Unit: Hawaiian Diet
Topic: Role of the Kalo (Taro)

Introduction:

Background: The taro, or kalo, was one of the food crops which the Hawaiian settlers brought with them from the south upon migration to the islands. Being that taro was the staple food of the Hawaiians it was grown wherever nature would allow. Taro was grown in one or both of the following manners: 1) Lo'i, or pond. David Malo describes the lo'i as such, "Banks of earth were first raised about the patch and beaten hard, after which water was let in, and when this had become nearly dry, the four banks were re-enforced with stones, coconut leaves and sugar-cane tops, until they were water-tight. Then the soil in the patch was broken up, water let in again, and the earth was well mixed and trampled with the feet. A line was then stretched to mark the rows, after which the huli, or taro tops, were planted in the rows. Sometimes the planting was done without the rows being lined in. Water was then constantly kept running into the patch." 2) The second method in dry areas was to clear an area, dig a hole, enrich with mulch, and proceed to plant the huli. It should be noted here that men alone planted taro as well as did the cooking.

Nutritiously, taro is a good source of Vitamins A and B. It has been speculated that Polynesians were physically large and fit due to the Hawaiians diet of taro, fish, and seaweed (See Ancient Hawaiian Civilization pps. 95-96 for more explanation).

Taro was cooked in an imu, or underground oven. It may be eaten freshly cooked or sliced and dried in the sun, but mainly, taro was pounded and eaten as poi. All parts of the taro were used. The leaves were used for leaf-type dishes, the stem for eating or replanting, and the corm was the main edible part from which poi was made.

Besides being an excellent food source, taro played an important role in the religious and medicinal practices of the Hawaiians. "Every time the farmer cooked an oven of food, he offered to the deity a potato or a taro before eating of it, laying it on the altar or putting it on a tree (Malo)." Lono was the god of agriculture, rain, and peace. In ceremonies, among other things, he was always offered taro. The goddesses Pele and Hi'iaka were offered taro greens. Medicinally, poi was mixed with coconut juice and served as a "strengthening medicine." The leaves were rich in vitamins and minerals, the raw juice was used as a medicine for the skin, and the raw pulp mixed with sugarcane juice and noni, was used as a laxative. As an astringent taro was mixed with salt and applied.

The first taro plant is said to have come from Haloa-naka. Haloa-naka was the premature son of Wakea who died. (students need to be given background about Wakea and Papa). The baby was buried outside the house and after awhile a taro
plant grew from the spot where the child had been buried. After that another child was born, named Haloa, who became the progenitor of the people on earth.

The term 'ohana', meaning family, is derived from the taro. 'Oha' means "to sprout," are the "buds" or off-shoots of taro plant. The suffix 'na' is added. This term, 'ohana', has evolved to mean the "off-shoots of a family stock."

Today, the making of taro into poi is done in factories where the whole process from cooking, peeling, grounding, and packaging is all done by machines. Poi may be found in plastic bags, cans, and even in powdered form. (I wouldn't recommend powdered poi, it tastes awful.) The availability of taro has dwindled and sometimes it's hard to find poi in stores. Poi, though, has continued to be an excellent food source and it may be soon that poi may be served in school cafeterias for those who prefer it to rice. If so, maybe more farmers will get back into growing taro.

Objectives: Students will...

1. Identify and name parts of the taro plant.
2. Describe the two ways in which taro is grown.
3. Describe the ways in which taro may be eaten.
4. Explain how taro was used medicinally.
5. Explain how taro was used religiously.
6. State the importance of the taro in Hawaiian society/culture.

Procedure:

1. Explain that the lesson will be on taro and its role in Hawaiian culture.

2. Instruct students that they will break into groups. In each group they are to:
   a. brainstorm and list on posterboard all that they know about taro.
   b. stop at the end of a given time, and then looking over their list, categorize their responses (food, religion, etc.).

3. Class to regroup and groups present. List responses on blackboard. Add in details/information as needed. Go through each category.

4. Give each student a drawing of the taro plant, have a copy projected on the overhead projector. Ask if anyone can name any part of the plant. Pencil in correct responses. Go through the entire diagram naming the parts and explain what each part was used for. Have students complete their copy.
5. Critical thinking: Ask students, looking at all the different ways in which taro played a part; what can you conclude about the taro and its role in Hawaiian culture and society? Encourage discussion.

