Orthodoxy, science and language in Kaupapa Māori schooling

Georgina M. Stewart
University of Auckland

Iho/Abstract

This paper critically discusses Kaupapa Māori schools, which emerged from Māori political aspirations, but have become dominated by essentialist attitudes towards language and culture. Dominating ideas or orthodoxies suppress alternative ideas that might strengthen practice in areas of weakness. The need for improvement of current practice is arguably most severe in the curriculum area of Pūtaiao (Māori-medium Science). I advocate a reflexive critical approach to education, encouraging those who work in kura to critique essentialism in their own practice, as well as in that of others. The article also argues that inadequate arguments and distortions by a critic of Kura Kaupapa Māori mean that her legitimate critical points cannot be used to assist in strengthening kura.

Kupu nunui/Keywords: cultural essentialism, Kaupapa Māori theory, Kura Kaupapa Māori (KKM), pūtaiao/science, undiscussability

Introduction

Māori-medium education is one of the most positive, tangible results to come out of the period known as the "Māori Renaissance" (R. Walker, 1996). Kura Kaupapa Māori (KKM, kura) are schools "based on Kaupapa Māori philosophy" (Sharples, 1994, p. 18), which is a critical, culturally-specific orientation towards education. The reasons for, and history of, the development of Kura Kaupapa Māori schools are well documented, along with the associated flax-roots social regeneration and the concomitant development in the academy of Kaupapa Māori theory and methodology (May & Hill, 2005; G. H. Smith, 2002).

In the 1980s, the Working Party on KKM developed policy required for kura to become part of the state education system. The legal definition of KKM was published in the document Te Aho Matua (Te Rūnanganui o Ngā Kura Kaupapa Māori, 2008). Members of the Working Party included Pita Sharples, Katarina Mataira, Tuakana Nepe, Monte Ohia, Elizabeth Rata, and others (Reedy, 1992). Pita is now a member of parliament and co-leader of the Māori Party, but I recall listening to him speak about Te Aho Matua in the mid-1990s at a hui at

Hoani Waititi Marae (an urban marae, or Māori community centre, in Auckland). The hui had been called as part of providing a mandate for the Te Aho Matua bill that Pita was overseeing through the law-making process at the time. Pita explained that Te Aho Matua was primarily a requirement of the Ministry of Education, needed in order to create a legal category of special character schools to be known as Kura Kaupapa Māori. His point (as I heard it) was that Te Aho Matua was a strategy or device that Māori were using to get what we wanted from the state education system, namely, control over our own kids' educations. The text of Te Aho Matua comprises statements relating to language and education drawn from Māori traditions at a metaphorical and pan-tribal level. The case for kura based on Te Aho Matua involved a different language medium, set of values and knowledge base, although the key factor in kura success has actually been whānau involvement (Education Review Office, 2002).

My argument in this paper is that the definition of KKM is primarily ideological, that is, strategic and political rather than educational, making the public discourse of KKM susceptible to becoming disconnected from the everyday reality of life in kura, as illustrated by some of the remarks below. While expressing serious concerns about kura, my argument is based on support for the kaupapa: in my view, it is not the kaupapa that needs to change, but aspects of how it is being implemented, for the sake of our tamariki and the future. The aim of my article is to suggest some ideas to further advance the achievements of kura, towards securing their future.

One member of the original KKM Working Party is my Pākehā colleague, Elizabeth Rata. At some point, Rata's support for KKM underwent a 180^{o} turn: today, she is the most outspoken published critic of Kaupapa Māori education (Rata, 2004a, 2004b). My critiques both intersect with, and differ from, those of Rata in her 2011 article, *Theoretical Claims and Empirical Evidence in Māori Education Discourse*.

Rata (2011) brings together facts and quotes from selected sources to build an apparently powerful argument that kura are not only underperforming but actually harmful. But while some of Rata's points are well made (drawing on some of the same evidence I do), other points she makes are misleading and incorrect. The third section below presents the main points in Rata's article, noting those with which I concur, and pointing out differences. I address Rata's work because I believe all scholarly critique holds potential value. In this case,

although she declares her support for advancing the interests of Māori education (Rata, 2011, p. 4), Rata is widely regarded as anti-Māori. Since encountering her critique of Kaupapa Māori in the mid-2000s I have been intrigued by its apparent hostility, and impressed by its forthrightness. To date, I know of no published Māori counter-critique of Rata. Far from personal attack, the aim here is to increase the benefit Rata's work might provide to the kaupapa.

