

## SIGN-UP SHEET ....Mahalo for your mana'o!

NAME	I WOULD LIKE TO PARTICIPATE IN YOUR WORKSHOPS		I AM INTERESTED IN BEING A RESOURCE SPEAKER		OTHER COMMENTS
	YES	NO	MOKULEIA June 15, 16, 17th FRI - SAT - SUN	DISCOVERERS' DAY October 4th 8th TUESDAY Monday	
1. <del>Nomur A. Hays</del>	✓			✓	
2. <del>Sammy Holmes</del>				✓	any aspect of Hawn canoes - design, const, type, uses etc of plants, animal, food psychodynamics on voyaging canoes etc
3. <del>Maoku Kowale</del>	✓		✓	✓	
4. <del>Nani M. Bodger</del>	✓			✓	Plans are tentative now - never can tell where I'll be or what I'm going to be into -
5. <del>Paula Luv</del>	✓		✓	✓	
6. <del>Melissa Kim</del>	✓			yes - but need to speak to Rowena	yes for some of the activities but cannot stay overnight
7. <del>Will Ky</del>	✓		✓		
8. <del>M. Lyman-McKee</del>	✓		✓	✓ - IF CAN, CAN...	
9. <del>Steve Soren</del>	✓		✓	✓	SAILING + SAILING THEORY. BOATING SKILLS + SEAMANSHIP. AIDS TO NAVIGATION. "modern" NAVIGATION. CANOE ORIENTATION. (Provide my own slides)
10. <del>Isabel Haskel</del>	✓		✓	✓	
11. <del>Peter Ago</del>	✓		✓	Don't know yet	
12. <del>Dave Lyman</del>	✓		Depends on availability as per work		

Please mark the subjects you are interested in speaking on.

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	YES	NO		
1 Alyce Keolu	✓		Depends	8th is the holiday 9th is school - so far
2 Ruzsa Keolu	✓		not sure I would like to <del>attend</del>	I will need to check my work calendar, so I may give you sometime for helping with the workshop.
3 Kahuopuna hua	✓		Yes - for sure!	Am almost definite I can be present.
4				
5				
6				
7				
8				
9				
10				
11				
12				

# PROGRAM SCHEDULE

Pihana Kanaka  
(Assembly)

Registration--Konia 108  
Opening Remarks--Mike Tongg-Pres. P.V.S.  
Introduction of Instructors and Coordinators

8:00--8:25

Greg Rhodes, HCSS President  
Announcements--Gordon Pi'ianāi'a  
Director, Hawaiian Studies Institute

Concurrent Sessions	Room 110	Room 114
<u>Session 1</u> 8:30--9:15	<u>Creative Activities &amp; Practical Ideas In Teaching Polynesian Voyaging</u>  Instructor--C. Lindo	<u>Migration and Settlement</u>  Instructor--N. Bowman
<u>Session 2</u> 9:20--10:05	<u>Basic Coaching In Stars Related to Polynesian Voyaging</u>  Instructor--W. Kyselka	<u>Hōkūle'a As An Educational Tool</u>  Instructor--G. Pi'ianāi'a
<u>Session 3</u> 10:10--11:00	<u>Basic Polynesian Navigation (Winds, Currents, Bird Flights)</u>  Instructor--S. Somsen	<u>Crafts That Kept Children Busy On Open Voyages</u>  Instructor--Colleen Murakami Diane Ott

## SPECIAL VISITATIONS

11:00--12:00	Visit to Midkiff Center
12:00--1:00	Visit to Waonahele and Lunch
1:00--1:25	Visit 60 foot koa canoe built by Wright Bowman
<u>Session 4</u> 1:30--2:30	Visit Planetarium at Bishop Museum Meet Nainoa Thompson--Hawaiian Navigator
<u>Session 5</u> 2:30--3:00	Talk to crew persons Board Hōkūle'a at Pier 12



HŌKŪLE'A

BOX 19000 A/HONOLULU/HAWAII 96818/PH: 841-3966

EVALUATION OF POLYNESIAN VOYAGING WORKSHOP

Your kokua will help us to improve our services to others.  
Please check ( ) the following. Mahalo nui loa for your mana'o (thoughts)!

TOPICS	MAIKA'I LOA (Excellent)	MAIKA'I (Good)	ANO MAIKA'I (Fair)	A'OLE MAIKA'I (Auwe! Please Improve)
1. Overall Organization				
2. Concurrent Sessions				
3. Comfort (Breaks, Rooms, Lunch)				
4. General Atmosphere & Spirit				

PLEASE LIST THE SESSIONS YOU ATTENDED AND USE THE CRITERIA ABOVE FOR CHECKING ( )

1.				
2.				
3.				
4.				
5.				
6.				
7.				

PLEASE COMPLETE THE FOLLOWING QUESTIONS WITH A CHECK MARK ( )

- What has been your acquaintance with the Children's Book Project, Nā Puke Huaka'i Kamali'i on Polynesian Voyaging? \*(Set includes 4 books):
 

<input type="checkbox"/> Never saw them before	1. The Vision of Mo'ikeha
<input type="checkbox"/> Saw another teacher's set	2. A Canoe for Uncle Kila
<input type="checkbox"/> Bought my own set	3. The Voyage to Tahiti
<input type="checkbox"/> Saw the school's set	4. Hōkūle'a
- What has been your acquaintance with the Teacher's Resource Curriculum Guide?  
\* (The guide is a resource and supplement to accompany the series of books.)
 

<input type="checkbox"/> Never saw it before
<input type="checkbox"/> Saw another teacher's copy
<input type="checkbox"/> Bought my own copy
<input type="checkbox"/> Saw the school's copy
- Did you benefit from the PVS workshop?
 

<input type="checkbox"/> Yes
<input type="checkbox"/> No
<input type="checkbox"/> Somewhat
- Would you like a follow-up workshop? YES/NO
- What suggestions do you have for future workshops?



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PROGRAM SCHEDULE

110 plus  
w/overseer

Pihana Kapa<sup>N</sup>  
(Assembly)

Registration--Konia 108  
Opening Remarks--Mike Tongg-Pres. P.V.S.  
Introduction of Instructors and Coordinators

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1:30--2:30	Meet Nainoa Thompson--Hawaiian Navigator
<u>Session 5</u>	Talk to crew persons
2:30--3:00	Board Hokule'a at Pier <del>10</del>

PROGRAM SCHEDULE

*Corrected sheet*  
10/31/80

naka  
Pihana Kapaka  
(Assembly)

Registration--Konia 108  
Opening Remarks--Mike Tongg-Pres. P.V.S.  
Introduction of Instructors and Coordinators

