

What Cost Technology? The Good, the Bad and the Ugly of Technological Gain

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Abstract: Hook's essay entitled Māori Technological Capacity I: A Socio-economic Opportunity (2007) provides an excellent opportunity to consider socio-economic opportunities relating to Māori technological capacity. The scope of his topic is indeed broad. This review of Hook's article is not so much in terms of how it proposes Māori might make the most of a contemporary 'Socio-economic opportunity' but more in terms of a post-modern deconstruction of why Māori may need to be better informed before seizing an opportunity of this nature. It should be noted that Māori have had a long history of seizing opportunity having leapt at the prospect to voyage from the mythical Māori homeland of 'Hawaiiiki' in search of adventure and discovery (Best, 1974; Buck, 1949). Similarly, Māori were quick to incorporate the advantages of neo-European iron artefacts into Māori society (Salmond, 1983; 1997). It could be argued that the Māori passion and drive to seek out new opportunities has been somewhat lost in modern times, making Hook's proposition that there is a need for reinvigoration via new and exciting technological opportunities one worth considering closely. However, one should judge wisely the practices of previous governments in terms of the national economy, education policy and the utilitarian aspect of technology and consequent consumerism. In summary, the Māori community may need to consider which aspects of technology might be beneficial while adhering to a heritage that has embraced developmental opportunities.

Keywords: Economic status, economic history, education history, education policy, government intervention, technological benefit

Hook's target article (2007) raises several contentious issues; that New Zealand's economy is becoming technology-based, that Māori must claim a place in this process, that technology is in of itself an indispensable commodity to Māori and that following an analysis of Māori 'capacity' more investment in education via strategic government-led education reform is required. Although Hook's intentions appear altruistic, more background information is helpful in understanding New Zealand's economic positioning, the place and impact that technology has had for Māori, and some examples of how education policy and reform have not always been a positive experience for Māori, even when the 'good of the nation's economy' is at question.

In terms of New Zealand's economy and contrary to Hook's suggestion, some economists suggest that New Zealand is a commodities and tourism-based economy and that there is little evidence that government policies are having a significant impact on changing New Zealand to a technology-based nation. Dr Eric Hansen, a former key advisor to Dr Don Brash during Dr Brash's term leading the Reserve Bank of New Zealand, stated that New Zealand is far from moving toward a technology-based economy and that unlike countries such as Ireland, who have converted to becoming a true technology-based economy, New Zealand's natural strengths lie elsewhere (personal communication, July, 2007). Some business leaders also suggest that New Zealand is moving away from becoming a technology-based economy as an increasing number of successful technology-based companies move production offshore. According to Richard Mathews who is a former vice president of J.D. Edwards, a multi-national, software company in the U.S., and the current CEO of Australasia's third biggest software company (Mincom), companies like J.D Edwards, People Soft, and Ubisoft develop

their technology offshore because of the unsupportive nature of government policies (personal communication, July, 2007).

We might understand Hook's assumption that New Zealand is moving toward becoming a technology-based economy considering current government policy and some of the successes New Zealanders have had in technology in the past. For example, in the 1830s, Māori were utilising technology in the highly competitive flax production industry and in some cases using technologically advanced flax stripping machines to increase production (Salmond, 1997). In the 1930s, Bill Gallagher designed electric fences that quickly became global export items; and in the late 1960s, Tait electronics produced cutting edge handheld communication sets (McCarthy, 2000).

However, the 'must have at all costs' nature of technology and a technology-based economy have also provided some unfortunate examples where technology has not improved the lives of the end-user. A key example in New Zealand's short history was the power struggle that followed the introduction of the musket. In this instance technology was used for the supposed benefit of the nation by providing one warring faction while limiting supply to another (Metge, 1976; Pearson, 1990; Salmond, 1983; 1997). The economic premise of supply and demand and technological 'edge' were used to devastating effect. More recently, the introduction of certain stimulants into the Māori community through home-based 'P' laboratories has seen 'scientifically-based' skills used in a less than productive format. The ongoing struggle to retain intellectual property rights in the face of multi-national conglomerates appropriating Māori medicinal information is yet another example of technology having a negative effect on the Māori community.