My own critique of Kaupapa Māori education is informed by critical sociolinguistics and postcolonial culture studies (Lamb, 2004; Leistyna, 2005; Salzmann, Stanlaw, & Adachi, 2012), and focuses on language and knowledge issues which, I argue, are central to understanding the current challenges facing Kaupapa Māori schooling. Since my views are based on my experience as a kura parent, a Wharekura (secondary KKM) teacher, and a curriculum developer of Pūtaiao (Māori-medium Science), my argument includes autoethnographic elements of personal narrative and self-reflective analysis (Tolich, 2010), within an overall Kaupapa Māori research approach (L. T. Smith, 1999; S. Walker, Eketone, & Gibbs, 2006). In this paper, 'kura' is used to mean 'school(s)' and therefore at a general level includes 'Wharekura', or secondary KKM, as a subset.

Achievements, orthodoxy and science in kura

This section reviews what has been achieved by KKM, with comments on strengths and weaknesses. From my personal knowledge of the Māori-medium education sector, I argue below that current practice is weakest in the curriculum area of science, or Pūtaiao. Insights from researching Pūtaiao can illuminate the whole Māori-medium curriculum.

The first KKM opened in the mid-1980s, operated by Māori parents, who met the costs by whatever means they could, including taking out personal mortgages. Soon the Ministry of Education began funding kura, and the number grew rapidly, with some existing schools being re-labelled, and many whānau starting kura from scratch. Even though the Ministry imposed a limit of five new kura per year, and the economic climate was tightening, through the 1990s and into the new millenium, the Māori-medium school sector continued to expand.

Reported views of KKM are overwhelmingly positive, often to the point of utopian (see, for example, Cooper, Arago-Kemp, Wylie, & Hodgen, 2004; Nepe, 1991; Powick, 2001;

Sharples, 1994). KKM are represented as schools in which the whole curriculum is taught in Māori, and which adhere to higher educational standards than mainstream schools. It is implied that kura are, or soon will be, achieving the twin goals that were the major educational drivers behind the original establishment of Māori-medium schools: overcoming historical disparity in educational outcomes for Māori students, and reversing the decline of te reo Māori from near extinction to a living language again (Ministry of Education, 2009).

One of the most widely reported pieces of evidence for the success claims of Kaupapa Māori schooling is that Māori-medium candidates achieve NCEA at significantly higher rates than their mainstream Māori peers. Serious educational inequities, however, lie hidden within these glowing statistics. Approximately 50% of all students who graduate from Wharekura (i.e who achieve NCEA Level 1, 2 or 3) do not get any credits at all in Science/Pūtaiao (Murray, 2007). Of all the learning areas, Science/Pūtaiao has a uniquely difficult task in re-framing itself for Māori education, since channels of curricular reform used in other subjects, such as texts by Māori authors or works by Māori artists, do not exist in the science curriculum where knowledge content is deliberately distilled away from the human stories of its origins. In addition, irrespective of language medium, senior secondary science requires both high text literacy and high numeracy skills, making it academically more challenging than any other subject. Nevertheless, the situation for Wharekura students is much worse than for Māori students in mainstream secondary schools, where Science is compulsory for all Year 11 students. Almost all students who complete Year 11 in a mainstream school achieve at least one internally assessed Science achievement standard.

The historical lack of participation by Māori in tertiary science education is an important reason for the lack of Māori teachers of Science/Pūtaiao, reflected in the extremely limited participation and achievement by Wharekura students in NCEA Science/Pūtaiao, discussed above. The way NCEA qualifications are structured into many individually assessed standards, but reported at the level of the whole qualification, however, conceals this severe subject disparity for Māori-medium students within the dominant triumphal representations of kura.

Kura have achieved many outstanding results—mainly because intelligent Māori people have used the freedom and protection provided by the KKM ‘brand’ from monocultural traditions in schools to build educational communities with new positive Māori identities.

Educationally, committed parents have availed themselves of opportunities to provide rich learning environments for their children, often with elements similar to the best of 'mainstream' education, including future problem solving, brain gym, mathex competitions, science camps, field trips, community projects, drama productions, learning Japanese, Spanish and other languages. Of course, underlying these sorts of programmes have been the benefits of kura staples, namely te reo, kapa haka, Ngā Manu Kōrero, tikanga marae, and, perhaps most vital of all, whānau involvement. The most important thing about kura may actually be something so fundamental it is invisible, so simple it is overlooked: their identity. In kura, unlike in the vast majority of schools, it is normal to be Māori. This fact alone brings significant parent and whānau involvement.

In recent years, kura that were originally opened as KKM primary schools (Years 1-8) have been undergoing re-designation into composite schools (Year 1–13), as their populations age. This ongoing process has been officially supported, despite acute curriculum problems at Wharekura levels (discussed below), and the salient lack of training for Wharekura teachers: all the Māori-medium teacher training programmes running around the country are specifically for teachers of Year 1–8 students.

