

THE
BENEFITS
OF

Immersion Education

A Review of the New Zealand
and Overseas Literature

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ABSTRACT

This paper summarises research findings on the benefits of immersion education for Maori, their whanau, and their communities. Research findings from New Zealand and relevant overseas indigenous immersion education are examined. The paper looks at some of the issues in bilingual/indigenous immersion education and the benefits of bilingualism. The literature examined gives both local (Maori) and overseas examples of the benefits of indigenous immersion education from early childhood education to school-level education. Research shows that benefits of immersion education for immersion students include both intellectual and emotional benefits. Immersion education also plays a distinct role in language and cultural revitalisation of Maori and other indigenous peoples. Gaps in the research on the benefits on immersion education for Maori are also noted.

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1 INTRODUCTION

This overview of the research literature on the benefits of immersion education for Maori, their whanau, and their communities was commissioned by Te Puni Kokiri (Ministry of Maori Development) to provide a summary of relevant research, both here and overseas.

The review has been undertaken within a very short time, and is thus dependent on those sources which were available in New Zealand, or readily retrievable from overseas. It is also dependent on material written in English or Maori. A quick glance at any major bibliography on bilingual education will include important research reported in French, Spanish, and other European and increasingly, indigenous languages. I have not been able to analyse this material, though much of it is eventually translated or summarised in English.

This search used the major international education research database, ERIC, and New Zealand databases NZBN and INNZ (Index New Zealand). Some Internet searching was undertaken using the search engines provided by the University of Texas (<http://www.utexas.edu/search>). New Zealand and overseas educational and linguistic researchers and key Maori educationists were also consulted for references and fresh material. The search provided more than 100 references, not all of which were directly relevant to this review.

The focus of the review is on the benefits of indigenous immersion education. Indigenous education refers to the education of indigenous peoples such as the Navajo and Hawaiian in the United States, the Inuit and the various bands of Canada (but not Canadian French), the Welsh in Wales, the Irish in Ireland, the Basques and Catalan in Spain, Aborigines in Australia, and the Maori in New Zealand.

The purpose of indigenous immersion education is not simply to educate children. Language and cultural revitalisation are the key to the emergence of indigenous immersion education. Schools and early childhood centres provide a (re)-entry for the adults of the community into cultural, social, and economic activities which fire the engine of indigenous (re)-development.

As with other aspects of social change, this is an area in which evidence is often to be found in attestation and gradual shifts in activity and attitude. It is unusual for social researchers to receive the funding which would enable the systematic studies of such change, and immersion education is no exception.

There is very little research literature (in English) available at this time on the benefits of indigenous immersion education for indigenous peoples and their communities. Most investigations of its benefits which rely on existing data and expert views arrive at the conclusion that it has a distinct role in language and cultural revitalisation, and that immersion students show both intellectual and emotional benefits. Most of the available studies analyse benefits mainly in terms of achievement in the majority and indigenous language, if reliable assessment tools are available in the indigenous language. Few studies give simultaneous information on student achievement and home and community language use, though most do try to put the data into context.

2 ISSUES IN BILINGUAL/INDIGENOUS IMMERSION EDUCATION

Bilingual Education

Bilingual education implies education in two languages. Experts have wide and varying opinions on what exactly it is. Cazden and Snow (1990) note bilingual education is a "simple label for a complex phenomenon". Baker (1993) describes bilingual education as the "umbrella term" covering education that promotes and uses two languages, as well as education for language minority children. Fishman (1976) and Hornberger (1991) distinguish between transitional and maintenance bilingual education. Transitional bilingual education aims to shift the child from their minority home language to the majority, dominant language. Maintenance bilingual education aims to develop the child's minority language. Holmes (1984) gives a definition of a bilingual education programme in a New Zealand context, based on the aims of bilingual education and methods of teaching.

A bilingual education programme is one intended to promote bilingualism either by the predominant use of a minority group language or by the use of two languages as mediums of instruction in the school. (p. 1)

She adds that language programmes that teach children a second language as a curriculum subject do not qualify as bilingual education.

Immersion Education

Baker (1993) considers maintenance and heritage language¹ bilingual education to be a particular type of immersion education. This term describes the context where language minority children use their native, ethnic, home, or heritage language in the school as a medium of instruction with the aim of full bilingualism. Examples include education through the medium of Navajo and Spanish in the United States, Catalan in Spain, Irish in Ireland, Gaelic in Scotland, Welsh in Wales, and Maori in New Zealand.

Immersion education can be early immersion or late immersion. An early immersion programme, such as kohanga reo² in New Zealand, immerses children in the minority language at a very early age. Late immersion starts with children when they are older, often around the ages of 11–13. The Canadians have had success in late-immersion French programmes, but it is widely accepted that immersion programmes beginning early and continuing are the most successful (Baker, 1993).

¹ The term heritage language describes a native, ethnic, minority, or ancestral language. The term community language is sometimes used in New Zealand.

