

Navigating a path to system impact:

Designing a strategic impact evaluation of education programs

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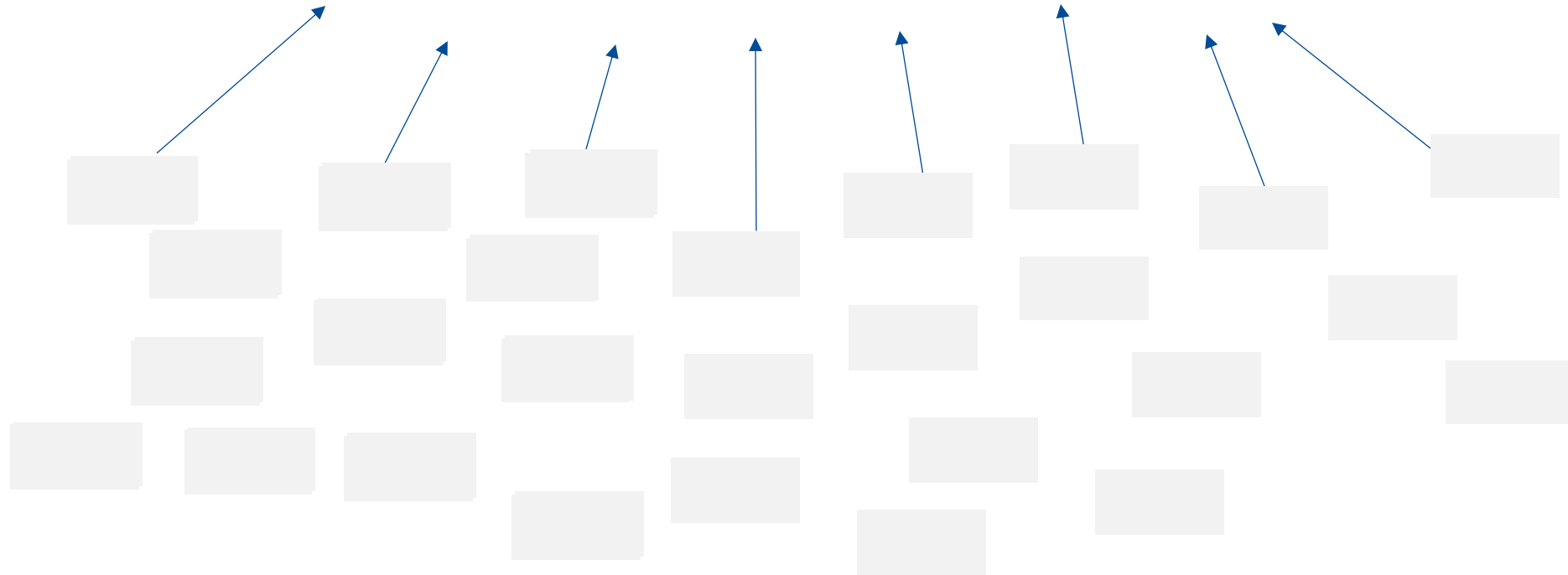


We wish to acknowledge the Wurundjeri Woi-wurrung peoples who are the Traditional Custodians of this land, and recognise their ongoing connection to land, waters and community.

We pay our respects to the First Australians, and their Elders past, present, and any first nations people joining us today and acknowledge the important role First nations people play as knowledge keepers and evaluators across the world.