Another recent trend is that a significant number of kura have departed from the Te Aho Matua umbrella, and from the associated national committee, Te Rūnanganui o Ngā KKM. Reasons for this move are cast in terms of politics or knowledge and language, with dissenting kura preferring to be iwi-based or independent, rather than 'held to account' to Te Aho Matua and Te Rūnanganui. Along similar lines, Te Marautanga o Aotearoa (the national curriculum statement in Māori) is sometimes rejected because it is not written in the iwi dialect or does not reflect iwi knowledge bases, including 'iwi science'.

Ironically, the arguments about iwi science show how not only Pākehā, but also Māori discourses, have fallen prey to essentialist notions about culture and language. Essentialist notions of culture and language held by Pākehā produce colonising Eurocentric policies of assimilation in education, against which KKM struggled to emerge. The argument for school-level autonomy based on iwi knowledge, however, is an example of a new form of Māori essentialism. This thinking demonstrates misunderstanding, not only by kura and iwi but also by the Ministry, of the notion of 'Māori science', which carries a lot of weight in the community (Lomax, 1996).

Even very well educated parents, teachers and others with whom I have discussed 'Māori science' over the years, sincerely believe that there is an alternative Māori form of science, on which the Pūtaiao curriculum is, or ought to be, based (Kapua, 1997). There are an effectively endless number of research articles, theses and books continuing to be written in support of this idea, including all those written from diverse sociocultural viewpoints in international contexts (Aikenhead & Michell, 2011). This debate has been prominent in "multicultural science education" (Cobern & Loving, 2001) and more recently "CSSE – Cultural Studies of Science Education" (Roth & Tobin, 2006).

The problem is that the 'Māori science' debate is not usually well understood by those in favour of incorporating it into the school curriculum. The most coherent meaning of the term 'Māori science' is as a form of protest against the currency in the academy of the term 'Western science' (McKinley, 2001; Parsons, 1992), which is a political meaning, as distinct from an epistemic meaning. To give the term 'Māori science' epistemic meaning is to suggest it is a distinct discipline of knowledge, suitable for the basis of a culturally relevant, and therefore more engaging, version of the notoriously monocultural and elitist science curriculum (Hodson, 1999). This confuses two quite different pedagogical aims of, firstly, teaching science better to Māori students, and, secondly, teaching traditional Māori knowledge (often called mātauranga Māori) instead of science. Across the curriculum, the argument for incorporating indigenous knowledge (IK) has been loudest in science, despite the truism that IK is holistic, and therefore covers the entire curriculum.

Language is uniquely difficult in Pūtaiao, where both the number and nature of specialised curriculum words present challenges, and there is a never-ending struggle to locate all the curriculum related words needed to teach entirely through the medium of te reo Māori. There is also a more subtle linguistic question about the potential of language structures used in science texts to inflict damage on traditional Māori forms of language (and therefore knowledge), which I have written about elsewhere (Stewart, 2010a). It seems logical to argue that sticking to a Māori-only policy in Pūtaiao becomes self-defeating after a certain point, around Year 6–8. The obvious answer is to teach Pūtaiao bilingually, which is probably what usually happens in Wharekura (where Pūtaiao is taught at all), but this is a very difficult solution to support publicly, given the working climate of adherence to fundamental Māori-medium principles like *kōrero Māori i ngā wā katoa, i ngā wāhi katoa* (speak Māori at all

times, in all places). Such practices have become unquestioned and unquestionable, and therefore can qualify as KKM orthodoxy.

This orthodoxy is a discourse process in which dominant ideas associated with strong social beliefs suppress contradictory thinking—indeed all thinking—and shut down discussion of alternative approaches based on other ideas. This process acts as social control by disciplining the behaviour of those working in the sector, for fear (say) of rejection and ostracism. The result can be termed "undiscussability" (Young, 1989, p. 132). Undiscussability hinders the ability of kaiako (teachers) to improve practice in areas of weakness, and encourages amnesia (Harrison, 1998): in this case, amnesia about the widespread limitations in subject, professional and cultural qualifications and experience of staff in kura, including principals; about the number of kura where management intervention has been necessary; and about the academic deprivation effects of the Wharekura curriculum.

Orthodoxy is also ideological in the sense of encompassing distorted beliefs. The language policy of "i ngā wā katoa, i ngā wāhi katoa" contradicts the original linguistic advice in *Te Aho Matua*:

> 2.2 Mō ngā tamariki, kia rua ngā reo. Ko te reo o ngā mātua tūpuna tuatahi, ko te reo o tauiwi tuarua. Kia ōrite te pakari o ia reo, kia tū tangata ai ngā tamariki i roto i te ao Māori, i roto hoki i te ao o Tauiwi [The aim is for the children to be bilingual. First let them develop competence in Māori, secondly in English. Equal competence in both languages will allow the children to achieve their potential in the Māori world as well as in the non-Māori world]. (Te Rūnanganui o Ngā Kura Kaupapa Māori, 2008, p. 736)

In other words, Te Aho Matua has never promoted the principle of 'Māori language immersion at all costs', and at all times and places. This principle is an example of the essentialist ideology dominant in kura, which merely replaces one universalist language oppression (i.e., the historical suppression of te reo Māori through corporal punishment of Māori children by school teachers) with another, remembering that oppression is always limiting, in this case on the fulfilment by kura kids of their academic potential. The argument advanced by Māori academics that cultural success *is* academic success (Cooper et al., 2004) has a political point, but serves mainly to confuse the debate about the difficulty for Wharekura of providing excellent Māori-medium education, particularly in Science and

Mathematics—subjects keenly wanted for their children by most kura parents, in my experience.

