

Assessing the Impacts of Worcester Polytechnic Institute's Melbourne Project Center

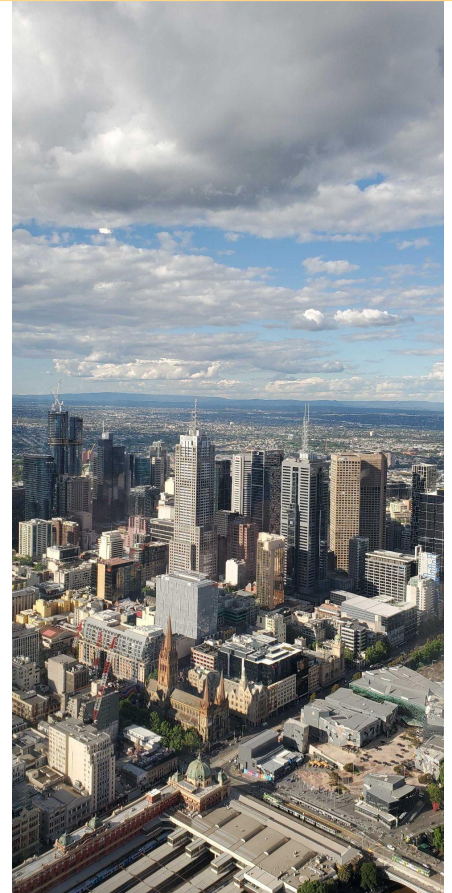
An Interactive Qualifying Project

Lily Dupuis, Keira Lynch, Ethan Prigge, and Deah Zajmi



WPI

December 12, 2022



Acknowledgment of Country and the Wurundjeri



Meet the Team



Lily Dupuis
Biomedical Engineering



Keira Lynch
Mechanical Engineering



Ethan Prigge
Aerospace Engineering

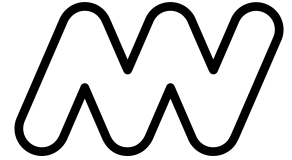


Deah Zajmi
Chemical Engineering



WPI Students in action

Accomplishments of the Melbourne Project Center



