A. NÄWAHĪOKALANIʻŌPUʻU SCHOOL

Nāwahiokalaniʻōpuʻu School is a preschool to grade 12 school where Hawaiian is the language of all classes on campus. It has a special status in state law that established the state’s Hawaiian language college (Ka Haka ʻUla O Keʻelikōlani) at the University of Hawaiʻi at Hilo. It is a public school and the demonstration site for full Hawaiian language medium education. Hawaiian language medium education involves Hawaiian being not only the language of the classroom, but also the language of administration, support staff, grounds keepers, and school events for parents. This creates an environment where Hawaiian is growing much stronger than in standard immersion programs and also leading to a major increase in the number of families using Hawaiian as the first language of the home.
B. LANGUAGE LEARNING ADVANTAGES AT NĀWAHĪOKALANIʻŌPUʻU SCHOOL
Because the students at Nāwahīokalaniʻōpuʻu have strong fluency in Hawaiian from the school and are immersed in English outside school, they have reached what is known as the threshold of dual language competence. This provides a cognitive advantage and also an advantage in learning third languages and additional writing systems.

C. THE CHOICE OF JAPANESE AND KANJI FOR ELEMENTARY STUDY
Hawaiian tradition places great emphasis on honoring ancestors. The largest ancestry other than Hawaiian represented among the students at Nāwahīokalaniʻōpuʻu is East Asian to include Chinese, Japanese, Okinawan, and Korean. These ancestors are honored by learning their languages. The one thing that all four languages share is the use of kanji. A decision was made to teach the kanji as a strong basis to learn the oral languages. Because, there are students from Japan learning Hawaiian within the UH-Hilo Hawaiian language college, Dr. William H. (Pila) Wilson, one of the faculty members, asked one of them with teaching experience, Ms. Miki Kawachi, to assist him in developing a set of kanji with Hawaiian meanings to teach the children. It was also decided to experiment with teaching oral Japanese with some learning of Japanese phonetic hiragana and katakana. Ms. Kawachi was the teacher the first year and has since returned to Japan. Ms. Mariko Sato is the current teacher.

D. WRITING HAWAIIAN IN KANJI
Unlike English, Hawaiian has a structure well adapted to being written in kanji. In some ways, Hawaiian is even better adapted to being written in kanji than is Japanese. Most meanings in Hawaiian are symbolized by a single word, as in Chinese. While resembling Chinese in having meanings symbolized by a single word, Hawaiian resembles Japanese in its sound structure with a concise set of syllables that form words through endless combinations. Dr. Wilson realized that Hawaiian could be written on an East Asian model either syllabically or through single words. In fact the students at the Pūnana Leo preschool and early elementary program at Nāwahīokalaniʻōpuʻu already followed Hawaiian tradition in learning to read by syllables rather than by single letters as in English. The syllabary used at the school is called the hakalama, and was modernized in the 1980s by Dr. Wilson when the Pūnana Leo preschools first began. It has a set of 45 syllables with which all native Hawaiian words can be
written and comes in long vowel and short vowel versions. The first line of the hakalama goes: ha, ka, la, ma, na, pa, wa, ‘a.

E. INTEGRATING THE HAKALAMA SYLLABARY AND KANJI

With Ms. Kawachi’s help, Dr. Wilson chose 45 kanji for 45 Hawaiian words each of which began with a different hakalama symbol. For example, for the syllable “ma”, “maka” or “eye” was chosen, and for the syllable “la” “lani” or “heaven” was chosen. The 45 kanji were then arranged in the order of the Hawaiian hakalama, but written from top to bottom and right to left as traditional in East Asia. A second innovation was to establish two diacritical marks to distinguish when a kanji was used as a syllable from when it was being used as a full word. The first diacritic indicates a syllable with a short vowel, while the second diacritic indicates a syllable with a long vowel. When no diacritic is included, the kanji is to be read as a full word. The end result is a chart of 45 kanji with two possible diacritic marks that allows children to read and write anything in Hawaiian through a combination of full words and syllables.

F. LEARNING THE KANJI

Because the basic 45 kanji are arranged in the same order as the hakalama chart, children have found remembering the 45 words associated with them quite easy. They read sentences and short stories written in the kanji, as well as write kanji. Visitors from Japan were amazed to see children in first grade reading kanji that
are not normally taught until later grades in schools in Japan. From the basic set Nāwahiokalaniʻōpuʻu students move on to learn new kanji for new words. These additional kanji are not used syllabically and are taken from a set list published by the Japanese Ministry of Education. While the Hawaiian pronunciation of the kanji taught is different, the basic meanings are the same. Children who have learned to read Hawaiian in kanji have identified kanji outside of school, on Chinese menus for instance.

