

Abstract

Climate Change is considered to be one of the greatest environmental challenges faced by society today. Throughout the discourse of Climate Change, there has been many approaches to adapt and mitigate the impacts of climate change. Education aims to be used as a tool to disseminate information to increase adaptation and mitigation of climate change impacts (Mochizuki & Bryan 2015). This has led to the development of “Climate Change Education” (CCE) within academia (Felton et al., 2016; Fünfgeld, 2015). Throughout academia, CCE has been implemented within traditional fields of academia as a subtopic or as a newly developed interdisciplinary field of study (Hess & Collins 2018; Leal Filho et al. 2018). The South Pacific which is the focus area of this study is facing the adverse impacts of Climate Change through rising sea levels and intensified natural disasters (Lata & Nunn 2012; Terry & Lau 2018). Accordingly, Pacific Island Countries and Territories (PICT) through the Pacific Community (PC) as the region's intergovernmental organisation have made addressing climate change a top priority within the region and employed mixed approaches to enhancing Climate Change resilience (Pacific Community 2016). Such an approach was the endorsement of the Framework for Resilience Development in the Pacific (FRDP) 2017-2030 by the PC which aimed to develop CCE within the region. Until 2017, the PICT had separately implemented CCE from Disaster Risk Reduction education in the region (Pacific Community 2016 pp. 15-17). The FRDP acknowledges the overlapping nature of these two fields and promoted the development of an interdisciplinary field of study with the combined aim of enhancing resilience (Pacific Community 2016 pp. 15-17).

Due to the novelty of CCE in the South Pacific, the PC outlined a 10-level programme that aimed to bridge students learning from high school certificate level (Level 1) to a Doctorate (PhD) level (Level 10) within the higher education system. In 2018, the first regional Level 3 and 4 of the Climate Change Resilience Programme (CCRP) was developed and implemented under the endorsement of the FRDP 2017-2030. Level 3 and 4 of the CCRP is equivalent to a university diploma level programme. The goal of the Level 3 and 4 CCRP was to provide a climate change resilience programme targeted at local community leaders in the South Pacific. The Level 3 and 4 CCRP was implemented at the Pacific Technical and Further Education College (Pacific TAFE), a college in the region's largest higher education institution, the University of the South Pacific (USP). In 2020, the PC initiated a review and revision of the Levels 3 and 4 CCRP. This thesis explores the Level 3 and 4 CCRP as a research project to understand how CCE is being introduced at higher education level in the South Pacific. The overall thesis is structured as an article compiled thesis which uses various theoretical concepts and methodologies to address the four Research Objectives (RO) that this study aims to investigate:

- **RO1:** To understand how the initial Level 3 and 4 CCRP implemented between 2018-2020 was structured and the stakeholder influence in its development.
- **RO2:** To explore how the revision and restructure of the Level 3 and 4 CCRP conducted after being initiated by the PC.
- **RO3:** To analyse the platform is being used to implement the Level 3 and 4 CCRP on a regional scale throughout the South Pacific.
- **RO4:** To trace the curriculum development process of the Level 3 and 4 CCRP within the University of the South Pacific (USP).

From January 2020 until November 2020, the author conducted a curriculum review of the Level 3 and 4 CCRP implemented at Pacific TAFE in USP. During this curriculum review process, the author identified the orientation and focus area of the contents of the Level 3 and 4 CCRP in order to develop an understanding of the structure of the curriculum. To identify the orientation of the curriculum contents, the Curriculum Space (CS) concept was applied to determine if vocational (practical) or liberal (theoretical) knowledge was the goal of the content and assessment. The focus area of the curriculum content was determined by identifying the application focus of the curriculum either on the workplace or local community. The results of this curriculum review highlighted that the Level 3 and 4 CCRP implemented between 2018-2020 was designed towards a liberal curriculum promoting critical thinking but was focused on the workplace environment rather than the local community. Such a curriculum structure redirected the programme away from enhancing community resilience. A possible reasoning for this redirection was that current and future community leaders were not involved in the curriculum development process.

Subsequently, from October 2020 until June 2022, a revision and restructure of the Level 3 and 4 CCRP was initiated by the PC. Based on previous research conducted on the curriculum contents, the author was invited to participate in the revision and restructure to refocus the programme towards local communities. The author observed the revision process of the curriculum objectives and how stakeholders negotiated these changes in throughout the revision. The Stage Gate decision making process called attention to the changes in the curriculum objectives that were agreed upon throughout the review process. At the same time, the relational ethics concept of “Teu Le Va” was applied to identify how compromises were made amongst various stakeholders throughout the revision of the Level 3 and 4 CCRP objectives. Results indicate that significant changes were made to the curriculum

contents that encouraged learning methods to accommodate the local community and promote hands-on resilience practices throughout the course.

With the revision of the completion of the revision and restructure of the Level 3 and 4 CCRP, the author focused on the how the CCRP will be implemented on a regional scale in the South Pacific. The concept of Regional Education Hubs (REH) which is the regional collaboration amongst higher education institutions (HEI) has become an emerging concept in the field of education regionalism. The concept was applied to USP in order to evaluate if the higher education institution could be a form of REH. REH are defined as state initiated foreign policies that encourages memberships of its HEI to collaborate and develop, HE in the region. This chapter focused on (i) identifying the various REH established various regions of the world, (ii) highlighting the mobility trends and motivations for establishing a REH and (iii) suggests that the University of the South Pacific (USP) is a REH. Results indicated that REH are established to promote collective approach to improving higher education in the region. The trends observed in the REH were (i) faculty, student and staff mobility within the REH and depending on the region, there were different motivations for establishing a REH. USP was identified as a form of REH as it serves to achieve regional progress as a platform to develop in higher education within the region but its structure is unique when compared to other REH.

Since identifying that one university (USP) is a form of REH and contributing to regional progress in higher education, the next step in the research project was to follow the power dynamics in the institution (USP). The focus was to follow the curriculum development process of a regional programme (Level 3 and 4 CCRP) within USP since the university has established its independent regulations for curriculum development. This chapter explores the power relationships amongst actors involved in the curriculum development of the Level 3 and 4 CCRP. The curriculum development process is used to highlight both, the actors involved and their influence in the development process. The concept of relational power (Burbules, 1986) is used to trace actors' compliance framed by (i) authority, (ii) hierarchy and (iii) organisational structure during the curriculum development process. Results indicate that all committees are somewhat influential in shaping curriculum development, depending on their specific roles in the process. However, how power structures between committees inform compliance (along a dominance-consent spectrum) differs significantly. The chapter demonstrates further that the capability to influence curriculum development is distributed highly unevenly between individual USP member states.

The overall research project is unique in that it is an article compilation format of a project regarding CCE in the South Pacific. The study analyses the initial Level 3 and 4 CCRP curriculum, the revision and restructure process, the implementation platform followed by the influence of the institutional actors on the curriculum. The project highlights the varying dimensions and decision-making process that CCE must go through to be implemented on a regional scale. However, the overview of how CCE is implemented in the South Pacific provides an insight into the potential of enhancing climate change resilience on a regional scale through higher education.

Keywords: Climate Change Education, South Pacific, decision-making, community resilience, vocational learning, stakeholder, Climate Change resilience, higher education, curriculum development, education review, stage gate decision, Educational Regionalism, student mobility, staff mobility, regional education hubs, university governance, relational power