

# **Vision 2020.** Eye health equity for Aotearoa/New Zealand.



RESEARCH

DESIS Otago Otago Polytechnic New Zealand



### **Community partner.** Tahuna Intermediate School

# DESIS Otago personnel.

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Vision 2020

### Funders. Ombler Trust Otago Participatory Science Platform

### Acknowledgements.

The working group included optometrist Professor Kelechi Ogbuehi and teacher Karen Parker.



### **Context.**

**New Zealand children's** vision is screened at age four for amblyopia (lazy eyes) and at age 10-11 for distance vision (shortsightedness). Some problems are not identified and not all of the children identified get glasses. Vision problems are a significant public health issue, compromising children's academic, sporting and relational achievements.



### The project.

A pilot in 2018 proved that children could screen each other's vision, in a curriculum context in which they also learned about common eye problems and protecting their eyes. In 2019 a working group started to adapt the Eyes Right Toolkit for the New Zealand context and for children.

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# The design process.

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The working group went through seven iterations to produce the new Vision 2020 Toolkit. The working group included stakeholder representatives, and local school children were involved as codesigners testing and giving user feedback. The final design was used with 12-year-olds, and the results validated against an electronic vision screener.



This project uses the innovative concept of child-to-child vision screening in an education context, to improve identification of health issues without significant additional spending. Continued positive results from research are likely to influence health policy in New Zealand. The project also increases awareness of the discounts available for local optometry services.



### **Activism and Civic Participation**



Tertiary students engage in social innovation as they work with secondary students in the classroom during the pilot, and with intermediate students in the design phase. The secondary and intermediate students learn about common eye problems and how to protect their eyes in the context of their science curriculum. The project is congruent with the seven point plan of the NZ Eye Health Coalition and helps with advocacy against inequity in eye health.

## **Social Interactions and Relations**



Children are empowered to check each other's vision in the classroom as a fun interactive activity. The children also engage in a low vision simulation exercise which increases understanding of the need for glasses and hence is likely to help reduce social stigma associated with wearing glasses.



The Eyes Right Toolkit was developed in the United Kingdom by the Pocklington Trust for adults. As well as adapting it with permission for children and for New Zealand, the project team produced the Eyes Right Toolkit app which is available for free download from the Google Play Store. This morphed into the Vision 2020 toolkit.

## **Skill Training and Design Education**

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### **Occupational Therapy**

#### **Product Design**

### **Information Technology**

Otago Polytechnic students in three different disciplines have been involved in this project as part of their learning for their degree programmes under staff supervision. Two Occupational Therapy students ran the pilot in 2018 a third was on the working group as was a Product Design student. Information Technology students developed the app version of the Eyes Right Toolkit. A microcredential is being developed.



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