<table>
<thead>
<tr>
<th>hana</th>
<th>kanaka</th>
<th>lani</th>
<th>maka</th>
<th>nahele</th>
<th>pahi</th>
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<td>lepo</td>
<td>mea</td>
<td>nele</td>
<td>pepeiau</td>
<td>wela</td>
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<td>lima</td>
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<td>iʻa</td>
<td>ola</td>
<td>ua</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

G. ACADEMIC EFFECTS OF LEARNING TO READ HAWAIIAN IN KANJI

Learning to read Hawaiian in kanji has strengthened the overall reading ability of students in Hawaiian since it reinforces the successful Hawaiian system of reading by syllables while pushing students to move on to the larger units of words. Linguists have shown that logographic-based kanji are stored in a separate part of the brain from the phonemic-based letters of the Roman alphabet, thus exercising a different part of their mind. Similarly, cognitive psychologists have shown that learning to recognize and write kanji strengthens
cognitive abilities that relate to geometry. These are all academic benefits of reading and writing Hawaiian using kanji.

H. CULTURAL EFFECTS OF LEARNING TO READ HAWAIIAN KANJI
Nāwahīokalaniʻōpuʻu School’s philosophical foundation for teaching Hawaiian speaking children to read Hawaiian in kanji is the Hawaiian cultural value placed on honoring ancestors. The teaching of kanji further strengthens the Hawaiian value as it includes more a larger portion of the ancestors of the students. Through one's ancestors one makes connections to the living which in Hawaiian thinking eventually includes all the people of the world, all living things, and even the earth itself, reinforcing ties to others. Hawaiian reading of kanji has connected the students of Nāwahiokalaniʻōpuʻu School with the broader community of descendants of East Asians in Hawaiʻi and with ancestral homelands in Asia. It has allowed students to see the parallels in the traditional Hawaiian hakalama syllabary with Japanese hiragana and katakana as well. The kanji have attracted considerable interest in visitors from East Asia who can read the Hawaiian logographic kanji with the same meanings as they are read in Hawaiian. There is now strengthened interest in students at Nāwahiokalaniʻōpuʻu to visit East Asia. There is also a better understanding of how Chinese characters spread out from China to a larger world, that now includes Hawaiʻi.

I. THE KANJI WRITTEN HAWAIIAN GREETING TO JAPAN AND ITS PEOPLE
The voyage of Hōkūleʻa to Japan includes a number of Hawaiian speaking crew members with affiliations with Nāwahiokalaniʻōpuʻu School. Those affiliations are through the Hawaiian language college and its nonprofit consortium partner the ‘Aha Pūnana Leo. Some of these crew members are also of part Japanese ancestry. As time for these crew members came to depart, members of the Nāwahiokalaniʻōpuʻu school family reflected on how the children could participate in the visit to the land of their Japanese ancestors. A decision was made to write a greeting to the land and people from a Hawaiian perspective, but write it in kanji and send it on to Japan aboard Hōkūleʻa. The greeting was developed with the assistance of teachers and was written in the kanji in class.
J. THE GREETING ITSELF
The greeting written in Hawaiian in the Roman alphabet follows with an English translation:

Ma ka ‘ao‘ao o nā iwi, nā koko, a me nā ‘i‘o Kepanē e pa‘a nei ke kino ‘ohana kula o nei wahi ʻōpū weuweu lā, ke aloha aku nei mākou i nā lani, nā kuahiwi, nā honua, a me nā wai o ka ʻāina kupuna, a pēlā me kona mau kupa i piha ai, mai ka lā hiki a ka lā kau, a mai kēlā peʻa kēia peʻa.

na mākou,
na haumāna aʻo huaʻasia o Ke Kula ʻO Nāwahīokalaniʻōpuʻu

On behalf of the Japanese bones, blood, and flesh that are a part of the make up of the body of our school family here at this humble building, we greet the
heavens, mountains, earth, and waters of the land of our ancestors, as well as the people who fill that land from the eastern sun until the western sun, and from boundary to boundary.

Sincerely,
The Hawaiian language kanji students of Ke Kula ‘O Nāwahīokalani‘ōpu‘u