8:00--8:25

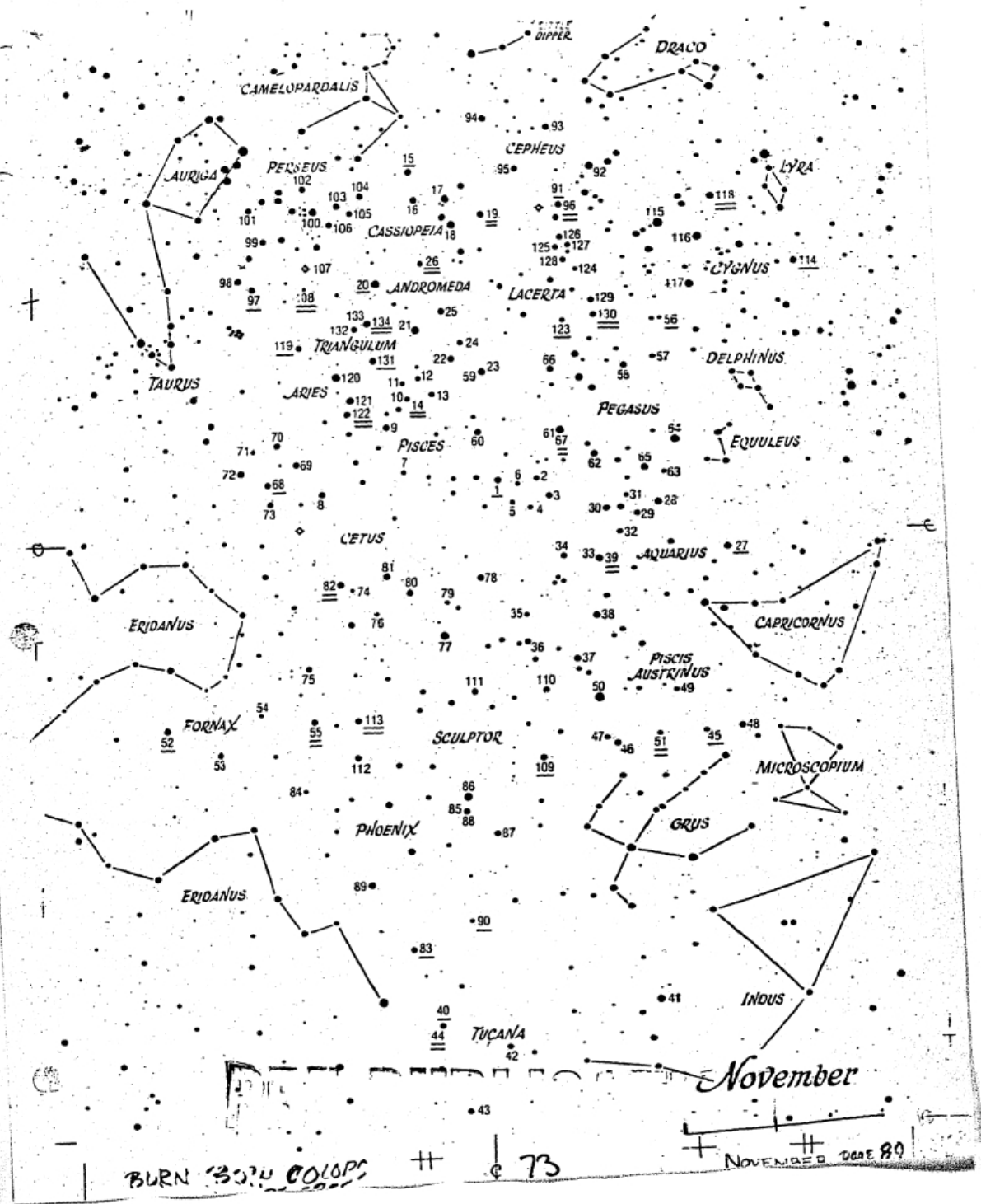
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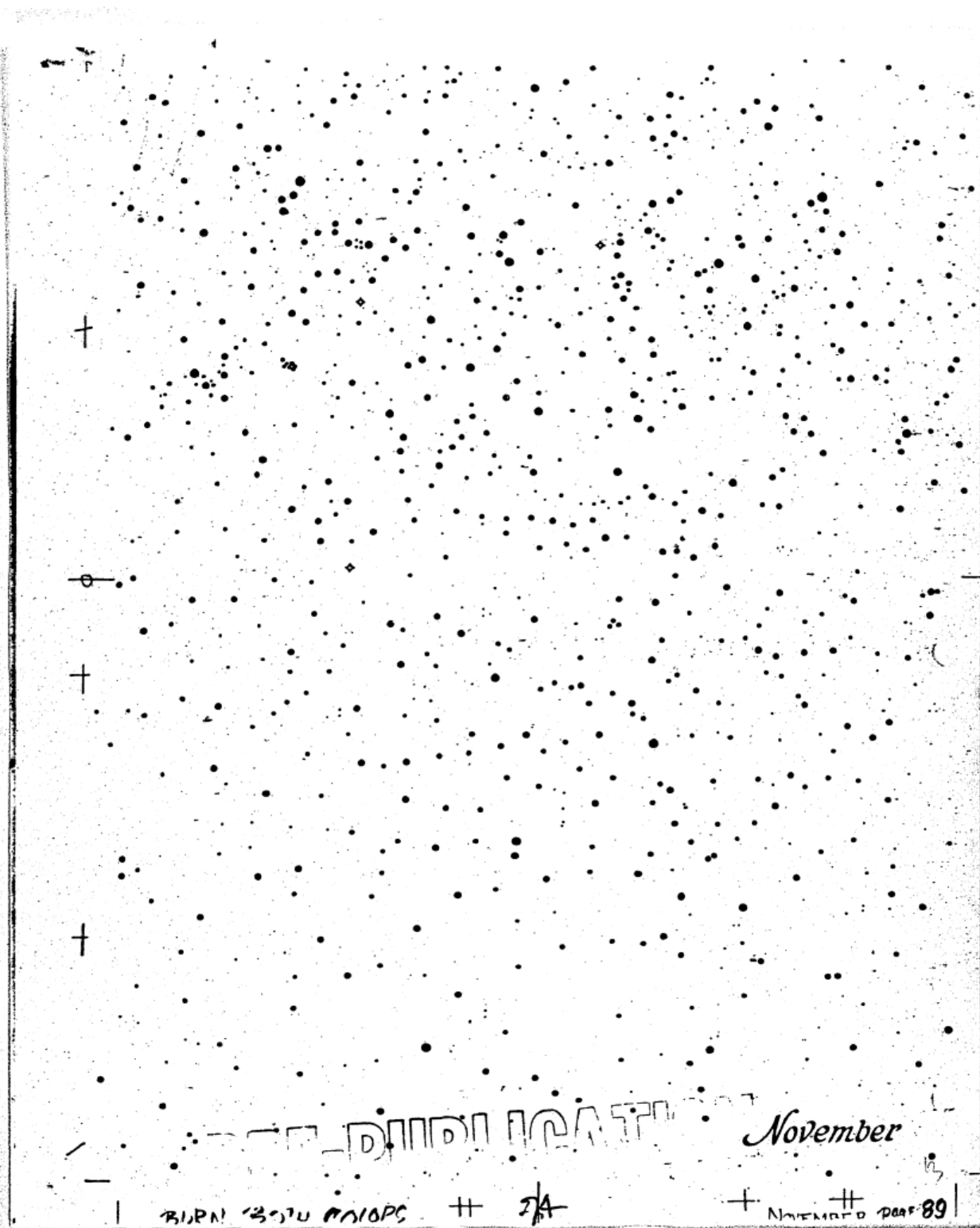
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ILLEGIBLE



ILLEGIBLE



NOVEMBER 1989

TEN EXAMPLES OF WAONAHELE PLANTS

-Information from *The Ahupua'a* by Nā Pono Hawai'i, Hawaiian Studies Institute, Extension Education Division, the Kamehameha Schools, 1979. p. 28, 29, 31, 33, 34, 36, 42, 48.

