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Photovoice as Pedagogy in a Pacific Setting: Exploring Complexity in Cook Islands Food Environments With Adolescent Learners

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ABSTRACT

Background: Photovoice has potential as a pedagogical tool to support student exploration of health-related issues. However, its application in school-based health education is under-represented.

Methods: This article details learning outcomes and teacher perspectives from the codesign, evaluation, and scale-up of a photovoice learning module in Cook Islands schools ($n = 7$, Years 5–10). Objectives were to support awareness and understanding of food environments. The research sits within the Pacific Science for Health Literacy Project, a 12-year partnership between the Cook Islands Ministry of Education, Te Marae Ora Cook Islands Ministry of Health, and the University of Auckland, targeting improved community health. Data were drawn from interviews with teachers and education leaders ($n = 19$), workshop and meeting notes, teacher observations, and student photovoice presentations.

Results: Findings revealed Photovoice was an effective tool supporting students to explore food environments, extending their understanding of complex factors influencing health. Photovoice proved beneficial for diverse learners and learner styles, supporting their success in conducting health-science investigations. Photovoice stimulated school-to-home conversations about food environments affecting health. Teachers reported that students acted on learning by making healthy choices. However, they highlighted challenges associated with achieving sustained behavior change.

Implications for School Health Policy, Practice, and Equity: Professional development and resources are required for teachers to effectively employ Photovoice approaches. Future research should explore the application of Photovoice as a strategy to enhance student decision making toward long-term healthy behavior change.

Conclusions: This study highlights the transformative impacts of Photovoice as a pedagogical tool.

1 | Introduction

Photovoice involves participants taking photos to capture experiences or viewpoints. Widely used in community-based research, photovoice allows participant insights to identify challenges and solutions in ways that other approaches might overlook [1–4]. Chio and Fandt [5] use a metaphor: “*the eye and the I*” of the camera, suggesting that the lens provides an opportunity for subjective selection and framing of issues, reflecting the essence of the photographer’s perspectives. In education, photovoice allows researchers to engage directly with students’ perspectives [6]. Although typically used to generate data, emerging research has identified the potential of photovoice as a pedagogical tool [3, 7, 8]. For example, photovoice may cultivate learners’ critical awareness of societal issues via the cognitive processes involved in selecting, reflecting on, and discussing images. However, photovoice as a pedagogy in school-based health education remains underexplored, with limited reporting on education outcomes [3]. This article reports on outcomes for students and teachers of learning utilizing photovoice to explore food environments with Year 5–10 students in seven schools in the Cook Islands.

1.1 | Adolescent Health Education: Navigating Complex Issues

Adolescence (10–19 years) is a key developmental stage, characterized by emergent physical, mental, and social maturity. School-based health education during adolescence can lay the foundations for health knowledge, attitudes, and behaviors that often persist into adulthood [8–10]. Learning should include exploration of the complexities inherent in environmental influences on health, including structural, social, cultural, and economic factors [11]. Young people who understand complex influences on health are more likely to incorporate multiple perspectives and reference systems-level drivers and less likely to attribute personal-level blame when discussing health issues [12]. Beyond school, understanding complexity in relation to health may support the development of the capabilities and motivation required to advocate for systems change [10]. An emphasis on complexity aligns with education for health promotion, described as the process of enabling people to increase control over and improve their health by addressing modifiable determinants of health [13, 14].

Photovoice is gaining recognition as a participatory approach that can empower adolescents to capture and communicate their perspectives, fostering agency and participation in social change [5, 7, 15, 16]. Studies in various contexts have demonstrated the flexibility of photovoice in exploring a range of health-based topics [17–20]. However, to be effective in school-based education, photovoice must be incorporated into programs that address the development of competencies (knowledge, attitudes, behaviors, and skills) defined as key curriculum goals.

1.2 | The Pacific Science for Health Literacy Project—Ora’anga Tumanava

This research sits within the Pacific Science for Health Literacy Project—Ora’anga Tumanava, a transdisciplinary initiative engaging education, health, science, and school communities

to promote educational development and reduce noncommunicable disease (NCD) risk in current and future generations in the Cook Islands [21, 22]. From 2013 to 2018, cross-curricular programs for Years 9–11 were developed to promote critically engaged citizenship and enhance scientific and health literacies by exploring the complexities of NCDs in the Cook Islands. These examined NCD prevalence, environmental exposures affecting health throughout life, and the impact of social changes on nutritional environments. Positive impacts on learning and behavioral changes, reflecting enhanced critically engaged citizenship, were observed [23–27]. Having used Photovoice to help Year 9 students reflect on meal composition, teachers identified its potential for deeper exploration in expanding programs to lower levels (Years 5–8). This study examines the experiences of teachers and students in developing and expanding the use of photovoice pedagogy with Year 5–10 students in the Cook Islands.

