

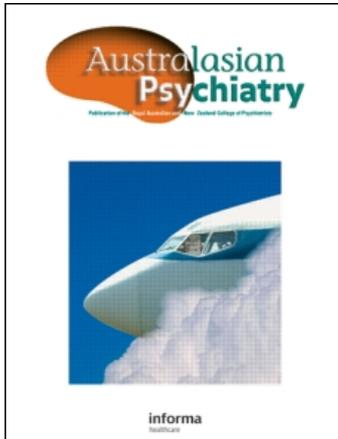
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# Pride and performance: evaluation challenges of a multimedia and information technologies project in remote Aboriginal Australia

Ernest Hunter, Helen Travers, Steven Pelham, Julie Gibson, Grace Hermawan and Corey Austin

**Objectives:** This paper explores an approach to an evaluation challenge: to demonstrate the impact of an initiative drawing on innovative use of information/multimedia technology and performance to address perceived social needs within a disadvantaged, remote Indigenous Australian community.

**Results:** The approach is described and preliminary data are presented supporting the importance of local production and participation.

**Key words:** Aboriginal, creativity, health promotion, Indigenous, new media, performance, touchscreen.

The excess burden of mortality among Indigenous Australians is well known and is significantly worse than that of Indigenous peoples in New Zealand, Canada and the United States. Furthermore, by comparison to those other 'anglo-settler societies' the mortality gap is not improving.<sup>1,2</sup> The initiatives described in this paper are located in Cape York, Queensland, where the proportion of residents of Aboriginal and/or Torres Strait Islander descent (9%) is nearly three times that for Queensland as a whole (3.5%), with median age 20.1 years vs. 35.6 years for non-Indigenous Queenslanders, and a greater proportion living in remote settings, where social disadvantage is compounded.<sup>4</sup>

While health status is clearly related to social disadvantage and remoteness, those factors alone are not sufficient to explain the poor health status of Indigenous Queenslanders,<sup>5,6</sup> with Health Determinants Queensland 2004<sup>6</sup> noting that in relation to socioeconomic factors: "Indigenous Queenslanders also have low access to computers and the internet, meaning that many are denied the benefits of the information revolution" (p. 23). For Indigenous Australians participation in the digital world is clearly associated with school retention<sup>7</sup> with remote northern Australia, including Cape York, having the lowest rates of Indigenous adolescent participation in education nationally<sup>8</sup> contributing to the 'Digital Divide'.<sup>9</sup>

## HITnet

The Health Information Technologies network (HITnet – www.hitnet.com.au), develops and deploys creative media solutions to reduce Indigenous health inequalities. HITnet seeks to improve individual and community agency and control with four interrelated objectives: improving health literacy through autonomous learning; digital inclusion by

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providing democratic technology access; participation in creative expression; and enhancing social inclusion and connectedness.

The National HITnet Development Program evolved through three overlapping phases.<sup>10</sup> Phase one (2001–02) was a pilot project of health information provision (diabetes and joint problems) through audio-feedback touchscreen kiosks in two sites, which demonstrated that Aboriginal people will use this technology and provided circumstantial evidence that this can change attitudes and intentions regarding health behaviours.<sup>11,12</sup>

Phase two (2003–06) saw expansion to four remote Cape York communities. The aim was to measure change in knowledge, attitudes, behaviour and local capacity, and involved production of new modules on diabetes, child health (including a ‘serious game’ to reinforce learning), and alcohol use (with an interactive version of the AUDIT – Alcohol Use Disorder Identification Test<sup>13</sup>). To reinforce harm resulting from alcohol misuse, a narrative approach was utilized for a further module, *Grog Story*, which allows the user to explore choice-contingent consequences within the narrative. Through producing this in a community, the project team recognized the powerful local ‘enhancement’ effects of participation in performance and production, which led to using the same approach, but with more sophisticated interactive video, for a sexual health module, *Put It On*, filmed in another remote community. (As an interactive DVD this has become a widely used sexual health promotion tool with a recent version – *Kaiyai Girl* – being produced by HITnet in Broome.)

Phase three is the national expansion of the network which has grown to include multimedia and web-ready product, with touchscreen kiosks in 30 remote and urban sites in Queensland and Western Australia, and a further 20 planned for 2008–09 in the Northern Territory, South Australia and the Queensland Corrections system. The project has thus expanded in terms of content (modules), presentation (including didactic, interactive narrative and serious game approaches), extent (national), and delivery platforms (interactive touchscreen and practitioner-mediated interactive DVD health promotion resources).

