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KAMEHAMEHA SCHOOLS

Successful Bilingual and Immersion Education Models/Programs

By Pacific Policy Research Center

Introduction

This literature review focuses on successful bilingual and immersion language programs with a particular emphasis on heritage (indigenous) language programs and regional differences. This review begins by clarifying definitions of bilingual and immersion, then highlighting what the literature says about models, program philosophies, community/identity, academic achievement and pedagogy. This review then considers case studies in Washington D.C., Hawai'i, New Zealand and Peru – these are the best case studies the literature has to offer, but are not the only case studies available in bilingual and immersion education.

A highly successful political campaign was mounted in the United States against bilingual/immersion education in the 1980s. Much of the research upon which this campaign was founded has been widely discredited, but it is important to note that this anti-bilingual education movement was successful in part because of the fledgling nature of bilingual education programs and the wide variety of program types. One of the enduring challenges of bilingual and immersion education is the many definitions that confuse practitioners, policy-makers, parents, and the public. A good place to begin this study is a review and clarification of definitions followed by a review of the differences of the broad philosophical orientations and educational goals found in bilingual programs.

What does bilingual and immersion mean?

Language immersion is a method of teaching language, usually a second language (L2), in which the target language is used as both curriculum content and media of instruction. According to Baker (C. Baker, 2006), there are three generic levels of entry into language immersion education divided according to age:

- Early immersion: Students begin the second language from age 5 or 6.
- Middle immersion: Students begin the second language from age 9 or 10.
- Late immersion: Students begin the second language between ages 11 and 14.

In programs that utilize immersion language education, students may enter and begin studies at different ages and different levels. The research shows that early

immersion in a second language is preferable to late immersion. Three main types of immersion can also be found in the literature:

- Total Immersion.
- Partial immersion.
- Two-way immersion.

In total immersion almost 100% of the school day is spent in the L2, meaning that almost all subjects will be taught in the L2. Partial immersion programs vary in their L2 emphasis, spending only some (usually around half) of class time in the target language.

An immersion program type that has become popular in the United States is called two-way immersion. This type can also be referred to as bilingual immersion, two-way bilingual and two-way dual immersion bilingual. Two-way immersion programs “integrate language minority students and language majority students in the same classroom with the goal of academic excellence and bilingual proficiency for both student groups” (Christian, 1997). Two-way immersion programs vary greatly yet share three key characteristics:

1. Instruction in two languages.
2. One language at a time.
3. Peer-to-peer facilitated language sharing.

It should be clear that not all immersion programs are bilingual. A classic definition of bilingual education is provided by Andersson and Boyer:

Bilingual education is instruction in two languages and the use of those two languages as mediums of instruction for any part, or all, of the school curriculum (Andersson, Boyer, & Southwest Educational Development Laboratory, 1970).

This definition is widely used in the literature (see (C. Baker & Prys-Jones, 1998; Jim Cummins, 2003; Freeman, 1998; Hamers & Blanc, 2000). This definition is important, according to Stephen May, because “it immediately excludes programs that include bilingual students but do not involve bilingual instruction, most notably submersion majority language programs, where students are taught only in the majority language, irrespective of their language background. It also excludes programs where a second language (L2) is taught as a subject only” (Jim Cummins & Hornberger, 2008). A good example of what bilingual education is not are English as a Second Language (ESL) programs whereby students are submerged in English as both language of instruction and language of the curriculum content. A bilingual program must provide both content and delivery in two languages, although bilingual programs vary somewhat in how the languages get distributed across the curriculum (see the section on Pedagogy).

Baker and Prys-Jones state that: “if there is a useful demarcation, then bilingual education may be said to start when more than one language is used to teach content (e.g. Science, Mathematics, Social Sciences, or Humanities) rather than just being taught as a subject by itself” (C. Baker & Prys-Jones, 1998).

Such broad definitions enable a diversity of implementation on the ground, and programs do vary greatly given their own set of circumstances. Before discussing the particularities of any

region, school or program, it is useful to consider general rules and models that serve to assist in program design, implementation, and development.

Models

Forty years of research and literature on immersive bilingual education has produced a broad array of descriptions, analyses and models. Stephen May (2008) has synthesized them into meaningful categories that highlight broad agreements among researchers. The first general rule is that programs can be defined as either subtractive or additive. A program is considered subtractive if it promotes monolingual learning in the dominant language, either losing or replacing one language with another. A program can be considered additive if it promotes bilingualism and biliteracy over the long term, usually by adding another language to the student's existing repertoire.

The next level of classification provided by May is programs that fall between transitional models, maintenance models, and enrichment models of bilingual education. A fourth model can also be found in the literature, known as heritage models.

Transitional bilingual education typically begins in Kindergarten or Elementary school by using the students' first language as the media of instruction but the aim is leave the students' L1 capabilities behind and develop only their L2 linguistic and academic proficiencies. Transitional bilingual education programs aim to stop teaching in the students first language after 1-2 years. This is a model that privileges the dominant language because it is assumed that:

1. The student cannot learn the dominant (target) language quickly enough when still being taught in the minority students first language.
2. The student will suffer academically as well as in literacy of the dominant language if the students first language is allowed to continue as media of instruction and curriculum content.
3. Students integrate better on a social level when they do not have remedial education away from other students.

Transitional bilingual programs are bilingual only at first, but the aim is clearly not bilingualism or biliteracy. The aim of a transitional bilingual program is eventual monolingual teaching and learning, usually in the dominant language.