1.3 | Cook Islands

The Cook Islands consist of 15 islands in the southeastern Pacific. The main island of Rarotonga (67.3 km²) is the most populated (10,898 residents). Of the remaining 12 inhabited Islands, Aitutaki (262 km north of Rarotonga) is the second most populated (1782) and fifth largest in land area (18.3 km²). The second largest island is Mangaia with 51.8 km² land area and a population of 471. The third largest island of Atiu (26.9 km²) has a population of 383 [28].

Food environments vary across the islands. Some are associated with rich volcanic soils; all are associated with abundant fisheries, tropical fruits, root vegetables, and leafy greens. Home and village gardening, fishing, and agricultural practices such as raising livestock support healthy nutrition and food security; however, there is heavy reliance on imported food (85% of food is imported) [28, 29].

Rarotonga has seven primary schools (Years 1–6), four secondary schools (Years 7–13), and three area schools (Years 0–13). Aitutaki has three primary schools and one secondary school (Years 7–13). There is one area school on each of the smaller Pa Enua [30].

The Cook Islands adult population (18–64 years) is burdened with very high rates of obesity (69.8%) and overweight (89.5%) and related NCDs such as type 2 diabetes, cancers, chronic respiratory conditions, and cardiovascular disorders. Risk factors for NCDs are increasing in children (5–19 years), with the proportion of overweight and obese children (aged 13–15 years) rising from 31% in 2017 to 46% in 2019 [31, 32]. The combination of geographic isolation, small population size, and limited economic resources magnifies the impacts of these burdens, driving extensive efforts across multiple government and community agencies for long-term and transgenerational NCD risk reduction strategies [8, 22, 31–37].

2 | Methods

2.1 | Photovoice Learning Module

The learning module: *Exploring our food environments using Photovoice*, was codesigned by teachers and project partners as a

component of the cross-curricular learning program that has been evolving locally since 2013. It aligns with Cook Islands national curriculum objectives, linking to learning areas of science, health, and English [38]. The module was developed in response to positive impacts of previous learning programs exploring the impact of environmental influences on life-long health for students in Years 9–11 and a decision to expand this learning downwards for younger students, with a focus on the food environment [3]. The module was piloted, evaluated, and refined in three schools (Table 1) before scale-up to a total of seven schools between 2021 and 2023.

The driving question (central inquiry) for students’ photovoice investigations was: *What influences the food we eat?*

This question was worded to be inclusive, open for exploration, and to support in-depth discussion.

Learning began by developing student understanding of pitoenua (health and wellbeing). This foundational learning supported subsequent activities focused on building capabilities related to exploring and understanding the role of food and nutrition in contributing to life course health. Photovoice skills and methods were then introduced. Students used school-owned devices (iPads) or obtained permission from the school Principal and their parents to use personal devices to take photographs. Positioned as “health scientists,” students employed Photovoice to collect and interpret their images as “data.” Question scaffolds (PHOTO or SHOWED techniques) were used to guide students in analyzing images [1, 15], or students wrote a narrative without scaffolding.

S: <i>What do you See?</i>	P: <i>Describe your Photo.</i>
H: <i>What is Happening in the photo?</i>	H: <i>What is Happening?</i>
O: <i>How does this relate to Our lives and the food we eat?</i>	O: <i>Why did you take a photo Of this?</i>
W: <i>Why does this happen When? OR why is this important?</i>	T: <i>What does this photo Tell us about our lives and the foods we eat?</i>
E: <i>How could this photo Educate others about food environments?</i>	O: <i>How might this photo present Opportunities or ideas to increase our consumption of healthy food?</i>
D: <i>What could we Do now?</i>	

Students developed posters or PowerPoint presentations to share their findings with peers and community members. The module included student learning and professional development resources supporting teacher knowledge of content and curricula via online and digital formats. Printed materials and digital resources via USBs were provided to schools where online connectivity was unreliable.

2.2 | Participants

Research participants were teachers from Cook Islands schools and education professionals from the Cook Islands Ministry of Education (Table 1).

