# Importance of goal setting and evaluation

## Best Practice Engagement: Recommendation 1

**The review on Best Practice Principles for Community Science Engagement Programs identified seven key recommendations for effective and impactful community science programs.**

Recommendation 1 is about setting goals and objectives during the design phase of a community engagement program, as well as incorporating practical evaluation strategies.

Firstly, ***establishing clear goals and measurable objectives*** from the outset provides a strong foundation for successful and effective community science engagement. Programs should define long-term goals, which are then supported by achievable short- and medium-term objectives.

*Image: Mackay's St Patrick's College students working with Forge Engineering to redesign a student-created prototype. This project was a collaboration with Queensland University of Technology and the Queensland Museum Credit: Sandra Bayliss*

Program design should be guided by the intended outcomes of the science engagement activities.

Secondly, ***building evaluation into a program during the design phase*** allows an assessment of whether those outcomes have been met. Evaluation can involve a mix of quantitative and qualitative methods to assess any changes in participants' knowledge, attitudes, confidence and/or behaviours.

Conducting evaluation before, during and after program delivery, using established evaluation tools and approaches, supports continuous improvement and helps build an evidence base for future programs.

Where feasible, longitudinal (long-term) evaluation can provide valuable insights into longer-term impacts, including changes in aspirations and career pathways of participants.

While participant outcomes are always a key focus, evaluation should also consider the experiences and perspectives of facilitators, organisers, partners and funders.

# Case study: National Science Week

National Science Week is Australia's largest annual celebration of science and technology, giving communities the chance to engage with STEM through hands-on activities, festivals, workshops and public discussions. The ***program's goals*** are to raise public awareness of science, inspire interest in STEM education and careers, strengthen ties between researchers and communities, and increase understanding of how science shapes everyday life.

The National Science Week program also builds in ***measurable objectives***. Activities are intentionally designed to reach diverse audiences, including regional and remote communities, young people, First Nations peoples and other groups historically underrepresented in STEM. Inspiring Australia Queensland recently ran a travelling launch through central and western Queensland, bringing scientists and science experiences directly to regional communities and enabling genuine two-way engagement.

In 2025, a record 2,594 events were registered nationally, with 397 across Queensland, reaching more than 40,000 participants through festivals, workshops, school activities and regional outreach. Nationally, 90% of events were free, and many were delivered in regional, remote and lower socio-economic communities to support equitable access.

***Evaluation is embedded*** throughout delivery, focussing on both participation and impact. Organisers, participants and partners contribute data through surveys, headcounts, dwell-time tracking and post-event grant reports, assessing reach, accessibility, satisfaction, and changes in knowledge, attitudes and aspirations. National Science Week shows how a well-designed, large-scale, annual science engagement program can create meaningful impact.

*Image credit: National Science Week activities, Inspiring Australia Queensland*

For further detail about *Best Practice Principles for Community Science Engagement Programs*, read the full report, which includes case studies and other resources, at www.chiefscientist.qld.gov.au.