Maintenance bilingual education programs do not involve development or extension of the minority language. They are limited to maintenance of the minority language which, when compared to transitional programs is considered additive and fairly strong. The student's first language (L1) and, by extension their sense of culture and identity is affirmed by the program. Education in the L2 may begin at an early phase, perhaps as much as 50% of the time (May, 2008), but the emphasis of the early years is clearly on L1 proficiency and academic achievement using the L1. A maintenance bilingual program aims to form a solid academic base for the student in their L1 that "in turn facilitates the acquisition of literacy in an L2, on the basis of the developmental interdependence principle" (James Cummins, 1979; Jim Cummins, 2000).

Enrichment bilingual education focuses on teaching students academic proficiency through the medium of a second language, whereupon literacy in the second language can be attained. The goal of enrichment programs, just like maintenance programs, is bilingualism and bilit-

eracy for individual students and also maintenance of the minority language in the community. Enrichment programs differ from maintenance programs in that they specifically seek to extend the influence of the minority language in an integrated national society. The goals are more than linguistic. Enrichment programs aim for cultural pluralism and autonomy of cultural groups.

Heritage is the fourth general model type that fits roughly between, and overlaps, both maintenance and enrichment. Its distinguishing feature is the program aim, which is generally a recovery of lost or endangered languages.

It should be noted that the aims provided in the following summary table are general in nature. Program aims emerge from particular sociohistorical and political contexts – these contexts are discussed in the next section on Program Philosophies and Goals.

Model	Immersion Type	Aim
Enrichment	Additive/Strong	The aim is bilingualism and biliteracy as well as extension of the minority language and culture into the community and nationally.
Heritage	Additive/Strong	The aim is rejuvenation of an indigenous language. The aim is usually bilingualism and biliteracy, although the heritage language can take priority.
Maintenance	Additive/Moderately strong	The aim is bilingualism and biliteracy, albeit somewhat limited. The student's L1 is maintained so that it can become the basis for L2 learning, but the L1 is not developed or extended. The student's culture and identity is affirmed.
Transitional	Subtractive/Weak	The aim is monolingualism. Instruction in the student's L1 is temporary because the aim is to leave that behind and teach only using L2. The dominant culture and identity is affirmed.

Program philosophies and goals

Program philosophies and goals reveal the theories and rationale behind each approach, and moreover they highlight the sociohistorical, cultural and political context of any language program.

The relationship between minority languages and public policy is defined by two main ontological positions. One is that minority language is a problem to be overcome, while the other is language as a resource (Freeman, 1996; Hornberger, 1991). The former is an orientation found in transitional immersion programs such as ESL whereby the goal is monolingualism. The latter is more closely related to enrichment and heritage immersion programs. The language-

as-resource philosophy is designed to elicit and build upon the skills and resources that all students bring to the classroom.

The sociohistorical context in which a program exists will generally have an impact on the philosophical orientation of the program, but this will depend greatly upon how well the context is understood and how well the program is designed to dovetail with each individual context.

As will be detailed below in the section on the Oyster-Adams Bilingual Elementary School, a language-as-resource philosophy leads to an additive immersion program. Oyster is a two-way bilingual immersion program that commits half its time and resources to English and the other half to Spanish. Students learn in both languages equally and share classrooms where activities are designed to elicit peer-to-peer sharing and learning of language and culture. This philosophy promotes integration between minority and majority (dominant) languages rather than assimilation of minority-language students by the dominant language culture.

Sociopolitical context can have a strong impact on program design as the rationale of, for example, heritage programs is to rejuvenate or revitalize an indigenous language that is under threat of extinction. The Hawaiian Language Immersion Program was introduced almost 100 years after the banning of the Hawaiian language. Efforts to create and develop bilingual immersion programs are always already political, and heritage language programs in particular are often thwarted by postcolonial structures of governance and funding that does not prioritize indigenous languages, paying only lip-service to the value of its rejuvenation. Meanwhile, indigenous students enrolled in a school that practices the dominant language and culture do poorly on standardized tests. The socioeconomic context bears heavily on the upward mobility of indigenous students, so heritage language programs come to symbolize much more than schooling. Parents and communities are generally involved in school activities and these links become critical in a heritage context. Teachers have a leadership role that can impact a student's identity and, as pointed out by Hawaiian activist Sam L. No'ēau Warner, non-indigenous teachers are not the same as indigenous teachers in this context (Warner, 1999). The question of who gets to teach and how is a question of authenticity that should be considered at least as important as other elements of a heritage language rejuvenation program. There is a shortage of indigenous Hawaiians who speak Hawaiian fluently and that are qualified teachers and this issue has been addressed in part by cultural excursions and the provision of community elders (Kupuna) in classrooms (see the fledgling Kahua program), yet the authenticity remains a contested terrain (Wong, 1999). These issues point to the importance of community, parent and indigenous involvement in program design and implementation of a heritage bilingual immersion program, and the vigor with which these relationships need to be established, maintained and developed.

Much of the literature that reflects the philosophical orientations and educational goals of bilingual programs is ethnographic in nature. In ethnography, considerable attention is given to relationships of power and the way that these relationships manifest themselves in linguistic codes and symbols. Program design that takes into account sociocultural context is common across much of the literature (Alanis & Rodriguez, 2008; C. Baker, 2006; Carrera-Carrillo & Smith, 2006; Charles, 2009; Cooper, 1989; Jim Cummins & Hornberger, 2008; Freeman, 1998; Hornberger, 2005, 2006, 2009; Paulston, 1994; Ricento & Hornberger, 1996; Tollefson, 1991; Yamauchi & Purcell, 2009). Socioculturally aware program designs inevitably lead school administrators, practitioners and parents to consider the question of power, often mediated through discussions about community and identity.