'A'ALI'I

-----  
Dodonaea spp.  
Endemic

The 'a'ali'i is a shrub or small tree with dark, heavy wood. If the trunks of the 'a'ali'i are long and straight they may be used for house posts.

The red-brown seed capsules are placed in wooden or gourd containers, water added, then hot stones. The dye resulting from this stone-boiling process is used on *kapa*.

HALA HĪNANO (male)

HALA HUA (female)  
Pandanus  
Pandanus odoratissimus  
Polynesian introduction

The woody trunk (kumu hala) of the male tree is used for house posts and occasionally for bowls. The trunk of the female tree is soft.

The leaves (lau hala) are plaited (ulana) into mats (moena), baskets (hina'i), fans (pe'ahi), pillows (uluna), sandals (kāma'a) and canoe sails (lā). The preparation of the *lau hala* and the *ulana* are women's work. Where *pili* is scarce and *lau hala* abundant the men thatch houses with the leaves.

The tender tip of the aerial root, although bitter in taste, is eaten raw or cooked for its medicinal properties. Fibers from the aerial root of the *hala* are used to string leis, and the musical bow ('ūkēkē) can be made from the wood. The fleshy end (pua hala) is cut from the sections or keys of the fruit cluster ('āhui hala) and strung into leis. Dried fruit sections serve as paint brushes. Children break open (kikē hala) the mature keys and eat the nut-like centers.

# KUKUI

Candlenut tree

*Aleurites moluccana*

Polynesian introduction

The *kukui* trees, which grow to heights of 80 feet, form dense growths in the lower mountains and in the wet gulches. The silvery green of the mature leaves can be seen for many miles. The leaves on *kukui* seedlings are large and bright green.

The wood is used sparingly as it is soft and decays easily.

The inner bark is pounded, water added making a stain for fish nets and a reddish-brown dye for *kapa*.

The gum (pīlali *kukui*) exuding from the trunk is chewed by children and also dissolved in water for a resin-like coating on *kapa*.

Children with thrush or coated tongue ('ea) eat *kukui* blossoms mixed with cooked sweet potatoes ('uala) as a treatment for this ailment.

The sap exuding from a green nut at the point where it is broken from the stem is rubbed over the white coated area in the mouth of a child suffering from 'ea. Sap from a nut or leaf petiole, applied to punctures and wounds on the skin, forms a seal which hastens healing.

The hard shells of the nuts are polished and strung into *lei*. The flesh of the raw nut is a strong cathartic. The flesh of roasted nuts is pounded and salt is added to make the relish 'inamona. Roasted kernels, chewed by fishermen on the reef or in canoes, are blown out over the small waves and ripples to form a film on the surface which increases visibility under the water.

# KĪ

Ti

*Cordyline terminalis*

Polynesian introduction

Kī is grown for its useful shiny green leaves (lā'i, contraction of lau kī). Although planted around dwellings by stem cuttings, it seems to grow wild without care in the lower forests.

Raw foods are wrapped (lāulau) in lā'i and cooked in the *imu* (kālua) or broiled over coals (lāwalu). Leaves in the *imu* insulate food from the hot stones and impart a flavor. Food is wrapped in lā'i and stored or transported in bundles (pū'olo).

Lā'i are tied to the upper edge of a *hukilau* net to frighten the fish into staying in the net. A tuft of lā'i is tied to an octopus lure (lūhe'e) to conceal the sharp bone hook.

Lā'i are tied to netting ('upena) to make rain capes for bird catchers. Shelters in the forests are thatched with lā'i as are those in lowland areas where *pili* does not grow. Structures in the *heiau* sacred to the god *Lono* are thatched with lā'i.

# 'ŪLEI

Osteomeles anthyllidifolia  
Endemic

'Ūlei is a rambling many branched shrub that spreads over the ground forming thickets not more than two feet high. It prefers dry areas from sea level to 4,000 feet in elevation. In some places 'ūlei has been known to grow into a 12 foot high shrub.

The compound leaves are a shiny green, the rose-like flowers are white and the globular white fruits contain a sweet purple pulp. The flavor of these edible berries is similar to that of rose petals.

The creeping branches are tough, strong and pliable. They are stripped of their bark to make fish spears (kao), digging sticks ('ō'ō), and carrying poles ('auamo/māmaka). 'Ūlei wood is used for the bow in *Hawai'i's* only stringed instrument, the 'ukēkē.

Of special importance is the use of pliable 'ūlei branches in fishing. Bark-free pliable ones are bent into the shape of a loop to form the frames for dip and scoop nets. Heavier branches hold the bag-like 'ōpelu nets open in deep water.

# 'ILIMA

Sida spp.  
Endemic and Indigenous

The 'ilima varies from small, recumbent plants to large shrubs. They bear yellow, orange or dull red paper-thin blossoms which are strung into lei.

'Ilima-ku-kahakai ('ilima standing on the beach) is a low lying plant which creeps over dry sandy or rocky places near the beach.

'Ilima-ku-kula ('ilima standing on the plains), an upright plant, reaches 3 to 5 feet in height on the plains and lower forests.

Mothers chew a few 'ilima blossoms and give them to their babies who are in need of a mild laxative.

# 'ŌHI'A LEHUA

Lehua  
Metrosideros collina  
subsp. polymorpha  
Endemic

One of the most abundant of all Hawaiian native trees, and the most varied in size, shape, and leaf form. It grows from near sea level in the windward areas to over 8,000 feet in elevation. Some reach 80 feet in height.

The wood, dark, dense, and long-lasting, is used for house posts, temple images, spears, poi pounding boards, and the gunwale strakes (mo'o wa'a) of the canoes.

The tufted blossoms vary from red-crimson to the less common salmon, yellow and white. The flowers, said to be sacred to *Pele*, are featured in chants, songs, and legends. The reddish young leaves (liko lehua) are brewed into a pleasant medicinal tea. Both blossoms and reddish leaves are combined with ferns into lei.



# LAMA

---

Diospyros spp.

Endemic

Oil extracted from roasted nuts is burned, using one or more *kapa* wicks, in the stone lamps (*poho* (*kukui*). Roasted kernels, strung on a coconut midrib (*nī'au*) or bamboo splinter, form a type of candle (*kōi*/*kāli/ihoiho kukui*). A torch (*lamakū*) consisting of a bamboo handle and a bundle of *kōi kukui* enclosed in a sheaf of ti leaves provides light for night activities.

Soot (*pa'u*) collected from burning roasted nuts gives a black dye for tatooing, for painting the hulls of canoes, and for dyeing *kapa*.

*Lama* trees grow from 20 to 40 feet in height in either wet or dry lower elevations. In thick stands of trees the trunks grow straight and reach a foot in diameter.

The young leaves (*liko lama*), orange to red in color, unfold from the tips of the upper branches and give a *lama* grove the appearance of radiating light (*lama*). Mature leaves are dark green and leathery.

The fruit cycle is opposite in color from the leaves. Immature fruits are green, then yellow and finally dark red. The fruit, a relative of the persimmon, is food for man and birds when ripe.

The wood, hard and light colored, is sacred to *Laka*, goddess of the *hula*. A block of uncarved *lama* wood, wrapped in *ōlena*-dyed *kapa*, is placed on the altar (*kuahu*) in the school of the dance (*hālau hula*) to symbolize *Laka*.

The wood is ideal for house posts and for walls around sacred or other important enclosures (*pā*), for example, *Kapālama*.