Similarly, the place of government intervention via education policies such as reforms that increase Māori representation in science-based courses, is an issue that requires more research before government policy is unleashed, yet again, on Māori education (Simon & Smith, 1990). A review of state involvement in Māori education, beginning with the 1858 Native Schools Act, showed that historically the main objectives of education policies have been to not only catholicise and anglicise Māori, but to hasten the desirable outcome of assimilation of Māori into European culture 'for the good of the nation' (Openshaw, Lee & Lee, 1993). In the late 1800s, schools were used not only for religious conversion but also to increase government access to Māori resources. For example, Māori were required to provide the land on which 'native' schools were built. Some years later, government policies endorsed non-academic positions for Māori in government-funded educational facilities. A sample of such an effect is provided by George Hogben, an Inspector-General of Schools, who proposed that Māori were meant for practical subjects such as woodwork and agriculture and as people of the land, should recognise the dignity of manual labour while maintaining their position amongst other Māori in a rural context (Openshaw, Lee & Lee, 1993). Therefore, while Hook proposes that education reform is needed to assist Māori, some cynics would suggest that government intervention into education policy has perpetuated an unproductive level of control over Māori education, indeed resulting in Māori developing their own means of education in the form of Kohanga reo (Smith & Smith, 1995).

Furthermore, it could be argued that government educational reform for the 'economic good of the nation' by increasing the number of Māori trained in science-based education is also flawed. Not unlike Gramsci's discussion of legal reform, education reforms have been seen as the natural domain of government intervention, and latterly in the interests of national economic development, questions can be raised about education being used for economic gain and inherent consumerism rather than the humanitarian goal that is for the 'public good' (Gramsci, 1971). Even more interestingly, world renowned economist, Theodore Bengstrom does not class education as being performed to effect 'public good' because of the perception that 'public good' is non-exclusive (Bergstrom, Roberts, Rubinfeld & Shapiro, 1988). Being non-exclusive would then mean that Māori would not be excluded through zoning or private

school access and that Māori would benefit at a rate equivalent to non-Māori. However, it is generally well known that Māori continue to be disadvantaged by the New Zealand education system (Henare, 1998; Te Puni Kokiri, 2000). Whereas Hook's article suggests that through education policy Māori will help to improve national prosperity and economic stability, technological gain also presupposes that government will use education reform for the benefit of 'all' New Zealanders. In addition, technological gain is under the premise that consumerism is a beneficial and necessary aspect of technology and that economic rationalisation of technological gain carries more weight than the humanitarian goals of an improved education system.

While Hook's equation is interesting in terms of social capital, human capital, physical assets and knowledge assets, there is a danger of oversimplifying some aspects that would threaten solutions proffered by the model. However, many Māori would agree with Hook that preparation is the key to taking advantage of any opportunity. Still, there are certain dangers in making Māori a homogenous group for the sake of formulating an equation for addressing Māori technological gain just as much as there is in suggesting that only those that have had postgraduate tertiary education in a science-based field are going to be the sole contributors to technological gain. Māori have a long history of being bundled into one group so that they may be more easily controlled coupled with the fact that at present some iwi Māori have handled their funds far more successfully than others (Fleras & Spoonley, 1999; Wilson & Yeatman, 1995). Hook's supposition that the development of social capital is a well known process to Māori does lend itself to becoming an opportunity on which Māori may build on an inherent skill within their own communities. An interesting proposal too that Māori should be dependent on government policy to produce suitable postgraduate science students citing Māori being pigeonholed as practically-based people when earlier examples in this review show that it has been the government that have perpetuated these myths and sometimes through their very own education policies.