Community and Identity

In two monograph issues of the *International Journal of Bilingual Education & Bilingualism* (Volume 8, Issues 2 & 3, 2005), it was identified that two core components of any effort towards biliteracy are community and identity (Hornberger, 2005). In most cases, an additive (enhancement or heritage) bilingual program will consider community and identity a priority in program planning and often also a central component of curriculum planning. In fact, two-way immersion programs can be a direct product of community and parents organizing around and reacting to questions of identity, as was the case in Hawai'i and New Zealand (May & Hill, 2005). The Oyster bilingual school (see Case Studies below) in Washington D.C. specifically, according to Freeman, rejects the national second-language learning model: "The Spanish-English language plan forms one part of a larger identity plan that aims to promote social change by socializing children differently from the way they are socialized in mainstream U.S. educational discourse" (Freeman, 1996). The Oyster model is clear in its goal of enhancing student's minority language while strengthening relationships between its two communities. Oyster promotes identity affirmation of both communities and develops relationships with parents and the community to help accomplish this.

The sociopolitical agenda at schools like Oyster is found in many bilingual immersion schools, and most particularly in schools that teach heritage (indigenous) language. Heritage bilingual immersion programs are always a response to community priorities and identity angst caused by the dying out of an indigenous language. Community involvement through parents, families and local networks is important for identity reconciliation and language revitalization, and is essential for the success of heritage programs. In fact, the literature consistently points to the primal importance of community support and involvement as being equally if not more important than that which happens inside the classroom. In some cases, such as among Quechua speakers in Peru the community is already aligned fairly well with language program whereas in Hawai'i the community and language programs have had to work to develop the community linkages that make it a successful integrated program from pre-school through graduate school, all in Hawaiian. It is poignant to reflect on the simple aphorism that, "schools alone are not enough" (Hornberger, 2008).

Academic achievement

A defining feature of two-way immersion language education is that, compared to other types of language teaching and learning, two-way immersion has enabled a greater degree of success for language minority students. When provided with education in their native language, language minority students perform better academically (Greene, 1998; Thomas, 2002; Willig, 1985). It has also been shown that students with high academic achievement and literacy in their native language have a tendency towards higher academic achievement and literacy development in English (Collier, 1992; Lanauze, 1989). May (2008) has pointed out that such additive bilingual programs "are most likely to see their students succeed educationally," while "subtractive programs not only atrophy their students' existing bilingualism, but also exhibit far lower levels of educational success for these students, particularly over time" (May, 2008). Thomas and Collier found that the amount of formal L1 schooling is the strongest single predictor of student achievement in L2 (Thomas, 2002).

There is some dissent among the literature about whether or not educational achievement is always better under two-way immersion/bilingual programs (K. A. Baker, & DeKanter, A. A., 1981; C. Rossell, & Baker, K., 1996; C. Rossell, & Ross, M., 1986). This research does suggest

caution in program design, implementation and development, but cannot be taken as a wholesale rejection of two-way immersion/bilingual programs. Rather, this literature (now dated) suggests a lack of consensus in the field. These authors just mentioned above conducted quantitative research measuring standardized indicators of academic achievement such as test scores yet do not make it easy to compare data across programs and regions because bilingual and immersion programs vary tremendously, as do the sociopolitical and economic circumstances of the programs. The revitalization of Maori is a case that most clearly highlights dissent over academic achievement between two-way programs and one-way immersion programs.

The Maori language programs in New Zealand have been tremendously successful at revitalizing Maori as a living language. Academic achievement cannot be compared to the national average of New Zealand because the education systems are fully separated. Students of the Maori programs are bilingual because they arrive at school with L1 English fluency but on school grounds are immersed in a Maori-only program and ethos. Maori becomes the students' L2. Over the last 20 years, various evaluations have been undertaken of Maori programs, including those by the New Zealand government's Education Review Office and the National Education Monitoring Project, all of which point to key conclusions that relate to academic achievement. In particular, Maori programs need to "provide students adequate time and exposure to Maori to enable their acquisition and development of Maori academic language proficiency in addition to the Maori conversational competence already being achieved" and that "consideration needs to be given both to teacher professional development in Maori academic language and Maori medium pedagogy" (May & Hill, 2005).

Academic achievement through heritage languages, as with each component of any bilingual/immersion program, relates back to philosophical rationale and identity. In the Maori case it is clear that language revitalization is the main priority.

Pedagogy

Some bilingual education programs such as those in California have a 90/10 immersion structure whereby 90% of courses are taught using the minority language and 10% of courses are taught using the majority language (in the case of California this would be 90% Spanish and 10% English). Other bilingual programs may be structured using the 50/50 immersion method. In general, a 100% two-way immersion bilingual program can be found in early elementary and a graduated rate of immersion is common between 100% and towards 50/50 as the students enter their teenage years.

The Oyster school in Washington D.C. specifies that each classroom shall have a 50/50 balance of majority (dominant) language students and minority language students – in this case, 50% English and 50% Spanish. Every classroom must also have one native Spanish-speaking teacher and one native English-speaking teacher. This method enables a balanced approach to sharing between learners. Classroom content is either English-only or Spanish-only and students are expected to assist and learn from one another.

The Oyster method can be called pedagogical equity. City Elementary School in south central Texas shares this method whereby "the environment is empowering, addressing issues of equity as well as test scores" (Alanis & Rodriguez, 2008). Transfer to the student's L2 occurs gradually alongside cognitive academic language proficiency and learning strategies taught through the student's native language.

Pedagogic frameworks will come from philosophical frameworks adapted in school policy, which in turn emerge from realities of the sociopolitical context in which the program finds itself. The literature is heavy with evidence that two-way bilingual immersion programs are successful pedagogic frameworks, even though proving academic achievement is less rigorously researched owing to problems of equitable comparison.

