Ebiil emphasizes a sense of appreciation, support, and trust that promotes sense of belonging and responsibility. The camp deters the youth from engaging in destructive activities such as alienation and rebellion, lack of self-identity, lack of ethnic pride, lack of interest or commitment to school and community, and lack of respect to nature and life by promoting confidence, empowerment and resiliency.

Starting from 2010, Camp Ebiil initiated a "Research Camp", in which

Teaching Indigenous Knowledge towards Environmental Conservation A Case Study of Camp Ebill in Palau

14 APCEI after the regular camp ended, participants aged 14 and older begin community-based capacity building projects where they participated in life skill training and conducted research and data collection for the rest of the summer. The project and activity for the Research Camp vary according to availability of resources and target learning area each year. Among the activities under taken during the last two years Research Camp were:

- Professional Association of Diving Instructors (PADI)
 Certification for counselors for assisting in reef conservation monitoring
- 2) Data coding and reporting training
- 3) Fishery Monitoring Survey conducted in 2 separate villages
- 4) Mesei Epistemology
- 5) Indigenous engineering and architecture

PADI certification offers participants the experience to dive the Ebiil Channel and monitor the Ebiil conservation site with the Palau Conservation Society. During the monitoring, they were able to observe the spawning activities for the first time. This provided a valuable experience for the camp participant while at the same time also taught them a useful skill for professional development.

The reef and fishery monitoring survey allowed the young people to evaluate the impact of conservation efforts by tracking fishermen's activities on a daily basis. Their conclusion showed that the conservation site has acted as a replenishing base for the adjacent reefs, thereby sustaining the fishing industry for the Ngarchelong community. This project is part of building the evaluation capacity for the program where youth participate in field activities that can produce tangible results, allowing for assessment of the applied conservation measures.

Mesei are large wetland areas designed for the cultivation of taro as part of







▲ Camp Ebiil participants with teacher in Mesei in Ollei Ngerchelong

the Palauan women traditional industry.⁴⁾ The large taro fields are divided among the village clans, lineages, and families as a main staple. In addition to food, taro fulfills clan customary obligations. As such, *Mesei* is one of Palauan women's valued assets which provide significant social status as a sign of industry and strength. Shown below are pictures of the campers and their experience in a *Mesei*.

The goal of the *Mesei* epistemology project is to produce a handbook containing indigenous knowledge on taro patch, which is traditionally a women's learning medium. The information collected includes management and cultivation techniques, natural treatment and control for pests and other plant diseases, herbal medicine from taro patch, watershed protection, and other indigenous knowledge. An example is the taro patch cultivation technique that uses natural medicinal plants to treat diseases to promote healthy and productive taro. Such a practice is crucial to protect the watershed and coastal areas which serve as an important cultural place for women gathering seafood. These processes will be documented and the result disseminated throughout Palau.

Engineering and architecture is taught by a community organization from

⁴⁾ Taro is a tropical plant primarily grown as staple source for Palauans with its edible starchy corm and leaf as vegetable. They are grown in wetlands and serve as a good source of vitamin C, beta-carotene, calcium, etc. Taro, Secretariat of the Pacific Community, Pacific Food Leaflets.

Teaching Indigenous Knowledge towards Environmental Conservation A Case Study of Camp Ebill in Palau

16 APCE Melekeok and a traditionally-trained architect. The projects included a restoration of a traditional dock stone platform and the structuring of a traditional dwelling. Knowledge on construction of a stone platform structure has become almost extinct as it has increasingly being replaced by concrete structures. But it is an important engineering design suitable for Palau's environment because it is more environmental-friendly than concrete structures. It is easy to maintain by villagers and serves as an effective way to control erosion and sediments on clay soil. This is identified in the historical structures of traditional villages situated on ridges of Ngemeduu in Ngarard with cultural artifacts dating some 2000 years ago. ⁵⁾

The picture below shows Ngaramecherocher Melekeok men's group training the camp participants of the stone platform engineering and structuring.



▲ Stone platform engineering

Among the activities in architectural training are: identifying of indigenous trees and their habitats, harvesting trees without damaging the forest, planning and designing using indigenous calculations, moon cycles and tides. The ideology behind the practice emphasizes assembling an architectural structure and floor plan that maintains harmony with nature and its energy. Environmental conservation is incorporated into the architectural practice.