At this point, early in the fourth decade in which the word ‘kura’ has been part of our national educational vocabulary, the outlook for Kaupapa Māori schooling is somewhat bleak. Many kura have run into management and governance problems. The national numbers in kura are on the decline (Ministry of Education, 2012a). Anecdotally, middle class Māori are leading this trend away from kura (expectedly, since middle class parents are more able and more likely than low income parents to actively choose and re-choose schools for their children). This is most often related either to dissatisfaction with the quality of teaching, especially in Science and Mathematics, or parental concern about the quality of English language learning available to their tamariki, or the effect of other problems such as bullying. The national numbers in Māori-medium schools drop by about half between Year 8 and Year 9 (Ministry of Education, 2012a) which, besides access restrictions (not all whānau who want to keep their children in Māori-medium beyond primary have a Wharekura in their locality) is most likely due to the balance between cultural and academic aspirations, noted above. Wanting the best for their children, many parents migrate them to English-medium for the latter, after a number of years in primary kura have satisfied the former.

Claims, critique and Kaupapa Māori

This section reviews Rata’s critique of KKM (2011), reading it against mine to show how the two critiques differ, and what they have in common. The overall argument of Rata’s article is that much of what is claimed about Kaupapa Māori education is not supported by factual evidence, such as national statistics. As the previous section shows, I agree with this point. But I question the validity of the four particular claims that Rata enumerates, and critically examine the so-called evidence she presents in support of them. The ‘claims’ of KKM she identifies are:

> that Māori education is a revolutionary initiative;
> that it is a cultural solution to underachievement;
> that it has reversed the decline of Māori language use;
> that it is a valid educational alternative for a distinctive population. (p. 3)

A significant problem in Rata's article is that she uses the phrase 'Māori education', a blanket term that includes a range of English and Māori-medium programmes, yet the object of her critique is actually KKM. This confusion creates a range of problems for Rata, as I discuss below. The first claim of KKM identified by Rata above is introduced by incorporating a certain group of words (post-Marxist, revolution, resistance, transformation, crisis and oppression) seemingly for the purpose merely of creating an atmosphere. Rata does not argue against this claim. Rather, she argues against a slightly different, but much more important claim: namely, that KKM is a *viable* initiative. She uses national data (some of the same numbers I cited above) to argue KKM may be declining, not thriving. If, as Rata suggests, the Ministry of Education is inaccurately reporting on kura, such an issue is far more important than refuting her first 'claim'.

Rata's (2011) second and third claims (that KKM is a cultural solution to underachievement and that it has reversed Māori language decline) are versions of the twin drivers of Kaupapa Māori schooling referred to in the previous section: better educational outcomes and language revitalisation. These were always the major aspirations behind the struggles by Māori parents, including Rata herself at the time, to establish KKM. Her discussion of these two claims, therefore, constitutes an evaluation of kura against their own purposes.

In relation to the claim about educational achievement, Rata's (2011) arguments overlap with my own about subject disparity within the overall improved NCEA achievement rates for Māori-medium candidates. I also concur with Rata's concern—which she presents as an explanation for this problem—about the current prevalence of the policy notion that improving teachers' cultural competence will bring about higher Māori achievement across the board (see also below). These are, however, two different problems: on one hand, there is no doubt Wharekura outcomes need to improve in some curriculum areas, but, on the other hand, especially given the divisions in the sector Rata emphasises in her article, Kaupapa Māori schooling cannot be blamed for inadequate Māori education policy, which is aimed primarily at the majority of Māori students in English-medium schools. Rata's arguments are considerably weakened by failing to address the complexity of the Māori education sector, which includes both mainstream and kura programmes.

In relation to Māori language revitalisation, Rata (2011) reports evidence that te reo Māori is still on the decline, according to some measures, contradicting the KKM claim to have

revived the Māori language. The research literature on language revitalisation, however, concludes that schools alone cannot save a language (Baker, 1993). No doubt the revitalisation card has been well-played in kura negotiations for state funding, but this does not amount to deception. In any case, the health of a language is not a simple thing to measure, as Rata (2011) indicates by referring to the evidence as "contradictory, even confusing" (p. 8). In Māori communities around the country it is mainly "kura kids" who are restocking the marae. Maybe Kaupapa Māori education has so far failed to achieve full intergenerational transmission, and has been unable to revive te reo Māori in all language domains, but these are unreasonable criteria on which to assess its overall worth. Rata's main interest in casting doubt on the language's future survival, however, seems to be accusing KKM of lying for trying.