The Center for Applied Linguistics released a report¹ in 2007 that suggests features of a successful dual language education that relate, among other things, to pedagogy. “Good instruction is associated with higher student outcomes regardless of the type of educational model that is used” (Levine, 1995; Marzano, 2003; Wenglinsky, 2000). The report highlights some critical-features of successful bilingual and immersion programs:

Method	Detail
Equitable Interaction	Promotion of positive interactions between teacher and learners. When applied equitably in a classroom with mixed L1 and L2 students this method has enabled both groups of students to perform better academically.
Targeted and Varied Teaching Techniques	Utilization of a variety of teaching techniques that respond to different learning styles. This method enables students with varying language proficiency levels to orient their learning more efficiently to the curriculum.
Student-Centered Teaching and Learning	The program should have a student-centered approach. Reciprocal interaction is preferable to teacher-centered knowledge transmission and is associated with higher-level cognitive skills. In classrooms with mixed L1 and L2 students, a bilingual program should encourage students to share their linguistic codes and cultural knowledge with other students.
Sharing Between Learners	Cooperative learning strategies should be encouraged. In a classroom with ethnically and linguistically diverse students, academic achievement improves when students collaborate interdependently on common objective tasks and share work experiences. Additionally, students expectations and attitudes toward each other become more positive.
Language through Common Task Orientation	Language transfer is not always a result of cooperative learning strategies, and attention should be paid to the type of task. Linguistic knowledge transfer will occur when the cooperative learning strategy is focused around a language task that facilitates the students sharing language knowledge.

Adapted from (E. R. Howard, Sugarman, J., Christian, D., Lindholm-Leary, K. J., & Rogers, D., 2007)

Bilingual Immersion Planning for Success

The literature on bilingual and immersion language programs is peppered with advice and guidance. The following are general criteria for success in two-way immersion education that are suggested across the literature for those planning a new program:

¹ http://www.cal.org/twi/Guiding_Principles.pdf

1. Programs should provide a minimum of 4 to 6 years of bilingual instruction to participating students.
2. The focus of instruction should be the same core academic curriculum that students in other programs experience.
3. Optimal language input (input that is comprehensible, interesting, and of sufficient quantity) as well as opportunities for output should be provided to students, including quality language arts instruction in both languages.
4. The target (non-English) language should be used for instruction a minimum of 50% of the time (to a maximum of 90% in the early grades), and English should be used at least 10% of the time.
5. The program should provide an additive bilingual environment where all students have the opportunity to learn a second language while continuing to develop their native language proficiency.
6. Classrooms should include a balance of students from the target language and English backgrounds who participate in instructional activities together.
7. Positive interactions among students should be facilitated by the use of strategies such as cooperative learning.
8. Characteristics of effective schools should be incorporated into programs, such as qualified personnel and home-school collaboration.

Adapted from (Lindholm, 1990) by (E. R. Howard, Christian, D., 2002)

Case Studies

Oyster-Adams Bilingual Elementary School, Washington D.C.

The Oyster-Adams Bilingual Elementary School is a public school that delivers a 50/50 two-way dual immersion bilingual model of education. This means that 50% of teaching and learning is in English and 50% is in Spanish. The school began in 1971 as a bilingual school and serves a student population that is linguistically, ethnically and economically diverse. The philosophical orientation of the Oyster school can be found in the following:

We believe that native Spanish speaking children will learn to perform better in an environment that respects their native language and provides continued growth in their native language. In addition, we believe that the education of English speaking children will be enriched by achieving competency in a second language at an age when achieving such competency is easiest.

We believe that the bilingual program at Oyster must provide an environment in which all students are afforded the opportunity to obtain the knowledge and skills that will enable them to succeed both as individuals and members of society. We believe that racial and ethnic richness and diversity form the bases through which we enrich and promote the goals of building a culturally pluralistic society (School, 2010).

It should be noted that grand policy statements such as this one from the Oyster bilingual school are used for marketing purposes and, whereas they give insight into the philosophy and educational goals of an institution, in practice these goals can be embraced and enacted differently across an institution. Curriculum and language planning is an ongoing and dynamic process, and at the Oyster school there is a distinct model of bidirectional bottom-up and top-down policy formulation. “The language minority and language majority groups at Oyster collaborate in their efforts to define linguistic and cultural differences not as problems to be

overcome but as resources to be developed” (Freeman, 1996). The collaborative effort is a key feature of Oyster that contributes to its success – policy, curriculum content and classroom activities are always co-created by the English and Spanish groups to maximize cultural balance and draw from the best of both worlds.

Innovations at the Oyster bilingual school include strong parental and community support, maintenance of high academic standards and a program of ongoing professional development, yet conflict remains between staff and between generations over philosophical orientations and how this impacts program design and development (Fern, 1995). This is not uncommon among bilingual immersion schools where sociohistorical, cultural and political issues are laid-bare and tackled head-on. The literature recommends that Oyster, as well as other schools, need continual professional development, including conflict resolution, collaborative action projects, mentoring and technical assistance to enable an open dialogue about potentially divisive issues.

Hawai‘i

The Hawaiian case reveals remarkable successes and best practice in bilingual education, yet is also a good example of a new bilingual program being introduced into schools that were not originally geared-up for it. Bilingual education in Hawai‘i began in the 1970s as a part of the existing Hawai‘i Department of Education Asian, European and Pacific Language program. The main goals of the Hawaiian Language Program:

1. To create an awareness and an appreciation of the various aspects of the Hawaiian cultural heritage which still permeate the lifestyles of many people living today in Hawai‘i nei.
2. To teach students the basic listening comprehension, reading, speaking and writing skills which will lead to the ability to think and to communicate in the Hawaiian language.