² Kohanga reo literally means "language nest". The term is used to describe Maori total-immersion preschool units, which teach Maori culture and language through the medium of Maori. The kohanga reo movement is sometimes referred to in the literature as *Tē Kohanga Reo (TKR)* or *Nga Kohanga Reo* or simply *kohanga*.

Total Immersion Education

In New Zealand, the term total immersion education is generally reserved for kohanga reo and kura kaupapa Maori³ where the medium of instruction and guiding philosophy is Maori. Since 1994 the Ministry of Education has classified Maori bilingual units in mainstream New Zealand schools into three levels or programmes, each with a different level of instruction through the medium of Maori.

- Level 1 programme—81 to 100 percent
- Level 2 programme—51 to 80 percent
- Level 3 programme—31 to 50 percent

Each bilingual unit is free to decide how, when, and at what time the majority language—English—is used in the classroom. No research has been done on how and when English is used in each of these levels. A level 1 immersion bilingual unit may operate as a total immersion unit. The first interim report of the Maori Affairs Select Committee Inquiry on Maori Education (1995a, p. 9) estimates that there are 31,000 students enrolled in level 1, 2, and 3 immersion programmes at the beginning of 1995. There are currently 2590 students enrolled in kura kaupapa Maori (Ministry of Education, personal communication, October 1995).

Benefits of Bilingualism

The dominant belief among academics and many members of the public from the turn of the century to the 1960s was that bilingualism had a negative effect on cognitive competence. These beliefs have not completely subsided since then, although research has now clearly shown that balanced or true bilingualism has a positive effect, as demonstrated in a study carried out by Peal and Lambert (1962). They tested both bilingual and monolingual children from similar backgrounds for mental ability using verbal and nonverbal tests. The bilingual children significantly outperformed the monolingual children in all tests undertaken. A large number of subsequent tests have confirmed Peal and Lambert's original findings, and there is now a sound body of research supporting the benefits which result from bilingualism. Cummins (1993) cites a number of studies showing cognitive benefits through bilingualism including more creative thinking, better metalinguistic awareness, and improved verbal and nonverbal abilities. An earlier overview of the benefits of kura kaupapa Maori (Te Puni Kokiri, 1993a, pp. 9–10) summarises findings from a number of early studies showing cognitive benefits of bilingualism. Bilingual speakers have been found to have:

- enhanced concept formations and divergent thinking (Cummins, cited in Diaz, 1983);

³ Kura kaupapa Maori means schools which run according to Maori principles and values, and which teach through the medium of Maori. Schools in New Zealand may be designated kura kaupapa Maori under the Education Act 1989 and receive funding from New Zealand's Ministry of Education capped programme.

- better ability to detect ambiguity (Cummins and Mulcahy, cited in Cummins, 1984);
- greater cognitive flexibility and are capable of more complex analytical strategies in their approaches to language operations (Ben-Zeev, 1976); and
- a wider and more varied range of experience than monolingual speakers as they have two cultures and operate in two different systems. Their need to switch codes is seen as beneficial to flexible thinking (Ianco-Worrall, 1972; Bain, 1976; Ben-Zeev, 1976; Cummins, 1976).

Most of the research findings comment that cognitive advantages are evident through the student's use of language. In this regard bilingual speakers:

- possess a greater sensitivity towards verbal and nonverbal cues (Ianco-Worrall, 1972; Bain, 1976; Ben-Zeev, 1976; Cummins, 1976);
- have greater awareness of their linguistic operations (Vygotsky, 1962); and
- have a more advanced awareness of language forms and properties (Ianco-Worrall, 1972; Cummins, 1978).

Immersion Education—Some Comparisons

Although there is now a substantial body of literature on the benefits of bilingualism and immersion education overseas, there is still very little literature on the benefits of immersion education for indigenous peoples. One of the reasons for this is that many indigenous peoples simply lack any form of formal education in their respective vernacular languages. Many Australian Aboriginal groups, for example, face the imminent complete loss of their vernacular languages with no immediate prospect of any form of bilingual or immersion education (Fishman, 1991; Jolly, 1995; Jordan, 1988).

Another reason for the lack of literature is that many indigenous immersion education initiatives are still in their infancy. Examples of very recent indigenous immersion education initiatives include Hawaiian immersion education and Scottish Gaelic immersion programmes. Even some of the more established immersion education programmes such as the Welsh and Irish initiatives lack substantial research. Baker (1988) claims the paucity of ongoing research into bilingual education was a contributing factor in the move away from Irish to English in the 1960s and 1970s in Ireland.

The Hawaiians seem to be the indigenous group who have the most in common with the Maori in terms of indigenous language revitalisation. The history of Maori in New Zealand and the indigenous Hawaiians of Hawaii show a number of striking parallels. Both peoples speak a threatened language belonging to the East-Polynesian subgroup of the Polynesian language family. These languages are almost mutually intelligible, with a large amount of shared vocabulary. Fluent Maori speakers living in Hawaii are able to learn Hawaiian without too much difficulty. The pre-European cultures of both peoples also show similarities. And both have suffered immensely from large-scale land alienation and forced assimilation into the dominant English language and culture. The Hawaiians, as with Maori, are now very much an urbanised people.