Evaluation: Test students on the taro plant diagram, growing methods, as well as on the historical uses of the taro.

Extension Activities:

1. Field trip to the Kanewai Lo'ī
2. Guest speaker- Taro farmer
3. Field trip to a poi factory
4. Research areas where taro is grown today.

References:


Written by: Doreen H. Dudoit
Unit: Hawaiian History
Topic: Living Foods

Ka ho'okomo (Introduction):

1. I thought that my assignment would be simple and easy because we've been having some ono-licious meals throughout the term of the Institute. As evidenced by my girth and added pounds, how could I not write about food? Besides, I once drafted a cookbook, da kitchen kanaka, and I still consider Hari (Kojima) as an acquaintance.

But the longer I pondered, observed, read and discussed with colleagues about foods, the more difficult and complicated the topic became. Not withstanding the course's goals, the diverse ethnic lunches had mesmerized my abilities to produce and I became enamored by the next days' feast instead of the topics at hand. From this perspective, typically nouveau, it is one great workshop!

Alas, I decided to incorporate my theme, 'mau mea'ai ola' (living foods), with the most basic truth about the Hawaiian --- that 'ke kanaka maoli' (native) lived WITH his environment, ALONGSIDE his history-past, present and future. This assignment should be inclusive of history, lifestyle, and environment, in substance and in thought, instead of exclusive. This concept is best represented in the poem by Rene Sylva titled "Native Plants":

The Hawaiian plants are social plants.
If you go look underneath the Hawaiian tree
there's all kinds of plants that grow under them.
Ferns and vines and shrubs and other kinds of trees.
They all grow together under the Hawaiian tree.
But the non-native plants are antisocial trees
like kiawe or the eucalyptus or the ironwood.
Go down to the beach sometime and look at
the ironwood tree, the mature ironwood tree,
nothing grows under there.
They don't like anybody else except
for one species, their own kind.

Needless to say, Sylva is NOT just talking of plants. So, I could not just write about my stomachs' delight, Hawaiian food, without also including 'mana'o' (thought) on Hawaiian lifestyle. Unlike a foreigner who dissects and isolates in order to acquire understanding and thereby make quantum conclusions, there's nothing Hawaiian that can be relegated to only "their own kind."

So, though it is not my intent to be 'haole' (foreign) and treat each thesis separately, defining it's extent and scope, lending explanation and clarity where possible, I do hope that each part will allow one to focus on the wholesome nature of Hawaiian foods, acquiring a better understanding and appreciation for Hawaiian history.
No laila, e māhele kākou i ka mau wai ola!

II. 'mau hewa' a "mau ho'ololi hou" --
( -errors/misconceptions) and (+corrections/new perspectives)

There are many erroneous concepts about Hawaiian foods, especially as they relate to Hawai'i and its past. These errors are often reflected across Hawai'i's cultural base, resulting in further negative theories and/or generalizations. As a result, these misleading conclusions have been ingrown into the minds and texts of succeeding generations, contributing to their demise. It is especially disastrous for the esteem and self worth of "ka 'Opio Hawai'i" (young Hawaiians) because they are constantly being reminded of these degenerate falsehoods.

Most of the conclusions are culturally biased and prejudiced by foreign scholars and researchers. In many cases, research was compared to and based on their own personal and societal conditions, habits, experiences, mores and belief system. This demonstrates the ethnocentric basis of the statements. Unfortunately, much of these errors continue to prevail within the Hawaiian community today and are accepted as truths.

As with many things in today's society, there are always other viewpoints, opinions or pieces of new evidence that result in further studies. For instance, something is presented as proof that such and such occurred, this way or that way, by persons unknown and reasons unsure. More studies are generated, and an infinite amount of scholarly perspectives produced. It is with this thought in mind, that I add my mana'o which may help qualify (glorify?) the Hawaiian of yesteryear, today and especially tomorrow. It is hoped that it might be substantive enough to elevate the plight of 'ke kanaka maoli' today, preparing them for a better future. This is aptly stated in the following Hawaiian proverb:

- If you plan for a year, plant kalo
- If you plan for ten years, plant koa
- If you plan for the future, have children

Each hewa(-) is followed by the ho'ololi hou(+)

- 1) It has often been said in Hawai'i (author unknown), "People in the world eat to live, but we live to eat." For many, food only satisfies a physical need. Food is an entity in and of itself having no effect on other conditions of life. At best, it serves as a conduit for social interaction.