Rata's (2011) fourth and final claim concerns the "two peoples" belief on which Kaupapa Māori education is based, referring to the ongoing debate in social science about the 'two worlds' notion (Munz, 1994; Salmond, 1991). Rata begins with a critique of Russell Bishop's version of Kaupapa Māori theory (Bishop & Glynn, 1999) as used in the Te Kotahitanga in-service teacher education programme in mainstream schools over the last 10 years (Bishop, Berryman, Cavanagh, & Teddy, 2007). Rata disputes Bishop's claims, firstly, that the "cultural mismatch" in classrooms is the cause of Māori underachievement, and secondly, that the solution to this long-standing problem is Te Kotahitanga's version of "culturally responsive pedagogy". I share Rata's concern about current Ministry policies for improving Māori achievement largely based on this work led by Bishop. But Kaupapa Māori education, which is centred in Year 1–8 Māori-medium schools, cannot be held responsible for how Bishop has applied Kaupapa Māori theory to his work in Year 9–13 English-medium schools, nor for the influence of Bishop's work on Ministry policy for Māori mainstream education (see, for example, Ministry of Education, 2012b).

Rata (2011) comes to her central concern: that the "impression given in the discourse" is of two "quite separate" people, Māori and Pākehā (p. 9). She offers a comment from an education advisory newsletter as "empirical evidence" that the "social reality" is otherwise: "it is sometimes a difficult task for schools to identify which of their students are Māori' (p. 9). In other words, she questions the status of Māori as a 'people' with their own 'culture' and 'world view', since if this is nonsense, then clearly, so is the idea of special Māori schools and special Māori pedagogy. But Rata has again taken an extreme version of an idea,

presented it as a ‘claim’ about kura, then refuted it using numbers—in this case, the ethnicity data collected by schools. In taking this trivialising approach, she fails to address the larger argument. She merely repeats points made in a classic philosophical debate waged in relation to a host of social arenas over many decades (see, for example, Hoyningen-Huene & Sankey, 2001; Wilson, 1970). This debate concerns epistemological and ontological universalism versus relativism (Siegel, 2001), and is not reducible to the problem of identifying the ethnicity of school students. Indeed, collection of ethnicity statistics by schools is one prime scenario that sets up Māori and Pākehā as separate categories. Rata supports her most substantial objection to Kaupapa Māori education, namely that it is based on understanding Māori as a separate people, by citing the difficulties caused by the state’s insistence on that very idea.

In my own research on Pūtaiao (Stewart, 2005, 2010b, 2011), I needed to address the question of identity, which eventually leads to the fundamental question of universalism versus relativism. Universalism is a philosophical tradition that influences many areas of Western thought, such as the Christian belief in one founding cause or supreme power, referred to as God. Universalism therefore underpinned missionary impulses in the Victorian era to convert Māori and other indigenous peoples to Christianity, in the belief that Christian doctrine was the truth, while any other religious beliefs or deities were false. The influence of universalist thinking led to Eurocentric assumptions in social science disciplines such as linguistics and anthropology, which have been challenged during the last 50 years by new philosophical ideas such as postmodernism and poststructuralism (Herrnstein Smith, 2005). Ideas that oppose universalism are collectively referred to as relativism, but debate between the two perspectives is ongoing, to a greater or lesser degree in each particular field of study. Relativism is vigorously opposed in the philosophy of science, on the grounds that scientific laws apply throughout the universe, and where the universalism/relativism debate is referred to as the “science wars” (Kovel, 1996).

The universalism/relativism debate impacts on Pūtaiao in the concern with Māori knowledge as distinct from the usual knowledge base of the science curriculum, as well as in relation to the identity of Māori students, and the use of an indigenous language as medium of instruction. Both universalism and relativism easily fall prey to essentialist thinking at each of these levels of debate, as explained below.

The universalism/relativism debate has similar contours in each domain it influences (language, culture, knowledge, etc). There is an either/or position taken by both sides, and a third hybridised position that moves beyond this zero-sum game (Rutherford, 1990). Hence, to understand 'Māori science' as a protest against the scientism of 'Western science' is more subtle and complex than the idea of replacing 'Pākehā science' with 'Māori science' in the Pūtaiao curriculum. Rather, the anti-scientism approach, which I term 'Kaupapa Māori science' (Stewart, 2007), uses the identity of Kaupapa Māori education as a standpoint from which to critique 'science', with the aim of improving on science, according to its own criteria (Boyd, 2001). Of course, kura do not automatically achieve this by virtue of their existence—appropriate Pūtaiao policy must be developed and implemented. Analogously, kura seek, among other things, to overcome the difficulties caused when Māori parents feel alienated by schools that have changed little since their own painful childhood experiences. This perspective sees relativism, not as a philosophical stance to replace universalism, but as a modifier, a reminder that universalism is absolute in only a limited number of domains.

