Neon's evaluation criteria to meet the Quality Standards

Quality matters to us

We want STEM teachers and their students to enjoy the very best engineering experiences, so we only feature experiences that meet our quality criteria.

Experiences that meet Neon quality standards:

1. Include positive and contemporary messaging about engineering

2. Raise young peoples' aspirations:

   For primary: Broaden horizons, challenge career stereotypes, and put curriculum subjects into a real-life context

   For secondary: Include an explicit careers dimension and align with at least 2 Gatsby benchmarks

3. Are designed and delivered so they are inclusive for students

4. Are committed to embedding learning and improvements

5. Clearly articulate expected learning outcomes

6. Are transparent on cost and time

7. Meet safeguarding, health and safety and data protection standards and have public liability insurance

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| About your experience | **Quality review** | Confirmation |

Which, if any, evaluation options apply to your experience? *

You must select at least 2 options to reach this quality standard.

- [ ] We survey young people to gather feedback about the experience during or soon after they take part.

- [ ] We survey educators, facilitators or volunteers to gather their feedback during or soon after the experience.

- [ ] We adopt a pre/post approach, surveying young people both before and after they have taken part in the experience to see if and how their responses change.

- [ ] We survey young people at multiple time points and track their responses to assess how effective the experience has been in achieving its intended outcomes.

- [ ] We collect survey data from a broad spread of attendees, and analyse evaluation results by young people's socio-demographic characteristics (e.g., age, gender, ethnicity etc.).

- [ ] We compare our evaluation survey results to figures from a similar sample of young people who did not attend our experience (i.e., a benchmark or a control group).

- [ ] We use trained evaluators to adopt a rigorous and robust approach (e.g., quasi-experimental or experimental methods).

- [ ] We conduct focus groups or interviews to gather supplementary evaluation data.

- [ ] We aim to gather feedback and/or evaluation data from at least 30% of young people that take part in the experience.

- [ ] Other

The Code pledges

Inspiring connection

Ensure programmes contribute to a sustained and rich STEM journey for all young people.

Driving inclusion

Ensure all young people have opportunities to engage in engineering-inspiration activities and no one is left behind.

Showcasing engineering

Promote a positive, compelling, and authentic view of engineering, showcasing the breadth of opportunities.

Improving impact

Improve monitoring and evaluation of programmes and activities to develop a shared understanding of what works.

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TOMORROW'S **ENGINEERS**
CODE