Friends of the Earth Melbourne



Brotherhood of St Laurence
Working for an Australia free of poverty



Snowy River Innovation

An Overview of the Project Plan

Preliminary Analysis

Summarize the
Melbourne Project Center
Activities

Objective 1

Design an
Impact Assessment
Tool

Objective 2

Assess Impacts the
Melbourne Project Center

Objective 3

Analyze
Project Characteristics

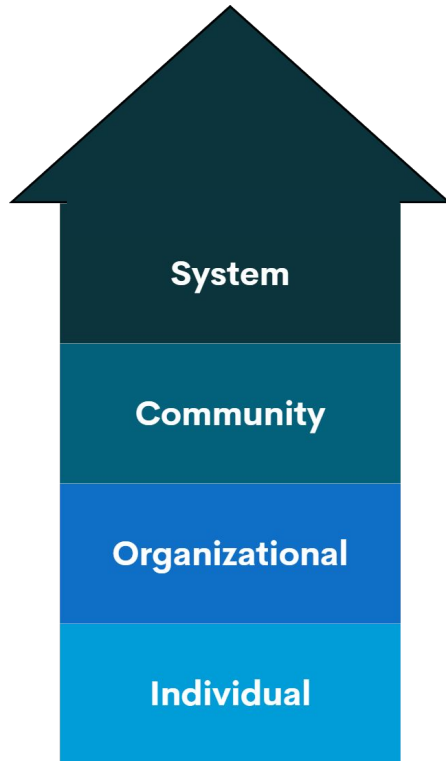
Objective 4

Analyze
Partner Relationships

Objective 5

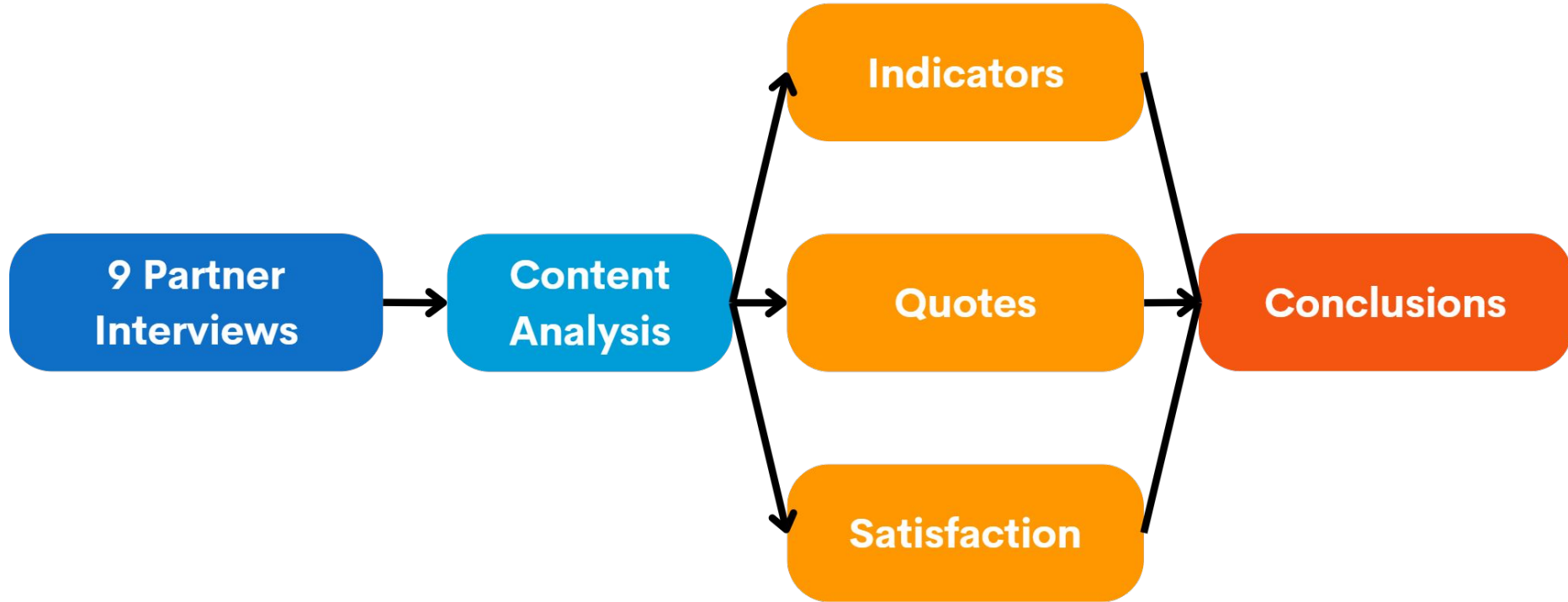
Collect and
Compile Promotional
Materials