The linguistic, social, and educational situations in many places are changing rapidly. Holmes (1991) found "no evidence of the successful programmes of Navajo language and culture in reservation Head Start programmes reported in the journals in the late 70s and early 80s (Spolsky, B., 1982)" (p. 166). Fishman (1991) also comments on an increasing shift to English by Navajo speakers due to the increasing encroachment of the outside world and dominant culture into the Navajo territory and cultural processes. On the other hand, Maori immersion education programmes such as kura kaupapa Maori⁴ and kohanga reo⁵ appear to be continually expanding in both numbers of students and schools.

⁴ As at the end of June 1995 there were 38 state-funded kura kaupapa Maori. It is envisaged that there will be a minimum of 53 kura kaupapa Maori established by the end of 1998 (Education Review Office, 1995).

⁵ The Ministry of Education (1994) reports that in 1991 there were 10,451 children enrolled in 630 kohanga reo and in 1993 there were 14,027 children enrolled in 809 kohanga reo.

3 OVERSEAS LITERATURE ON THE BENEFITS OF INDIGENOUS EARLY CHILDHOOD IMMERSION EDUCATION

Metalinguistic Benefits

Ritchie (1994) cites evidence from Cummins (1993, p. 57)⁶ that suggests intensive second-language learning in early childhood helps to focus on linguistic phenomena and promotes an analytic orientation towards language. Evidence is given from Dodson (1983) that early word play is more complex in the bilingual child. The range of utterances such as comparing and contrasting, interpreting, mixing and separating was more extensive in bilingual children than in monolingual (Dodson, 1983, p. 410, cited in Ritchie, 1994, p. 1). Ritchie also cites evidence from Fantini (1991, p. 111) showing that the bilingual child has access to differing visions of the same world, and an understanding of language relativity, which enables the child to step outside of one paradigm and compare and contrast one view with the other. This comparative facility enables the child to see a language as one particular system among many, to have access to more general categories of analysis, and be more aware of linguistic operations (McLaughlin, 1984, p. 33, cited in Ritchie, 1994, p. 1).

Education

Wales

Holmes (1991) reports several types of nursery classes and schools providing Welsh-medium education in Wales. Some are Welsh-medium; others include only some use of Welsh. One group Mudiad Ysgolion Meithrin (MYM—Welsh-medium Nursery Schools and Playgroups Association) provides Welsh immersion programmes for children whose first language is English. MYM is considered a dynamic force in Welsh-medium education (Holmes, 1991, p. 67). The programme was initially wholly voluntary, but has received government funding since 1975. In 1985 there were 433 schools, and 199 parent-toddler groups catering for nearly 6000 children (Holmes, 1991, p. 68). The MYM immersion education programme is considered a success, and an essential part of Welsh-medium education, which extends right through the school system. No assessment of the achievement of students in MYM programmes is reported.

Ireland

Fishman (1991) describes Irish immersion preschools termed *Naíonraí*. These preschools are outside the regular public school system and function entirely in

⁶ Cummins (1993) cites studies that show that the development of competence in two languages can result in greater levels of linguistic metalinguistic awareness and the facilitation of additional language acquisition. None of the studies cited by Cummins (1993) concerning the cognitive benefits of bilingualism involved indigenous languages.

Irish. *Naionrai* have blossomed in recent years and in 1985 numbered 185 (Fishman, 1991). *Naionrai* graduates acquire proficiency in both comprehension and expression, acquire positive attitudes to the Irish language, and reinforce or gratify such attitudes in their parents (Fishman, 1991, p. 136). It seems the *Naionrai* make an important contribution to producing Irish speakers and family wellbeing.

Spain

Basque Region

Early immersion education in the Basque region⁷ is described by Tarrow and Iram (1987) and Tarrow (1990). The Basques have given priority to early childhood education in their successful language and cultural revitalisation. *Ikastolas* (schools where Basque is spoken) originated in the 1920s with the purpose of reviving *Euskera*⁸ (Basque) as a language of daily use, and as the major medium of classroom instruction. Originally supported by the church and financed by parents, they gained government funding in 1976. In 1982 the Basque government made a commitment to give public funding to preschools in which at least 25 percent of the teachers provide their instruction in *Euskera*. Today the majority of young children in the Basque region receive their instruction in *Euskera* (Tarrow & Iram, 1987, p. 6).

Catalonia

Immersion education in Catalonia is also growing. In 1989 there were 1500 nursery school classes (for children aged 3 to 8) in more than 500 schools in 48 towns and cities (Tarrow, 1990). Teachers surveyed in 72 of these schools at the end of the 1985 year reported many positive changes. Part of the success of the programme is attributed to the fact that teachers have been very enthusiastic in its initial stages (Tarrow, 1990). The programme is growing rapidly in parental popularity, leading to their requests for other schools' participation.