+ 1) Indeed, we are very fortunate to be alive so that we can eat! Unlike many societies, our kupuna were able to breed within our souls the fact that eating is more than just a physical exercise of survival. Consequently, our people have been blessed with abundance. And the more the traditions and rituals were observed, the more was received from the Gods.

Today people in developed countries eat for looks, taste, economy, and
increasingly, health. Of course, those in underdeveloped countries are simply eating to survive. Whence did they lose their mana? In ancient times, Hawaiians ate for that very essence of mana that came from the foods. Though it is called nutrients, and calories, and proteins, etc., (today), it was the living energy that perpetuated life and maintained balance.

I know much has been written about famines. But, it wasn't long term, nor was it widespread. Besides, it was necessary to have this time to fast as it brought ka po'e kahiko closer to their spiritual nature. And it afforded them an opportunity to exercise self discipline, develop faith and to extend their knowledge of things to subsist on. It was not as negative as haole history portray.

Contrary to Western opinion, beliefs and practices, food does not and cannot stand alone. In the Hawaiian creation chant, KUMULIPO, all things share a common parentage, thereby having living connections and relationships. This chant emphasizes the spiritual, mental and, social aspects of life long before it deals with its physical purposes. Then from the physical creation of the first living organism, "uku-ko'ako'a" (coral polyp), through the evolutionary processes of the "iilo" (dog), ka po'e Hawai'i exhibited a deep respect and reverence for these 'kupuna' (ancestors), revealing a sincere emotional bond to them.

All things were first 'mana'o' in the 'po' (night), indicating the spiritual nature of life. Some have suggested that po is within the darkest recesses of the mind. If so, then it would require great mental prowess to create life and worlds the way we best believe it to have happened. The fact that ancient Hawaiians recognized this kind of beginning lends credibility to their wisdom and knowledge.

Another creation chant, the KUMUHONUA, states that woman, called 'lalo hōnua', was taken from man. This strongly indicates the need for living things to have bonds and social interaction. The 'mo'olelo' (story) of the first man demonstrates this relationship with other living things. The 'hiapo' (first born) of Wakea, sky father and his daughter, Ho'ohokulani, is Haloa maka. However, he is 'alalu' (stillborn) and therefore 'kanu' (planted). From this planting comes forth the 'kalo' (taro). As 'kaiku'ana' (older sibling), this taro plant, colocasia esculenta(L), establishes a very special position in the traditions of ka po'e Hawai'i. All of the kalo's descriptive parts are the same terms used for the Hawaiian 'ohana' (family). The 'mana' (energy) it possesses is ingested by all living things and it becomes imbedded in non-living things. The result is a natural 'pono' (harmonious) relationship between all things, each having a spiritual beginning and sustaining itself throughout time. It was this inherent right of indigenous people to exhibit, throughout time, the philosophy that all things ARE sacred and must be preserved. Unlike foreign beliefs, there was nothing that had no meaning or purpose.

The second born was also called Haloa. It was from this kaikaina' (younger sibling) that all mankind derived. Thus it is man's 'kuleana' (responsibility) to 'malama' (care for) and nurture his elder brother, the kalo. It is man who exercised 'ho'ihi' (respect) and 'aloha' (love) for the "Åina (land) in which kalo was buried. It was this relationship between man and his "creators", man and his environment, that became the basis for rituals and 'kapu' (restrictions). Is it any wonder then, that 'ka
Hawaii'i maoli' (native Hawaiian) sees the wheels of Western progress as speeding to nowhere, snapping the traditional ties to their origins, and causing them to be aimless and lost?

