

#### Legacy Down Under:

Documenting and Promoting the Melbourne Project Center

Kelly Carlson, Isaiah Cochran, Jennifer Day, Cara Seely

Advisors: Professor McCauley & Professor Michalson WPI Local Coordinator: Jonathan Chee Sponsor: WPI IGSD



# Worcester Polytechnic Institute

#### The WPI Plan

#### "A bold experiment in higher education"





# The Global Projects Program





# Interactive Qualifying Project

#### The IQP Process

Preparatory Term (7 weeks)

Project Term (7 weeks)

Understanding the Problem

Social Science Research

**Proposal** 

Data Collection and Analysis

Community Interactions

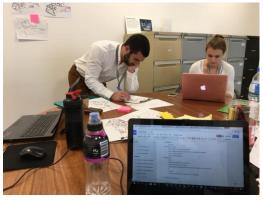
Deliverables and Recommendations

#### High Impact Learning

	Project-Based Learning	Service Learning	Study Abroad*
Learning Goals	<ul> <li>Manage multiple tasks</li> <li>Collaborate effectively on a team</li> <li>Communicate with multiple stakeholders</li> <li>Create innovative and relevant solutions</li> <li>Improve understanding of underlying material</li> </ul>	<ul> <li>Education via community service</li> <li>Improve personal efficacy</li> <li>Enhance individual growth</li> <li>Combat reductive seduction tendencies</li> </ul>	Improved open- mindedness     Experience learning as a way of life     Intercultural development
Unique Application to the IQP	<ul> <li>Contribute research and recommendations to address open-ended problems</li> <li>Hands-on group work</li> <li>Project spanning several months</li> </ul>	Community-based nature     Working alongside organizations and their communities	Immersion into an unfamiliar culture     Emphasis on ethics and collaborative practice  *Not all IQPs are completed abroad

#### Melbourne Project Center: 1998-2016







~160 Projects

~40 Sponsors

~600 Students

#### Current Sponsors of IQPs









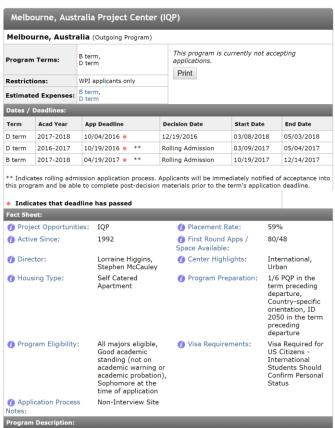






# Project Goals

#### Shortcomings



Sponsors

**Students** 

Limited information about the MPC

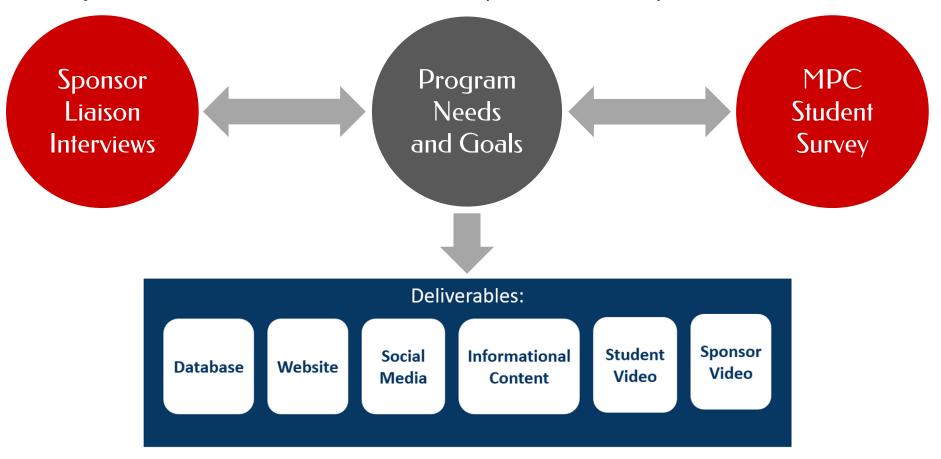
Lack of documented feedback from sponsoring organizations

Reliant on word-of-mouth information from peers

Little information produced by WPI on the Melbourne area

Project Goals

#### Project Goal: Understand and Improve the Impacts of the MPC



Project Goals 12



# Findings

## Perceived Impacts from Sponsor Liaisons



83.3% High Impact on Sponsoring Organization

75.0% High Impact on Project Community Stakeholders

70.8% Long Lasting Impacts

**92.6%** Positive Experience with the WPI IQP

88.9% Positive Experience with WPI Students and their Professionalism

Findings (14)

## Student Survey Results



**73.6%** List of Activities to do at the Project Center

63.7% Project Center Specific Video

61.9% Project Center Specific Website

15



#### Database

Tab	Descriptions	
Projects	Information on projects from 1999 to 2017 Includes: titles, abstracts, authors, sponsors, link to final report	
Sponsor Overview	Overall information about the sponsors Includes: how many projects they sponsored, if they were contacted or interviewed for this project	
Project Sponsors	Contact information for sponsor liaisons	
Sponsor Impacts	Raw data from sponsor liaison interviews	