⁵⁾ Cultural Chronology of Earthwork in Palau, Western Micronesia by Jolie Liston, Cultural Chronology of Earthwork in Palau, Western Micronesia, Archeol Oceania 44 (2009), 56-73.



▲ Bringing in wood for structuring of traditional dwelling

The skill can be further developed for those who may want to pursue a career in architecture and use it later on in their lives as adult homeowners. Palauan architecture ideology says that the earth is alive with its own energy and forces. We must understand this energy so that we can live in the same flow as the energy instead of against it. Results of this year's camp will provide support for the development of Camp Ebiil's own facility which has the intention of providing year-round programs teaching about culture and nature.

3. Palauan Values and EIU

3.1 Palauan Values and Principles in Camp Ebiil

Palauan values and principles taught at Camp Ebiil are built into the learning objectives and practiced as rules of conduct within the camp. They are posted in the Bai and are used and expressed throughout the camp training, meetings, and activities. The values taught in the camp include:

- Omengull (Respect to everything)
- Humility
- Generosity
- Sacrifice for others' welfare
- Responsibility for self and others
- Consciousness about human relationships
- Reliability for self and others

Teaching Indigenous Knowledge towards Environmental Conservation A Case Study of Camp Ebill in Palau

18 APCEII

- Peace-promoting conduct
- Appreciation and respect for "Mother Nature"
- Taking care of the vulnerable
- Cultural pride

These are just some of the main Palauan values taught within the camp as rules of conduct and as lessons to be learned from the knowledge and practices passed on as life skills and industry. Although the young people are aware of such values, their regular environment does not necessarily support the practice of such rules of conduct, which promotes the notion of young people as societal menaces. As regularly observed, the young people enter the camp with a very anti-cohesive attitude as a defensive tool probably learned from their regular environment. After intense observation as a result of living together, the children are given higher levels of expectation and leadership roles depending on their recognized individual ability. Those who misbehave or continue to act against the above mentioned values will be reprimanded with increased or additional responsibilities. Evening dinners are accompanied by sharing of personal and group observations of the Camp as a whole. Reminders are given about the individual and group responsibilities and the rules of conduct. The improved positive molding and character building of the young people can be easily observed throughout the camp. This is the reward that camp volunteers are given and promotes returning volunteers every year. This is not to say that there aren't any challenges. There is the constant reminding for the completion of tasks, in addition to the logistical challenges. But those are important part of the process that must be dealt with and overcome during every camp. At the end the campers behave as one family and as always, they are sad to go home.

3.2 Palauan Values and EIU

Palauan values are not so different from other cultures of the world. In fact they are more similar than they are different. A Palauan proverb says:

"A rengalk a nglekel a blai me a buai, ea ungil me a mekngit a di du el suobel."

It means "The mother and father are parents to a child, the community is also a parent to that same child; and good and bad are all lessons to be learned; so be careful with what you teach."

Palauan values insist on peaceful negotiations which can be observed in the rules of conduct applied to traditional leaders. For example, a chief does not speak loudly in a meeting hall or at the Bai, but has a personal messenger whose job is to transmit his words to another.

Additionally, Palau as a small community has maintained use of its own language in a manner that is sensitive and indirect so as not to offend others, even during an argument. There is a saying that we are a small community and those you may offend, you will see tomorrow. Thus one must be careful to relay a message without hurting relationships. Palau has never witnessed any major war, uprising, or coup. The constitution of Palau prohibits ownership of guns except for the purpose of police and public safety. These constitutional laws were created to uphold Palauan values in order to maintain the Palauan identity.

Palauan values and EIU both promote the values of peace, respect to cultural diversity and environment. Peaceful teachings should begin at home in order to influence others to do the same. We must practice what we say if we are to be successful ambassadors of peace. This is embedded in the passage of knowledge in Camp Ebiil.