The Jiusto and Vaz framework captures the range of impact

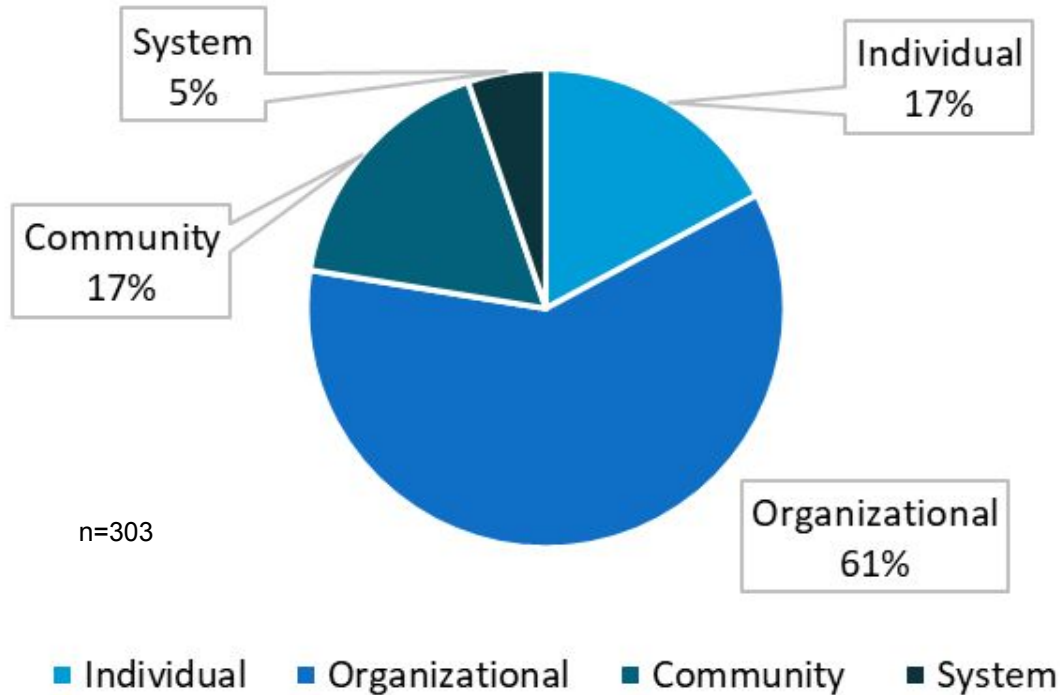


Impact Groups	Impact Indicators
Groups beyond the organizations	Policy changes, legislation changes, social movements
Communities the organization work with/for	Advancement of community knowledge, cultural education
Partner organizations	Changes in organizational practices, grants received
Staff of the organizations	Career improvement, mindset change, learning

Assessing the Impacts

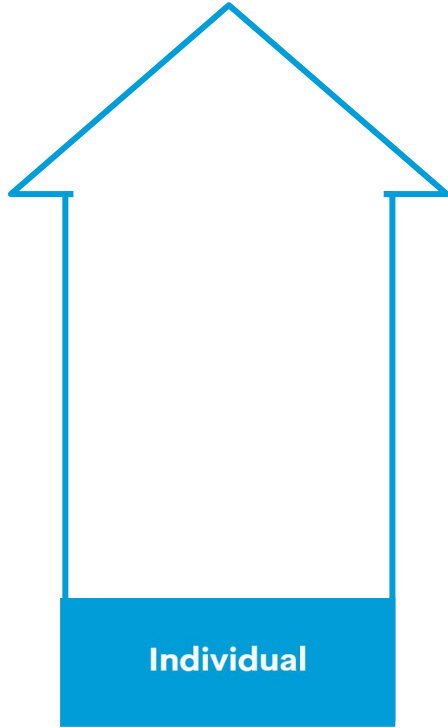


An Overview of Impact



Impacts on Every Level

WPI projects have helped improve the organization staff's professional and leadership skills as well as develop their careers.

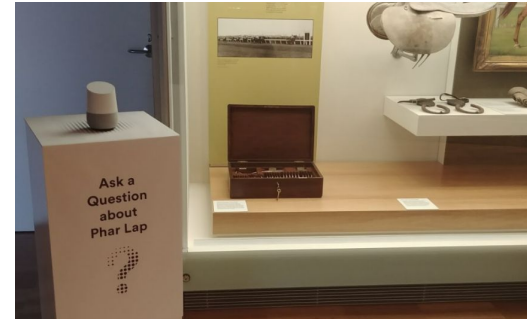
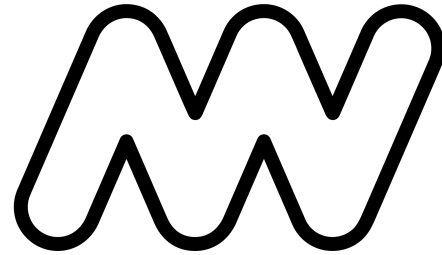
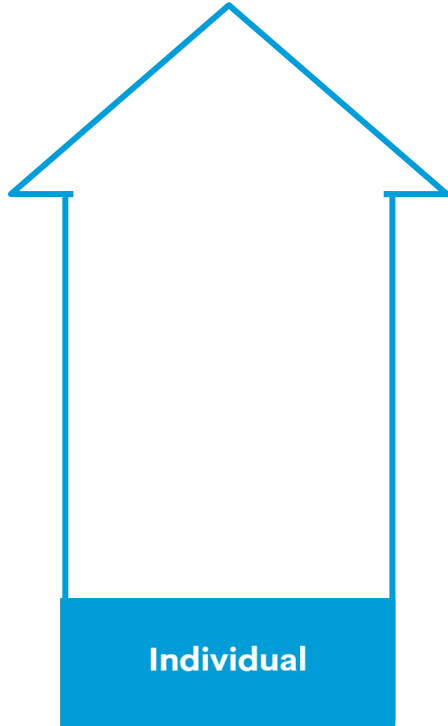