## THE INTERVENTION CHALLENGE

The initiative on which this paper is based was conceived in the aftermath of widely publicized community disturbances (presented in the media as ‘riots’) in 2006 in ‘Dugong Bay’, which has a population of approximately 850 of whom more than 90% are Indigenous and is characterized by persistent and pervasive social disadvantage. This occurred during ‘The Wet’ when these remote communities are isolated by torrential monsoon rains, and during which tensions mount with the heat and humidity.

Subsequently, service providers and residents approached HITnet to engage youth and others in a project during the following Wet to reduce the likelihood of further disturbances. Through community consultations it was decided to create a touchscreen module on bush tucker as a means of engaging widely and across generations, using subject matter that privileges local and traditional knowledge, and the relationships inherent therein.

The *Wet Season Bush Tucker* module was shot in Dugong Bay late in the Wet Season of 2006–07. Despite preparation, recruitment and engagement of participants was slow but with enthusiasm developing during filming. This had also been the case during the filming of *Put It On* and, consequently, the HITnet team sought to develop a digital record of the production process which was subsequently deployed on the local HITnet kiosk to support engagement. It became clear that there was substantial community interest and enthusiasm, so much so that a *Dry Season Bush Tucker* module was suggested and subsequently produced in the Dry Season of 2007 drawing on a much larger group of interested residents. Digital process recording was continued with a view to producing a documentary record (*The Making of...*). In early 2008, during the deployment of the *Dry Season* module, evaluation was commenced to identify and record the social impact of this ongoing initiative.

## THE EVALUATION CHALLENGE

Evaluation of health promotion interventions is notoriously difficult, particularly in Indigenous settings in which widespread social disadvantage presents a range of confounding factors. Furthermore, while nutrition was the subject matter of these modules, this initiative’s major aim was to bring about changes at social and personal levels with nutrition/bush tucker serving as the vehicle. Thus, this approach foregrounds the social outcomes with any content-related health outcomes being welcome, collateral benefits.

The approach to evaluation is informed both by these objectives and also by recognition that the creative and performative elements of the project should be incorporated into the evaluation. This was undertaken through adoption of a set of principles, these being:

- the voices of community members should be foregrounded;
- where possible this should be a dialogue between community members rather than driven by an external evaluator;
- the methodology should privilege narrative/performative approaches.

This evaluation is ongoing and involves two streams: creative and formal. The creative stream draws together the digitally recorded material collected during production (the documentary narrative – *The Making*

of...) and filmed recordings of group and individual interviews from the formal stream. Editing is at the discretion of the creative team, undertaken independently of the content analysis of interviews. Film documentation as an evaluative tool in social empowerment projects has been used in other disadvantaged populations,<sup>14</sup> in this instance forming one arm of a triangulation approach.

The formal stream is being undertaken using surveys with an opportunistic sample of community residents (to assess knowledge, attitudes and behaviours associated with bush tucker resources, and personal use of the touchscreen kiosk), and group and key informant semi-structured interviews (participants in the production of the module and a range of representatives of key community groups whose interests segue with the objectives of the project). These findings are supplemented by trace data analysis of kiosk use. By thus producing two outputs this methodology provides a check on the findings through the degrees of coherence between the formal analysis and the documentary narrative, and between the latter and community experience through presentation of *The Making of...* to Dugong Bay residents.

## PRELIMINARY FINDINGS

The creative stream of the evaluation continues with *The Making of...* in post-production at the time of writing. The first round of interviews is complete and analysis is ongoing. The following preliminary data are drawn from those interviews, a recent survey of 15 service providers in three of the community settings in which the kiosks are located (including Dugong Bay), and kiosk use trace data for the month of August 2008 for eight Cape York sites (including Dugong Bay).

Trace data analysis shows that across these sites between 90 and 253 'purposeful sessions' (sequences of kiosk activations in which at least one content-rich screen is accessed – this being an index of intentional rather than random use) were recorded (253 in Dugong Bay) involving access of between 257 and 683 modules (598 in Dugong Bay, sessions may involve accessing more than one topic), and with an average purposeful session duration ranging from 9 to 22 minutes (14 minutes in Dugong Bay). Trace data confirmed findings from the survey of service providers that users are equally distributed by sex and that the majority of users are children and young adults.