-2) 'Ka po'e kahiko', (the people of time past), were fat and obese. Their slovenly, lazy, carefree work habits added to this physical dilemma of being overtly overweight. Combined, the two rationale made them susceptible to illness and diseases and initiated the westernization of foods in Hawaii'i nei.

Of course, these claims were readily substantiated at any Hawaiian lu'au where many huge, overweight, obese participants attended. And at these celebrations, the most discussed topic after foods, was health. The high mortality rate was of major concern but was usually attributed to poor economic and social conditions.

It was also said that Hawaiians thought size was a plus for social interaction. "Big was beautiful" or "da mo', da betah!" are common expressions attributed to Hawaiians.

+2) The mo'olelo and "oli" (chants) of the 'kupuna' (ancestors) all spoke of a different kind of individual then those described by recent researchers. Stories of military feats, of athletic and 'hula' (dance) competitions by Hawaiians contradicted the studies. History, as recorded by the first 'haole' (foreigner), supports the 'mo'olelo' (oral traditions) of ka po'e kahiko. For instance, Ellis, Stewart and King all write "the natives, in general, were tall, above middle stature, well made, and possessed fine muscular limbs. Their graceful gait were stately and they ran nimbly. In addition, the people were capable of bearing great fatigue, were energetic, active and strong. Physical activity was a normal part of their life. All of this energy and hard working nature was a reflection of their excellent heath." In many of the journals by foreign sailors and whalers, descriptions abound "of native women paddling their canoes and swimming round about, then climbing the sides of our ships to offer themselves to us." It was noted that "many a woman endured her travails with nary a sweat or hardship on her part." From these inscriptions, I find it difficult to believe that ka poe kahiko were fat, obese, and grossly overweight. As further proof, "Where are there photographs of overweight Hawaiians of old?"

The subsistence economy of ka po'e kahiko demanded that no one be 'slovenly, lazy or carefree'. The 'ohana concept accounted for any surpluses produced. The 'ahuapua'a' (land division) system insured a variety of products to be produced and shared. Thus, idleness and slothfulness were not virtues associated with the past. Instead, it should be noted that the Hawaiians had a better understanding of work ethics, techniques, and conditions than did the 'malihini' (visitors). They were capable of producing more, in less time, using less land and energy than the haole. This was because the Hawaiian was in pono with his environment, inclusive of things spiritual as well as physical.

Often, the Hawaiian queried, "Why didn't the haole work the fields in the cool of the day, before dawn or after sunset? Why do they work through the hottest part of the day in the fields, instead of being 'ma uka' (upland) or 'ma kai' (seaside),
where it was cooler? Why did they not integrate leisure with work? Why did they
over plant, especially during seasons that were not conducive for maximum growth?
Where was the help from their families? Why didn't the 'luna' (foremen) work too?
Why did the haole not observe the basic rituals of gratitude to ones' ancestors?" Is it
any wonder then, that newcomers made many erroneous observations of ancient
Hawaiians?

Fact is, it was not until after Western contact and the introduction of the
market economy that the confused and bewildered Hawaiians became as had been
described in official studies. Now, it was possible to "earn an increase of someone
else's sweat", as evidenced by the sandalwood trade. Now, profit at any cost was
important! Soon it was necessary to be totally consumptive of nature's offerings even
if it meant creating future environmental hardships for the unborn.

With the change in work habits, the diet of the Hawaiians became
dependent upon the haoles, for they no longer spent sufficient time to raise 'mea 'ai'
(foods) that provided 'mana' (life force). They no longer had time, too, to show their
appreciation, respect and reverence for their kupunas. Soon, this separation created
a loss of pono or imbalance. Not having sufficient mana to resist was the cause of
illness and disease. The stage had been set for Westerners to bring their dreaded
'oku'u (plagues) that have since been the scourge of the Hawaiian people.