Sap in *koa* is disagreeable in flavor so the wood is not used for food dishes.

Most of the surfboards (*papa he'e nalu*) are made from *koa* wood although a few are of *wiliwili* or *ulu* wood.

# KOU

---

*Cordia subcordata*

Polynesian introduction

*Kou* is a quick-growing cultivated tree which may reach 30 feet in height. The tree provides shade around the houses (*hale*), especially in the warm, leeward areas. The beauty of the wood and the ease with which it can be cut makes *kou* the most highly prized of all woods for food bowls (*'umeke kou*) and platters (*pā kou*).

Images are carved from *kou*. A brown dye is obtained from the leaves. *Lei* are strung from the orange flowers. Read the legend to learn why no one wears a *kou* flower *lei* in one part of the *'Ewa* district on *O'ahu*.

DOCUMENTS CAPTURED AS RECEIVED

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copy 1 set (complete)  
for Nani

# HAWAIIAN PLANTS - WAONAHELE

Prepared by Sarah Quick

## COMMON - White label

ALAHE'E (n)  
KOU (i)  
'A'AWA HUA KUKUI (e)  
'ULEI  
NEHE (e): creeping  
KI (i)  
LEHUA 'AHIHI (e)  
LAMA (e)  
HALAPEPE  
KOKI'O KE'OKI'O (e)  
'AKIA (e)  
MANELE  
NAIO (e)  
MA'O (e)  
PA'U O HI'IAKA (e)  
AULU (e)  
PAPALA KEPAU (e)  
'ILIMA (e): creeping  
bush  
KUKUI (e)  
'OHI'A LEHUA (e)  
HALA (e)  
'ANAPANAPA (n)  
HAPU'U: I'I (e)  
PULU (e)

## RARE - Red label

LOULOU (e)  
HO'AWA (e)  
HAU KUAHIWI (e)  
'A'ALI'I (e)  
MAMANE (e)  
KOKI'O CLAY (e)  
KOKI'O KAUA'I (e)  
ACHYRANTHES SPLENDENS (e)  
'ILIAHI ALO'E (e)  
UHI UHI (e)  
MA'O HAU HELE  
'OHAI (e): creeping  
NAUPAKA (e)  
KOKI'O KE'OKI'O (e)  
'OHE'OHE MAKAI (e)  
KOKI'O 'ULA'ULA (e)  
NUMROIDENDRON (e)

n = native-indigenous  
e = endemic  
i = introduced

# HAWAIIAN PLANTS - WAONAHELE

Prepared by Sarah Quick

## COMMON - (White label)

- ✓ ALAHE'E (n)
- KOU (i)
- ✓ 'A'AWA HUA KUKUI (e)
- 'ULEI (e)
- NEHE (e): creeping
- KI (i)
- LEHUA 'AHIHI (e)
- LAMA (e)
- HALAPEPE
- KOKI'O KE'OKI'O (e)
- ✓ 'AKIA (e)
- MANELE
- NAIO (e)
- MAO (e)
- PĀ'Ū O HI'IAKA (e)
- ✓ AULU (e)
- PĀPALA KĒPAU (e)
- 'ILIMA (e): creeping
- bush
- KUKUI (e)
- 'ŌHI'A LEHUA (e)
- HALA (e)
- ✓ 'ĀNAPANAPA (n)
- HĀPU'U: I'I (e)
- PULU (e)

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e = endemic  
i = introduced

## RARE (red label)

- LOULU (e)
- HŌ'AWA (e)
- HAU KUAHIWI (e)
- 'A'ALI'I (e)
- MĀMANE (e)
- KOKI'O CLAY (e)
- KOKI'O KAUA'I (e)
- ACHYRANTHES SPLENDENS (e)
- 'ILIAHI ALO'E (e)
- UHI UHI (e)
- MA'O HAU HELE
- 'ŌHAI (e): creeping
- NAUPAKA (e)
- KOKI'O KE'OKI'O (e)
- 'OHE'OHE MAKAI (e)
- KOKI'O 'ULA'ULA (e)
- MUMROIDENDRON (e)

① retype

10/28/80

② cut & paste neatly  
for Chi mtg -

Hokulea Workshop



# Hawaiian Plants - WAOA HELE

Prepared by Sarah Quick

## Common (white label) (25)

clāhe'e (n)  
 kū (i)  
 'a'awa - kūa - kūuile (e)  
 'ūlei (e)  
 neke (e): creeping \*  
 kī (i)  
 lehua 'āhiki (e)  
 lāma (e)  
 hāla pepe  
 kōkī'o kē'oke'ole (e)  
 'āki (e)  
 māwele  
 hāio (e)  
 māo (e)  
 (3 words) pā'ū o Hīiala (e)  
 lūlu (e)  
 pāpala kēgen (e)  
 'ihima (e)  
 creeping  
 bush  
 kūuile (e)  
 'ōhi'a lehua (e)  
 hāla (e)  
 ānāpāpā (n)  
 hāpū'ū - i'i  
 - pūlu (e)

n = native - indigenous  
 e = endemic  
 i = introduced

## Rare (red label) (17)

loulou (e)  
 kō'awa (e)  
 hāu - kō'awa (e)  
 'a'ali (e)  
 mānana (e)  
 kōkī'o clay (e)  
 kōkī'o tūdi (e)  
 ? - achyranthes  
 papilionacea (e)  
 'ilīchi a'lo'e (e)  
 ūhi ūhi (e)  
 (3 words) mā'o hāu hāle  
 'ōhai (e) - creeping  
 kōpaka (e)  
 kōkī'o kē'oke'ole (e)  
 kōkī'o hāu hāle (e)  
 kōkī'o 'ula'ula (e)  
 ? - micondendron  
 micondendron

Abbreviations used on  
 end - endemic  
 indig - indigenous  
 Poly. intro. - Polynesian  
 introduced





HOKŪLE'A

DISCOVERING THE SEAFARING ROOTS OF OUR HAWAIIAN ANCESTORS

WORKSHOP IN COOPERATION WITH  
The Hawai'i State Council for The Social Studies,  
The Kamehameha Schools and The Polynesian Voyaging Society

DATE: November 8, 1980

PLACE: The Kamehameha Schools (Konia Building/upper campus)  
Invitation to visit Midkiff Learning Center and  
Waonahale (Garden of Native Hawaiian Plants)

COST: \$2.00 - HSCSS Members  
\$4.00 - General Public

TIME: 8:00 a.m. -- 3:30 p.m.