Brotherhood
of St Laurence

Working with a WPI student group teaches staff how to let young people take the lead (Courtney Green, The Brotherhood of St Laurence)



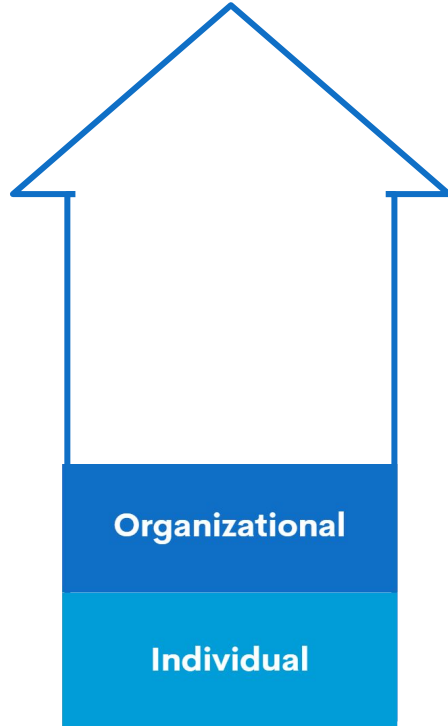
WPI projects have helped increase organization staff's knowledge and understanding.



The Melbourne Museum had little experience with voice activation in their exhibits before partnering with WPI (Carolyn Meehan, Museums Victoria)



WPI projects have improved partners' organizational practices and efficiency.



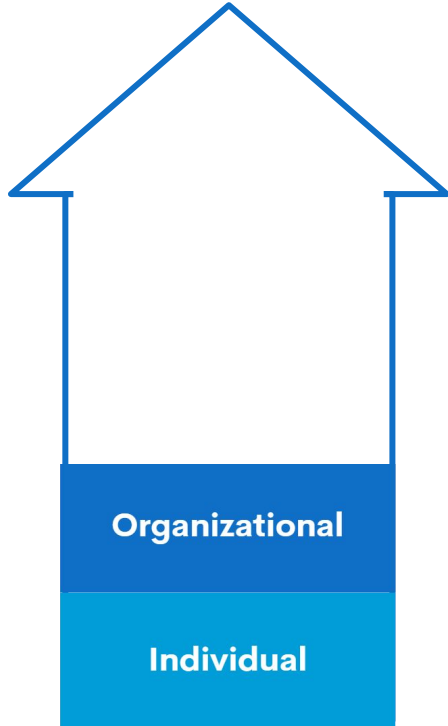
better together



ESF learned where they could efficiently cut costs due to research done by a WPI student group (Siusan MacKenzie, Emergency Services Foundation)



WPI projects have helped partners receive grants and funding.



WPI research allowed Snowy River Innovation to take on a \$30,000 study that compared methods of turning biomass into biochar (Peter Young, Snowy River Innovation)



WPI projects have increased community knowledge and understanding.



Friends of the Earth Melbourne



WPI students adapted campaign information for a new Melbourne Metro line to be more accessible and user friendly (Claud Gallois, Friends of the Earth Melbourne)



WPI projects have engaged members of communities the partner organizations serve.