Proportionate evaluation

Jess Di Simone
Evaluation Manager, EngineeringUK

EngineeringUK

Webinar Aims

To understand the principles associated with a 'good' evaluation

To identify different levels of evaluation

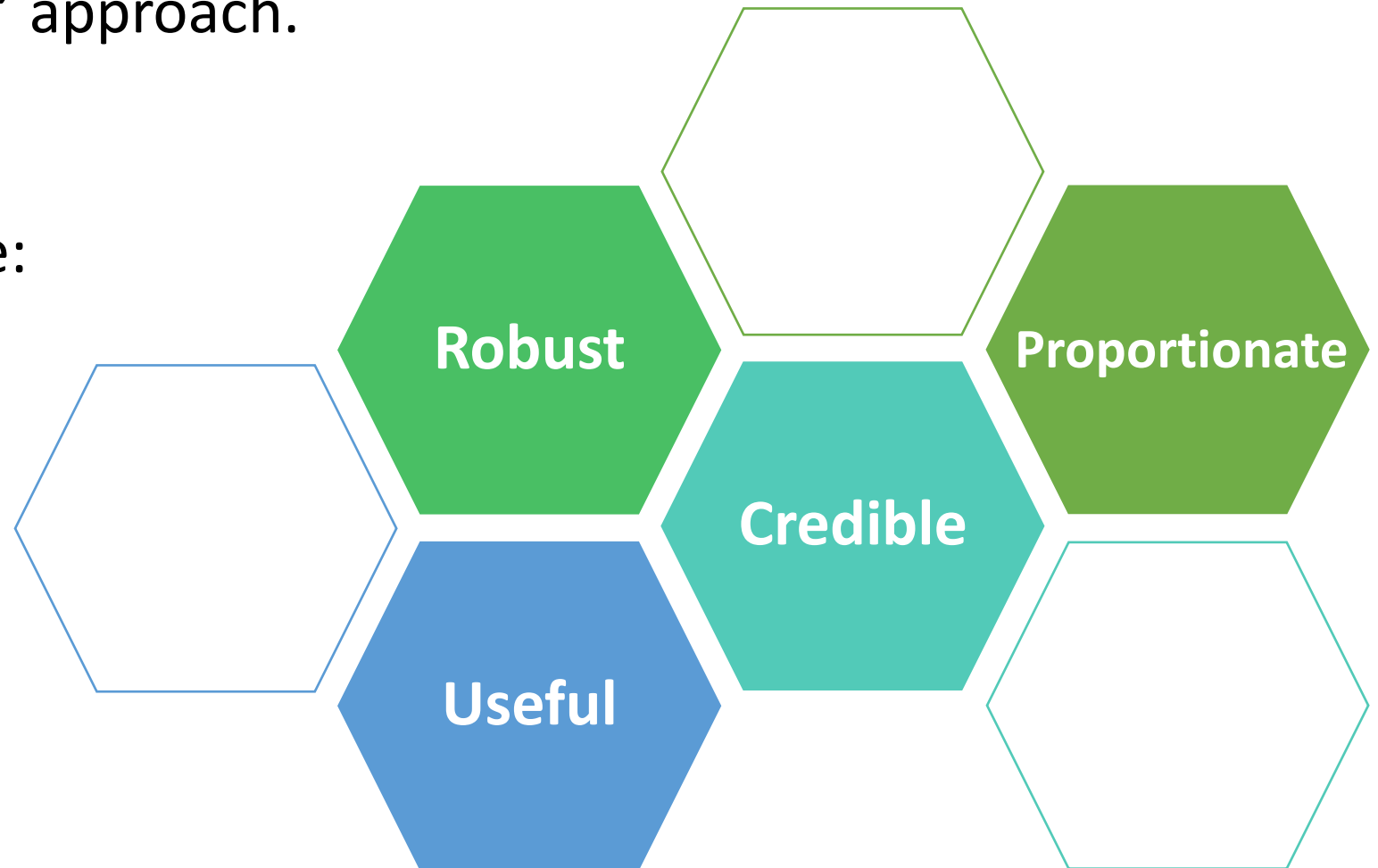To understand considerations for planning an evaluation

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What is a 'good ' evaluation?

There is no single definition of a good evaluation as there is no 'one size fits all' approach.

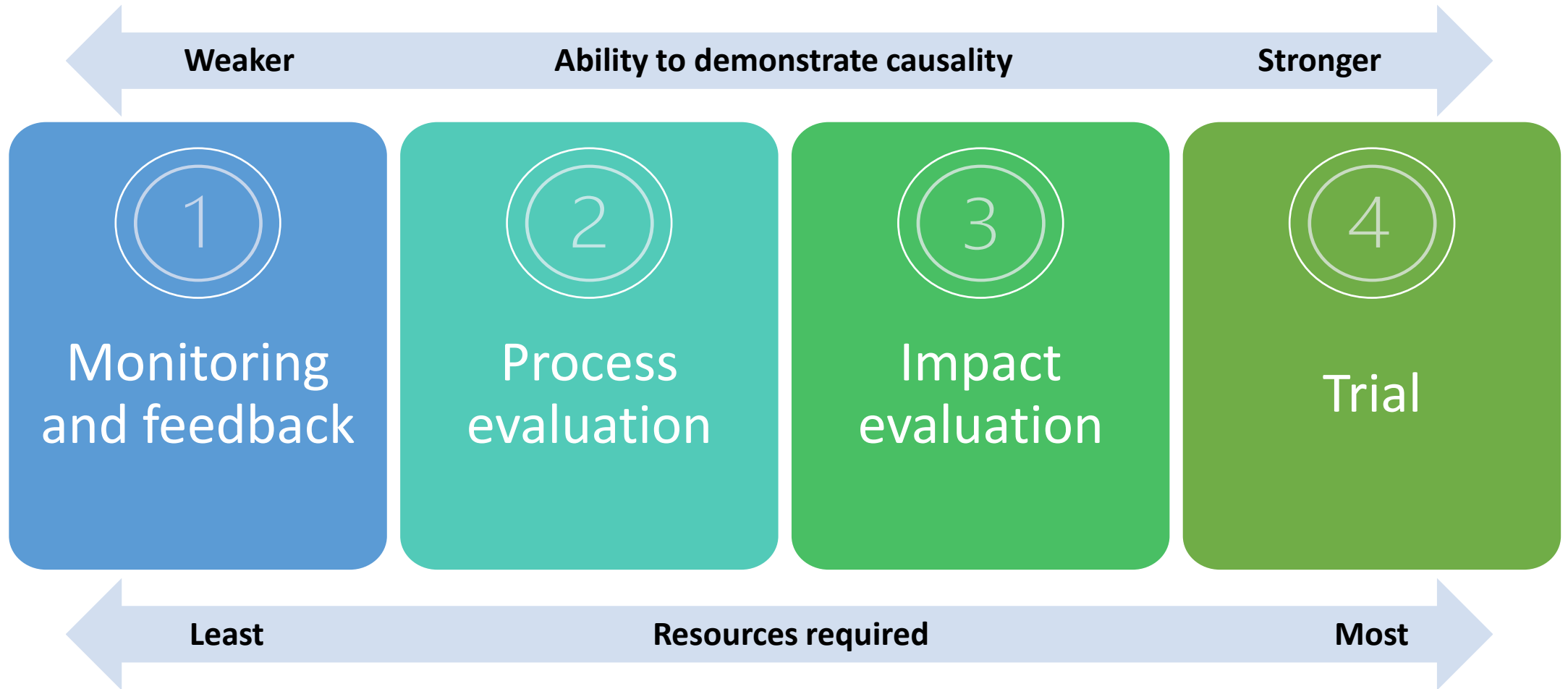Guiding principles for
a 'good' evaluation include:

