



Drawing as a participatory method alongside interviews and 'talanoa' to understand children's views of reef passages on Ovalau island, Fiji, in 2025.

Study report

Matina Kaitapu¹²

Research team Devavrat Bishwa¹², Sarah-Fina Manulevu¹², Watesoni Nata¹²

Data Study supervised and supported by

Annette Breckwoldt³, Elodie Fache², Andreas Kopf¹, Salanieta Kitolelei¹³, Alexandra Nozik³, Simonne Pauwels⁴, Auréa Pottier²

Data collection supported by

Jasha Dehm¹, Malakai Kaitani¹, Jokim Kitolelei¹

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1 The University of the South Pacific (USP); 2 French National Research Centre for Sustainable Development (IRD);

3 Leibniz Centre for Tropical Marine Research (ZMT); 4 French National Centre for Scientific Research (CNRS)

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SOCPacific2R - A Sea of Connections: Valuing Reef Passages in the South Pacific Region.

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Principal Investigators of SOCPacific2R

Dr. Élodie Fache, IRD

Dr. Annette Breckwoldt, ZMT

Dr. Amanda Ford, USP



1. Introduction to the project and research context

Reef passages are natural breaks in reefs that connect the coastal zones to the open ocean. As hotspots for biodiversity reproductivity, and as pathways for fisher(wo)men as well as a variety of non-human species, they hold remarkable value for environment and society.

The project SOCPacific2R designs its research activities using an empirical inter- and transdisciplinary approach, combining natural and social sciences methods, and focuses on reef passages in Fiji and New Caledonia. The project aims to:

1. Conducting a transdisciplinary study of reef passages as under-researched features of social-ecological coral reef systems that constitute complex, interconnected, and dynamic assemblages of living and non-living, dwelling and transiting, entities that interact with each other;
2. Documenting both area-based and other management and conservation arrangements applied to reef passages, including the pros and cons that local stakeholder groups identify;
3. Establishing a participatory science-society-policy dialogue informed by social-ecological studies, Oceanian socio-cosmologies and sovereignties, and governance norms in/for the management and conservation of reef passages.

SOCPacific2R works with various stakeholders to achieve the project's goals: scientists, administrators, NGOs, and local communities. The outcomes of the project will feed into wider frameworks on marine sustainability such as the UN Decade of Ocean Science for Sustainable Development (2021-2030).

Local communities are the main knowledge holders and users of the reef passages that surround the Fijian and New Caledonian islands. The presented study aimed to learn their perspectives and experiences concerning the reef passages on Ovalau island in Fiji through an interdisciplinary research team, and was conducted by a student group of the University of the South Pacific (USP) between September 2025 and February 2026.

2. Research Study Set-Up

This study was conducted on Ovalau island, Fiji, using a qualitative and child-centered approach in which drawing serves as the primary data collection method, supported by individual semi-structured interviews and group discussions (Fig. 1). Drawing allows students to visually express their knowledge of land-sea connections, spatial uses of the reef, and views of the reef passage located in front of their school, which cannot be understood through words alone. This method was particularly appropriate to interact as an international team with Fijian students, for whom English is the language of education but not their mother tongue.