Philosophically speaking, only very simple things such as electrons and physical laws can be placed in absolute, hard-edged categories (Lakoff, 1987). Rata (2011) uses the terms "irreducible categories" of "racial groups" in relation to Māori views of self-identity, but ethnic identity is a complex concept, not a yes/no question. One of Rata's pieces of evidence for the sway of this two peoples claim comes from a chapter by Alison Jones and Kuni Jenkins (2008) who refer to "working the hyphen" in the phrase "indigene-colonizer" to discuss the potential for positive research collaborations in a nation whose history has been based on such a relationship. Jones and Jenkins explicitly reject the notion Rata attributes to them, noting "the indigene is never absolutely different [from the colonizer]" (Jones & Jenkins, 2008, p. 484). Rata misquotes Jones and Jenkins to shore up her straw-man argument that Māori educationalists are misguided about the reality of Māori education.

The close readings of Rata's article (2011), above, have been undertaken in order to show that her critique of Kaupapa Māori education fails to stand up to detailed scrutiny. Evaluation of Kaupapa Māori schooling requires knowledge of the everyday realities of life in kura, as well as an understanding of the relevant theoretical and philosophical concepts.

Conclusion

In my view, questions about how to improve educational outcomes of KKM revolve around the central issue of language medium. While I fully endorse the aim of producing competent bilingual Māori citizens, the immersion pedagogy for language acquisition that guides practice in Kōhanga Reo and early years in KKM has been enshrined by cultural essentialism to the point of educational detriment to the long-term interests of kura students, whānau and iwi. In order for kura to achieve their aims we may need to do three things. First, speak honestly about what is really happening in Wharekura classrooms; second, listen carefully to criticisms, seeking their value for improving our practice. Third, we may need to give up some of our "shibboleths" about language use (Harlow, 2005, p. 139), which have grown out of proportion, and obscured some of the original wisdom of Te Aho Matua.

The big message is that we should have confidence in our tūpuna—those who contributed to Te Aho Matua, as well as those in the 19th century who so avidly acquired English, literacy and knowledge of the wider world. To consider more nuanced language policy in Wharekura is not to take a 180^{o} turn, but to return to the words of Te Aho Matua, and re-think the mythologies that have grown up about it. The kaupapa of Māori-medium education is sound, but not when it is applied without thinking, which is the key meaning of the word 'orthodoxy'. Kaiako would benefit from developing greater understanding of cultural essentialism and its relevance to language and knowledge in the Māori-medium curriculum. The critical theoretical underpinnings of KKM warrant a matching reflexivity with regard to practice. Kaupapa Māori educators require courage and confidence to critique their own practice, as well as those of others, in order to ensure the future of this kaupapa.

Rārangi kupu/glossary

ao	world
Aotearoa	New Zealand
he aha?	what is?
i	(grammatical particle) to/from/in
iwi	kinship grouping, 'tribe'
kaiako	teacher
kapa haka	Māori performinng arts
katoa	all
kaupapa	cause, philosophy
ki	to/with
KKM, Kura Kaupapa Māori	Māori-medium schools that adhere to Te Aho Matua
kōrero	talk, discourse
kotahitanga	unity
kura	school

Māori	indigenous people of Aotearoa New Zealand
marae	Māori community centre, 'plaza'
marautanga	curriculum
mātauranga Māori	traditional Māori knowledge, Māori education
mea	thing, to say or do (colloquial)
mō	for, concerning
ngā	the (plural)
Ngā Manu Kōrero	National Māori Speech Competitions (funded by PPTA)
o	of
ōrite	equal
pakari	adult, strong
Pūtaiao	Science in the Māori-medium curriculum
reo	language, voice
rua	two
rūnanga	council
tamariki	children
tauiwi	foreign(er), Pākehā
te	the (singular)
Te Aho Matua	Title of legal definition of KKM
Te Kōhanga Reo	Māori immersion ECE movement that preceded KKM
tēnei	this
tikanga	customs
tū tangata	stand strong, achieve (metaphorical)
tuarua	second
tuatahi	first
tūpuna	ancestors
wā	time
wāhi	place
whānau	kinship grouping, extended family, school community
Wharekura	secondary KKM

Rārangi pukapuka/references

Aikenhead, G., & Michell, H. (2011). *Bridging cultures: Indigenous and scientific ways of knowing nature*. Don Mills, Ontario: Pearson Education.