Like the Basque region, Catalonia has only recently had some degree of autonomy restored (Mar-Molinero, 1989). Catalan⁹ immersion education initiatives are still in their infancy. Commentators on language revitalisation such as Fishman (1991) consider the Catalans have had some degree of success in their efforts to revive Catalan as an everyday language. Early childhood immersion education is considered an important part of this endeavour.

North America

There does not seem to be any systematic or government-supported provision of early childhood indigenous immersion education for many indigenous peoples in North America. Holmes (1991) visited a number of Native American reservations

⁷ The Basque region, generally referred to as the Basque Autonomous Community (BAC), is a region in the North of Spain, near the French border.

⁸ *Euskera* is an "isolate" in linguistic terms. It does not appear to be related to any of its neighbouring European languages such as French, Spanish, or Catalan.

⁹ The Catalan language is related to Spanish. Spanish speakers can read Catalan without too much difficulty (Tarrow, 1990). This situation is unusual in indigenous immersion education. Most indigenous languages are not closely related (e.g., Celtic languages of Irish, Welsh, and Gaelic) to the majority language in their countries or not at all related to the majority language(s), e.g., Basque, Maori, and the Native American languages.

in the United States to investigate indigenous early childhood programmes. He reports:

It was only in the Crow reservation around Pryor, Montana where I found most of the children speaking their native language as their first language - around 85% of them. The language is widely used in the home and supported in the Pre-schools, the schools and the communities. Crow speakers do not defer to English speakers in the presence of non-Crow English speakers. This is a strong measure of self-esteem of status of the language. (p.166)

Podmore (1993), in commenting on the lack of Canadian studies or publications that focus on the maintenance of indigenous languages through early childhood programmes, adds that the need for language maintenance has been clearly documented by the National Indian Brotherhood, Assembly of First Nations (1988):

Aboriginal languages deserve official status within Canada, constitutional recognition, and accompanying legislative protection. The federal government is obligated to provide adequate resources to First Nations to ensure the development of language structures; curriculum materials; First Nations language teachers; resource centres; and immersion programs. Aboriginal language instruction is necessary from preschool to post-secondary and adult education. (p. 16)

This document specifies the benefits of early childhood education for First Nations children as providing a head start in acquiring cognitive and motor skills, and in maintaining language and culture (1988, p. 18).

Hawaii

The *Punana Leo* of Hawaii is the indigenous early childhood immersion education programme that has the most in common with indigenous early childhood immersion education in New Zealand. *Punana Leo* shares the same meaning as *kohanga reo*, that is, both literally mean "language nest". Both were set up primarily as a means of language and cultural maintenance and revival. *Punana Leo* first began in 1984, and are undoubtedly modelled to some extent on the *kohanga reo* of New Zealand (Slaughter, Lai, No'eau Warner, & Kahulu Palmeira, 1990). No studies have yet been done on the benefits of *Punana Leo* for Hawaiians.

Summary

This section has attempted to cover the benefits of early childhood immersion education for overseas indigenous people. The literature shows that many indigenous groups do not have any provision at all for early childhood immersion education; other indigenous groups have only just begun to provide such programmes. Some groups such as the Welsh, Basque, and Irish have long histories of early childhood immersion education provision. These groups believe that immersing children in the target indigenous language in early childhood is both crucial and beneficial to maintaining and reviving language and culture and economy. They generally note that their children have positive attitudes to their own indigenous language and culture. An important ingredient in the success of these early childhood education programmes has been that these indigenous people have had territorial autonomy, have been the majority people within that territory, and have been able to ensure the allocation of public resources to education.

4 OVERSEAS LITERATURE ON THE BENEFITS OF INDIGENOUS IMMERSION EDUCATION AT SCHOOL LEVEL

Educational Achievement

The most obvious benefit of a total immersion programme is that students gain proficiency in two languages, both the indigenous language and the majority language. Swain (1989) notes that there are about 200 research studies in Canada that show immersion education (mostly French) results in proficiency in two languages.

Tarrow (1990) reports an evaluation of Catalan education which tested children¹⁰ from the three different models of bilingual education available in Catalonia: Model A (all instruction in Spanish, with Catalan taught as a subject), Model B (bilingual with Catalan progressively increased), and Model C (instruction in Catalan with Spanish as a subject). The results showed that speakers taught in Castilian did well in both Castilian and Spanish, and that the greater the degree of immersion, the higher the level of Castilian spoken.

Gaelic-medium immersion teaching available in Scottish primary schools also uses three models. In the first model, total immersion in Gaelic is available throughout the primary school, through a separate stream within a primary school. In the second model, full immersion in Gaelic is maintained until the end of primary 2, followed by a Gaelic-dominated bilingual phase with a gradual shift towards greater use of English (but still within a separate unit of a primary school). In the third model, Gaelic is used for the first 2 years of the primary phase, then children move out of the designated unit and merge with the rest of the school. Studies conducted in 1992–93 showed that teachers perceive children taught through Gaelic were achieving similar levels across the curriculum as children taught through English, regardless of the model of immersion used. The same report notes that parents rate positively their children's development across the curriculum and their progress in English and Gaelic language skills (MacNeil, 1993).