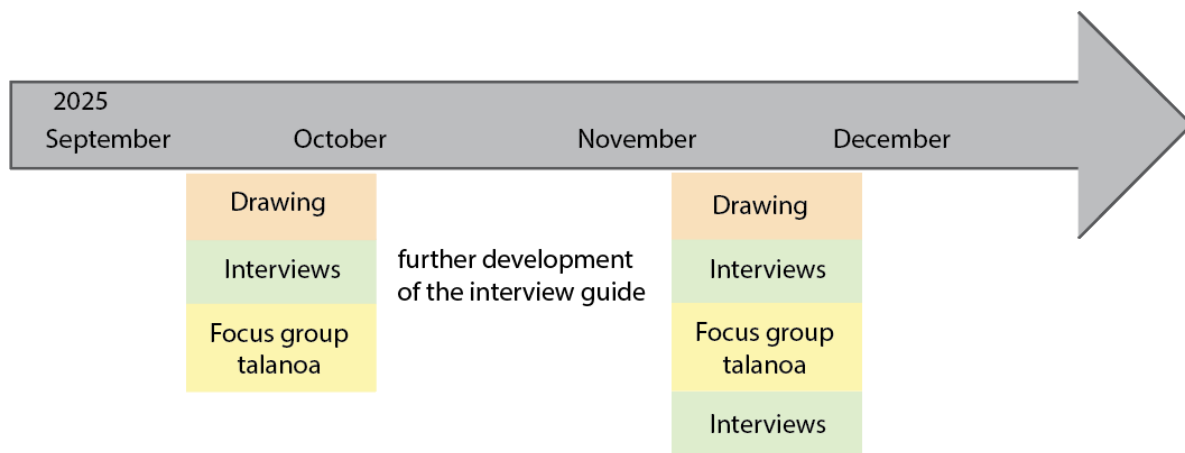


Figure 1: Timeline of applied methods presented in this study.

2.1 Multi-method approach applied on Ovalau island

The semi-structured interviews were first employed to give an opportunity to the students to describe their drawings in their own words, then to contextualize the visual and symbolic information in the students' drawings. Also, it was conducted to explore whether children's locations of stay, gender, and age influence their fishing practices and knowledge of fish, reefs, passages, and land-sea connections. The last method used, group discussions, aimed to enable the children to reflect collectively on specific questions and to share with each other their respective experiences and perspectives.

This combination of drawings, semi-structured interviews, and group discussions forms what we have termed a 'Talanoa Activity'. According to Matapo and Enari (2021:80), talanoa is defined as "a phenomenological Pacific research framework that affirms Pacific thinking, language and culture", even though it is not a generic or universal concept within the South Pacific region. It refers to an exchange of knowledge and ways of thinking, whether it is formal and informal, without a rigid framework, and "allows people to engage in social conversation which may lead to critical discussions or knowledge creation that allows rich contextual and inter-related information to surface as co-constructive stories" (Vaiolleti 2006:24). Non-human actors are also acknowledged as "powerful actors in talanoa (Matapo and Enari 2021:86).

Our Talanoa Activity aimed to conduct research that is culturally grounded and build a safe space for students to narrate their own stories, document each other's stories, and highlight the value of their own knowledge and voices. It contributed to challenging the "culture of silence" (Vunisea,2008), which remains ongoing in Pacific Island countries, including in Fiji, and which implies that the views of certain community members, such as young people, are not heard.

The Talanoa Activity was conducted in two primary schools of Ovalau island, Fiji, during school hours: on the 1st of October 2025 at Loreto Catholic Primary School (Tokou Village, South-Eastern of Ovalau island), and on the 22nd of November 2025 at Delana Methodist Primary School (Levuka Town, old colonial capital of Fiji). There were 26 students (14 boys, 12 girls) who participated, ranging from the ages of 9 to 12 years old. The recruitment of the students into the study was based on 3 criteria: 1) location of schools, near a reef passage,

2) teachers' or head teachers' interest in the project and using drawing to directly explore the children's view on the reefs, and 3) the age group targeted, namely children aged 9-12, so Year 5-6 students.

2.2 Free Prior Informed Consent (FPIC)

Before conducting the Talanoa Activity in these two primary schools, a Free Prior Informed Consent (FPIC) form was given to the Head teacher or the Year 5/6 teachers to distribute to the children for their parents or guardians to sign (*Attachment01*). This allowed the team to work ethically and with respect to the children's rights. At the same time, it was also necessary to check whether the team could take and use pictures of the children, as well as the drawings they would produce for the research project and academic purposes. Before starting the Talanoa Activity on the allocated date and time, the team verified that the parents or guardians of each child present had signed the form and authorized their participation in the activity; we also took into account any negative responses regarding the use of photos and drawings. We also verbally confirmed each child's FPIC at each stage of the activity.

3. Individual methods applied in the study

3.1 Children Drawing

Before the Talanoa Activity was carried out in the schools, two other major processes were conducted, directly adapted from the work of Fache et. al. (2022): defining the drawing instruction in both English and Fijian, and preparing an interview guide for the semi-structured interviews.

The drawing instruction had to be easy to understand for students, and designed in a way that enables children to 1) provide information related to reef passages, 2) feel ownership of their work, and 3) share their knowledge freely rather than by force.

