

MKW evaluation Summary for Mid-term Review

Number of people that visited the FLEET booth (Estimate only)

Weekday (Mon-Frid) = 30-40 people per day

Weekend (Sat-Sun) = 80-120 people per day

Significant is the quality of the engagement. The shortest conversation with any member of the public was about 5 minutes. The longest was about 20 minutes with most being about 10 minutes. Any discussion covered the motivation for FLEET’s research, the varied research problems that underpin the research, the research itself and the social implications of FLEET’s research.

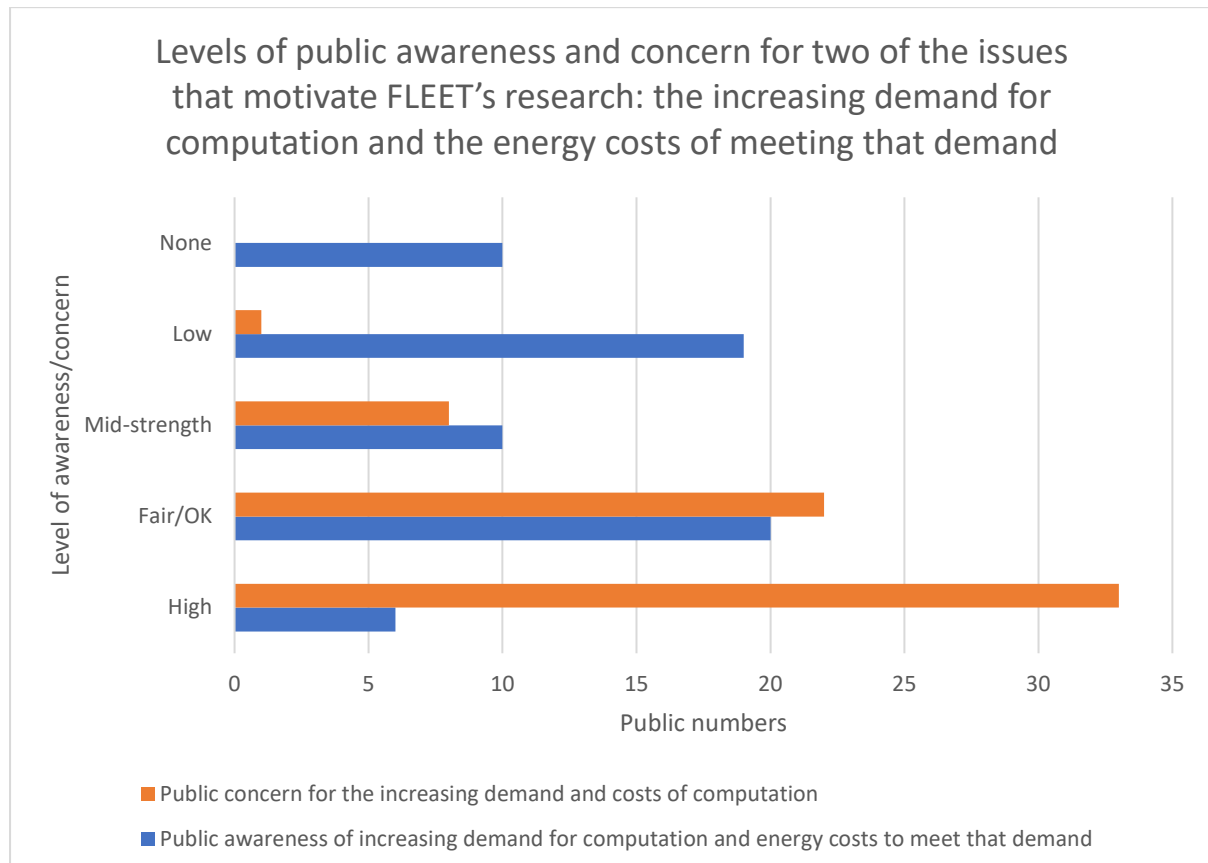
Pre- and post-evaluation was conducted to understand the impact of the public’s engagement with FLEET

Pre-evaluation survey

Pre-evaluation was a short two question survey on butcher’s paper and visible to the public. It asked the following two questions with the public to select answers from a 5-point Likert scale:

- Describe your awareness of increasing demand for computation and energy costs to meet that demand
- Describe your concern for the above demand and costs (It was made clear to the public that costs in this context concerned social, environmental and economical costs.)