Robust

Credible

Proportionate

Useful

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What do we mean by proportionate?

'Fit-for-purpose evaluations that are genuinely useful to decision makers.'
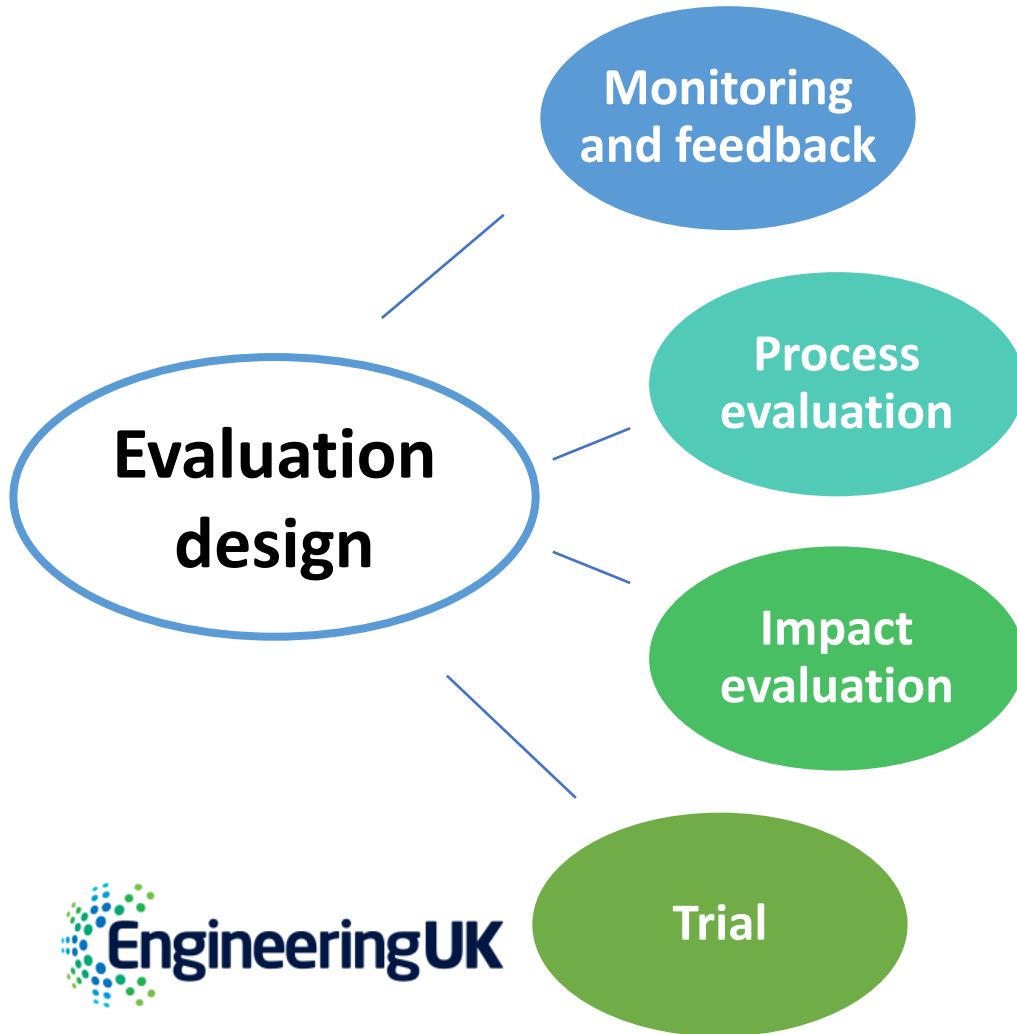
(Magenta Book, 2020)