Cummins (1978) reported that grade 3 Irish-medium students performed at the same level in English, but significantly higher in Irish, than a group of English-medium students matched on IQ and socioeconomic status. Price (1985) showed that children receiving Welsh bilingual education scored better in the more creative areas under test than did their matched peers receiving English-medium instruction, and at the same level in other areas.

Rosier and Holm's (1980) study outlines how Navajo bilingual students (from grade 2 to grade 6) did better on standardised achievement tests in arithmetic and reading than did Navajo students at comparable schools who had received English-

language-only instruction; they also did better than Navajo students at the same school who had received English-language-only instruction.

Aspin (1994) reports research carried out by Gale *et al.* (1981) in the Northern Territory of Australia comparing the performance of Aboriginal children in bilingual classes with Aboriginal children in English-only classes over a period of 4 years in a range of subjects. The children in the bilingual classes outperformed those in English-only classes in seven out of ten tests. Despite the fact that children's achievement in bilingual classes was still below the national average, it was considered that the students benefited considerably from the bilingual classes.

Slaughter and Lai (1994) report that Hawaiian immersion students (grade 6) were achieving as well as other Hawaiian students in English-medium education in English reading comprehension, writing, and mathematics on standardised and alternative measures of achievement. These same Hawaiian students were found to have a high level of oral fluency in Hawaiian, and had learnt how to read, write, and do mathematics through the medium of Hawaiian.

Revitalisation of Language

One of the most cogent benefits of immersion education is the revitalisation of language. A well-known successful case is Hebrew (Fishman, 1991). Many other indigenous immersion programmes are aiming to revitalise the language. Slaughter and Lai (1994) note that the Hawaiian language immersion programme is a major initiative to reinstate, modernise, and preserve the language and culture of Hawaii through its children. McNair (1980) (cited in Tarrow, 1990) views schools as a major means of language revival in Spain. Fishman (1991) considers immersion education crucial in language revitalisation but warns, along with many other authors, that immersion education alone will not lead to full-scale language revitalisation.

Revitalisation of Culture and Sociocultural Benefits

It is clear that for a number of indigenous peoples immersion education has become essential not only as a mechanism of language maintenance or revival but also as a mechanism of enhancing and maintaining an indigenous culture. The Hawaiian language immersion programme (Slaughter & Lai, 1994) is described as an important sociocultural innovation in public education in Hawaii. The focus of the programme is both linguistic and cultural survival. These two factors are inherently linked and very much dependent on each other. Stairs (1988), in describing the development of Nouveau Quebec Inuit education, notes a strong consensus concerning a maintenance aim or a cultural survival aim in the context of indigenous education.

Economic Benefits

A frequent result of an indigenous immersion programme is a high demand for fluent bilingual teachers. Many indigenous immersion programmes are desperate for fluent teachers. Other government and educational organisations offer employment opportunities for bilinguals. Tarrow (1990) notes parents see competency in

¹⁰ He does not give the ages of the children being evaluated.

Catalan as a means of getting ahead and want their children to learn the language. In Catalonia a number of Spanish speakers are learning Catalan. Cummins (1993) suggests immersion education can also turn around the results of previous underachievement in the dominant education system which have resulted in narrow work opportunities for indigenous people, and low or negative expectations of the usefulness of education.

Racial Harmony

Indigenous immersion education programmes often cater for some non-indigenous students. This can only result in greater understanding of indigenous culture and language by non-indigenous students. The increased understanding of indigenous culture enhances community cohesion and helps break down racial and cultural barriers. Holmes (1991) concludes that early childhood programmes such as kohanga reo are beneficial not only to Maori children but other children as well:

These programmes are advantageous not only to Maori children but also to Pakeha and other tauwiwi children. This knowledge can enrich us both individually and as a society. We can develop a deeper appreciation and understanding of Maori language and culture, and more positive cross cultural interpersonal relations. (p. 164)

We would also have greater access to literature and other cultural treasures, and it would help in our progress towards a multicultural society. (p. 165)

5 EVIDENCE ON THE BENEFITS OF MAORI IMMERSION EDUCATION

The very recent renaissance of Maori immersion education means that there is as yet only a small number of studies available. Much of the work is primarily descriptive: of teaching and learning processes; of language development; of student, whanau, and community enthusiasm and support which ripples out into the creation and/or strengthening of supportive communities; of the creation of more interest in education and the seeking of further opportunities in education, training, and employment; and of resource difficulties. It is not surprising that research has taken a back seat with the low and probably inadequate level of resourcing, highly dependent on voluntary initiative and contribution (e.g., Benton, 1993; Education Review Office, 1995; Maori Affairs Select Committee, 1995; Riddell, 1994). If more systematic research of immersion education is to be done, then resourcing for it will have to come from other sources.