17

#### MPC Outreach



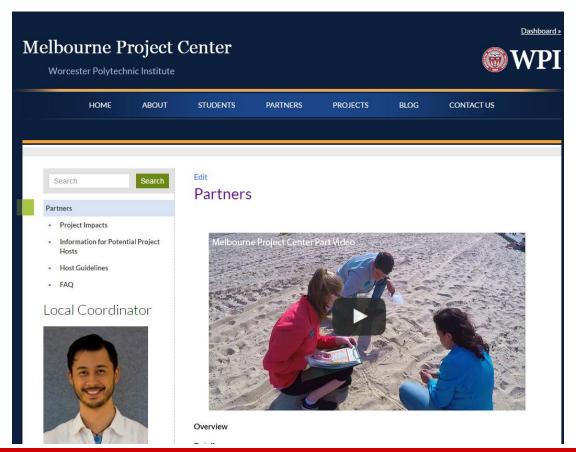




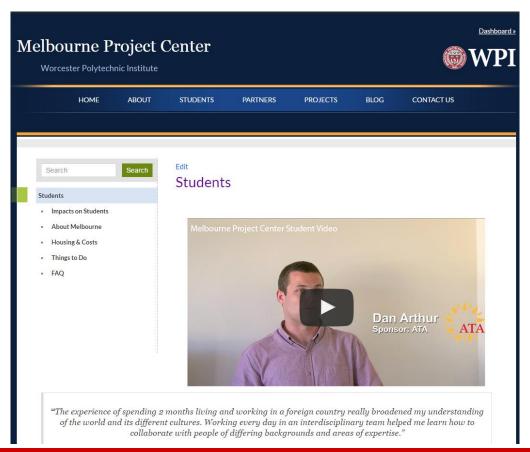
"In terms of the impact.. it gave them [service providers in Fawkner] the evidence base to gain funding to set up a small community market. It helped them to show that food insecurity needed to be addressed. Now fresh fruit and vegetables are sold at discounted prices."

- Meredith Lawrence, Fawkner Community House

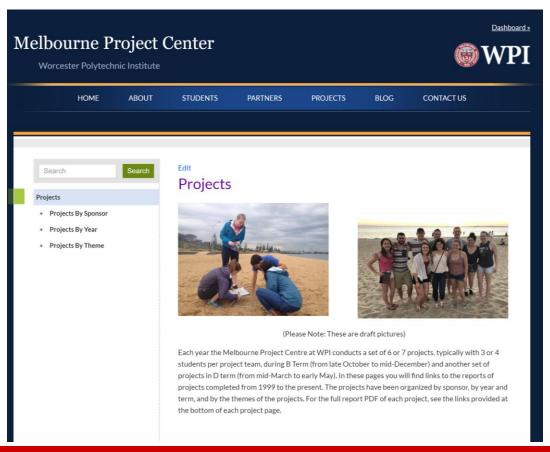












#### Website

#### Projects Projects By Sponsor Projects By Year 2016 2015 2014 A Critical Assessment Of Endpoint Technology for the E.W. **Tipping Foundation** An Analysis of Hoarding and Squalor Related Incidents and Responses by the Metropolitan Fire and Emergency Services Board An Evidence Based Approach to Home Fire Safety Analyzing Qualitative Data at Museum Victoria Analyzing the Potential Use of Solar Photovoltaic Systems by Commercial Businesses in the

Moreland Municipality

Banksia Gardens Community

Centre B14 — After-School Computer Club

CERES Australia 2050 Trail

Digital Literacy Programs for

Coburg Neighborhood Houses

Phase 2 — Designing an Interpretive Trail

#### Gas or Electricity — An Evaluation of Electricity and Natural Gas as a Residential Energy Source

#### Authors

Ashleigh C. Collins, Jake A. Brown, Andrew M. Andraka

#### Sponsor

Alternative Technology Association

#### Advisors

Andrew G. Klein. Seth Tuler

#### Term

March - May 2014

#### Abstract

Australian natural gas prices are projected to increase 30-50% by 2030, leaving many residential consumers with higher cooking and heating expenses. The Alternative Technology Association (ATA) recognized this impending increase and is seeking ways for consumers to reduce the costs of cooking and heating. ATA is creating a financial model to determine the cost of energy for consumers in the future. Our goal was to assist ATA in informing consumers of cost efficient cooking and heating appliances. For their model, we determined initial and consumption costs of each of three electric appliances: cooktops, hot water heat pumps, and reverse cycle air conditioners. Through a series of fact sheets, we suggested how different households could save money on their energy bill

#### Final Report

Gas or Electricity — An Evaluation of Electricity and Natural Gas as a Residential Energy Source