4. Programme Significance

4.1 Impact to the Community

⁶⁾ The only noticeable political struggle was related to the negotiation and adaptation of the current political relationship with the United States, which originally suggested the removal of Palau's constitutional status of Nuclear Free Zone. This created a resistance group mainly of women who went all the way to the United Nations to challenge the agreement and as a result, Palau was able to enter into the agreement without losing its nuclear free zone status.

Teaching Indigenous Knowledge towards Environmental Conservation. A Case Study of Camp Ebill in Palau educational programmes which incorporate Palauan knowledge important to the preservation of environment and culture. Since the inception of the programme the camp has continued to train at least 30 participants every year, as well as develop field studies with domestic and international schools and colleges. Some of the campers have grown into conservation programmes workers, reef protection researchers, and part of other cultural and environmental preservation-related professions.

Camp Ebiil has provided a platform for young people to participate in

20 APCEII At the same time, the community in which the camp has taken place becomes one of the most active environmental protection advocates. The Northern Lagoon has become the priority area for National Conservation Programs in the last 3 years. This year's camp, which was conducted from 4 June to 13 July 2011, focused on the restoration of a traditional dock that had collapsed over time. The last time that the completed dock was captured in a picture was from a painting by Dr. Kramer during the German colonizers in the early 1900's (German rule in Palau ended in 1914). This area was an important cultural artifact and architectural treasure to the village. It is where the elderly men of the village would gather to talk about important issues on the development of the village; where they would monitor the younger men as they went out to sea and ensured that they maintained proper harvesting. It is also here that young men were taught about reef knowledge, and how to carve and structure canoes, etc. Government-sponsored structuring of the current dock and a typhoon in 1991 destroyed the structure and diminished the tradition. Restoration of



▲ Traditional dock before restoration



▲ Restoration process

the dock will revive the place and its tradition in maintaining important cultural practices that influence societal norms and behavior of young men.

Aside from the restoration of the dock, the research on Mesei epistemology conducted by the female participants during the camp will be published as a handbook that will be disseminated in Palau to promote preservation of the culture. Furthermore, the Mesei participants presented their research during the first national Taro Festival which was held on 6-8 July 2011. Speakers and participants spoke of the need to educate young people on this important knowledge, and were astounded to witness the report from the young campers on Mesei knowledge. The campers also presented the traditional chants and dances related to Mesei culture. It is the hope of Ebiil society that these young participants will one day become the passers of Palauan knowledge which they learned through participation in Camp Ebiil.



▲ Camp Ebiil participants presenting about their Mesei Epistemology study in the First National Taro Festival (6-8 July 2011) in Palau Community College in Koror.



▲ Participants showcasing performance art in community center in Ollei, Ngerchelong before Taro Festival in Koror.

4.2 Evaluation and Critical Reflection

Currently, Camp Ebiil is participating in an evaluation programme under a US federal grant for youth and substance abuse. The programme focuses on providing training and capacity building for organizations serving youth on evidence-based program evaluation. Two of the organization members have previously participated in evaluation training and in turn trained the

Teaching Indigenous Knowledge towards Environmental Conservation: A Case Study of Camp Ebiil in Palau

22 APCEI board members and general members of the organization on evaluation methodologies and application suitable for the camp.

Included in the evaluation strategy is a survey to previous participants, their families, community members who participated as teachers, and the community leaders. The evaluation will provide a better understanding on the impact of the programme on the community and give constructive criticism for more effective planning and implementation of the program. Each participant is asked to answer a questionnaire on the basic knowledge for the specific target learning areas before and after to measure teaching and learning effectiveness. Additionally, a comprehensive programme evaluation is conducted by an external evaluator contracted under the evaluation project to assess the the camp's effectiveness in the last seven years and to make recommendations for the programme improvement. The information will be shared with the community and collaborating partners.

4.3 Programme Achievements & Recognition

Camp Ebiil has been recognized by various levels of government and non-governmental agencies in the Palauan community as a vital program to be promoted in light of developing future generation of Palauan who will protect and preserve the sense of being a Palauan. The varied recognitions have come from invitations to participate in conferences as speakers and panels for culture, nature, conservation, education, and youth programs. Conference sponsors include UNESCO, Society of Archeology for the Pacific, National Youth conferences, Palau Taro Festival, and Palau Conservation Society conferences.