2.3 | Research Questions

Research questions focused on teacher perspectives regarding the use of photovoice, student engagement, and learning outcomes:

1. What student learning outcomes evolved from engagement in the program?
2. What is the potential for the use of Photovoice as a pedagogical tool to:
 - promote student understanding of influences on complexity in food environments?
 - support the development of capabilities to empower students to communicate their learning to others and to act on their learning.

2.4 | Data Collection and Analysis

Data were drawn from:

- recorded proceedings from teacher workshops, responses to discussion questions in an online professional learning course, and notes from research team meetings
- individual audio-recorded teacher interviews
- teacher observations of student engagement and learning, student comments and questions
- samples of student work.

Teacher interviews were transcribed using intelligent transcription [39]. Analysis of interview and document data began with data familiarization and the generation of high-level categories aligned with each research question. Qualitative thematic analysis used iterative, inductive processes to discover patterns and themes within the data [40]. Exemplar quotes and examples of student work were identified. Participant checking took place by returning interview transcripts with key quotes highlighted for participants’ editing and discussion. Further workshopping then took place with teachers and project partners, discussing and agreeing on key themes for teacher perspectives and student learning outcomes.

3 | Findings

Findings are presented under key themes that describe teacher use and perspectives of the module, student learning outcomes, and broader impacts of photovoice learning in families and communities.

3.1 | Teacher Application and Perspectives of Photovoice Learning

Every teacher could articulate their motivation and purpose for utilizing the module. One pilot teacher emphasized the cultivation of “critical awareness,” which entails students examining and evaluating factors that influence food choices. She also prioritized the importance of developing procedural and practical knowledge of research skills.

To develop a critical awareness of their food environment while also providing an opportunity for them

TABLE 1 | Collaborating partners and participants.

Institute			Year group(s)		Participant role	Codesign and pre-pilot				Conference			
type			involved			workshop participant 2021	Module pilot participant 2021	Workshop attendee 2022	Full module trial participant 2022	presentation participant 2023			
S1	Year 0–6		5–6		Teachers	T1							
						T2							
					Education leader	EL1							
S2	Year 0–6		5–6		Teachers	T3							
						T4							
S3	Year 0–13		5–6		Teachers	T5							
						T6							
					Education leader	EL2							
S4	Year 7–11		9–10		Teacher	T7							
S5	Year 7–10		9–10		Teacher	T8							
S6	Year 7–10		9–10		Education leader	EL3							
					Teachers	T9							
						T10							
S7	Year 0–13		7–8		Teacher	T11							
M1	Ministry of Education		—		Education leaders	EL4							
						EL5							
						EL6							
						EL7							
						EL8							

Note: Primary school: Years 0–8; Area school: Years 0–13; Secondary school: Years 7–13. Shaded cells indicates participation. Abbreviations: EL, Education leader; M, Ministry; S, school; T, teacher.

to have hands-on experience with the photovoice research technique. [T8]

For one education leader, advantages included opportunities for students to practice research skills while participating in relevant learning:

Students being able to apply research skills by looking at something that is real for them enhances the learning experience, making it more valuable and relatable. They will remember their learning into the future. [EL4]

Teachers linked motivation for using the module to high prevalence of NCDs in their communities.

For us here in the Cook Islands, just about every child will have someone in their home [who] is suffering from an NCD. [T4]

Motivation to use the module was similarly linked to societal impacts of the high rates of NCDs experienced by the population:

They [students] know what [NCDs] are, especially [Type 2] diabetes, because there's no [dialysis] machine over here and they've got some family members who are stuck in New Zealand, on dialysis. So, it really made them think about that. And then emphasising that what do they think [will happen], if this continues, because it will continue if [young people] are not educated at this level. [T2]

All participants noted the need for sensitivity and respect when suggesting that students explore their home food environments, demonstrating awareness of the potential for images to reveal poverty or other circumstances impacting the food environment:

A few were a bit tight in sharing because of their status at home. The notion of 'eat what they have'. [T9]

Nevertheless, teachers positioned students as agents for change and as influencers within their homes:

It's nice to get the kids educated, so they can promote it, or even tell it to their parents and say, Mom, Dad, you know, shouldn't be eating that. [T10]

There was wide agreement that Photovoice facilitated an enjoyable "hands-on" strategy that supported diverse learners to convey ideas and "succeed" in their learning, independent of literacy levels.

