

Climate change awareness in educational spaces: Itaukei responses through Indigenous knowledge sharing – case study: Talanoa with Dr T podcast & Fijian communities

Tarisi Vunidilo

University of Hawaii-Hilo

Abstract

With the exponential rise in ‘gloom-and-doom’ reports of climate change spreading like wild-fire around the Pacific, something interesting has been taking place around the many digital platforms regarding learning for I Taukei (indigenous Fijian) families around the world. More and more Fijians, both young and old alike, are embarking on a journey to discover more about their identities and climate change through oral history, language, and its associated ‘indigenous’ calendar. As a teacher and host of the online podcast ‘Talanoa With Dr T’, I too have covered, shared, and discussed scientific reports relating to climate change in the iTaukei language. Because of this, I am able to simplify scientific findings relating to climate change through Tukuni (story-telling) and Veitalanoa Vakaviti (Fijian language sharing) to those listening. In this paper, I will be discussing how understanding climate change through digital community sharing and online classes using indigenous knowledge can be done, in order to reach out to everyone in our community, from those living in the islands to those living in the diaspora. Since April 2020, my digital program continues to reach over sixty-thousand people on a weekly basis, where followers listen to stories related to itaukei traditional calendar (Vula Vakaviti) that teaches Fijian families on environmental changes associated with seasons, fruits and fish. There are many examples shared by the listeners as well. For example, there are instances where entire villages are relocated, forcing families to become more vigilant and being more aware to all the environmental changes happening around them. I believe that sharing information in the local language and dialect aids in furthering indigenous knowledge

gathering and understanding, and will lead to more proactive steps and actions taken by our local iTaukei families around Fiji.

Introduction

Over the last few decades, there has been a rise in increasingly urgent conversations among world leaders and others on how to find solutions to effectively combat the impacts of human-induced global climate change issues. Unfortunately, these abstract conversations run the risk of avoiding discussion about the immediate and real impacts of climate change on local communities, especially indigenous people. The paradox is that indigenous people are confronted with increasing pressures, ranging from demand for natural resources to the impacts of development, population growth, and international trade (Watters, 2002: 238). In the context of these impacts, we must not underestimate the power that local communities have to develop creative and viable strategies to combat and/or adapt to climate change. Indigenous communities are often the most vulnerable, as they face the most significant impacts as many live on coastal villages on most islands in the Pacific. Most scholars and activists agree that effectively stabilizing the environment will require concerted efforts to limit and stop the pollution of our air, seas and lands. I firmly believe that education regarding climate change awareness is first and foremost needed in all indigenous communities.

In this paper, I will discuss some of the opportunities for engagement in climate change education and awareness that can make a difference to the lives of Fijian communities in Fiji and abroad. I will discuss how understanding climate change can be achieved through the utilization of digital community sharing, and online classes using traditional knowledge (TK), in order to reach out to everyone in our community, from those living in the islands to those living in the diaspora.

Growing up in Fiji, I learned in school about the root causes of climate change. These include the release of carbon dioxide into the atmosphere (particularly throughout the 1970s) from the fossil fuel industry. The acidification of the oceans and the mass extinctions of species are among the consequences of such actions. The people in the Pacific, who are among the most vulnerable to environmental destruction (Salem, 2020), are responding through personal and collective action. It is empowering to see young activists from across the Pacific responding to the United Nation's call for action, by participating in meetings in New York and in the regions (Westerman, 2019). The question I ask is: "*Are these actions reaching the local communities and are they understanding such calls to action?*" I believe that more can be done to reach all members of the Fijian community by way of three things:

- Equal education for all
- Effective use of digital technology
- Proactive use of indigenous languages and dialects

The ‘Talanoa With Dr T’ (Vunidilo, 2021) online program, a case study I discuss in this paper, utilizes digital platforms as a means of outreach to connect with Fijian families in Fiji and in the diaspora. As the sole author and content creator, I created this online program in April 2020, a month after COVID-19 rapidly began to spread around the world. In an effort to reach children in Fiji during the first global lockdown period, I organized story-telling sessions in the iTaukei (indigenous Fijian) language via my Facebook page and YouTube channel. This program has amassed over 40,000 followers through Facebook and over 5,000 YouTube subscribers, and membership numbers continue to grow. I frequently invite guests who have inspirational stories to share in order to empower Fijian people during these stressful times, who discuss climate-related topics in both the Fijian and English languages.