CERES



Hands on activities based on African and Indonesian villages developed by a WPI team made the wider community aware of CERES (Subik Baso, CERES)



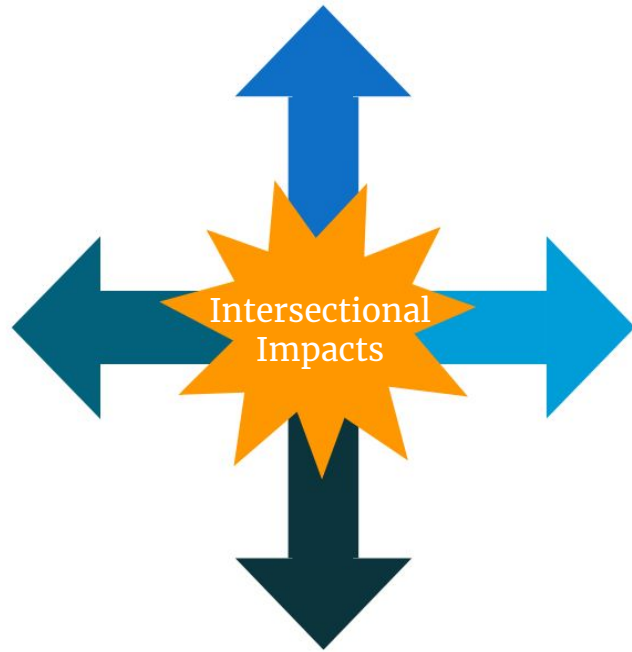
WPI projects have reached the attention of organizations beyond our partners



WPI research done with the Metropolitan Fire Brigade contributed to discussions on the fire safety of hoarding homes (Rob Llewellyn, Australasian Fire Authorities Council)



WPI projects expanded personal, organizational, and community networks.



WPI projects encourage partner organizations to have a multidisciplinary department approach that “breaks down the silos in [the] organization.” (Jonathan Chee, Banksia Garden Community Services)



Analysis of Project Types

Project Type

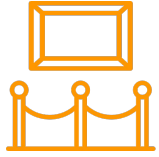


Exhibit Design



Technical Consulting



Design



Program Development



Marketing



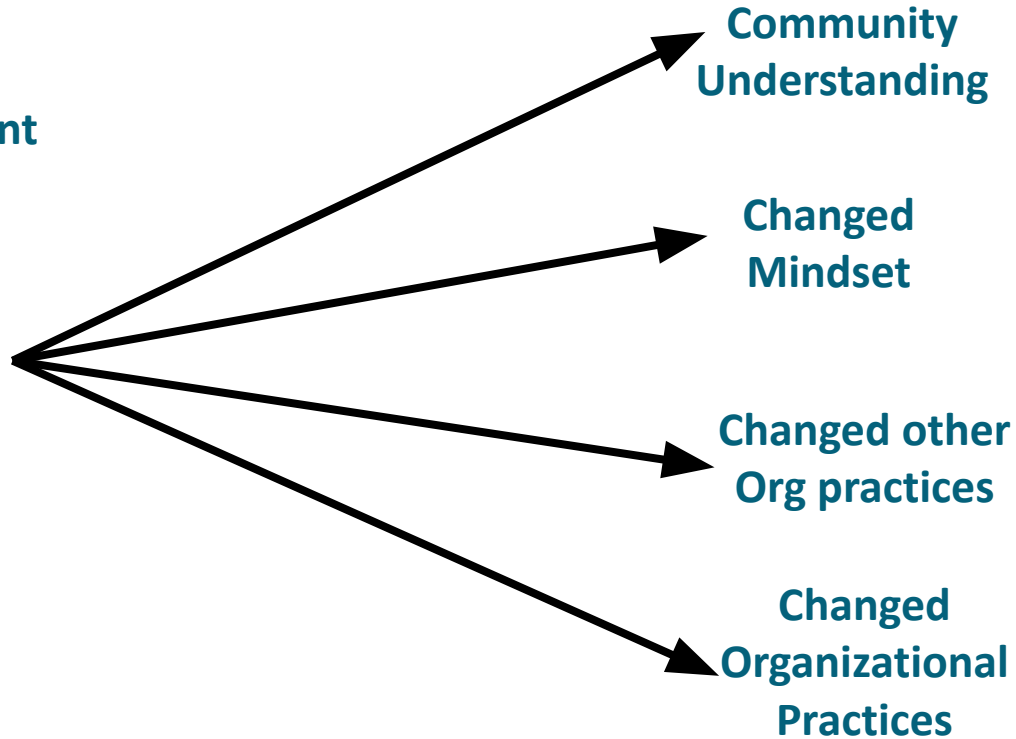
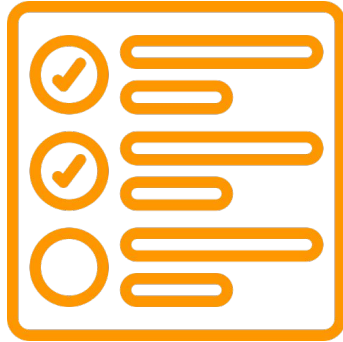
Impact Assessment