The prime purpose of kohanga reo, kura kaupapa Maori, and wharekura kaupapa Maori is revitalisation of language, culture, and community. While Harker (1980) critiqued the Currie Commission's view that a mainstream school "is not, nor can it ever be, the prime agency in conserving the Maori cultural heritage" by noting that mainstream schools are also expected to conserve the heritage of New Zealanders of European origin, the work of conservation is somewhat less demanding than the work of revitalisation (Benton, 1993). The difference in function between Maori immersion and mainstream schools or programmes means that comparisons of effects or associations need careful construction. Assessment of student achievement is a prime illustration: should students from the different kinds of school be given tests devised for mainstream schooling, or those devised for immersion schooling? A moot point at the moment, however, since New Zealand is only now moving to a system of mandatory standardised assessment in the primary school, and suitable assessments of Maori language are in their infancy.

I have concentrated here, therefore, on those studies which provide empirical data, or which provide clear attestation of the benefits of immersion education for Maori. But there are also some studies of mainstream education which point indirectly to the benefits which could be expected to occur from a differently provided education. Much evidence has been presented of the underachievement of Maori in the New Zealand education system (e.g., Benton, 1988). Interpretation of this includes variance in home support, low (pakeha) teacher expectations, the scaling and norm-referenced nature of senior secondary national examinations, parental attitudes formed by their own negative school experiences, the absence of Maori in curriculum content and class lessons, and the difficulty of succeeding in "pakeha" terms without some disassociation from Maori identity. Some of these obstacles dissolve, or are better able to be addressed, in immersion settings.

For example, Carkeek, Davies, and Irwin (1994) found in their comparison of resources and classroom behaviour in seven schools that Maori girls were most active

in the immersion school classrooms, and more confident in taking on teaching and leadership roles. The study of the career aspirations of 62 Maori girls in four secondary schools in the lower North Island reported by the Ministry of Women's Affairs (1993) indicates that Maori teachers were often those sought out first by Maori students as a source of vocational and training information, and that these students were less likely to either seek or find advice in the absence of teachers of their own identity. This study also gives a good example of the kind of attestation often given of educational settings which are Maori oriented, in this case a bilingual unit:

Because my school has a bilingual unit which I am part of, I deal with Maori things everyday. Therefore there is little doubt that whatever I do when I leave school is bound to have something to do with Maoritanga, and the school also encourages students to continue on to tertiary education. (Ministry of Women's Affairs, 1993, p. 20)

6 THE BENEFITS OF MAORI EARLY CHILDHOOD IMMERSION EDUCATION

Kohanga reo is a preschool immersion programme that is based on *kaupapa Maori*.¹¹ All preschool children may attend kohanga reo. Most of the children at kohanga reo are Maori. The kohanga reo movement has parallels with other successful early childhood indigenous initiatives overseas such as the Irish *naionrai* and Basque *ikastolas*. These three movements are indigenous responses aimed at preserving their respective indigenous languages and cultures. Unpaid volunteers initiated each movement. All three movements subsequently received government funding and support. Kohanga reo differs from the *naionrai* and the *ikastolas* by catering only for preschool children.

Revitalisation

The 1988 government review of kohanga reo gave strong support to the suitability of kohanga reo for children under 5 years, for the whanau, and for Maoridom (Government Review Team, 1988):

Our conclusion is that Te Kohanga Reo is a vigorous lively movement which is reaching young families who would not have participated in existing early childhood services. Both Maori and Pakeha, teenagers, parents with young children and kaumatua travelled long distances to spend one night on a marae in order to tell the review team of the importance of the Te Kohanga Reo movement and what it meant to them personally. The kohanga kaupapa is powerful in drawing people together to support each other and work towards the ultimate goal of a bilingual and bicultural nation as envisaged in the Treaty of Waitangi. (p. 47)

The Review Team concluded that the kohanga reo movement has revitalised Maori culture, contributed to the maintenance and revival of Maori language, and empowered Maori communities (Government Review Team, 1988):

The Kohanga Reo has arrested the fragmentation of the traditional cultural base . . . Te Kohanga Reo has revitalised the use of the marae, and is helping preserve the Maori language which is an endangered taonga. All this has come about through the autonomy of the kohanga reo with the kaupapa, which has meant that the kohanga reo whanau have had to acquire administration and management skills and take responsibility for the consequences of their own decisions. They are responding to the challenge. (p. 47)

Smith's (1986) study on the contribution of women to kohanga reo found that Maori women were actively involved at all levels of the kohanga reo movement, and that it was the Maori nature of the movement's structure which had encouraged Maori women to reassert themselves as active, equal partners in the struggle to retain and promote te reo and whanau (cited in Hohepa, 1990, p. 9).