Earlier this year, I spoke with archaeologist Dr. Julie Field, whose work has included excavating archaeological sites in the Sigatoka Valley, Nadroga Province. She discussed climatic change over time which has impacted the environment and the lives of Fijians living in the valley (Vunidilo, 2021). I also spoke with Nunia Moko, Director of Mareqeti Viti (Nature Fiji), who explained the importance of managing our natural resources, such as birds and trees, due to their unique and important roles in the environment that we live in. She followed on to discuss the extinction of certain flora and fauna (Vunidilo, 2021).

Taitusi Dradra of Serua Province, a recent graduate of the University of the South Pacific, reiterated Nunia Moko’s points by encouraging Fijians to get to know their environment better and to make good decisions that limit negative consequences on their surroundings, in the ocean or on land. Another guest, Paula Raqekai, encouraged iTaukei landowners to prepare and keep inventories of their flora and fauna. This was an interesting discussion as it encouraged many iTaukei to develop and maintain an intimate connection with their vanua (land). Paula Raqekai also emphasized that this involved village teamwork and he called on school leavers and young graduates who may have training in this field of study to assist local villagers. Ulaiasi Radio of Nadakuni Village, Waimaro, Naitasiri Province, supported Paula Raqekai when he discussed the case study of the Sovi Basin, which is a protected conservation site. The stories shared by these guests started an education program that has been warmly embraced by Fijians around the world. We have received thousands of positive responses and the program has amassed close to 50,000 followers. Since most of the guests spoke in the iTaukei language, their stories were clearly articulated and well understood by the audience.

‘Talanoa With Dr T’ is an educational program that is currently available free of charge, accessible via social media and YouTube channels. Education through digital spaces is an effective ways to reach our communities and all participants in this education program willingly volunteer their time and provide the information they have gathered in order to educate and inform our communities on various environmentally related projects. Their stories are incredible. In the following sections, I will discuss three methods of effective climate change community outreach: *Education, digital technology and indigenous languages*.

Climate Change and Education

Education grants people the freedom to restructure their attitudes, behavior, and beliefs and it helps them to make informed decisions (National Education Association, 2020). Education through digital spaces is an effective way to reach our communities. Education empowers people, and it motivates the young to take action. Education is crucial for socioeconomic development. It enhances skills and creates job opportunities. It helps people improve their living standards. Education contributes to gender equality. But, despite these crucial benefits, access to education remains a challenge, particularly in the world's poorest nations (Randell, 2019). Classrooms, as well as family homes and village meetings, provide opportunities for young people to be informed of the many impacts of global warming and how to adapt to climate change. During the current COVID-19 pandemic, as a majority of people continue to learn via virtual learning spaces, 'Talanoa With Dr T' offers an extension of these virtual classrooms. The 'Talanoa With Dr T' program is one way of reaching everyone equally, whether or not they have a formal education, as the information shared is free to access for everyone. I am on a mission to invite academics and climate change activists to my program in order to share climate change information with everyone.

I believe that climate change education is crucial for everyone. One of the essential points of teaching climate change to students is to impart the message that it has consequences for the earth and for human lives. Many students want to take an active role in combating climate change and are interested in how they can do so in the classroom. Here, educators have the opportunity to embed information about climate change into their lessons to ensure these students have the knowledge they need to address the issue however they see fit. Educators must be empowered to help students understand climate change concepts and, in addition, students can learn and apply critical learning strategies in their homes and communities (National Education Association, 2020).

Literature is one way of disseminating information about climate change. This is echoed by Fiji's youngest climate activist, Ann Mary Raduva, who represented Fiji in the Global Climate Strike in New York on September 20, 2019. In her interview with the Fiji Broadcasting Commission Television Program (FBC News, 2019), she said that her engagement with climate change began with her interest in reading National Geographic magazines. She also enjoyed watching documentaries. Her ability to read, watch and learn about climate change activities and programs around the world, in addition to the support of her parents, enabled her to become the voice of young people of Fiji. She was able to put her ideas into action when she started a movement by carrying out beach clean-ups with her sister and mangrove planting that involved local schools around Suva. Her involvement in these activities attracted the local media, and they began to follow her projects, thus informing the local communities of what youths can do in their local environments. Additionally, she began lobbying the Fiji Government to review the *Fiji Litter Act* 2008 and to classify balloon releasing as littering. Her trip to New York in 2019 was sponsored by three universities, one of which was the University of Hawaii.