LUNCH: Brown Bag

WORKSHOP AGENDA:

1. Creative Activities and Practical Ideas in Teaching Polynesian Voyaging  
INSTRUCTOR: Cecilia Kapua Lindo  
Vice Principal and Teacher - Hongwanji Mission School  
Chairperson - Education Committee, Polynesian Voyaging Society  
Author, Editor - A Resource Curriculum Guide on Polynesian Voyaging - Na Hana Huaka'i (The Voyaging Works) Activity Book
2. Migration and Settlement  
INSTRUCTOR: Nani Bowman  
Teacher of Hawaiian Studies - The Kamehameha Schools
3. Basic Coaching in Identifying Stars Related to Polynesian Voyaging  
INSTRUCTOR: Will Kyselka  
Professor of Science - University of Hawai'i: Bishop Museum  
Planetarium  
Collaborator of Navigational Techniques and Astronomy  
Author - North Star To Southern Cross, 12 Star Maps, Hawaiian Skies
4. Hōkūle'a As An Educational Tool  
INSTRUCTOR: Gordon Pi'ianai'a  
Director of Hawaiian Studies Institute - The Kamehameha Schools,  
Extension Education Division  
Co-chairman of Education Committee - Polynesian Voyaging Society  
Captain of the Hōkūle'a - 1980 Trip  
First Mate of Hōkūle'a - 1976 Trip
5. Basic Polynesian Navigation (Winds, Currents, Bird Flights)  
INSTRUCTOR: Steve Somsen  
Instructor of Navigation at the University of Hawai'i  
Documentor and crewperson on the Hōkūle'a, 1980 Trip
6. Crafts That Kept Children Busy On Open Voyages  
INSTRUCTOR: Colleen Murakami  
Teacher - Ma'ili Elementary School
7. A Trip to the Planetarium, Bishop Museum  
Meet Nainoa Thompson - young Hawaiian navigator who navigated Hōkūle'a to Tahiti/Hawai'i by stars. He will introduce you to the stars that helped to make the 1980 journey of the Hōkūle'a possible.
8. Meet 1980 Crewmembers of the Hōkūle'a Aboard the Hōkūle'a - Pier 12  
Question and answer time with crewpersons who journeyed to Tahiti and back to Hawai'i by non-instrumental navigation.

WORKSHOP

DISCOVERING THE SEAFARING ROOTS  
OF OUR HAWAIIAN ANCESTORS

NOVEMBER 8, 1980



HŌKŪLE'A

In cooperation with the Hawai'i State Council for Social Studies,  
Kamehameha Schools and the Polynesian Voyaging Society\*

PROGRAM SCHEDULE

Pihana Kanaka (Assembly)	Registration - Konia 108 Opening Remarks--Michael Tongg, President, PVS* Introduction of Instructors and Coordinators, Greg Rhodes, HCSS Pres. Announcements--Gordon Pi'ianāi'a, Director, Hawaiian Studies Institute	
8:00--8:25		
CONCURRENT SESSIONS	ROOM 110	ROOM 114
SESSION I	<u>Creative Activities &amp; Practical Ideas In Teaching Polynesian Voyaging</u>	<u>Migration and Settlement</u>
8:30-9:30	Review of Teacher's Guide, Activity Book (Hand outs of maps and other materials on Polynesian Voyaging)  Instructor: Cecilia Kapua Lindo	Teacher's Guide, Activity Book, Study of the Ahupua'a (Hand outs)  Instructor: Nani Bowman
SESSION 2	<u>Basic Coaching In Stars Related To Polynesian Voyaging</u>	<u>Hōkūle'a As An Educational Tool</u>
9:45-10:45	Transparencies, slides, illustrations, hand outs  Instructor: Will Kyselka	Slides, posters, other audio-visual aids on Hōkūle'a  Instructor: Gordon Pi'ianāi'a
SESSION 3	<u>Basic Polynesian Navigation (Winds, Currents, Bird Flights)</u>	<u>Crafts That Kept Children Busy on Open Voyages</u>
10:50-11:50	Slides, illustrations, activities, hand outs  Instructor: Steve Somsen	Sennit making (hau & coconut) etc. Instructions available.  Instructor: Colleen Murakami
11:50---1:15	VISIT MIDKIFF LEARNING CENTER LUNCH AT WAONAHELE (Brown Bag) EVALUATIONS (PLEASE HAND IN IF YOU ARE LEAVING)	
SESSION 4	<u>GO TO THE PLANETARIUM AT BISHOP MUSEUM</u> (5-minute drive from The Kamehameha Schools) Meet Nainoa Thompson, young Hawaiian navigator who navigated Hōkūle'a to Tahiti/Hawai'i, by stars. He will introduce you to the stars he followed as he made the successful journey.	
1:30-2:30		
SESSION 5	<u>VISIT THE HŌKŪLE'A - PIER 12</u>	
2:30-3:30	Meet and talk with crew members who made the journey to Tahiti/Hawai'i on the Hōkūle'a in 1980.  Hand in your evaluation sheets please! ALL PAU!	

COORDINATORS

Nani Bowman, Teacher, The Kamehameha Schools  
Laura Koide, Teacher, Honowai Elementary School  
Will Kyselka, Professor of Science - University of Hawai'i: Bishop Museum Planetarium  
Cecilia Lindo, Chairperson, Education Committee, Polynesian Voyaging Society  
Alicia Nakamoto, Teacher, Castle High  
Gordon Pi'ianāi'a, Director of Hawaiian Studies Institute, The Kamehameha Schools  
Greg Rhodes, President, Hawai'i State Council for the Social Studies  
Elaine Takenaka, State Social Studies Curriculum Specialist  
Angelina Taylor, Teacher, Cathedral School



HOKULE'A

REGISTRATION FORM

Reservations Required...Limited to 100 at the Planetarium and Hokule'a

Registration Deadline: October 21, 1980

Lunch: Bring Brown Bag

Cost: \$2.00 HSCSS Members  
\$4.00 General Public  
(Make check payable to Hawai'i State Council for Social Studies)

Mail form to: Hawaiian Studies Institute/EED  
The Kamehameha Schools  
Kapalama Heights  
Honolulu, Hawai'i 96817

NAME: \_\_\_\_\_ TELEPHONE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_ ZIP: \_\_\_\_\_

OCCUPATION: \_\_\_\_\_

LOCATION: \_\_\_\_\_

Please list your choice of topics for SESSIONS 1, 2 & 3. (Check schedule for topics.)