- Being consistent with the type of intervention and its complexity

- Taking a practical approach, tailored to the context of the intervention, considering resources and time available

- Balancing what is enough but not excessive (only done when useful)

- Feeding into decision-making

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Levels of evaluation

Weaker ← Ability to demonstrate causality → Stronger

| 1 Monitoring and feedback | 2 Process evaluation | 3 Impact evaluation | 4 Trial |

Least ← Resources required → Most

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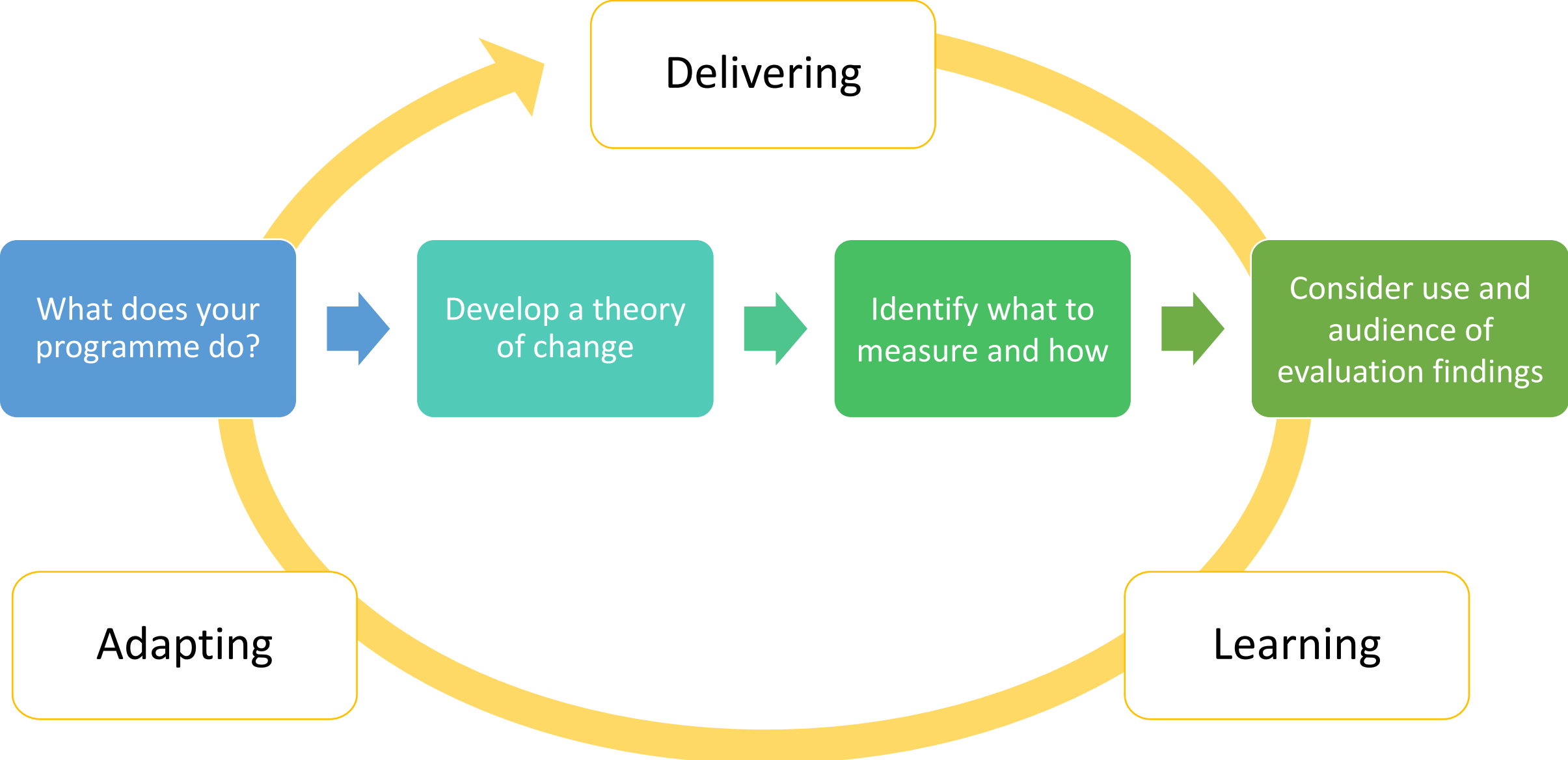|	LEVEL OF EVALUATION	WHAT ARE THE AIMS?	WHICH APPROACH IS USED?	
← Weaker.......... Ability to demonstrate causality......... Stronger →	4. Trial	to provide robust evidence of the impact of a programme which will be persuasive to external stakeholders at all levels.	Using a **random controlled design**, including baseline and follow-up, with qualitative data to support interpretation of findings.	**← Most..............Resources required.................Least →**
	3. Impact evaluation	to start to assess impact through measuring change in key outcomes through a robust sample.	**Data collection before and after the programme activities (pre- and post-evaluation)**, ideally with some form of control or comparison group (not necessarily randomly assigned).	
	2. Process evaluation	to assess who is being reached, what factors influence the way that the stakeholders engage with, and potentially benefit from, the programme, including identifying whether there is evidence to broadly support the programme's theory of change.	Monitoring, **surveys after the programme activities** with wide range of stakeholders (young people and teachers), perspectives on impact gathered, potentially supported by qualitative data.	
	1. Monitoring and stakeholder feedback	to assess feasibility, monitor delivery and to identify improvements for the intervention.	Combination of **surveys and interviews or focus groups, may be in small numbers**, as well as activity monitoring reach.	