#### Supplementary Materials

ATA FactSheets.zip

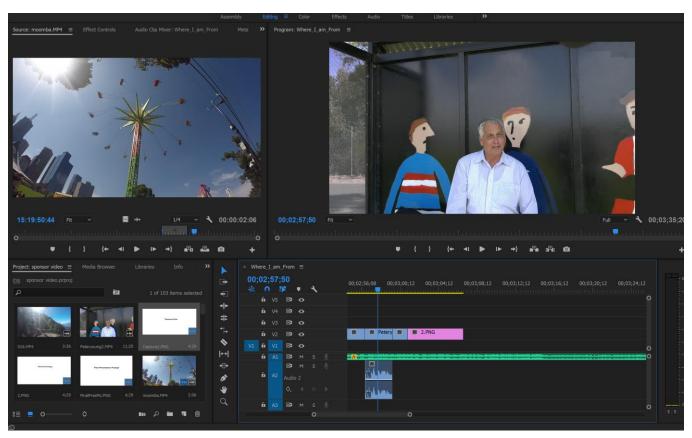
#### Social Media



#### Student Video



# Sponsor Video



#### Conclusion

#### Elements of the WPI Strategic Plan



More in Four

Global Projects for All

Major and a Mission



Competency-based
Online Education

WPI PhD Plan

Research Enterprise



Center for Project-based Learning

Global Partnerships

Foisie Innovation Studio

Conclusions

## Acknowledgements



A number of the organizations who have hosted IQPs between 1998 - 2017

Thank you to all the sponsors and liaisons who made this project possible.

Special thanks to Professor McCauley, Professor Michalson, and Jonathon Chee.



# Questions?

mpc17-mpcspring@wpi.edu

## Image Sources

https://www.wpi.edu/offices/marketing-communications/resources

https://au.pinterest.com/pin/32088216065513053/

https://www.princetonreview.com/schools/1023881/college/worcester-polytechnic-institute

https://www.wpi.edu/academics/undergraduate/project-based-learning/global-project-program

https://wpi-sa.terradotta.com

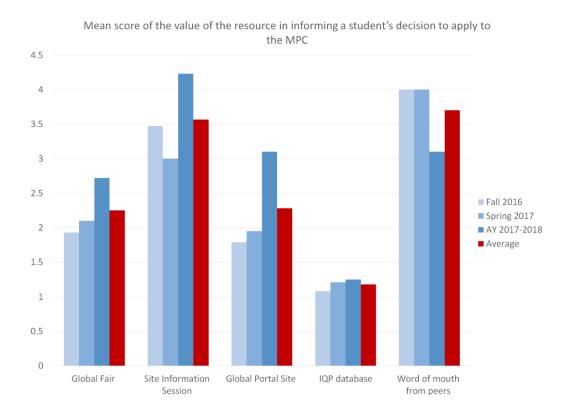
http://wp.wpi.edu/melbourne/projects/projects-by-term/2014-2/fawkner-community-house-solutions-to-decrease-the-amount-of-food-insecurity-in-fawkner-victoria-australia/

https://www.facebook.com/WPIMPC/?ref=bookmarks

http://wp.wpi.edu/strategicplan/

Additional content was created by the MPC team.

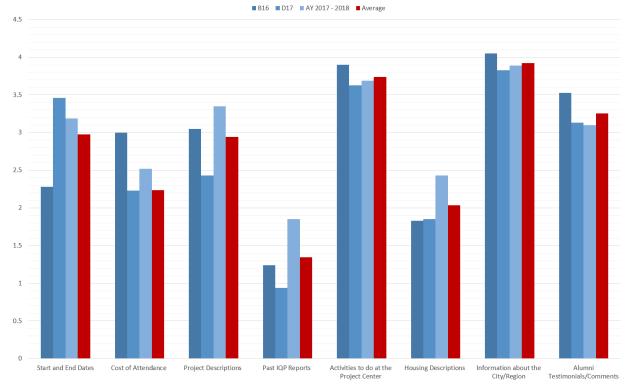
## Resources Currently Available to Students



Appendix 30

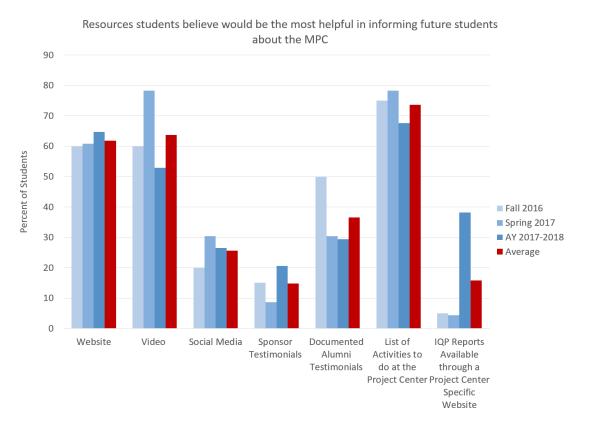
# Information Students Found Important

Information content ranked on importance in informing a student's decision to apply to the MPC



Appendix 31

#### Resources for Future Participants



Appendix 32