SESSION 1: \_\_\_\_\_

SESSION 2: \_\_\_\_\_

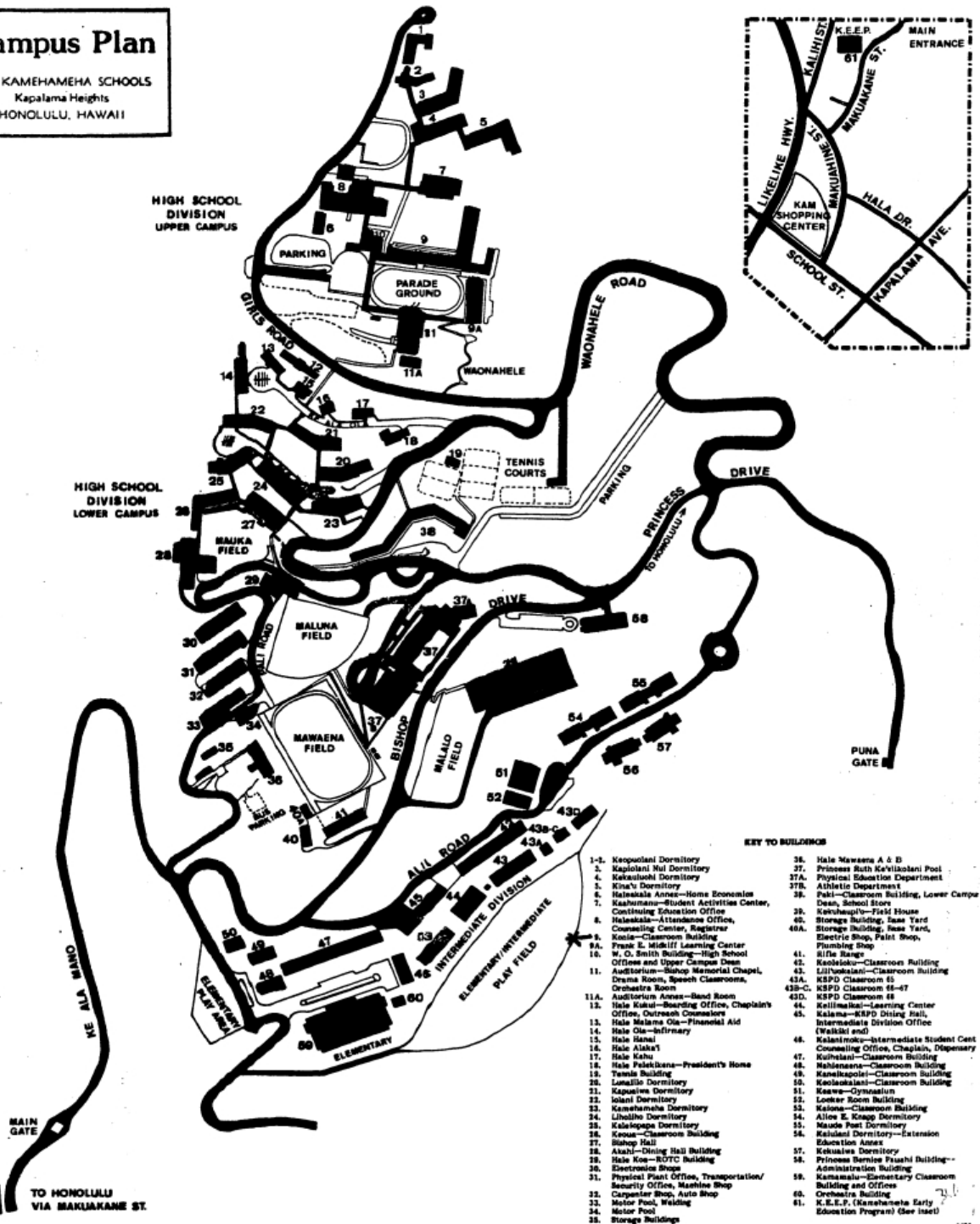
SESSION 3: \_\_\_\_\_

Cost of Books on Polynesian Voyaging:

A Resource Curriculum Guide on Polynesian Voyaging	\$2.50
Set of 4 Children's Books on Polynesian Voyaging	\$6.00
Na Hana Huaka'i (Activity Book)	N.A.

# Campus Plan

THE KAMEHAMEHA SCHOOLS  
Kapalama Heights  
HONOLULU, HAWAII



# PROGRAM SCHEDULE

Pihana Kanaka  
(Assembly)

Registration--Konia 108  
Opening Remarks--Mike Tongg-Pres. P.V.S.  
Introduction of Instructors and Coordinators

8:00--8:25

Greg Rhodes, HCSS President  
Announcements--Gordon Pi'ianāi'a  
Director, Hawaiian Studies Institute

Concurrent Sessions	Room 110	Room 114
<u>Session 1</u> 8:30--9:15	<u>Creative Activities &amp; Practical Ideas In Teaching Polynesian Voyaging</u>  Instructor--C. Lindo	<u>Migration and Settlement</u>  Instructor--N. Bowman
<u>Session 2</u> 9:20--10:05	<u>Basic Coaching In Stars Related to Polynesian Voyaging</u>  Instructor--W. Kyselka	<u>Hōkūle'a As An Educational Tool</u>  Instructor--G. Pi'ianāi'a
<u>Session 3</u> 10:10--11:00	<u>Basic Polynesian Navigation (Winds, Currents, Bird Flights)</u>  Instructor--S. Somsen	<u>Crafts That Kept Children Busy On Open Voyages</u>  Instructor--Colleen Murakami Diane Ott

## SPECIAL VISITATIONS

11:00--12:00	Visit to Midkiff Center
12:00--1:00	Visit to Waonahale and Lunch
1:00--1:25	Visit 60 foot koa canoe built by Wright Bowman
<u>Session 4</u> 1:30--2:30	Visit Planetarium at Bishop Museum Meet Nainoa Thompson--Hawaiian Navigator
<u>Session 5</u> 2:30--3:00	Talk to crew persons Board Hōkūle'a at Pier 12

*Rough Draft*

112-22000-1  
P. 1 of 1

ABSTRACT

FOCUS: Area I. Training of Persons in Ethnic Studies

Level: Elementary Education

Overall Objective: To train elementary school teachers, and other ethnic studies personnel in the area of Polynesian voyaging so as to enhance their understanding of ethnic identity, interethnic communication and relations and the process of American multi-culturalism.

SPECIFIC OBJECTIVES:

1. To establish five regional Polynesian voyaging resource centers at Honolulu, Windward O'ahu, North Shore O'ahu, Kealia on Kaua'i, and Pihi on Maui.
2. To train resident resource persons in Polynesian voyaging at each of the five satellite resource centers.
3. To use the Hokule'a as a floating classroom to be temporarily berthed near each of the five resource centers.
4. To have the five regional Polynesian voyaging resource people train elementary school teachers and other professionals in ethnic studies to:
  - a. Identify Polynesian voyaging resources and resource people.
  - b. Explain the concepts and techniques of Polynesian voyaging.
  - c. Demonstrate the value of a multi-ethnic approach by explaining the unique components of Polynesian voyaging and culture.
  - d. Effectively use the curriculum materials provided by the Polynesian Voyaging Society.

APPROACH:

The project is organized to provide resource materials and training in two stages.

The first stage is to organize the curriculum materials and train persons to permanently operate one main resource center and four satellite resource centers. The second stage is to train personnel and teachers of elementary school aged children in the use and availability of Polynesian voyaging resources and its relevance for understanding ethnic identity, interethnic communication and relations and the process of American multi-culturalism.

AMOUNT OF FUNDING REQUESTED: \$59,960.00

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Polynesian Voyaging Society (PVS)  
Resource and Training for Multi-Cultural Education

ETHNIC HERITAGE STUDIES PROGRAM  
October 1, 1979 - September 30, 1980

Budget Justification

6.a. Personnel Salaries	Rate/ • Month	Months of Effort	Approximate % of Effort	Cost
Project Director	416.00	12	25.00	5,000.00
Trainer/Curriculum Developer	1,000.00	12	100.00	12,000.00
Trainer/Administrative Assistant	1,000.00	12	100.00	12,000.00
Crew Supervisor	1,000.00	12	100.00	12,000.00
Satellite Trainers:				
from Seagull School	850.00	3	100.00	2,550.00
from Rainbow School	850.00	2	100.00	1,700.00
from Island School	850.00	2	100.00	1,700.00
from Piahi School	850.00	2	100.00	1,700.00
		Subtotal		48,650.00

c. Travel

Airfare - Interisland

1 RT Kauai-HNL-Kauai	50.00
1 RT Maui-HNL-Maui	50.00
4 RT HNL-Kauai-HNL (\$50.00 X 4)	200.00
4 RT HNL-Maui-HNL (\$50.00 X 4)	200.00

Per Diem

HNL: \$30.00/day X 4 days X 2 trainers	240.00
Kauai: \$30.00/day X 5 days X 3 staff	450.00
Maui: \$30.00/day X 5 days X 3 staff	450.00
Kauai: \$30.00/day X 10 days X 1 crew supervisor	300.00
Maui: \$30.00/day X 10 days X 1 crew supervisor	300.00