Additionally, hoping to capitalize on the need for a quick and better diet,
the haole started fast foods cooked in fats and inundated with synthetic preservatives.
Or he packaged foods with pizzazz and color; song and dance type of soft-sell The
bottom line was the objective and nothing else mattered. A whole nation suffered!
Finally, it did not matter how big one was as long as he/she was capable of minimal (survival) tasks. Size was important for those situations involving life. In activities like 'hahal' (hunting), 'lawai'a' (fishing), 'mahi'ai' (farming), and 'ho'okEkE' (competition), size was generally beneficial. More so during lean times too! It also played a very significant role in warfare. Being large aided the individual in his relationship with the Gods, for one could not stand before them if his stature and demure was small. The experience was physically and emotionally demanding. Thus the insides of a person needed to be much more larger than his outer appearance, the so called "big hearted person"

Integration..."ka ho'ohui":

Like ka po'e kahiko, foods can be and should be incorporated into the beliefs and practices of everyone's lives. As teachers, the integration of materials, topics and strategies into the lesson is a must for today's generation of 'haumana' (students). A study of the parts, haole technique, is only effective if it leads to an appreciation and understanding of the whole, Hawaiian concept. Conversely, the whole (i.e. culture) constitutes the survival of its' parts (i.e.. mea 'ai, hula, etc.).

Following is a suggestion on how the above might be used in a Hawaiian studies classroom:

Objective--to understand and appreciate Hawaiian history through chants; to identify the significant and sacred obligatory relationship of the individual to his or her environment;

Materials-The Kumulipo and The Legend of Hawai'i Loa; family genealogical sheets or information; vocabulary list;

Process--whole class brainstorming discussion on the origin of man and the world; examine other creation theories; stimulate in-depth thought through inquiry about historical data;

Focus--jig saw reading of the first and second time period in the Kumulipo; clarifying and identifying each species as it evolves or is introduced; selected readings from Fornanders' on Legend of Hawai'i Loa; review and define vocabulary terms;

Action-- make a comparative list of creations/events found in Christianity to that of the Kumulipo or Kumuhonua; incorporate a section of the students' genealogy into the second time period; write a short story on some family member;

Application-- utilizing a portion of the student's 'mo'oku'aahau' (genealogy), the student will develop a story, oli, or song, about one or more members of his/her family;

Evaluation--observation of students' interaction with peers; exam on vocabulary; finished product.
Following is a suggested CORE type plan. It integrates six disciplines of study. It reinforces basic principles or concepts through collaborative and cooperative methods. It is Hawaiian! This is the type of planning being instituted at Molokai this school term, with Hawaiian studies being the lead discipline.

1) **Objective**—to gain a better understanding and appreciation of the relationship of all things;
   - SS: to compare Hawaiian and Western values, concepts, and thought about origins; to study beginning Hawaiian language;
   - LA: to identify parts of a mo'olelo; to recognize themes in mele (song), oli, 'ka'ao' (legend);
   - Sc: to compare the concepts in Kumulipo (Evolution) to that of the Bible (Creation); to identify (Mendel) genetics in students' genealogy;
   - M: to use estimation and rounding whole 'hulu' (numbers) in Carbon dating; to design a time chart based on first two 'wa' (era);
   - FA: to develop skills in photography as a means of recording history; to compare ancient art;
   - PE: to develop health and fitness, for road cleanups, through proper diet and exercise; to identify and practice basic 'hula' (dance) movements;

**Materials**—*The Kumulipo*, 1st two 'wa' (time periods), Book of Genesis, selected mele, oli, ka'ao, Mendel chart, photo equipment, Na Pu'uawai or Wai'anae Health booklets, etc.

**Process**—students are to be divided into groups ('ohana) to reinforce basic cooperative and social skills.

**Action**—
   - SS: identify (5) differences and (3) similarities between Hawaiian and Western thought or concepts about the origin of man;
   - LA: write captions or develop short stories for each of the photos or drawings made in FA;
   - Sc: List the pros and cons of evolution and creation; do select breeding of human genetic characteristics (Mendel's system);
   - M: develop a scaled, timeline (chart), using various students' birthdate as point of reference, then marking the estimated times of creation/evolution for each species found in the chant: dates determined according to carbon dating formula;
   - FA: take photos of plants and animals in the students' surrounding, then placing them on
the timeline in chronological order;
PE: Adopt-A-Highway as a service project,
incorporating Hawaiian values; develop a
dance routine describing something in the
students' environment;

Evaluation--participation in group assignments, observed interaction, a
comprehensive time chart, oral (discussion) test

Following is another suggested plan for the classroom:

