Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

# Dancing at the Interfaces: Ways of Doing

# The Interfaces between Indigenous Knowledges and Western Science

A thesis presented in partial fulfillment of the requirements for the degree of

Master of Philosophy

at Massey University, Palmerston North,

New Zealand.

Stephen Ernest Kahu Tauwhare

2008

#### **Abstract**

An opportunity exists for Māori to lead the development of a new way of knowledge production in Aotearoa New Zealand that acknowledges and capitalises on the rich traditions of both mātauranga māori and western science. Research at the mātauranga māori and western science interface has the potential to contribute to the preservation and evolution of mātauranga māori and for the creation of new knowledge of benefit to Aotearoa New Zealand society.

Dancing at the interfaces is the title for this thesis. The title encapsulated how I see the interactions and relations between matauranga maori and western science. A primary focus of this thesis is the interfaces between branches of knowledge mainly indigenous knowledges, for example mātauranga māori, and western science. The research begins by exploring the national and international literature for harms done to indigenous knowledges and mātauranga māori since colonisation. A profile of harms was compiled from this literature and based on interviews with four Māori scientists regarding their own impressions and experiences of the interfaces. From this data five themes at the interfaces emerged: activity, passion, challenge, uncertainty and deficit. These themes are used to describe characteristics of the interfaces and develop recommendations for developing a new way of knowledge production at the interfaces. The research concluded that there are several issues and three key elements that must be addressed at the interfaces to facilitate the collaboraiton of matauranga māori and western science as a transformative force for Māori development. The key elements were: ways of doing literacy; rangatiratanga and leadership; and innovation and productivity.

#### Acknowledgements

He mihi aroha tēnei ki a koutou i tautoko ai ki ahau ia rā, ia rā, ia rā ka whakaoti tēnei tuhituhinga. Ka tae mai te wā whakamutunga mō tēnei mahi ēngari kei te mōhio ahau, kei te mōhio koutou hoki, ko tēnei te timatanga kē mō ētahi atu mahi nunui hei tautoko te haerenga a Ngai Tātou te iwi Māori ki te ao mārama, tērā wāhi tika mā tātou e tū kahikatea.

Tēnā koutou, tēnā koutou, tēnā anō tātou

The most important people to me in the world at the moment include my wife Elaine, my mother, Gloria and my extended whānau who must have thought I was never going to finish this thesis.

The interviewees who willingly contributed their time and whakaaro to enable me to complete this research, also contribute their efforts day in day out to support the development of new ways of doing at the interfaces with and between mātauranga māori and western science. Only those of us who work in this field can fully understand the difficulties and pressures that are on Māori at the interfaces and I have nothing but respect for you.

My supervisor Margaret Forster has probably endured one of the most difficult Masters candidates she has encountered for quite a while. Yet she has stood by me and enabled me to venture off on several tangents while pulling back into line when required. There are also many others who have supported me, pushed me, nagged me, ordered me and provided me with motivation when I needed it.

Thanks.

Heoi anō, ki ngā tūpuna kua wehe atu kē kite pō, i whakatakoto ai koutou tērā huarahi māku e hikoi ki te ao māori, ki te pūtaiao hoki. Ahakoa kei te taumaha ngā mahi mō ētahi o ngā wā, nā koutou au i homai te kaha me te matau ka haere tonu ki runga i tēnei ara tika.

Kei a koutou te mana.

### **Table of Contents**

	Abstract	-ii-
	Ācknowledgements	-iii-
	Table of Contents	-iv-
	Figures & Tables	-V-
1.0	Introduction: Dancing at the interfaces	-1-
2.0	Harms at the interfaces – Past & Present	-17-
3.0	Methodology	-50-
4.0	Results & Discussion	-57-
5.0	Discussion	-92-
6.0	Conclusion	-111-
7.0	References	-117-
	Appendix 1: Information sheet	-X-
	Appendix 2: Consent Form	-X-
	Annendix 3: Question Schedule	-Y-

## Figures & Tables

Figure 1. Ways of Doing at the Interfaces with and between mātauranga māori and western science.	-13-
Figure 2. A profile of accumulated harm at the interfaces with and between mātauranga māori and western science	-39-