Mileage: 3,000 miles X \$.15	450.00
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Subtotal	2,690.00
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6.c. Supplies

1. Office Supplies	300.00
Subtotal	300.00

f. Contractual

Consultant in Polynesian Culture	1,000.00
Air Travel	100.00
Per Diem 2 days @ \$30.00	60.00
Consultant - Evaluation	2,000.00
Air Travel	100.00
Per Diem 2 days @ \$30.00	60.00
Consultant - Photographer	1,000.00
Subtotal	4,320.00

h. Printing

1. Printed materials	
2,000 copies of work booklet and evaluation sheet	1,000.00
Subtotal	1,000.00

* i. Indirect Charges	3,000.00
Subtotal	3,000.00
TOTAL	<u>\$59,960.00</u>

\* Indirect Charges - fiscal management will be provided by the executive committee of the Polynesian Voyaging Society. Costs were figured at approximately .05% of \$56,960.00. The committee consists of:

Michael A. Tongg - President and attorney  
 Anthony Guerrero, Jr. - Treasurer and Vice President  
 First Hawaiian Bank  
 Kaipo Kauka - Vice President and Community Heritage  
 Coordinator for Hawaii Foundation for  
 History and Humanities

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PART IV - PROPOSED NARRATIVE

1. OBJECTIVES AND NEED FOR THIS ASSISTANCE

In 1778, when Captain James Cook rediscovered Hawai'i, he estimated 300,000 native Hawaiians. By 1840, the Hawaiian race dwindled down to 20,000 people.

When Cook, the missionaries, immigrants and others came to the Hawaiian Islands tremendous and tragic changes took place. The islands, isolated from the outside world, were suddenly invaded by an influx of people. Diseases were introduced, the kingdom was overthrown by foreigners, and the culture was uprooted. Such rapid transition had devastating effects which proved almost fatal to the entire Hawaiian race.

In the 1840's, the popular saying of the day was "Na kanaka o ku'u wale aku no i ka uhahe. ("The people freely gave up their souls and died.") Physical and psychological death had been the choice of many Hawaiians who could not cope with the despair that overwhelmed them.

The calamitous results of the past still plague many Hawaiians today. They have the highest incidence of poverty, high school drop-outs, and unemployment of any racial group in Hawai'i. Preventive measures have to be implemented and applied. When people have inadequate education, a limited knowledge of their cultural roots, poor self esteem, and where families are disoriented, societal problems escalate. Education therefore is the key to building up self-worth, self-sufficiency, and self-direction.

Along with the social ills, the 1970's show a resurgence of interest and hope for the Hawaiian culture among Hawaiians. There is a desperate vitality and commitment among American Hawaiians

to learn about their culture, to uplift themselves and their heritage through education. A deliberate search is being made for Hawaiian identity. Regrettably, Hawaiian culture has been regarded irrelevant in the past. However, on November 7, 1978, voters of Hawai'i realized this need and voted on promoting and implementing Hawaiian studies into the school system and community. This was an amendment proposed by members of the Constitutional Convention of 1978.

A renaissance in Hawaiian culture is evidenced by the founding of the Polynesian Voyaging Society in 1973. Its purpose has been to do research work in Polynesian voyaging canoes, Polynesian navigational system, Polynesian culture and all the other arts and artifacts that made migration and settlement of the Hawaiian Islands possible, by the first settlers. Multi-racial members of the society built the Hokule'a, a double hulled canoe, in 1974, trained a crew in 1975, and sailed from Hawai'i to Tahiti in 1976. The three year plan became a life-size reality which received strong community support.

The 60 foot, twin hulled canoe called Hokule'a was designed to answer the question of whether the ancient Polynesians regularly navigated the 3,000 mile course between Hawai'i and Tahiti. Multi-racial builders of the canoe found that centuries before Columbus, Polynesians aboard voyaging canoes had explored a huge triangle of the earth's surface, with Hawai'i, Easter Island and New Zealand as its outer limits. Guided by the stars, currents, and ocean swells, they accomplished incredible feats of navigation and seamanship as they sailed across thousands of miles of open ocean.

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Though Hokule'a was built mainly of modern materials, such as plywood and fiberglass, her lines were authentic and reconstructed from sketches by explorer Captain James Cook and other explorers. Her sails, copied from ancient Hawaiian rock paintings were shaped like crab claws. This design proved more practical than modern sails that were tried because the crab claw contour minimized stress and spilled the wind during squalls.

In 1976, seventeen men who made up the crew of Hokule'a, sailed her to Tahiti. One of the key men was the navigator, Mau Piailug, from the Satawal atoll in Micronesia. Mau, a strong 44 year old, became a full fledged navigator at the age of 18, and roamed far and wide through the central Carolines without relying on any navigational instruments. Mau was assisted by Rodo Williams, a Tahitian and former schooner captain, and David Lewis, a Caucasian who had studied with traditional navigators in Tonga and Micronesia. None of the three used any instruments during the voyage, nor did they receive any hint of their position from the escort vessel that accompanied Hokule'a on this 3,000 mile journey. Half of the crew who went on the voyage were Hawaiians. Hokule'a reached Tahiti after 34 days and was received by a jubilant crowd of 15,000 Tahitians, the largest crowd in the memory of that island.

Hokule'a received national and international acclaim because the National Geographic Society filmed the magnificent and historic journey. They also published 3 separate articles about Hokule'a in their magazine. Hokule'a has become a legacy and symbol of Hawai'i, a success story that needs to be shared. Slides, pictures, and logs were taken when Hokule'a made her incredible trip.

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All these materials need to be made more readily available. Hokule'a can be used as a floating classroom. The experience for students and teachers to feel, touch, and see an authentic Polynesian replica of the canoes that brought the first settlers to Hawai'i would be an unforgettable and valuable educational tool. It could help guide Hawaiians back to their roots and give them insight into the awesome courage and intelligence of their ancestors. It can also explode the myths and negative stereotyping about Polynesians.

## 2. RESULTS OF BENEFITS EXPECTED

This proposal seeks to promote the contributions which Polynesian Americans and by implication, other ethnic groups can offer in making America a truly pluralistic and culturally diverse society.

More specifically, this proposal is to train elementary teachers so as to enhance their understanding of ethnic identity, inter-ethnic communication and relations, and the process of American multiculturalism. To this end, the proposal focuses on:

- a. Establishing five permanent satellite resource centers with trainers.
- b. Training approximately 170 elementary school teachers and other professionals in ethnic studies to become familiar with the area of Polynesian voyaging so that they will be able to:
  1. Identify Polynesian voyaging resources and resource people.
  2. Explain the concepts and techniques of Polynesian voyaging.

3. Demonstrate the value of a multi-ethnic approach by explaining the unique components of Polynesian voyaging, crafts, artifacts.

4. Effectively use the curriculum materials provided by the Polynesian Voyaging Society.

- c. Providing an opportunity for approximately 3,490 children from 5 geographical areas to experience boarding and learning about a replica of a 60 foot Polynesian canoe.
- d. Developing with the assistance of the Department of Educational Psychology an evaluation of this project to determine the overall training effects of the course.