The Hawaiian Language Program heavily emphasized cultural goals, which leads to the conclusion that linguistic and cultural revival was the core of this effort.

The Hawaiian Language Immersion Program, Ka Papahana Kaiapuni Hawai‘i, was developed in 1987 as a one-year pilot program in combination kindergarten/first grade in two schools and expanded to a K-6 program in four schools by 1989. By 1995, there were 756 K-8 students enrolled in the Hawaiian Language Immersion Program which taught in Hawaiian only until grade five and six when English is introduced as the medium of teaching and learning for one hour a day.

These were the early years of program development and implementation, during which several hindering factors were identified: 1) lack of translated and/or original printed curriculum materials in the medium of the Hawaiian language, 2) necessary experimentation concerning the direction and content of the curriculum, 3) inexperience of some teachers in teaching, and all of the teachers, in the beginning years, of teaching through Hawaiian, and 4) continuous placement of the first cohort of students in the same combination classroom with younger students (Lai & Slaughter, 1995). SAT test scores of the first cohort to complete elementary education in Spring 1993 indicate that the Hawaiian Immersion students achieved subpar in reading and moderately subpar in mathematics, although Lai and Slaughter point out that “it was not feasible to construct a valid and fair experi-

mental comparison group for this study” (Lai & Slaughter, 1995). Overall, students were able to achieve fluency in oral Hawaiian and learned reading, writing, and mathematics through the medium of the Hawaiian language. The report into the first elementary concluded, “there is a continuing need for these teachers to receive in-service training in effective teaching methods and new curriculum. There is also a need for all HLI teachers to receive in-service training in new methods of assessing student achievement, teacher researcher perspectives in evaluation, and in the special problems of assessment in second language settings. In-service training for teachers and administrators in all the above areas should receive a renewed emphasis in the program” (Slaughter, Bogart, Bobbitt, Hawaii. Dept. of Education. Hawaiian Language Immersion Program., & University of Hawai‘i at Mānoa. College of Education. Curriculum and Instruction Dept., 1995). The introduction of Hawaiian immersion education was fast-tracked by the Board of Education and the Hawai‘i Department of Education and presented significant challenges, among which were basic concerns such as identifying appropriate sites and hiring qualified teachers. There is no evidence, however, to suggest that these types of problems would have easily been solved by postponing an extra year or two.

The Hawaiian Language Immersion Program is currently provided for K-12 students and is still a total immersion bilingual program in Hawaiian until fourth grade and partial immersion in Hawaiian and English from fifth grade onwards. According to the Hawai‘i Department of Education website: “it is an academic program, delivered through the Hawaiian language, based upon Hawaiian knowledge and cultural practices, attentive to community, family and student goals” (Hawai‘i Dept of Education, 2010). The latter part about being attentive to goals suggests the need for context specific local program design, development and implementation – this includes local sociopolitical issues, community needs and resource availability. Program outcomes do not currently exist but are being developed and will be called K-12 Hawaiian Literacy Framework and Performance Standards for Cultural and Language Proficiency. The philosophical framework and criteria for success of the Hawaiian Language Immersion Program is currently served by the Hawai‘i Guidelines for Culturally Healthy and Responsive Learning Environments² which is a document developed by the Native Hawaiian Education Council and University of Hawai‘i, Hilo, and was adopted in 2002. Of the sixteen guidelines, seven distinct thematic best practices are distilled as follows:

‘Ike Honua (Value of Place)

Developing a strong understanding of place, and appreciation of the environment and the world at large, and the delicate balance necessary to maintain it for generations to come.

‘Ike Ho‘oko (Value of Applied Achievement)

Measuring success and outcomes of our learning through multiple pathways and formats.

‘Ike Kuana‘ike (Value of Cultural Perspective)

Increasing global understanding by broadening the views and vantage points from which to see and operate in the world. (Developing the cultural lens from which to view and operate in the world.)

‘Ike Maui Lahui (Value of Cultural Identity)

Strengthening and sustaining Native Hawaiian cultural identity through practices that support the learning, understanding, behaviors, and spiritual connec-

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<http://www.olelo.hawaii.edu/olelo/nhmo.php>

tions through the use of the Hawaiian language, culture, history, traditions, and values.

‘Ike Na‘auao (Value of Intellect)

Instilling and fostering a lifelong desire to seek knowledge and wisdom, and strengthening the thirst for inquiry and knowing.

‘Ike Piko‘u (Value of Personal Identity)

Promoting personal growth and development, and a love of self, which is internalized and develops into a sense of purpose/role. (Growing aloha and internalizing kuleana to give back.)

‘Ike Pilina (Value of Relationships)

Enriching our relationships between the people, places, and things that influence our lives through experiences that ground us to our spirituality and connect us to our genealogy, culture, and history through time and place.

(Na Honua Maui Ola, June 4, 2002)

A feature of heritage bilingual immersion programs is that they respond to threat of extinction of language and culture of an indigenous people. Cultural learning and ways of knowing that are non-Western are taught alongside and through the indigenous language, as the above seven practices make clear. The second, ‘Ike Ho‘oko (Value of Applied Achievement), illustrates the discomfort with a Western epistemology of knowledge and learning measurement. These guidelines are broad, and this could also be, at least in part, because the program must remain flexible enough to adapt to varying contextual circumstances and levels of education as well as being relevant to the community that stands alongside and outside of the school. The Hawaiian Language Immersion Program, like all others presented in the literature, continues to grow and develop in dynamic ways.