Even the quiet students and those with learning needs were able to participate. This gave these students the opportunity to be good at science. [T8]

For one education leader, opportunities offered by Photovoice for perspective-taking was most significant:

They all come from different perspectives...they might see differently to what another student says.

And I think the beauty of it is when they sit together, and they discuss, you know, 'Why did you take this photo?' One student is saying this is happening, but another student is saying, 'Nah, **this** is what's happening.' [EL3]

Collectively, these data indicate that teachers linked the Photovoice learning objectives with exploration of the impact of the food environment's contribution to current and future health and wellbeing of individuals and the community.

3.2 | Student Learning Outcomes

A range of learning outcomes was identified. For example, one student [School 1] presented an image of a rubbish bin as a reflection of school food consumption patterns and waste sources, demonstrating their understanding of how consumer choices create waste and impact the environment. Another Year 5 student [School 3] understood that eating more fruit promotes health. They framed an image of green tomatoes smothered by weeds, arguing that the weeds stifled growth. Table 2 presents selected images from student PowerPoint presentations and outlines teacher recommendations for extending learning.

3.3 | Visibility of Photovoice Learning in Students' Homes

Parents were interested in the photovoice learning and wanted children to know more about preparing healthy food:

For me to get parents coming and asking if I'm going to be helping their children with recipes that help with heart conditions and diabetes or blood pressure – it means they are going home and doing something – they are actually sharing at home. [T3]

This and other parent comments demonstrated impacts beyond the classroom and reinforced teachers' beliefs that students can influence health behaviors in the home.




3.4 | Taking Action

Through participation in photovoice, students developed greater awareness of factors influencing the quality and costs of food options.

Students reflected that the school is selling 50% junk food, and 80% of the students are aiming for the junk food because the price is low, it's cheaper compared to the salads. Students were shocked by the amount of junk food and the disparity in prices of healthy vs junk food. [T8]

Importantly, teachers identified instances where students acted on their photovoice learning. One teacher explained that students had "got the message" about healthy choices and had therefore "passed" a form of assessment by "living" their learning through action:

TABLE 2 | Student PowerPoints: Teacher analyses of learning.

Student PowerPoint slide	Teacher analysis of learning and recommendations for further learning		Data source
	<p>P: My picture is showing all the ingredients inside the school canteen burger.</p> <p>H: We can clearly see that this meal is a favorite.</p> <p>O: A burger is a lunch that I tend to eat almost every week.</p> <p>T: Although there is a fair share of vegetables in my burger I need to include more in future meals and get healthier options from the school canteen, school garden, or home.</p> <p>O: You can still eat burgers but substitute healthier options such as wholemeal bun and more vegetables.</p>	<p>This student demonstrates understanding that:</p> <ul style="list-style-type: none"> the burger provides nutrition including vegetables food can be healthy and enjoyable hamburger healthiness varies by ingredient choices different food environments include school, home, and gardens <p>Possible next learning steps:</p> <p>Investigating food preferences and economic factors. Understanding nutritional content.</p>	School canteen hamburger School 3
	<p>P: My picture is showing an area of groceries displaying in the shop.</p> <p>H: The shop is selling canned food, chips, noodles, and biscuits.</p> <p>O: Shop is part of our food environment in the community.</p> <p>T: Yes there are cans of food in the shop which can be unhealthy so it's up to me to add vegetables from the garden to make it healthy.</p> <p>O: Yes you can still buy the food from the shop but it's up to you to make the healthy choice. For example, having chips as a treat or adding rukau/pota (taro leaves) to the corn beef.</p>	<p>This student understands that:</p> <ul style="list-style-type: none"> there are different food environments including shops and gardens different environments offer different foods, some healthier than others healthy choices can be planned into meals <p>Possible next steps:</p> <p>Explore structural and economic barriers and enablers affecting access to a healthy diet.</p>	Local shop School 7
	<p>S: This is what's available to buy at school vendors.</p> <p>H: The vendor is preparing chicken curry and cordial for our lunch.</p> <p>O: Without these lunches we will starve at school.</p> <p>W: A box of chicken is affordable for meals to make for lunches. Chicken curry is a popular meal on the island.</p> <p>E: If students eat this daily, we will have high risk of obesity because of the sugary drinks.</p> <p>D: We should try adding more vegetables to the meal and provide water to the students to avoid NCD risks.</p>	<p>This student understands that:</p> <ul style="list-style-type: none"> availability of food influences what they eat factors such as affordability and popularity influence food choices over-consumption of sugary drinks can increase obesity risk <p>The student has suggested action to support healthier nutrition in the school environment.</p> <p>Possible next steps:</p> <p>Extend learning by exploring social and cultural norms in food environments and influences on food choices within and beyond individual control.</p>	School lunch School 4

Note: Student PowerPoint slides have minor edits to enhance readability. As far as possible, the original text was kept for authenticity.