Results



Key finding: The public had mid to low awareness of the increasing demand for computation and the consequent energy demand of this computation. In contrast, the public had a relatively high concern about this problem.

Post evaluation survey

An online survey asked the following two questions:

- Write one new / interesting thing that I learned from this experience with FLEET today?
- On a scale of 1 - 5, How has your appreciation and awareness of physics changed after your time with FLEET?

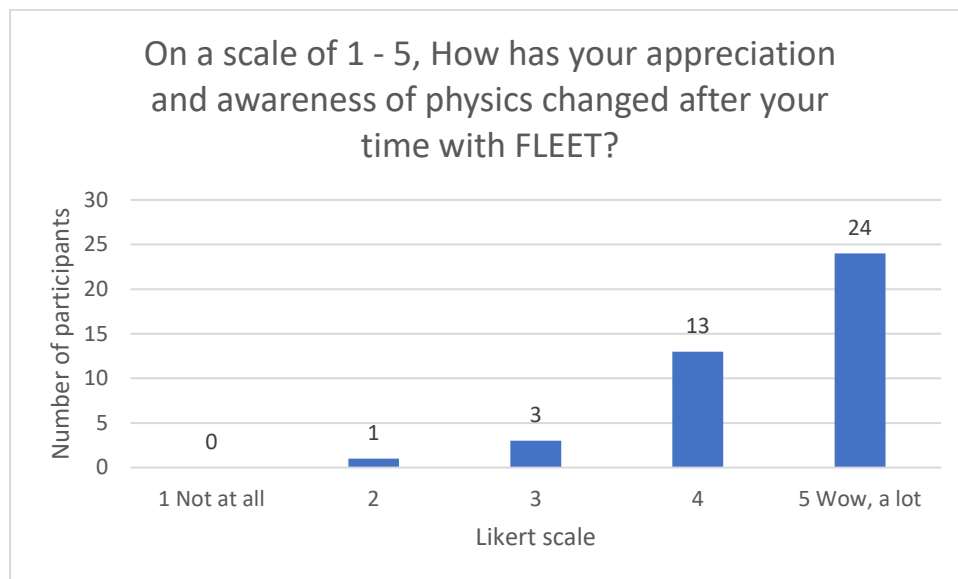
Results

Write one new / interesting thing that I learned from this experience with FLEET today?

Key themes to emerge from the data:

- An awareness of the demand-energy consumption problem
- Public concern – social, sustainability relative to demand/consumption problem
- Learning physics – 2D materials, zero/low-resistance, topological insulators
- High value for FLEET research (eg, “importance of quantum physics for more sustainable future”)
- Critical thinking about implications of FLEET research

How has your appreciation and awareness of physics changed after your time with FLEET?



Key message: the public’s time with FLEET had a positive effect on their appreciation and awareness of physics.

Volunteer perspective

Because this one is handy and available - one quote from FLEET volunteer (The one I got from Patjaree that I gave to Nancy van Nieuwenhove for her newsletter. Edit as necessary)

“Outreach helps me become a better communicator with the public and from other scientific disciplines. Working at Melbourne Knowledge Week has made me realize I still need to practice a lot, though there were a lot of questions from the public that were more technical

than I expected. It is good to know that many people are interested in FLEET research on low-energy electronics,” (Patjaree Aukarasreenont, FLEET PhD student, RMIT).

FYI – FLEET outreach objectives for MKW

Outcomes:

An appreciation/awareness of the purpose and value of FLEET research and physics generally.

Increased public awareness of problem of the increasing energy consumption of computation, and the implications of this.

A public thinking critically about the meaning and value of FLEET research.

Primary and secondary students with a greater awareness and interest in physics – its value and meaning to society

FLEET researchers with improved communication skills and greater understanding of audience values and perceptions of physics/FLEET research