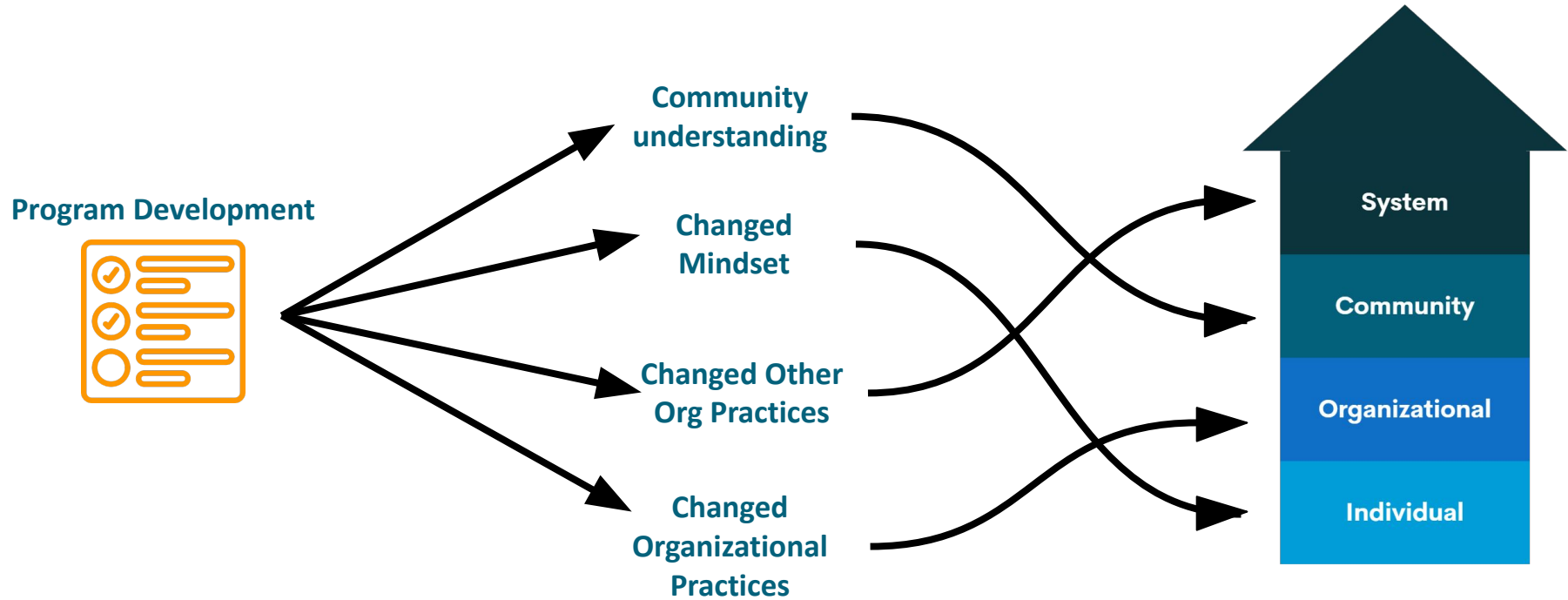
Research

Impact Indicators

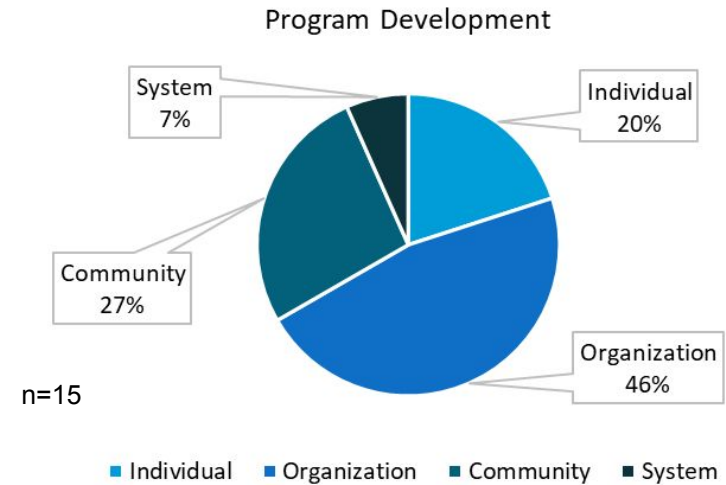
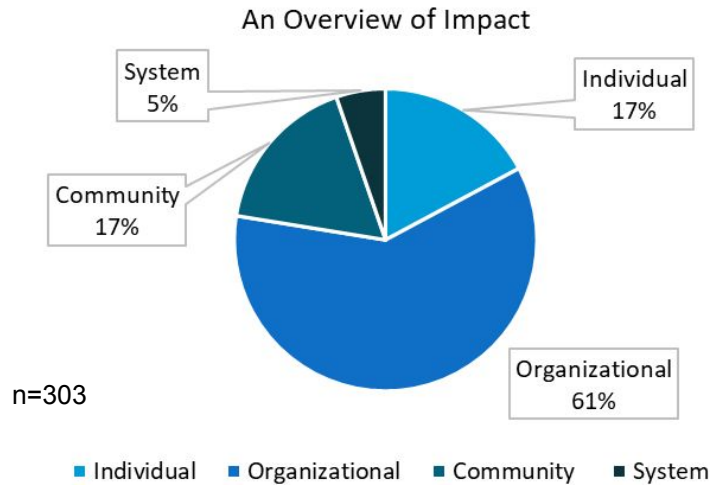
Program Development



Levels of Impact



Our research will help future IQP project designers



Partner Relationships

Partner relationships with center directors and students



Prof. Stephen McCauley and
Prof Lorraine Higgins



April and Neil from Port Phillip
EcoCentre with team members

Recommendations

Recommendations for Center Directors and the GPP



DIGITAL WPI

Port Phillip EcoCentre

- [A Citizen Science Platform for Long-Term Monitoring of Microplastic Pollution in Port Phillip Bay](#)
- [A Pump-Based Method to Sample Midwater Microplastic Pollution](#)
- [Developing Biodiversity Protection Strategies for Urban Greenspace in Melbourne](#)
- [Using Data Visualisation to Communicate the Sources of Plastic Pollutants in Port Phillip Bay](#)
- [Next Generation Baykeeper: Encouraging Strategic Collaborations Around Port Phillip Bay](#)

Recommendations for Partners



ESF & WPI Reports

ESF has for a number of years partnered with Worcester Polytech a university in Massachusetts USA to host third year students undertaking a research project as part of its Melbourne Study Centre.

[READ MORE >](#)



Acknowledgements

We would like to sincerely thank:

- **Prof. Holly Ault** - Project Advisor
- **Prof. Tanja Dominko** - Project Advisor
- **Prof. Stephen McCauley** - Project Advisor and Melbourne Center Director
- **Prof. Lorraine Higgins** - Melbourne Center Director
- **Jonathan Chee** - Local Coordinator
- **Lori Ostapowicz-Critz** - WPI Librarian
- Our **interviewees and survey respondents**
- Our **student peers**

We couldn't have done it without you!