3. APPROACH a.

The Polynesian Voyaging Society intends to disseminate its knowledge of Polynesian migration, (open sea voyaging and double hulled canoes) discovery and settlement to the population and particularly elementary school teachers and children of five large areas in Hawai'i. In this application we are proposing to make major changes in the direction of the society - - from one whose purpose has been to test theories regarding Polynesian voyaging to one that will serve as a floating classroom for children throughout the Hawaiian Islands. To accomplish this it hereby plans to hire two persons to act as teacher trainers and curriculum consultants and a crew supervisor to manage the canoe and related instructional use. The trainers will coordinate the development and use of curriculum materials and the training of four regional trainers to train teachers of public schools in Polynesian voyaging.

Our plan is to establish five permanent satellite curriculum resource centers with resident trainers and to temporarily station the canoe at five different locations so that teachers and groups of elementary school aged children will have the experience of using the materials already developed by the Polynesian Voyaging Society, seeing the visual presentations, participating in the workshops and boarding the canoe. Members schools of the Hawaii Association of Rural Private Schools (HARPS, all private, non-profit organizations) will assist in providing facilities for the five regional resource and training centers and will help host the canoe as it voyages from port to port. As hosts, the schools will provide one staff person each to be trained as trainers in Polynesian voyaging. The HARPS schools will hold public seminars, will coordinate the scheduling of elementary school classes visiting the canoe and will serve as permanent resource centers for the distribution and storage of curriculum materials.

During October and November, the two trainers and crew supervisor will organize the educational materials of the Polynesian Voyaging Society and plan the curriculum that will be implemented at the five regional sites selected for the distribution of curriculum materials. In October, the Polynesian Voyaging Society will distribute information regarding the availability of instructional materials regarding Polynesian voyaging. This will be done through the Department of Education channels and through a one day workshop to be held at Kamehameha Schools on Discoverer's Day, October 8. During November and December the Polynesian Voyaging Society trainers will develop the educational materials while hosting visits from elementary school teachers and classes in the

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Honolulu area. Also during December, four staff persons from the four participating HARPS schools will meet on O'ahu for 4 days of training regarding use of Polynesian voyaging curriculum materials. They will take back with them to their schools the materials and information developed by the Polynesian Voyaging Society and will establish permanent satellite resource and training centers regionally. They will advertise locally their functions in this project and will schedule schools, teachers and various organizations to visit the canoe as it visits their region.

In January 1980, the canoe will sail under the supervision of the crew supervisor from Honolulu Harbor to Kaneohe Bay on the Windward side of O'ahu. It will be berthed at the Heeia Kea pier next to Heeia State Park through March. At this site a trained staff person from Seagull School with the assistance of the two Polynesian Voyaging Society trainers will coordinate the visitation and instruction of teachers and students on the Windward side of O'ahu. The canoe will stay at He'eia until the end of March when it will be sailed to Haleiwa Harbor on the North Shore of O'ahu where a trained staff person from Rainbow Elementary School will serve the function of trainer and coordinator for elementary school teachers and their students. At the end of May the canoe will sail for Kaua'i and will be berthed at Nawiliwili Harbor where the canoe will be hosted and visitations will be coordinated by Island School. During the summer months when schools are on vacation, emphasis will remain on elementary school aged youth by arranging for organizations such as Scouts, 4H, and summer fun type recreational programs to visit the canoe. At the end of July

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the canoe will sail to Kahului Harbor on Maui where Piahi School will host and coordinate canoe activities.

The dates given as sailing times are approximate and will be influenced by weather and condition of the canoe. The scheduling of the visits of the canoe is also affected by the seasons. The channels between the islands are usually much more difficult to cross during the winter months, therefore, interisland sailing will be accomplished during the summer. If the canoe is unable to keep appointments for the aforementioned reasons, training can be done without the use of the canoe.

At each of the training sites, public and private schools and youth organizations from that geographical area will schedule visitation times with the host schools. In advance of its visitations, local teachers will have the opportunity to borrow curriculum materials from the resource center and receive training in their use from the regional trainer.

Staff from the Polynesian Voyaging Society will spend at least 15 days cumulative time at each of the satellite centers on Maui and Kauai to supervise and evaluate trainers. On O'ahu as much time as necessary will be spent for training and evaluation of centers at the Windward and North Shore centers. The crew supervisor will spend at least 10 days at each of the locations of the canoe.

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3. APPROACH b.

QUANTITATIVE MONTHLY PROJECTIONS OF NUMBERS OF PERSONS  
SERVED AND TRAINED -

<u>Month</u>	<u>Activity Schedule</u>
October	Two trainers and the crew supervisor will organize the curriculum materials with assistance from the curriculum consultant. A one day workshop will be held for the public and especially public school teachers regarding the availability of this project on Discover's Day.
November	Twenty teachers from the Honolulu District will be trained by the Polynesian Voyaging Society staff and approximately 400 children may be scheduled to visit the canoe.
December	Fifteen teachers from the Honolulu District will be trained and approximately 300 children may visit the canoe. Four satellite resource center trainers will attend a four day workshop in Honolulu to be trained for this project.
January	Fifteen teachers from the Windward O'ahu District will be trained at Kaneohe Bay by the Seagull School satellite trainer with assistance from the Polynesian Voyaging Society staff. Approximately 330 children may visit the canoe.

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February

Same

March

Same

April

Fifteen teachers from the North Shore District of O'ahu will be served at Haleiwa boat harbor by the Rainbow School satellite trainer with assistance from the Polynesian Voyaging Society staff. Approximately 300 children may use the canoe facilities.

May

Same

June

Fifteen adults from Kauai will be trained by the Island school satellite trainer with assistance from the Polynesian Voyaging Society staff. Approximately 300 children will use the canoe facilities.

July

Same

August

Fifteen adults from Maui will be trained by the Pihahi School satellite trainer with assistance from the Polynesian Voyaging Society staff. Approximately 300 children will use the canoe facilities.

September

Same

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3. APPROACH c.

Evaluation will be contracted to Dr. Frederick T. Bail of the Educational Psychology Department of the University of Hawai'i. Evaluation will be accomplished by:

1. Observing the operation of the five regional centers.
2. Interviewing the resource people.
3. Interviewing a sample of elementary school teachers trained by the resident resource people.
4. Developing, administering, and evaluating the results of a questionnaire for the regional resource people.
5. Developing, administering and evaluating the results of a questionnaire for the teachers serviced by each of the regional resource people.

Interim and final reports will be coordinated by the project coordinator. This will be done quarterly and will include:

1. A fiscal report
2. Information regarding number of trainees served
3. Numbers of persons utilizing satellite resource centers
4. Number of visitors to the canoe
5. Information gathered for evaluation
6. Report from meetings with the advisory council
7. Photographs of training

3. APPROACH d.

Cooperating Institutions

1. Department of Education  
State of Hawaii

Nature of Effort

They will disseminate publicity and information regarding the availability of the satellite resource centers and the Hokule'

2. Kamehameha Schools

They will provide facilities for holding workshops and for doing maintenance on the canoe. They will also assist in the cost of printing and producing materials.

3. Bishop Museum

They will provide office space at below market value.

4. Alu Like

They will provide copying service.

5. Hawaii Association of Rural Private Schools (HARPS)

Each of the HARPS school will provide staff persons with 4 days of paid release time for training in December. They will provide transportation for Polynesian Voyaging Society staff and consultants while on Maui and Kauai. They will donate facilities for the permanent storage of curriculum materials and after the project year will continue to act as resource persons.

6. Department of Transportation Harbors Facilities

They will provide assistance and facilities for the berthing of the canoe Hokule'a.