Last week we had Athletics and what shocked me was the majority of students refused to buy stuff from the shop and had their parents bring lunch to school. And for me that was a big tick saying they got the message. And we talked about how it was better for them to drink the Nu, the coconut milk, rather than Powerade and things. So students had it [Nu or coconut juice] in bottles. And for me to see that, I turned to [other teachers] and I said, 'They've passed, because they're living it.' [S2-T4]

This is a clear example of transfer as evidence of learning, where students fundamentally understood the principles being taught. However, while such actions were encouraging in the short term, teachers also referenced challenges associated with sustaining healthy behavior change.

I taught them the reality of this [Type 2 diabetes], the consequences of this. I told them. You can't go to the spare parts shop to get a spare foot to replace [an amputated foot] if you're a diabetic. So it's like the students were in fear mode; 'Ahhh, we are going to do

healthy lifestyles.’ But after one week they went back to their old lifestyle. But as long as they have understood the concept . . . [S3-T5]

Nonetheless, students’ understanding and ability to articulate the dire future consequences of unhealthy diets were seen by teachers as one step in the right direction.

4 | Discussion

This research focused on teacher perspectives and adolescent learning outcomes in an exploration of the value and uses of photovoice for health education in the context of food environments. The overarching photovoice inquiry question of “*What influences the food we eat?*” was key in supporting learners to explore factors that affect the types of foods that people can access and consume.

Increased understanding of factors that influence health is associated with the potential to act on these factors [41]. Our research demonstrated that photovoice approaches can be employed as a pedagogy supporting adolescents to “see,” understand, communicate, and act on their developing knowledge of the influences of food environments on their own and others’ wellbeing; present and future.

Our findings show that Photovoice was an effective means of supporting students to collect and analyze “data” about their food environments. Findings also signal the potential of Photovoice in facilitating a deeper understanding and awareness of the complex array of factors impacting food consumption. Students gained hands-on experience of a commonly used social science research method, encouraging them in a small way to experience themselves acting as “health scientists” in their communities. The decision to use an open driving question was deliberate, allowing for a broad range of responses, potentially capturing the complexity and diversity of influences that students might identify that might not be immediately apparent [42]. This driving question can be adapted to direct focus more specifically toward, for example, barriers and enablers to health behaviors in food environments and other learning contexts such as physical activity [43].

By allowing students to reflect on their own local environments, learning was real, relevant, and accessible. It placed emphasis on students’ perspectives and creative engagement with the issue. This was evidenced by their choice of images, ranging from more conventional images of gardens to the inventive and unexpected, such as the rubbish bin or an image of the road home from school with fruit trees out of sight. Others have similarly identified the potential for photovoice to enable creative responses that reflect participants’ realities [44]. While not explicitly assessed, teacher feedback identified the potential of Photovoice for supporting their diverse and/or low literacy learners, an important observation in this work.

With Oono et al. [18], we concur that Photovoice offers significant transformative learning opportunities, not only as an approach for engaging students in health-based “research” but

potentially empowering them to effect social change. Our findings related to learning transfer advance Photovoice as enhancing the potential for adolescents to act on their learning to promote improved nutrition. However, we note that teachers highlighted the challenges of supporting and achieving sustained behavior change, which are not measured in this study. These challenges are universal. To achieve sustained change in complex food systems requires: education and awareness, comprehensive social and environmental supports that improve abilities to access and choose healthy food, and gradual overcoming of deeply ingrained habits and behaviors [42, 45–50].

Aligning with observations of others, we note that Photovoice served as an effective approach for extending learning interactions and fostering reciprocal conversations about food between school and home. Families play a pivotal role in shaping youngsters’ health behaviors [50]. However, as children mature to adolescence and beyond, they are increasingly able to influence nutrition in the home [51]. This influence can be positive or negative, making the need for education in early adolescence vital and highlighting the importance of integrating family dynamics into educational initiatives aimed at health promotion [52].