Although the literature does not specify pedagogy, the Hawaiian Language Immersion Program combines efforts and integrates resources from the community. Parents agree, where possible, to speak the language in their homes with their children, enabling the Hawaiian curriculum to come to life, not unlike a holistic learning model. A large network of aunts, uncles and grandparents (kupuna) are involved to varying degrees with educational activities inside and outside of the classroom, including music, storytelling and excursions. Pedagogy is often aligned with the Montessori method involving interactive learning organized into themed islands of interest (Pease-Pretty On Top, 2003).

A standardized test called Hawaiian Aligned Portfolio Assessment (HAPA) is used in place of the state-wide test, Hawai‘i Content Performance Standards III (HCPS III). The HAPA test is required for students in the Hawaiian Language Immersion Program because they have been taught only in Hawaiian. The test is given in Grade 3 & 4 and tests both reading and mathematics. Questions and problems are in Hawaiian and answers must also be in Hawaiian. It is not possible at this time to separate test scores given using the HAPA test from those scores attained using the HCPS III test in English because the Department of Education publishes only the total scores of any given school, complex or region.

The Hawaiian Language Immersion Program is supported across the broader community at the non-governmental, administrative, political and academic levels. For example, the University

of Hawaii-Hilo provides teacher training in Hawaiian language immersion (Kahuawaiola) as well as Hawaiian language courses at many of its campuses that offer evening courses for adults and advanced learning in Hawaiian for students graduating from the Hawaiian Language Immersion Program.

While program issues inevitably still exist, it helps to focus on previously identified problems that have received considerable attention and resources and are much improved. Four main concerns were identified in the 1994 Long-Range Plan for the Hawaiian Immersion Program:

1. Ensuring qualified personnel
2. Achieving quality curriculum
3. Providing appropriate facilities
4. Enabling local governance

(Hawai'i Dept of Education General Education Branch, 1994)

The Hawaiian case provides insight into what may face a start-up bilingual immersion program. Personnel will depend partly upon recruitment of local talent and partly upon provision of appropriate training, particularly at the local level. Curriculum for Hawaiian language programs is growing and developing continuously and has reached a stage that makes it manageable for teachers. Publications in Hawaiian and about Hawai'i have boomed since the 1990s. Facilities have always been a problem for schools that are already space-limited, although the Kaiapuni program has embedded in existing schools across the five main inhabited islands. Charter schools provide another avenue for reconciliation of facilities. Governance is a structure that changes with each location but seems to flourish with the commitment of the broader community stakeholders. It should not be forgotten that community stakeholders were the instigators of the first Hawaiian immersion pilot programs and continue to be a part of the implementation and development of these programs.

New Zealand

There are over 700 Kohanga Reo (language nests) serving around 13,000 Maori pre-school children. First organized in 1982, Kohanga Reo practices total immersion in the Maori language and values. The literature states that, for Maori educators there is a distinct line between Maori immersion and bilingual education and in fact they are considered opposites (Hornberger, 2009). English is strictly forbidden on Maori education premises at all times. "The prohibition is controversial in a nation where English is socially and educationally dominant and highly desirable for academic and social advancement; and all the more controversial considering that the Maori children attending the school arrive as English speakers" (Hornberger, 2006).

The example of Maori immersion programs is one of remarkable revitalization of a heritage language under threat. It cannot be discounted that banning English in Maori schools has played a part in this successful revitalization. Not unlike the challenges faced in Hawaii, Maori language programs have struggled to provide enough qualified teachers – qualified in terms of both bilingualism and teaching strategies that are specifically attuned to the needs of students whose native language is usually not Hawaiian or Maori and who have to compete in a job market whose dominant language is English. A renewed focus in New Zealand has emerged around the idea of pre-service and in-service training for teachers.

Peru

Reflecting on the Quechua case observed in Southern Peru, Nancy Hornberger notes that Quechua is part of a series of heritage bilingual immersion programs where public policy became aligned with indigenous peoples. After the overthrow of the authoritarian government of Alberto Fujimori in 2000, Peruvians were led by Quechua speakers Valentin Paniagua (Interim President 2000-2001) and Alejandro Toledo (2001-2006). President Toledo is indigenous of Andean origin and grew up in a Quechua family of sixteen, six of whom died when he was still a child. These indigenous credentials secured his election and he went on to tackle poverty among indigenous peoples and establish indigenous languages, cultures and identities as priorities in the education system, including bilingual programs.

Quechua has over 3 million speakers in Peru and 6-8 million across the Andes region. Quechua is not associated with formal language learning, at least by the communities that still speak Quechua as a first language. Formal education is associated with Spanish, which has violently displaced Quechua as the dominant language across the Andes region. There is a belief among Quechua communities that young speakers brought up using Quechua as their first language will eventually return home to the region even if they have left to seek employment and experiences outside of the Andes region (Hornberger, 1988). Even though Quechua is a language under threat, it is not a language under threat of extinction and this raises a nuanced discussion about program design for heritage language learning. In particular, programs might consider their answers to the following questions that elicit reconciliation of best practices with the notion of best fit for the communities these programs will serve (adapted from Hornberger 1988, using Hawai'i as an example):

1. How are Hawaiian and English used, valued and influenced in Hawaiian-speaking communities in Hawai'i?
2. How are Hawaiian and English used and valued in bilingual education and non-bilingual education schools in these communities?
3. How does the latter fit with the former?

Inspired by the Quechua case, Hornberger goes on to ask: a) can language maintenance be planned? And, b) can schools be effective agents for language maintenance?