The latest development in this area includes hosting a one-day camp for Tazukayama University in Japan in November 2009 and December 2010. Ebiil Society also recently received an award of \$10,000 from New Zealand small scheme grants for the camp operations, a \$30,000 grant from SAMSHA (a US federal funding for youth and alcohol prevention), a nomination for the Department of Interior-National Parks and Recreation

Award in Washington D.C. for cultural preservation, and the nomination to participate in this EIU Best Practice programme.

The camp has also gained local and international recognition in the form of news print, local television interviews, local conferences and other international programs for youth and cultures. Recently, Camp Ebiil 2011 was featured on the local television network Oceania TV (http://www.oceaniatv.net/on_otv/palaunews110701.html) on 1 July 2011, featuring activities of the camp. The camp has also been featured in several newspapers, such as the Island Times and Marianas Variety.

4.4 Future Plans

1. Evaluation enhancement plan

Ebiil Society's main goal in its enhancement plan is to develop and improve the organization's capacity in monitoring and evaluation. In order to evaluate the programme's effectiveness, indicators have been developed to measure relevancy to the programme's main objectives. The indicator table has been included in the appendix.

The four main evaluation components to be developed and enhanced are as follows:

- To enhance the society's capacity in evaluation by conducting a case study of the camp to see its impact on youth's resilience, attitude and behavior on alcohol use and other risks. Case study will be submitted for review and possible publication in a peerreviewed journal, and will be used to provide feedback on the program's impact to the Board members, the general organization members, and community;
- To develop generic evaluation guides and tools to evaluate the program activities. The generic evaluation guides and tools will be based on the identified areas of focus;

Teaching Indigenous Knowledge towards Environmental Conservation A Case Study of Camp Ebill in Palau

24

- 3) To provide technical assistance in the development of instruments, pilot testing, administration, compilation, analysis, interpretation and reporting of results to various audiences;
- 4) The finished tools are incorporated into the overall Camp Ebiil evaluation component. The tools were piloted during Camp Ebiil 2011 and the collected data will be presented to an expert evaluator for analysis and interpretation. It will be conducted as a form of training for the board, particularly those identified as key people on evaluation who will be responsible for the continued development of evaluation capacity building. The administration will be conducted by an evaluation team identified within the board that will be responsible for training the camp counselors on administration and compilation. Aside from developing capacity for evaluation and reporting, the young people will learn a basic skill in survey and evaluation.

2. Future collaborations

Future collaborations include developing a community archeology programme with the University of Aberdeen in Scotland that will provide field research opportunities for participating college students to earn college credit. Completion of traditional facilities will allow for the development of an indigenous training center to provide year-round programs. Additionally, at the local setting, various states have requested assistance in developing programs for the individual communities using the same model. The plan is to introduce and coordinate the program in Melekeok State next summer.

5. Conclusion

Palau is often missed in the global lens due to its small size. Through this publication in EIU Best Practices, Ebiil Society hopes to demonstrate our spirit in organizing a youth education program not available in the traditional school system, but nevertheless play a critical role in the

continuation of Palau's culture and nature. It is the spirit of the small community of Ollei, Ngarchelong and those of the supporting agencies and private individuals that have allowed the organization to grow. Ebiil Society firmly believe that educating the children without an awareness of the environment will turn them into adults disconnected from that very environment they depend on, and hence will not have the sensitivity or the knowledge to protect it.

Traditional education of Palau has always been integrated into the natural environment and taught by environmentally conscious people who felt the responsibility towards Mother Earth. Ebiil Society is determined to revive the traditional form of education by incorporating practical exposure to culture and nature and at the same time to develop mediums for teaching and learning. The traditional concept of *Diangel* (a boat house that represents medium of knowledge exchange for men) and Eliuis (taro patch that represents medium of knowledge exchange for women) as mediums of education must be revived either through the traditional education in the form of practical field application or revival of community organizations mentoring and teaching practical applications of knowledge during traditional cultural ceremonies or events.

Confidence begins with strong foundations, and strong foundations must begin with the early teachings of identity and pride. Palau's basic foundations are of respect, humility, sacrifice for others' welfare, generosity, human consciousness, and peace. Ebiil Society strives to enrich young people's lives with the teachings of indigenous Palauan knowledge in hopes to promote conscientious individuals, peace-promoting families, and peaceful societies.