Thus, the drawing question for Year 5-6 students was "*Droini taka mai na cakau, kei na cava iko kila e dau yaco ena dela ni cakau*" in Fijian and "Draw the reef and, from your understanding, draw what happens on the reef" in English. The first part of this instruction ("draw the reef") aims to explore children's views of and connections with the reef, and whether they would spontaneously think about the reef passage located in front of their school. The second part ("from your understanding, draw what happens on the reef") was designed to explore children's ecological knowledge of the sea and whether they would include fishing practices in their drawing, and provide other additional information, such as land and sea connections. In addition to analysing the drawings for research purpose, the images were also put together in posters (*Attachment03* and *Attachment04*) to present to the communities and discuss the outcomes.

3.2 Semi-structured interviews with children

A semi-structured interview was conducted face-to-face with children, in Fijian or English, after they completed their drawings (*Attachment02*). This individual interview was unrecorded and lasted about 10 minutes. Notes on paper were taken to document the interview. These concrete conditions aimed to allow children to freely share their knowledge and other additional information openly, without hindrance.

These interviews were based on two different interview guides: an initial version prepared for Loreto Catholic Primary School (LCPS) and an adjusted version for Delana Methodist Primary School (DMPS).

After the semi-structured interviews conducted with Year 6 students at LCPS, we have realized that some of the questions that were asked did not provide the in-depth information necessary to achieve my research objectives. Therefore, we formulated a revised interview guide that can provide richer information about fishing practices and other sea-related activities. This is shown in *Attachment02*, Table 2.

The children's drawings and associated interviews were thematically analyzed based on research questions that were developed before the Talanoa Activity: Will children draw the reef passage in front of their school or not? Will children represent land and sea connections in their drawings? Will children draw the fishing activities that they do, observe, or imagine? Each drawing was analyzed manually, by carefully looking at it as a whole as well as each of its components/elements, with a specific focus on reef features, marine and terrestrial entities, and human activities.

In addition, while analyzing the children's drawings, we identified other interesting pieces of information that the Year 5-6 students highlighted and that were considered valuable. Therefore, inductive reasoning based on the children's drawings leads to creating new research questions: Will the drawings of the boys and girls be different in terms of fishing gear, fishing ground, and fishing practices? Will the children show their ecological and fishing knowledge, and how? Will the children draw any other sea/reef-related activities?

Attachment05 shows how children's drawings were analyzed under six research questions – three defined before the Talanoa Activity and three that emerged during the analysis phase – using Microsoft Excel.

3.3 Group discussion (talanoa)

The group discussion was organized in a '*talanoa* approach', where everyone in the classroom had opportunities to share their knowledge, stories, and interests on the reef and reef passages. The idea of this '*talanoa* approach' was to build a safe space for children to truly feel ownership of their own knowledge, comfort to speak in English even though it is not their first language, and peer learning, while ensuring that children feel that their knowledge is valued by the research team. The talanoa session was conducted following a set of six questions shown in *Table 3*. For each question, groups of 3-4 children had time to reflect and discuss, and to write down their answer on an A3 sheet of paper. At the end of this time, a spokesperson appointed by the group shared their answer with the rest of the class.

The group discussion data was manually analyzed and reviewed through repeated reading to identify relevant information that is related to the research questions designed.

The data were first reviewed through repeated reading to identify key themes, and relevant information was subsequently organized and entered into spreadsheets for systematic analysis.

3.4. Follow-up individual semi-structured interviews

This was the last method used for data generation/production. If the method is quite similar to the second step, it differs in several ways: the focus was not on the children's drawings but mainly on their fishing practices and knowledge, so the interview guide was distinct (see Table 4), and this time the interaction generally took place outside of class hours and of the school. The main goal of this research phase was to get a deeper understanding of the students' knowledge of fishing activities, fishing grounds, land-sea connections, and their personal definitions of reef passages. It was also interesting to explore the students' knowledge of different species of fish and seabirds they know or commonly observe, including their names, colours, and habitats. In the follow-up interview, we interviewed 21 students altogether (13 students from Loreto Catholic Primary School; 8 students from Delana Methodist Primary School).

The follow-up semi-structured interviews were unrecorded, as their parents or guardians were not present, and to allow students to converse or '*talanoa*' freely. The interview guide was the same for every student in both primary schools to ensure that the data produced could be used to compare students' knowledge by gender, school location, village or origin, and denominations (Methodist versus Catholic).

The dataset from the group discussion was examined manually and reviewed repeatedly to pinpoint information that connected to the coined research questions. The initial review associated with thorough reading to unfold key themes, and then the appropriate information was organized and entered into the spreadsheets for a systematic analysis.

Sources & References

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Matina Kaitapu