Conclusion

Bilingual and immersion language programs can have multiple incarnations – there is no one program that fits all sites and circumstances. The research points towards general features of language education success, many of which correlate with two-way immersion/bilingual models. Programs that focus on heritage languages such as Maori and Hawaiian exist in a complicated sociopolitical context that will impact the program design. Both Maori and Hawaiian programs share a common trait that they are both 100% immersive in the language for at least the first 4 years. Thereafter, English is introduced into the Hawaiian curriculum, but the Maori curriculum does not allow any English. Academic achievement is mixed and the literature is inconclusive on most aspects of heritage language learners' student achievement, however, two-way bilingual immersion programs are seen to produce solid academic competency at the same time as dual language learning. Above all, any bilingual or immersion programs that teach heritage languages will rely greatly upon the contributions and support of the communities that they serve.

There are strongly polarized positions for and against bilingual education. It is commonplace to view bilingual education as either a matter for second language departments and second language teachers exclusively, or as a problem of immigration policy. Positions remain polarized unless education reform engages and empowers teaching practitioners. From this will develop a rootedness that can generate emancipatory change in both the quality of language instruction and the integrational ethos of the whole school/community. The Hawaiian immersion program has accomplished the most and stands out as the pre-eminent example of integrated heritage language learning. Recommendations for future development in Hawai'i and for heritage bilingual programs elsewhere include ongoing professional development and deeper integration of parents, community and the school/program. These two recommendations are worth highlighting because they help to alleviate concerns about non-indigenous influence, cultural authenticity, identity affirmation, and opposing philosophies and rationales while staying focused on pedagogy and academic achievement.

Hawaiian activist Sam L. No'eau Warner affirms that when we ask whether or not schools can save indigenous languages, we are really asking about the fundamental right of choice of the indigenous people who speak those languages to make their own decisions about the content and medium of their children's education – it is about social justice, and language issues are always people issues (Hornberger, 2008).

Works Cited

- Alanis, I., & Rodriguez, M. A. (2008). Sustaining a Dual Language Immersion Program: Features of Success. *Journal of Latinos & Education*, 7(4), 305-319.
- Andersson, T., Boyer, M., & Southwest Educational Development Laboratory. (1970). *Bilingual schooling in the United States*. Austin, Tex.: Southwest Educational Development Laboratory; [for sale by the Supt. of Docs., U.S. Govt. Print. Off. Washington.
- Baker, C. (2006). *Foundations of bilingual education and bilingualism* (4th ed.). Clevedon ; Buffalo: Multilingual Matters.
- Baker, C., & Prys-Jones, S. (1998). *Encyclopedia of bilingualism and bilingual education*. Clevedon; Philadelphia, PA: Multilingual Matters.
- Baker, K. A., & DeKanter, A. A. (1981). *Effectiveness of Bilingual Education: A Review of the Literature*. Washington, DC: U.S. Department of Education.
- Carrera-Carrillo, L., & Smith, A. R. (2006). *7 steps to success in dual language immersion : a brief guide for teachers & administrators*. Portsmouth, NH: Heinemann.
- Charles, W. (2009). Indigenous Youth Bilingualism from a Yup'ik Perspective. *Journal of Language, Identity, and Education*, 8(5), 365-368.
- Christian, D. (1997). *Profiles in two-way immersion education*. [Washington, D.C.] McHenry, IL: Center for Applied Linguistics: Delta Systems.
- Collier, V. (1992). A Synthesis of Studies Examining Long-Term Language Minority Students Data on Academic Achievement. *Bilingual Research Journal*, 16, 187-212.
- Cooper, R. L. (1989). *Language planning and social change*. Cambridge ; New York: Cambridge University Press.
- Cummins, J. (1979). Linguistic Interdependence and the Educational Development of Bilingual Children. *Review of Educational Research*, 49(2), 222-251.
- Cummins, J. (2000). *Language, power, and pedagogy : bilingual children in the crossfire*. Clevedon [England] ; Buffalo [N.Y.]: Multilingual Matters.
- Cummins, J. (2003). Bilingual Education. In J. a. R. Bourne, E. (Ed.), *Language Education: World Yearbook of Education*. London: Evan Bros.
- Cummins, J., & Hornberger, N. H. (2008). *Bilingual education* (2nd ed.). New York: Springer.
- Fern, V. (1995). Oyster School Stands the Test of Time. *The Bilingual Research Journal*, 19(3 & 4), 497-512.