While the camp has been successfully implemented in the last 7 years, the opportunity to be reviewed as a case study helped us in measuring the camp's efficacy in reaching the goals set and building resilience in young people. It is further able to support advance development for the program

Teaching Indigenous Knowledge towards Environmental Conservation: A Case Study of Camp Ebill in Palau and justify the importance of maintaining it in our local communities. The results can also be shared as a model study with other communities through publication and dissemination in EIU Best Practices.



I. Camp Ebiil Evaluation Form

Sample of Evaluation Form to test camp participants' knowledge on Oral History, Cultural and Historical Sites of Ngarchelong Village

Content	1 st Level	2 nd Level	3 rd Level
Cultural and Historical Site	What are some cultural and historical sites of Ngarchelong State?	In which village are these sites in? What are the stories associated with these sites?	Why are we learning about these sites? How are they relevant to people today?
	How many villages make up Ngarchelong? What are the names of these villages?	How many of these villages are currently inhabited and how many are not?	Why are there abandoned villages?
Villages	What village of Ngarchelong are you from?	Can you name the kebliil (clan) in which your family belongs to? Can you name some of your relatives from Ngarchelong?	Can you locate the odesongel or chutem that your clan or family is associated to in Ngarchelong? How are you related to them, by family or by clan?
Traditional Village	What are stoneworkslike odesongel, iliud, euatel, chelduklrael, diong? How many docks does Ngarchelong have?	Who made these s tone works? How many houses in Ngarchelong still uses odesongel, euatel, orchelduklrael?	What types of building designs were used to build this stone work? What is the ideology behind the design?
Council of Chiefs	What are the chiefly titles of the Council of Chiefs from Ngarchelong?	What are the names of the Council of Chiefs of these villages? What are the women's counterpart names of these chiefs?	What are the chiefs' main functions today? How do we show respects to the chiefs?
Legends	What are some legends originating in Ngarchelong?	What are the moral lessons taught from these legends? Can you give the location in Ngarchelong these stories are derived from?	How can these lessons be applied to our lives today? Can you retell this story and convey the moral of the story?

Teaching Indigenous Knowledge towards Environmental Conservation: A Case Study of Camp Ebill in Palau

28 APCEIU

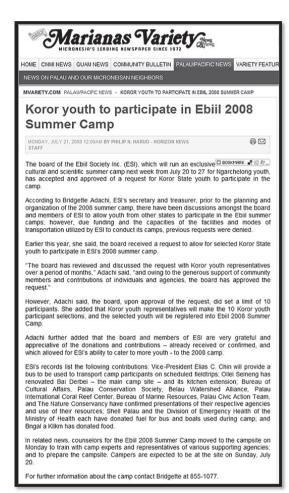
II. Evaluation Indicators

The table below shows indicators for measuring learning objectives, used to measure effectiveness of the teaching methodologies for the camp as a whole and the impact on the development of the young people.

Avg% Ethnic Knowledge Gained • Marine= • Taro Patch Cultivation= • Historical Sites= • Oral History= • Fishing=	Avg % Character Building knowledge gained Bai protocols= Community protocols= Family protocols=	Number of participants gaining life skills or training
Alcohol use amongst participants = Baseline to be developed • % who have been in a car w/ driver under alcohol influence for the last 30 days = • % who had at least one alcohol drink w/in the last 30 days = • % who think alcohol is part of Palauan ethnic culture= • % who have better understanding of alcohol effects =	Measuring ethnic pride = Baseline to be developed • % Use of local language= • % Knowledge of local poetry= • % Knowledge of local art= • % Knowledge of local food = • % knowledge of Palauan medicine=	Measuring conservation knowledge gained = Baseline to be developed • Ecosystem = • Plants = • Watershed = • Reef = • Birds=

III. Media Coverage

Ebiil Society featured in Marianas Variety on 21 July 2008.



29 apceiu

Teaching Indigenous Knowledge towards Environmental Conservation: A Case Study of Camp Ebill in Palau Ebiil Society featured in Island Times on 16 May 2011.



30

IV. References

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