1a) Objective--to improve the esteem of the 'Opio by studying different
perspectives about their history; to gain a better understanding of the whole person in
context of his environment; to appreciate ka po'e Hawai'i through study of their
language

Materials- selected readings from bibliography; newspapers; audio-
visual; vocabulary list;
Process--class discussion on studies by academia; group readings;
summation of videos; oral reports on personal history;
Focus--jig-saw the selected readings; develop a position paper on
'truths of history as experienced by kupuna'; review and define value concepts;
Action--visit the Ke Ola O Na Kupuna program and 'talk story' or
participate in activities about their history using the language; keep a week's journal
of integrated activities with the environment; learn and practice the language through
cultural experiences;
Application--participate in school and community organizations or
activities; continue the personal history journal
Evaluation--observation of students' interaction with community and
family; language and culture proficiency; orals

Following is another suggested CORE type plan:

2) Objective--to improve student's self-image through study of their history,
their environment and their people and language

SS: to compare Hawaiian and Western values,
and thought about lifestyles; to understand
man's impact on the environment;
LA: to identify historical themes about the
environment found in legends;
Sc: to develop proposals for some of the negative
effects on the environment by past decisions
using the scientific method;
M: to use demography and the effects on
environment; to interpret migratory patterns
based on statistics;
FA: to develop skills in graphic art for use in
studying history; to distinguish between
graffiti and petroglyph;
PE: to develop a diet and exercise routine based on
ka po'e kahiko;
**Materials**—readings from bibliography; newspapers clippings; audio-visual; vocabulary list; art supplies; graph charts;

**Process**—discussions on environment and lifestyles;

**Focus**—assign selected readings; develop a positions for debate; review and define value concepts;

**Action**—

SS: develop a play/skit showing how Hawaiians lived then and now; compose a song expressing the feelings of changes;

LA: write letters to the editor on environmental issues; develop historical stories about family

Sc: do a health survey of the student body; measure the amount and type of pollutants around the school, along roads, at the ocean;

M: develop a formula for interpreting information gathered by science; make predictions for similar schools, areas or the future in incremental years;

FA: make drawings of plants and animals in the environment at the stage of being affected;

PE: produce a healthy diet menu based on ancient foods; establish an exercise program that can be adapted by all members of the school and community;

**Application**—participate in school and community organizations or activities; contribute time, energy and mana'o on environmental concerns affecting the school or community;

**Evaluation**—observation of students' interaction with community and family; language and culture proficiency; orals.

'Ho'opau' (to end)

Maika'i loa ka halawai *(Mark please check the word kia to see if it's correct)* kia...mahalo nui...nui ka mau hauoli a'u...mahalo...e ho'opomaikai ia 'oukou a pau...mau le'a le'a nui no wau!! aloha...moke'
"Āina (land)
'ahuapua'a' (land division)
'alo'ha' (love)
'alualu' (stillborn)
'hahai' (hunting)
'ha'o'ole' (foreigner)
'helu' (numbers)
'hiapo' (first born)
'ho'ihi' (respect)
'ho'okēkē' (competition)
'hula' (dance)
"hīlo' (dog)
'Ka po'e kahiko', (the people of time past)
'ka 'ōpi'o Hawai'i'i (young Hawaiians)
"ka ho'okomo" (introduction)
'kākāina' (younger sibling)
'kāiku'ana' (older sibling)
'kalo' (taro)
'kanu' (planted)
'ke kanaka maoli' (native)
'kuleana' (responsibility)
'kūpona' (ancestors)
'lawai'a' (fishing)
'ma kai' (seaside)
'ma uka' (upland)
'ma'āi (farming)
'mālama' (care for)
'malihi' (visitors)
'mana' (life force)
'mana'o' (thought)
'mau hewa' (-errors/misconceptions)
māu ho'ololi hou'(+corrections/new perspectives)
māu mea'ai ola' (living foods)
'mo'oku'a'uhau' (genealogy),
'mo'olelo' (oral traditions)
o'hana' (family)
o'li' (chants)
o'po' (night)
o'pono' (harmonious)
'uku-kō'ako'a' (coral polyp)
'wa' (time periods)