Cloher and Hohepa (1995) studied 24 Tai Tokerau Maori families living in Otara. They report:

The roles of kohanga were important not only in the re-creation of whanau but in meeting other needs. It [kohanga] was perceived by kohanga families involved in this study as

¹¹ *Kaupapa Maori* means based on Maori principles and values.

providing a context to help them realise goals and aspirations they had for their children—about strengthening their culture, about creating a wider social context. (p. 34) Parents whose children attended kohanga reo were less likely to report problems with their children than others (32 percent compared with 55 percent), and were more aware of community services providing family support for Maori (58 percent compared to 18 percent).

Royal-Tangaere's (1992) study describes the process by which Maori language was transferred from her daughter at kohanga reo to the other members of the family in the home environment. The use of Maori in the home by the daughter inspired a greater use of Maori amongst other family members.

The kohanga reo movement has also provided education, training, and employment opportunities for Maori people. Benton (1993) reports parents of kohanga students becoming involved in kohanga reo, learning Maori, and subsequently returning to kohanga as *kaiako*.¹²

Children's Achievement

Hohepa's (1990) study of children's language in a kohanga reo found that kohanga reo provides a complex and supportive context for language learning and for learning the values, beliefs, and practices embodied in the kaupapa of kohanga reo, kaupapa which reflect deeply held Maori values.

Ka'ai's (1990) study of kohanga reo students reported identifiable Maori pedagogical patterns and argues these patterns would be best matched and enhanced through the availability of kura kaupapa Maori. Benton (1993), in his analysis of the role of kohanga reo in language revitalisation, also warned that the benefits of this early language acquisition would be lost if kohanga reo graduates were unable to move into a Maori immersion school environment.

The Education Review Office's most recent overview analysis of its assurance audits (1994) reported that most of the 41 kohanga reo audited were "providing sound developmentally appropriate programmes. Parent involvement in the programmes was often high." (p. 1) As with other (mainstream) early childhood education programmes, largely because of the lack of reliable assessment for children of this age, the kohanga reo children were not systematically assessed.

Katene (1992) studied the academic and social impact of kohanga reo and bilingual education on the children in a number of Wellington schools offering bilingual education. She found that (unlike Maori children in mainstream programmes) no kohanga reo graduates in the sample were undertaking remedial reading programmes, or receiving psychological or welfare-type counselling. Also, parent-school contact was positive. All the children in total immersion education were reported to be reading in English 2 years above their chronological reading age, and well above their monolingual peers (p. 3).

¹² *Kaiako* means teacher.

7 THE BENEFITS OF MAORI IMMERSION EDUCATION - SCHOOL LEVEL

Education Benefits

Government-funded Maori immersion education beyond kohanga reo includes kura kaupapa Maori, level 1 bilingual units (in mainstream schools), and immersion programmes in various whare wananga. Te Atarangi is an independent national organisation that teaches Maori through immersion. Some Te Atarangi courses in tertiary institutes receive funding, but much of Te Atarangi's work is voluntary. There are also iwi-based groups that teach Maori to adults through immersion.

There have been a number of studies undertaken on Maori bilingual programmes in primary and secondary schools. Benton (1985) evaluated eight bilingual primary schools¹³ in rural areas that still had a high number of Maori speakers. Children's knowledge of Maori was assessed using five tests, one a standardised developed instrument. Benton reported good standards in the children's oral language, reading, and comprehension. Parents and members of the community were surveyed on their own knowledge of Maori and the extent to which Maori was used in households and the district. Benton reports positive attitudes towards Maori language and the bilingual programmes.

Spolsky (1987) visited a number of bilingual schools and bilingual units. He reported that unique achievements had been made in a short time, and that a number of teachers were pioneering in a new field. He made a number of recommendations to the Ministry of Education in terms of future resource requirements and the need to train Maori teachers to ensure the future of Maori language education.

There are two studies of the processes involved in establishing and maintaining bilingual units. Harrison (1987) describes the lengthy negotiations and reasons for the establishment of a bilingual school,¹⁴ its goals, operation, and community support. Douglas (1993) describes the early years of a whanau bilingual unit at Ngaruawahia High School. Self-confidence blossomed, and more students continued their schooling, their academic performance improved, and absenteeism decreased—though teachers sought further improvement in all three areas (p. 91). Students also reported their new sense of each other as fellow whanau members, and an increase in the support they offered each other (p. 81). Parents noted the increased self-confidence, and detected more positive attitudes to education.

No longer is it 'uncool' to succeed at school, it seems that in many instances the students find it 'uncool' to hinder others from achieving their goals. (p. 79) The school counsellor found a striking increase in the number of Maori students seeking advice about tertiary education (p. 78).

Jacques (1991) studied six bilingual programmes in South Island primary schools. She found only a small amount of Maori being used in classrooms, but effective

¹³ Only one of eight bilingual schools mentioned in Benton (1985) has changed status to kura kaupapa Maori. This school is Ruatoki.

¹⁴ This bilingual school, Rakaumanga, has changed status to kura kaupapa Maori.

promotion of children's self-esteem and self-confidence and no impairment in students' performance in English-language tests. No assessments were made of children's ability in Maori.