Baker, C. (1993). Bilingual education in Wales. In H. Baetens Beardsmore (Ed.), *European Models of Bilingual Education* (Vol. 92). Clevedon: Multilingual Matters.

Bishop, R., Berryman, M., Cavanagh, T., & Teddy, L. (2007). *Te Kotahitanga phase 3: Establishing a culturally responsive pedagogy of relations in mainstream secondary school classrooms*. Wellington: Ministry of Education.

Bishop, R., & Glynn, T. (1999). *Culture counts: Changing power relations in education*. Palmerston North, NZ: Dunmore Press.

Boyd, R. N. (2001). Reference, (in)commensurability and meanings: Some (perhaps) unanticipated complexities. In P. Hoyningen-Huene & H. Sankey (Eds.), *Incommensurability and related matters* (pp. 1-63). Dordrecht: Kluwer.

Cobern, W. W., & Loving, C. C. (2001). Defining "science" in a multicultural world: Implications for science education. *Science Education, 85*(1), 50-67.

Cooper, G., Arago-Kemp, V., Wylie, C., & Hodgen, E. (2004). *Te rerenga ā te pīrere: A longitudinal study of kōhanga reo and kura kaupapa Māori students. Phase I report*. Wellington: New Zealand Council for Educational Research

Devine, N. (2004). *Education and public choice: A critical account of the invisible hand in education*. Westport CT: Praeger.

Education Review Office. (2002). *Performance of Kura Kaupapa Māori*. Wellington: Education Review Office.

Ernst & Young. (1999). *The knowledge economy: A submission to the New Zealand government by the Minister for Information Technology's IT advisory group* (ISBN 0-478-23435-X). Wellington: Ministry of Commerce.

Harlow, R. (2005). Covert attitudes to Māori. *International Journal for the Sociology of Language, 172,* 133-147.

Harrison, K. (1998). Social studies in the New Zealand curriculum: Dosing for amnesia or enemy of ethnocentrism? In P. Benson & R. Openshaw (Eds.), *New horizons for New Zealand social studies* (pp. 63-82). Palmerston North: ERDC Press.

Herrnstein Smith, B. (2005). *Scandalous knowledge: Science, truth and the human*. Edinburgh: Edinburgh University Press Ltd.

Hodson, D. (1999). Critical multiculturalism in science and technology education. In S. May (Ed.), *Critical multiculturalism: Rethinking multicultural and antiracist education* (pp. 216-244). London & New York: Falmer Press.

Hoyningen-Huene, P., & Sankey, H. (Eds.). (2001). *Incommensurability and related matters*. Dordrecht & London: Kluwer Academic Publishers.

Jones, A., & Jenkins, K. (2008). Rethinking Collaboration: Working the indigene-colonizer hyphen. In N. K. Denzin, Y. S. Lincoln & L. T. Smith (Eds.), *Handbook of Critical and Indigenous Methodologies* (pp. 471–486). Los Angeles, CA: Sage.

Kapua, T. (1997). Defining Māori science. *Historical Review, 45*(2), 91-98.

Kovel, J. (1996). Dispatches from the science wars. *Social Text, 14*(46/47 Special Issue on 'Science Wars'), 167-175.

Lakoff, G. (1987). *Women, fire and dangerous things: What categories reveal about the world*. Chicago: University of Chicago Press.

Lamb, S. (2004). *Language and reality*. London and New York: Continuum.

Leistyna, P. (Ed.). (2005). *Cultural studies: From theory to action*. Malden and Oxford: Blackwell.

Lomax, T. (1996). Māori science revisited. *NZ Science Monthly, 7*(6), 12-13.

May, S., & Hill, R. (2005). Mäori-medium education: Current issues and challenges. *International Journal of Bilingual Education and Bilingualism, 8*(5), 377-403.

McKinley, E. (2001). Cultural diversity: Masking power with innocence. *Science Education, 85*(1), 74-76.

Ministry of Education. (2009). *Ka hikitia*. Wellington: Ministry of Education.

Ministry of Education. (2012a). *Māori-medium education*. Retrieved from http://www.educationcounts.govt.nz/statistics/maori_education/schooling/6040

Ministry of Education. (2012b). *Tātaiako: Cultural competencies for teachers of Māori learners.* Retrieved from www.minedu.govt.nz/theMinistry/EducationInitiatives/Tataiako.aspx

Munz, P. (1994). The two worlds of Anne Salmond in postmodern fancy-dress. *The New Zealand Journal of History, 28*(1), 60-75.

Murray, S. (2007). *Achievement at Māori immersion and bilingual schools: Update for 2005 results*. Wellington: Demographic and Statistical Analysis Unit (DSAU), Ministry of Education.

Nepe, T. (1991). *E hao nei e tēnei reanga: Te toi huarewa tīpuna: Kaupapa Māori, an educational intervention system.* (Unpublished doctoral thesis). University of Auckland, Auckland.