In summary, compared to writing a target article, providing a commentary or critique (especially without offering feasible solutions) is a significantly easier task. In this respect, Hook's paper is a worthy and timely contribution in that it urges us to consider very challenging issues facing Māori. In analysing a range of related topics he provides a platform from which Māori might seize new and exciting opportunities. His consideration of the role of government is helpful in that it makes one more aware of the need to seek a more thorough understanding of the history of Māori education policy before suggesting government intervention is the answer to contemporary issues. Manipulating education policy and creating an overdependence on government intervention is not a process that reaffirms the tino rangatiratanga of Māori communities (Barlow, 1999). Be that as it may, Māori have a history of pursuing opportunity and, Hook's paper has provided a valuable insight into the potential that is available in and to the Māori community. Significantly, the German war general Commander Erwin Rommel ascertained the potential of Māori some fifty years earlier in the unlikely dunes of North Africa, stating, with a battalion of Māori, he could have taken all of North Africa (Fraser, 1997). Surely then contemporary Māori certainly have something to offer not only in technology, but in a multitude of challenging and broader domains.

References

- Barlow, C. (1999). *Tikanga Whakaaro: Key concepts in Māori culture*. Auckland: Oxford Press.
- Bergstrom, T.C., Roberts, J.A., Rubinfeld, D.L., & Shapiro, P. (1988). A Test for Efficiency in the Supply of Public Education. *Journal of Public Economics* 35, 289-307.

- Best, E. (1974). *The Māori As He Was. A brief account of Māori Life as it was in Pre-European Days*. Wellington: A.R. Shearer, Government Printer.
- Buck, P. (1949). *The Coming of the Māori*. Wellington: Whitcombe & Tombs Ltd.
- Fleras, A. & Spoonley, P. (1999). *Recalling Aotearoa: Indigenous politics and ethnic relations in New Zealand*. Auckland: University of Auckland.
- Fraser, D. (1993). *Knight's Cross: A Life of Field Marshal Erwin Rommel*. New York: Harper Collins
- Gramsci, A. (1971). *Selections from the Prison Notebooks*. London: Lawrence and Wishart.
- Henare, M. (1998). Nga Tikanga me nga ritenga o te ao Māori: Standards and foundations of Māori society. *The April Report*, 3, 21-39.
- Hook, G.R. (2007). Māori Technological Capacity I: A Socio-economic Opportunity. *MAI Review*, 2, Target Article 1.
- McCarthy, K. (2000). *Tait Electronic Limited: Competitive Advantage New Zealand*. Wellington: Victoria University
- Metge, J. (1976). *The Māoris of New Zealand*. Wellington: Allen & Unwin.
- Openshaw, R., Lee, G. & Lee, W. (1993). *Challenging the Myths: Rethinking New Zealand's Educational History*. Palmerston North: Dunmore Press.
- Pearson, D. (1990). A dream deferred: The origins of ethnic conflict in New Zealand. Wellington: Allen & Unwin.
- Salmond, A. (1983). The study of traditional Māori society: The state of the art. *Journal of the Polynesian Society*, 92, 309-332.
- Salmond, A. (1997). *Between worlds: Early exchanges between Māori and Europeans*. Auckland: Penguin Books.
- Simon, J. & Smith, L. (1990) *Policies on Māori Schooling: Intentions and Outcomes*. A Symposium Presented by Judith Simon & Linda Tuhiwai Smith, NZARE.
- Smith, L.T. & Smith, G.H. (1995). Ki Te Whai Ao, Ki Te Ao Marama: Crisis and Change in Māori Education. In A. Jones, K. Morris Matthews, J. Marshall, L. Smith & G. Smith (Eds.) *Myths and Realities: Schooling in New Zealand*. Palmerston North: Dunmore Press.
- Te Puni Kōkiri, (2000). *Progress towards closing social and economic gaps between Māori and non-Māori*. A report to the Minister of Māori Affairs. Wellington: Te Puni Kōkiri.
- Wilson, M.A. & Yeatman, A. (1995). *Justice and Identity: Antipodean Practices*. Wellington: Allen & Unwin.

Author Notes

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