Ohia (1993) undertook case studies on two bilingual units in Wellington, one in a high school, the other in a primary school. He found supportive attitudes to these units from parents, teachers, and students. The children at the primary school were reading at acceptable levels in English and Maori, and the children at the high school were achieving acceptable levels in all School Certificate subjects.

Wagemaker (1988) undertook research on an early bilingual unit in a Tauranga high school. Parents, staff, and teachers were surveyed on their perceptions of the advantages and disadvantages of the unit. Data were also gathered on the use of Maori in the home. He reports an overall positive impact of the unit in such aspects as an increase in the number of students staying longer at school, and a decrease in problem behaviours and guidance issues reported by the guidance teachers and 31 percent of all the school's teachers. There was "a noticeable initial academic impact, particularly in achievement in Maori language" (p. 37).

Two studies have focused on kura kaupapa Maori: Reedy (1990, 1990a & b, 1991, 1991a, 1992) and Aspin (1994). Reedy's studies provide a comprehensive picture of kura kaupapa Maori. He surveyed parents, caregivers, kaumatua, boards of trustees, and teachers in five kura kaupapa Maori in Auckland and one in the Manawatu. As part of the research Tuki Nepe assessed 33 six-year-old children from kura kaupapa in Auckland on their Maori reading and oral ability, vowel and syllable identification, and their basic mathematics skills, using the Maori language for all testing. Reedy (1992) found good growth in children's use of oral Maori, their reading of Maori, and in their numeracy skills. There are also strong developments in personal confidence, and a positive view towards Maori identity. Aspin (1994) reports that a group of Maori students learning mathematics through Maori, scored higher in a mathematics achievement test than a similar group of Maori students who had studied mathematics in an English-medium school. Both groups were from predominantly low-income families, with only 4 percent of the kura kaupapa families in white collar or semi-skilled work; 68 percent were from families dependent on state benefits for income. Maori was the second language for almost all the students.

The Education Review Office's evaluation report (1995) on kura kaupapa Maori reports positive relationships and good rapport between teachers and students, high student motivation to achieve, good attendance patterns, and evidence from the few kura with a formal English-language reading programme that "students have acquired reading skills in English of a standard appropriate to their age" (p. 9).

Hollings, Jeffries, and McArdell (1992) report an urgent need for the development of assessment procedures for immersion education, and a need to focus on further teacher development and training for teaching in immersion education. The 1995 Education Review Office report on kura kaupapa Maori also reports preservice training and teacher development, curriculum resource development, and the development of assessment procedures as critical needs for kura kaupapa Maori.

Economic Benefits

Another benefit of kura kaupapa Maori and Maori immersion education for Maori is an economic benefit, in terms of employment in the Maori language industry as teachers, journalists, broadcasters, publishers, and translators (Te Puni Kokiri, 1993a), and also in terms of the ability to research land claims.

8 GAPS IN THE RESEARCH

There are many questions relating to immersion education which have yet to be researched. Some involve new ground; others are needed to provide more systematic evidence to convince those who find the numerous attestations of benefits insufficient. The main research questions now are:

- What use do Maori children make of Maori language out of school? Does their competence in Maori language draw them more into Maori community activities than their peers receiving mainstream education in English?
- Are Maori children in immersion education achieving comparable or better levels in English and other curriculum subjects than their peers in mainstream education?
- Are Maori children in immersion education better motivated to learn, more confident, with better social skills than their peers in mainstream education?
- Are Maori children in immersion education achieving acceptable levels in the comprehension of spoken Maori, and in reading, writing, and speaking Maori?
- Do Maori children in immersion programmes show an understanding of Maori values and orientation?
- What aspirations do adolescents and graduates of immersion education programmes have toward work, community and voluntary participation, and further learning? What do they do to realise these aspirations?
- Are there any variations in immersion students' achievement levels, language use, community participation, and aspirations as adults associated with variations in the home environment such as use of Maori language, family income, and parental education?
- What effects do immersion programmes have on the adults involved? Do they provide learning opportunities for adults to strengthen their own language knowledge and use? Do they provide a focal point for community activity which strengthens individuals' confidence in their Maori identity, and provides networks of support, further education, employment opportunities? Do they enhance the transmission of Maori cultural knowledge and tikanga? Do they enhance participation in iwi and Maori community activities?
- Are differences in immersion programmes (for example, in philosophy, degree of immersion, or type (kura kaupapa Maori or bilingual unit in mainstream school)) reflected in differences in student cultural and language knowledge, language use, approaches to learning, strength of identity, aspirations as adults, and community participation?
- Do variations in school immersion programmes reflect variations in local communities (for example, small rural communities compared with urban areas) or availability of early childhood immersion programmes? For example, will urban programmes have less emphasis on the learning of iwi history and traditions?

There is an urgent need for funding for research that will provide answers to these questions and assist the ongoing development of the benefits of immersion education for Maori, their whanau, and their communities.

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