Parsons, M. J. (1992, March 19-23). *Ethnobotany - a Māori perspective.* Paper presented at the Conference on People, Plants and Conservation: Botanic Gardens into the 21st Century, Wellington.

Powick, K. (2001). *Te aho matua. Me pēhea te whakahaere i ngā mātāpono o te wāhanga reo i roto i te akomanga o te Kura Kaupapa Māori?* (Unpublished honours dissertation). Waikato University, Hamilton.

Rata, E. (2004a, 5-7 July). *Ethnic ideologies in New Zealand: What's wrong with Kaupapa Māori.* Paper presented at the TEFANZ Conference 2004, Auckland College of Education.

Rata, E. (2004b). Kaupapa Māori education in New Zealand. In J. Demaine (Ed.), *Citizenship and Political Education Today* (pp. 59-74). New York: Palgrave Macmillan.

Rata, E. (2011). Theoretical claims and empirical evidence in Māori education discourse. *Educational Philosophy and Theory*. Advance online publication. http://onlinelibrary.wiley.com/doi/10.1111/j.1469-5812.2011.00755.x/full

Reedy, T. (1992). *Kura kaupapa Māori: He mahinga rangahau me te whakapakari: Te pūrongo whakamutunga/Kura kaupapa Māori research and development project final report.* Wellington: Ministry of Education.

Roth, W.-M., & Tobin, K. (2006). Editorial: Announcing cultural studies of science education. *Cultural Studies of Science Education, 1*(1), 1-5.

Rutherford, J. (1990). The third space: Interview with Homi Bhabha. In *Identity: Community, culture, difference* (pp. 207-221). London: Lawrence & Wishart.

Salmond, A. (1991). *Two worlds: First meetings between Māori and Europeans 1642-1772*. Auckland: Viking - Penguin Books (NZ) Ltd.

Salzmann, Z., Stanlaw, J. M., & Adachi, N. (2012). *Language, culture, and society: An introduction to linguistic anthropology* (5th ed.). Boulder, CO: Westview Press.

Sharples, P. (1994). Kura kaupapa Māori. In H. McQueen (Ed.), *Education is Change* (pp. 11-21). Wellington: Bridget Williams Books.

Siegel, H. (2001). Incommensurability, rationality, and relativism: In science, culture and science education. In P. Hoyningen-Huene & H. Sankey (Eds.), *Incommensurability and related matters* (pp. 207-224). Dordrecht: Kluwer.

Smith, G. H. (1990). The politics of reforming Māori education: The transforming potential of Kura kaupapa Māori. In H. Lauder & C. Wylie (Eds.), *Towards successful schooling* (pp. 73-87). London and New York: Falmer Press.

Smith, G. H. (2002). *The development of Kaupapa Māori: Theory and praxis*. Auckland: The International Research Institute for Māori and Indigenous Education, The University of Auckland.

Smith, L. T. (1999). *Decolonizing methodologies*. Dunedin, New Zealand: University of Otago Press.

Stewart, G. (2005). Māori in the science curriculum: Developments and possibilities. *Educational Philosophy and Theory, 37*(6), 851-870.

Stewart, G. (2007). *Kaupapa Māori science.* (Waikato University, Hamilton).

Stewart, G. (2010a). *Good Science? The growing gap between power and education*. Dordrecht, The Netherlands: Sense.

Stewart, G. (2010b). Science in the Māori-medium curriculum: Assessment of policy outcomes in pūtaiao education. *Educational Philosophy and Theory, 43*(7), 724-741.

Stewart, G. (2011). The extra strand of the Māori science curriculum. *Educational Philosophy and Theory*, *43*(10), 1175-1182.

Te Rūnanganui o Ngā Kura Kaupapa Māori. (2008). *Official version of Te Aho Matua o ngā kura kaupapa Māori and an explanation in English*. Wellington: Retrieved from nzccs.wikispaces.com/file/view/Supplement_TeAho32Feb08.pdf.

Tolich, M. (2010). A critique of current practice: Ten foundational guidelines for autoethnographers. *Qualitative Health Research, 20*(12), 1599-1610.

Walker, R. (1996). Māori resistance to state domination. In M. Peters, W. Hope, J. Marshall & S. Webster (Eds.), *Critical theory, poststructuralism and the social context* (pp. 257-268). Palmerston North: Dunmore Press.

Walker, S., Eketone, A., & Gibbs, A. (2006). An exploration of kaupapa Māori research, its principles, processes and applications. *International Journal of Social Research Methodology : Theory and Practice, 9*(4), 331-344.

Wilson, B. R. (Ed.). (1970). *Rationality*. Oxford: Basil Blackwell.

Young, R. E. (1989). *A critical theory of education: Habermas and our children's future*. New York: Harvester Wheatsheaf.