These data sources were also broadly in agreement in terms of content choice. Across all communities there is a preference for narrative rather than didactic material, particularly when there is a 'performative' element and, especially, where there is local content production. In three of these communities the *Bush Tucker* module was the most commonly accessed topic, with *Put It On* and *Frame of Mind* (a mental health literacy module based on workshops involving music

production) being the other most popular modules accessed. All of these are community produced and involve performative elements. For Dugong Bay the distribution of use by topic deployed in that community in August 2008 is presented in Table 1 (as modules are rotated this list does not include all available topics).

To assess baseline knowledge and behaviour relating to bush foods, 12 community informants (seven females, five males, age range 17–57 years) were presented photos of eight bush foods from the module. Depending on the particular bush food, between 25% and 95% correctly identified language names, between 10% and 75% English names, between 25% and 70% where the food was found, and between 25% and 70% what time of the year that food was available. Older informants were more knowledgeable in terms of these resources. Responses were also collected in terms of attitudes and behaviours associated with accessing and using bush resources which will not be presented here save for noting broad knowledge and a relationship with age (collecting more important for older informants) and gender (young men being more attuned to hunting than collecting).

A semi-structured interview was undertaken with six participants in the production of the *Bush Tucker* module. Among the themes emerging were the importance of knowledge transfer to intergenerational ties, and of personal transformation through participation in the production process, exemplified by the following quotes:

I wanted to be involved in the project because I wanted to be there as a second elderly person to show our next generation what to do and what to eat and how to find this bush food ... Well, for me the best thing about the

**Table 1: Purposeful sessions by module topic: Dugong Bay, August 2008**

Topic	No. 'purposeful sessions'
<i>Bush Tucker</i> (produced in Dugong Bay)	187
<i>Granny Why Don't You Smoke?</i>	16
<i>Grog Story</i> (produced in community A)	122
<i>Frame of Mind</i> (mental health promotion) (produced in B, C and D)	62
<i>Healing Spirit</i> (suicide prevention) (produced in community A)	75
<i>Community stories</i> (for Dugong Bay)	66
<i>Put It On</i> (sexual Health) (produced in community E)	70

bush tucker [project] was to show those young people so that they can learn more about what to do and where to find bush food in the future. It was good for me to join the program, it made me feel good and proud to share stories with the community, especially young girls.

Being in front of the TV, being a star and explaining the bush foods – the meanings – and teaching information. When I was in front of the film I had my little grandson with me. I was happy that he was there with me and that I could show him the bush foods. When we made the changes to the film that was good too. The good and right information is better – we have to make sure that it is right.

That night when you showed the video [launching the module] all the kids were happy, kids at the front were laughing, all the families were together . . . I learn about bush food from my grandma. When I was a little girl we used to camp down at the beach. There was lots of fruits near our camp. They showed me what fruit to pick – not the poisonous ones – they showed me the Iiti fruit and how I know which fruit that is. We collected aka, apple, akau, mungkul . . . So when my family kids are getting bigger we show them from the start. When I take my little girl down the beach I show her also . . . My grandma showed me, now I show my little daughter. That's how our culture got started from early – old people showed us first.

It made me feel proud to share my knowledge with other people and kids. Most important that kids hear and the outside world – not many people know about our traditional food . . . The best thing about being involved in the video was getting the stories for the kids to learn. It was also good for the touchscreens, but most kids know the bush foods from the video – because I show it at school.

## DISCUSSION

Information and communication technologies have dramatically expanded the range of options for health promotion practitioners – even in remote and disadvantaged populations. By engaging those communities in the development and production of resources, such activities can powerfully influence personal and group agency as well as address the 'Digital Divide'.<sup>9</sup> These effects can be amplified through incorporating performance as part of the creative and health-promoting process,<sup>15,16</sup> particularly in populations (such as Indigenous Australia) more attuned to listening and watching as sources of needed information rather than literacy-based media.<sup>17</sup>

While the information presented here is from the early stages of an ongoing evaluation, it supports earlier findings from this project regarding the importance of participation and performance as a key health promotion strategy.<sup>11,12</sup> There is also preliminary, theoretical work exploring the potential economic benefits of this project.<sup>18</sup> However, the challenge remains to clearly demonstrate health gains and cost effectiveness now

that this is a mature program with national reach. The challenge is also to develop evaluation strategies that are not only capable of identifying social and health outcomes but which match the ingenuity and innovation of the interventions with methodologies that recognize participation and creativity.

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