Which level of evaluation is appropriate for you?

	Appropriate when...	Not appropriate when...
Monitoring and feedback	• Piloting a new intervention • The intervention is light touch or involves a small number of participants • There is no, or limited, information on whether the intervention works	• Needing to demonstrate causality
Process evaluation	• Needing to understand more about how the intervention works • Developing an initial understanding of what type of impact the intervention may be having, including when this isn't yet clear	• Needing to demonstrate causality • The intervention is light touch
Impact evaluation	• Needing to understand the difference the intervention made to different population groups, if sample size allows • Data can be collected before and after the intervention	• The impact expected is unknown • The intervention changes over time • The intervention is light touch • Needing to understand and improve the quality of delivery is prioritised
Trial	• Needing to demonstrate a causal link between the programme and the outcomes • The delivery of the intervention doesn't change • Random allocation is possible	• Delivery of the intervention varies and is light touch • Interaction between a control and experimental group is expected • The intervention is delivered in a complex context

Evaluation design

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Evaluating with young people

When designing your evaluation, young people need to be at the centre of the evaluation choices you make from defining your key questions, to data collection and reporting.

- Who are the gate-keepers you need to involve?

- When would young people be able to take part in the evaluation?

- What resources would a young person need to participate in the evaluation?

- What can we expect a young person might know?

- Is the language you are using easy to understand for young people?

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Where to start when designing an evaluation?

Delivering

What does your programme do? → Develop a theory of change → Identify what to measure and how → Consider use and audience of evaluation findings

Adapting

Learning

Moving towards more complex approaches

Depending on the level that is most suitable to your STEM outreach, the following can be ways to move towards evaluating using more complex approaches:

- Review your theory of change

- Pilot an approach

- Don't try to do everything at once – focus on fewer questions to test

- Record lessons learned

- Consult with others in the STEM outreach sector

- Refer to best practices and resources

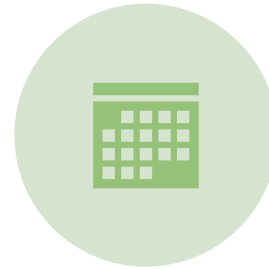- Work with independent evaluation experts

Evaluation plans

WHAT TO EVALUATE?

HOW TO EVALUATE?

WHEN TO EVALUATE?

WHO TO INVOLVE?

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Additional resources

- [Magenta Book: Central Government guidance on evaluation](#)

- [Bond: Choosing appropriate evaluation methods tool](#)

- [Better Evaluation: Rainbow Framework](#)

- [The Centre for Youth Impact: Resource hub](#)

- [Education Endowment Foundation](#)

- [Tomorrow's Engineers](#)

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