While findings confirm that Photovoice is a valuable tool in opening conversations about healthy nutrition between school and familial settings, care needs to be taken. Similar to findings by Abma and Schrijver [15], our application of Photovoice in home and other community environments is tempered by caution and the anticipation that students could capture images that inadvertently convey negative or stereotypical views or expose family poverty. Supporting awareness that poverty can be a driver of poor nutrition is important. However, this underscores the need for sensitivity when guiding students to observe and reflect on their personal circumstances and food environments.

In the Cook Islands context as in many cultures, food is associated with sharing, hospitality and connection, celebration, kindness, creativity, and love [53, 54]. It was important for teachers to highlight this element, and for students to understand the significance and complex interplay of cultural and social norms surrounding situations where food is consumed. For example, large community church events are commonplace (80.4% of respondents stated that they were affiliated with a Christian church in the 2021 Cook Islands census). Photovoice learning approaches thus necessitate encompassing a holistic understanding of these distinct yet interconnected environments, as discussed in recent literature [55].

Our research shows that students understood and illustrated the contrast between locally produced and processed foods. This offered scope for extending their understanding of the positive health implications for sustainable, local food production compared with the prevalence of imported processed foods. Further learning could include prompts that encourage students to investigate food history and change over time [3]. This is an ongoing focus for the Pacific Science for Health Literacy Project - Ora’anga Tumanava team.

Teachers drew on their own knowledge to highlight the diversity of food environments between Rarotonga, where processed imported foods are more abundant and available, and the Pa Enua

(outer islands), where there is greater reliance on locally produced natural sources. As an example, on the small island of Mitiaro, residents rely on home-grown fruits and vegetables, raise pigs, gather seafood, and often barter with each other. In contrast, residents on Rarotonga have an array of locally produced and imported foods from sources ranging from large supermarkets to roadside stalls. These differences draw attention to the interplay of geographical, cultural, and economic factors that shape the types of foods that are accessed and consumed, emphasizing the need to consider such contextual diversity and draw on local knowledge when planning the exploration of food environments using Photovoice. Understandings about why local foods should be prioritized as healthy choices tie learning to the larger narrative of environmental sustainability and knowledge of natural food systems [56, 57].

In acknowledging and preparing for this complexity in learning, our findings align with Cooper et al. [16] emphasizing the need for teachers to be well-equipped via professional learning with knowledge to guide students toward these understandings. This level of learning for teachers is important because such awareness can move classroom conversations about health behaviors beyond individual-level blame for food choices toward supporting student cognizance of community-wide factors and the role of structural, social, economic, and other complex influences [5, 12, 58].

4.1 | Limitations

This small-scale qualitative study involved the codesign, implementation, and evaluation of photovoice learning in seven schools. The possibility of evaluating impact by identifying instances of learning transfer has emerged as one viable method that warrants further investigation. Similarly, there is potential to investigate the leveraging of school-based assessment of actions related to health behaviors to orient and incentivize students toward a broader and longer-term health-based purpose for their learning [58]. This will necessitate ongoing research to develop appropriate strategies and valid assessment instruments.

5 | Conclusion

When people attain a better awareness and understanding of factors that shape their own and others' health, it supports them to identify where and how they could make or influence change. This research has illustrated how and why Photovoice could be used as a transformative pedagogical tool in school-based health education, supporting learners to "see" or better identify complexities within their food environments, so they might begin to decide where and how to act. The effectiveness of this approach relied on the collaborative processes of module codesign and evaluation between Pacific Science for Health Literacy Project - Ora'anga Tumanava teacher partners, ensuring that the learning met the diverse needs of students while remaining true to core health-based education objectives. The connections achieved between schools and families strengthen motivations and the rationale for continuing to undertake such learning in the future. For some students, participation in photovoice catalyzed (short-term) behavior change.

The challenge for education-health research partnerships is to advance approaches for photovoice as a strategy to enhance student decision-making and action toward longer-term healthy behavior change.

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Ethics Statement

Ethical approval was gained from the University of Auckland Human Participants Ethics Committee (Ref #23262) and the Cook Islands National Research Committee (Ref #11-22).

Conflicts of Interest

The Cook Islands Ministry of Education is a partner in the Pacific Science for Health Literacy Project. Direct employers within the Ministry of Education were not involved in participant recruitment for this study. The authors declare no conflicts of interest.

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