Tertiary institutions are taking the lead in educating local communities about climate change. In the case of the University of the South Pacific (USP), being a regional institution allows them to be in a good position to promote this important educational platform for both students and teachers. The Tuvalu Campus, previously led by Dr. Rosiana Lagi, has become a wonderful example of community inclusion in the USP's academic programs. Lagi was working with the communities and teachers in Tuvalu on weaving in the Traditional Knowledge (TK) and best practices in the school curricula and in community policies. An example of TK would be how locals would predict the impending arrival of a hurricane, through the changes in the flowering and fruiting of certain trees such as breadfruit. Dr. Lagi also worked with the Foundation for Youth Development in researching and building capacity on lost TK and the skills of forecasting weather. In addition, she worked on mitigating the effects of, and adapting to, climate-induced environmental changes. Dr Lagi's method of working with local communities is impressive as she proactively include Tuvaluan voices and TK into locally written books. Tuvaluan students were empowered to write their traditional stories that contained lessons associated with their elders and communities (Climate-U, 2020). I have invited Dr. Lagi twice on to my program to share the work she is doing by advocating climate change through education offered at USP.

Climate Change and Digital Technology

Many climate change activists are encouraged to find creative ways to engage local governments, corporations and communities with climate change sustainable efforts. One way is through the use of 'virtual spaces' for sharing and learning. Through the 'Talanoa With Dr T' online program, this author, Tarisi Sorovi-Vunidilo, known as Dr. T, invites guests who have inspirational stories to share, in order to educate and empower Fijian people during these stressful times. Due to the increased pressure from, and the impacts of, climate change and sea-level rise in Fiji, particularly the outer islands, I have invited climate change experts as well as academics and environmentalists to share their research data on my platform. Moreover, these guests also spoke the indigenous iTaukei language (Vosa Vaka Bau), which enabled relevant climate change messages to reach Fijian homes across the country. For example, Dr. Rosiana Lagi of USP, mentioned earlier, is a climate change advocate in Fiji who has expressed a keen interest in returning to participate in future interviews, and to continue to discuss and advocate climate change in simplified forms for program audiences in Fiji and abroad. In her interview, Dr. Lagi drew attention to the ways in which TK has been used in predicting hurricanes by observing the over-fruiting of breadfruits, a story she heard echoed in Tuvalu, where she was based. In the past, when elders experienced this phenomenon, they knew to expect a hurricane, urging local communities to prepare for an imminent disaster.

Professor Patrick Nunn, an academic who is well known in the circles of geography, geology and archaeology, has similarly shared his work on this platform. He recorded oral histories around Fiji to highlight the power of oral history itself, and traditional knowledge. In a recent talk, he spoke

about a place called ‘Vuni-ivi-levu’, a sunken island located between the islands of Ovalau and Moturiki, in the Lomaviti Province. From his disciplinary knowledge in geology, Nunn noted that due to plate tectonic movements below the sea, this island had moved and eventually fallen from its continental shelf. The island is nowhere to be found today. However, when Nunn conducted oral history on the neighboring island of Moturiki, he found that the people there still have stories related to the lost island. Similarly, on the island of Kadavu, he collected ‘volcano’-related stories about sunken and dormant volcanoes that still exist on the island. Nunn reminded iTaukei people of the importance of oral histories and how they need to be recorded and shared, as they are at risk of being lost along with the TK they hold..

Climate Change and Indigenous Language

Many of the world’s 7000 documented language groups are endangered, due to falling rates of language and culture transmission from one generation to the next (Hirsh, 2013). With the exponential rise in reports of climate change in the Pacific and the spread of the COVID-19 virus, many digital platforms have been created to fill the need for learning iTaukei (indigenous Fijian) language and history for families around the world. More and more Fijians, both young and old, are embarking on a journey to discover more about their identities and climate change through oral history, language, and its associated ‘indigenous’ calendar. As a teacher and host of the online podcast ‘Talanoa With Dr T’, I too have shared and discussed scientific reports relating to climate change in the iTaukei language. Because of this, I am able to simplify scientific findings relating to climate change through **Tukuni** (story-telling) and **Veitalanoa Vakaviti** (Fijian language sharing) to those listening.