- Freeman, R. D. (1996). Dual-Language Planning at Oyster Bilingual School: "It's Much More Than Language". *TESOL Quarterly*, 30, 557-582.
- Freeman, R. D. (1998). *Bilingual education and social change*. Clevedon [England]; Philadelphia: Multilingual Matters.
- Greene, J. (1998). *A Meta-Analysis of the Effectiveness of Bilingual Education*. Austin: University of Texas, Thomas Rivera Policy Institute.
- Hamers, J. F., & Blanc, M. H. A. (2000). *Bilinguality and bilingualism* (2nd ed. ed.). Cambridge: Cambridge University Press.
- Hawai'i Dept of Education General Education Branch. (1994). *Long-range plan for the Hawaiian Language Immersion Program : Papahana Kaiapuni Hawai'i*. [Honolulu]: Office of Instructional Services/General Education Branch, Dept. of Education, State of Hawaii.
- Hawai'i Dept of Education, H. L. I. P. (2010). *Curriculum and Instruction*. Retrieved June 11, 2010.
- Hornberger, N. H. (1988). *Bilingual education and language maintenance : a southern Peruvian Quechua case*. Dordrecht, Holland ; Providence, R.I., U.S.A.: Foris Publications.
- Hornberger, N. H. (1991). *Extending Enrichment Bilingual Education: Revisiting Topologies and Redirecting Policy*. In O. Garcia (Ed.), *Bilingual Education* (Vol. 1, pp. 215-234). Philadelphia: John Benjamins.
- Hornberger, N. H. (2005). *Introduction: Heritage/Community Language Education: US and Australian Perspectives*. *International Journal of Bilingual Education & Bilingualism*, 8(2/3), 101-108.
- Hornberger, N. H. (2006). *Voice and Biliteracy in Indigenous Language Revitalization: Contentious Educational Practices in Quechua, Guarani, and Maori Contexts*. *Journal of Language, Identity & Education*, 5(4), 277-292.
- Hornberger, N. H. (2008). *Can schools save indigenous languages? : policy and practice on four continents*. Basingstoke [England] ; New York: Palgrave Macmillan.
- Hornberger, N. H. (2009). *Multilingual Education Policy and Practice: Ten Certainties (Grounded in Indigenous Experience)*. *Language Teaching*, 42(2), 197-211.
- Howard, E. R., Christian, D. (2002). *Two-Way Immersion 101: Designing and Implementing A Two-Way Immersion Education Program At The Elementary Level*. Santa Cruz: University of California, Santa Cruz. (D. E. Center for Research on Education).
- Howard, E. R., Sugarman, J., Christian, D., Lindholm-Leary, K. J., & Rogers, D. (2007). *Guiding Principles for Dual Language Education* (2nd ed.). Washington, DC: Center for Applied Linguistics.

- Lai, M. K., & Slaughter, H. (1995). Hawaiian language immersion, lessons from a six-year study.
- Lanauze, M., & Snow, C. (1989). The Relation Between First and Second Language Writing Skills: Evidence from Puerto Rico Elementary School Children in Bilingual Programs. *Linguistics and Education*, 1(323-339).
- Levine, D. U., & Lezotte, L. W. (1995). Effective schools research. In J. A. B. C. A. M. Banks (Ed.), *Handbook of research on multicultural education* (pp. 525-547). New York: Macmillan.
- Lindholm, K. (1990). Bilingual Immersion Education: Criteria for Program Development. In A. Padilla, Fairchild, H., Valadez, C. (Ed.), *Bilingual Education: Issues and Strategies* (pp. p.91-105). Newbury Park, CA: Sage.
- Marzano, R. J. (2003). *What works in schools: Translating research into action: Association for Supervision and Curriculum Development*.
- May, S. (2008). Bilingual/Immersion Education: What the Research Tells Us. In J. Cummins, & Hornberger, N. H. (Ed.), *Encyclopedia of Language and Education* (2nd ed., Vol. Bilingual Education, pp. 19-34): Springer Science+Business Media LLC.
- May, S., & Hill, R. (2005). Maori-medium Education: Current Issues and Challenges. *International Journal of Bilingual Education & Bilingualism*, 8(5), 377-403.
- Paulston, C. B. (1994). *Linguistic minorities in multilingual settings : implications for language policies*. Amsterdam; Philadelphia: J. Benjamins Pub. Co.
- Pease-Pretty On Top, J. (2003). *Native American Language Immersion: Innovative Native Education for Children & Families: American Indian College Fund*.
- Ricento, T. K., & Hornberger, N. H. (1996). Unpeeling the Onion: Language Planning and Policy and the ELT Professional. *TESOL Quarterly*, 30, 401-427.
- Rossell, C., & Baker, K. (1996). The Educational Effectiveness of Bilingual Education. *Research in the Teaching of English*, 30(1), 7-74.
- Rossell, C., & Ross, M. (1986). The Social Science Evidence on Bilingual Education. *Journal of Law and Education*, 15(4), 385-419.
- School, O. (2010). *Philosophy/Filosofia*. Retrieved June 11, 2010, from <http://oysterbilingual.devis.com/AboutUs/OysterBackground/Philosophy/>
- Slaughter, H., Bogart, L. B., Bobbitt, D., Hawai'i. Dept. of Education. Hawaiian Language Immersion Program., & University of Hawai'i at Mānoa. College of Education. Curriculum and Instruction Dept. (1995). *Longitudinal study of the first kindergarten class to complete elementary school in Hawaiian language immersion: A report on cohort 1-B, 1987 to 1994*. Honolulu: Curriculum and Instruction Dept., College of Education, University of Hawai'i.
- Thomas, W. P., & Collier, V. (2002). *A National Study of School Effectiveness for Language Minority Students' Long-Term Academic Achievement: Final Report, Executive*

Summary. Santa Cruz, CA and Washington, DC: Center for Research on Education, Diversity & Excellence).

- Tollefson, J. W. (1991). *Planning language, planning inequality: language policy in the community*. London ; New York: Longman.
- Warner, S. N. (1999). Kuleana: The Right, Responsibility, and Authority of Indigenous Peoples to Speak and Make Decisions for Themselves in Language and Cultural Revitalization. *Anthropology & Education Quarterly*, 30(1), 68-93.
- Wenglinsky, H. (2000). *How teaching matters: Bringing the classroom back into discussions of teacher quality*. Princeton, NJ: Educational Testing Service.
- Willig, A. (1985). A Meta-Analysis of Selected Studies on the Effectiveness of Bilingual Education. *Review of Educational Research*, 55, 269-317.
- Wong, L. (1999). Authenticity and the Revitalization of Hawaiian. *Anthropology & Education Quarterly*, 30(1), 94-115.
- Yamauchi, L. A., & Purcell, A. K. (2009). Community Involvement in a Place-Based Program for Hawaiian High School Students. *Journal of Education for Students Placed at Risk*, 14(2), 170-188.