Tukuni is defined as a tradition that is told or passed on from one generation to another (Capell, 1991). This is an ancient practice where an elder in the village was tasked with the role of storyteller, bringing to life stories of war, celebrations, triumph and loss. As time has passed, such practices have diminished, rarely occurring today. However, there may be instances where grandparents conduct impromptu *tukuni* at home. As far as ‘Talanoa With Dr T’ is concerned, it has become a ‘digital tukuni platform’ where Fijian children all over the world can log in to listen to stories, songs and nursery rhymes. Children can also learn both the modern and traditional calendars of Fiji known as the ‘**Vula Vakaviti**’.

The iTaukei traditional calendar (**Vula Vakaviti**) is based on seasons that are made visible through environmental changes associated with the flowering of trees, ripening of fruits and presence of certain fish based on their quantities. For example, the month of December is known as *Vula I Nuqa Lailai* (when rabbit fish are in season but in smaller quantities), and January is *Vula I Nuqa Levu* (when the quantity of rabbit fish increases). Understanding and having knowledge of such events encourages listeners to be aware of their surroundings, and empowers them to make informed decisions based on food security and harvest. Other benefits of knowing this calendar include the ability to be more aware of, and in harmony with, the natural world. Speaking to

panelists on the ‘Talanoa With Dr T’ program highlighted instances where entire villages were relocated due to sea-level rise, forcing families to become more vigilant and take notice of all the environmental changes happening around them. I believe that sharing information in the local language and dialect aids in furthering indigenous knowledge gathering and understanding, and will lead to more proactive steps and actions taken by our local iTaukei families around Fiji.

The Way Forward

During the COVID-19 pandemic there has been an exponential rise in ‘digital spaces’ that encourage story-telling despite, or because of, the strict lockdown situations faced by communities in the Pacific region. While many families are in lockdown, if they have a reliable internet connection they can access all of these virtual programs. Such programs have allowed many to access climate change information that includes indigenous knowledge of overcoming disasters. In the case of Fiji, the Fiji Museum has a ‘virtual museum’ platform where online visitors can access selected artifacts and exhibitions. They can also share these artifacts on their social media pages such as Facebook, Instagram, and others. As a result, online visitors have begun to share personal stories and memories regarding these artifacts, and in return, online “talanoa” or “story-telling” spaces have been formed among Fijian people locally and abroad. Such story-telling spaces are vital during these times, since COVID-19 regulations stipulate social distancing and discourage gathering in groups. These ‘virtual gatherings’ create opportunities to discuss indigenous knowledge sharing, which in turn leads to meaningful discussions that relate to island living and everyday issues that people face, such as sea-level rise and global warming.

In summary, this paper has discussed how understanding climate change through digital community sharing and online classes using indigenous knowledge can be carried out, in order to reach out to our communities, from those living in the islands to those living in the diaspora. I have highlighted the important role digital spaces play in Fiji and Tuvalu communities in Oceania. Reviving ancient history through story-telling is indeed valuable today. Oral histories related to land, the ocean and sky are captured in songs, nursery rhymes and traditional calendars. During this pandemic, the ‘Talanoa With Dr T’ program has generated information sharing from mainstream research to reach the community level within Fiji. The use of the iTaukei language has aided in critical climate change information reaching local communities. Such information is vital for decision-making, especially when it is related to relocation and environment mitigation. It is envisaged that ‘virtual spaces’, ‘tukuni programs’ and ‘virtual museums’ can be effective methods of community outreach that will ensure that iTaukei communities in Fiji receive well researched and refined data. Programs such as these will benefit communities and, most importantly, can potentially save lives. Online outreach is a vital way of facilitating community empowerment by enabling the sharing of valuable indigenous knowledge to all our Fijian families in Fiji and around the world.

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Glossary

‘Talanoa With Dr T’ – digital podcast created by the author where she shares stories in the local language and dialects.

iTaukei – translated as the “owner of something”, in this case it is a term used to define indigenous Fijians – known to be the first settlers in Fiji.

Author's biography

Dr Tarisi Vunidilo has a MSc in Anthropology and a Postgraduate Diploma in Maori and Pacific Development, from the University of Waikato, a Postgraduate Diploma in Arts, majoring in Archaeology, Australian National University, and a BA from the University of South Pacific. She completed her PhD in Pacific Studies in 2016 on the topic of “iYau Vakaviti-Fijian Treasures, Cultural Rights and Repatriation of Cultural Materials from International Museums”, at the University of Auckland (New Zealand). She is currently an Assistant Professor in Anthropology at the University of Hawaii-Hilo. She currently holds a Post Doc position with the University of Gottingen in Germany.