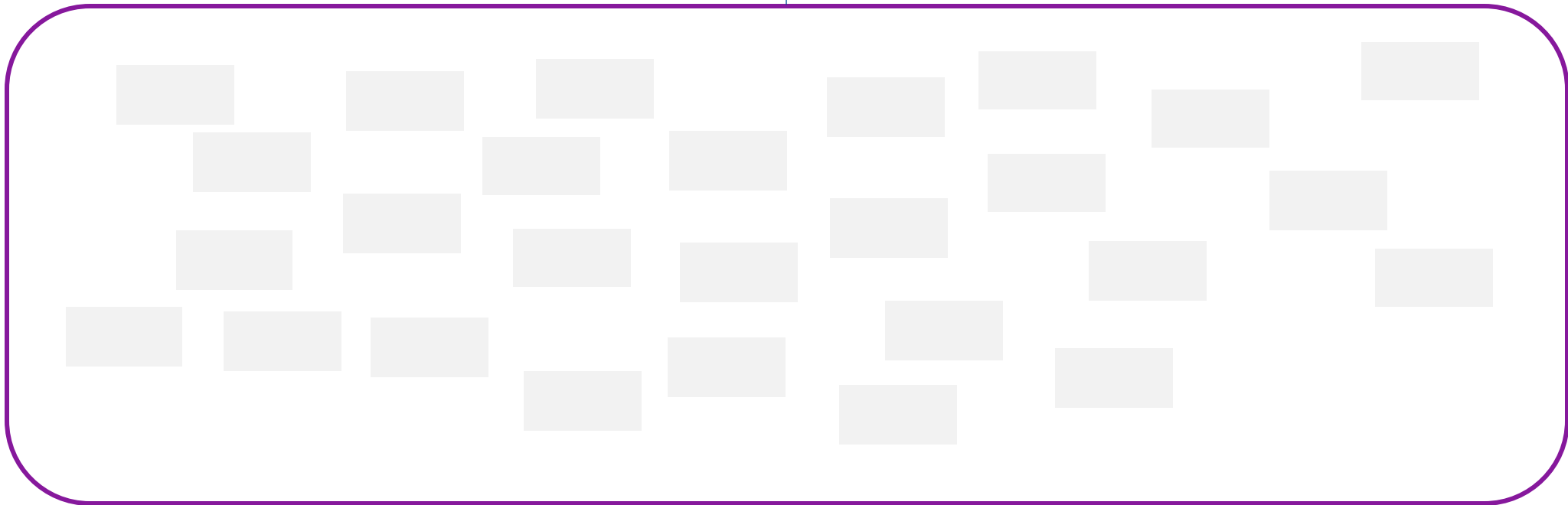
Imagine if...

Outcome: All children have access to an equitable and inclusive education



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Outcome: All children have access to an equitable and inclusive education



Overview

- 1 The brief
- 2 What informed our thinking
- 3 Key elements of the evaluation design
- 4 Lessons learned and next steps



1

The evaluation brief - What we've been asked to do



Evaluation objectives

Conduct a strategic evaluation of 27 education initiatives over 4 years

Objectives:

1. Understand the **holistic impact** of the education initiatives on 3 system outcomes
2. **Inform refinements** to policy and implementation
3. **Provide recommendations** on options for potential reforms to inform future investment decisions

Internal evaluation unit in DE engaged in February 2024 to lead the evaluation

Evaluation audience: DE policy and implementation areas and central agencies

Areas of enquiry



Alignment

Are we:
doing the **right things**?

Are they:
of **sufficient scale**?

Are there:
other things we
should be doing?



Implementation

Are the:
interventions being
delivered **efficiently**
and with **fidelity**?

How are:
they **interacting**?



Impact

What is:
the **cumulative** and
relative **contribution**
of interventions to
system outcomes?

What is:
the **value for money** of
these interventions?

2

What informed the evaluation design



Deep understanding of what we are evaluating

What we know:

- 27 initiatives introduced into the education system since 2019
- Wide variance in scale and nature of initiatives
- Differing levels of maturity
- Designed and rolled out separately
- More may be added over time if new interventions are funded

The evaluand is **not**:

- ❌ An individual intervention
- ❌ A package of interventions functioning together to generate specified outcomes
- ❌ The Victorian government school system

The evaluand **is**:

- ✓ Multiple interventions operating in the Victorian government school system (focusing on their cumulative effect on system outcomes, not the impact of any one intervention).

Assessment of relevant approaches and theory

Systems



- Results Based Accountability
- Complex systems approaches
- Systems thinking concepts and principles
- Systems Evaluation Theory

Impact



- Theory-based evaluation
- Realist principles - contexts, mechanisms
- Synthesis – qualitative and meta-analysis

Economic



- Quantitative Scenario Modelling
- Value for money analysis

Behaviour Change



- Behaviour change theory – Capability, Opportunity and Motivation (COM-B)

Principles for overall evaluation approach

Exploratory

Embrace a learning mindset to test and adapt evaluation activities over time

Interdisciplinary

Draw on a range of approaches, theory, methods and perspectives to reflect the complexity of the evaluand

Collaborative

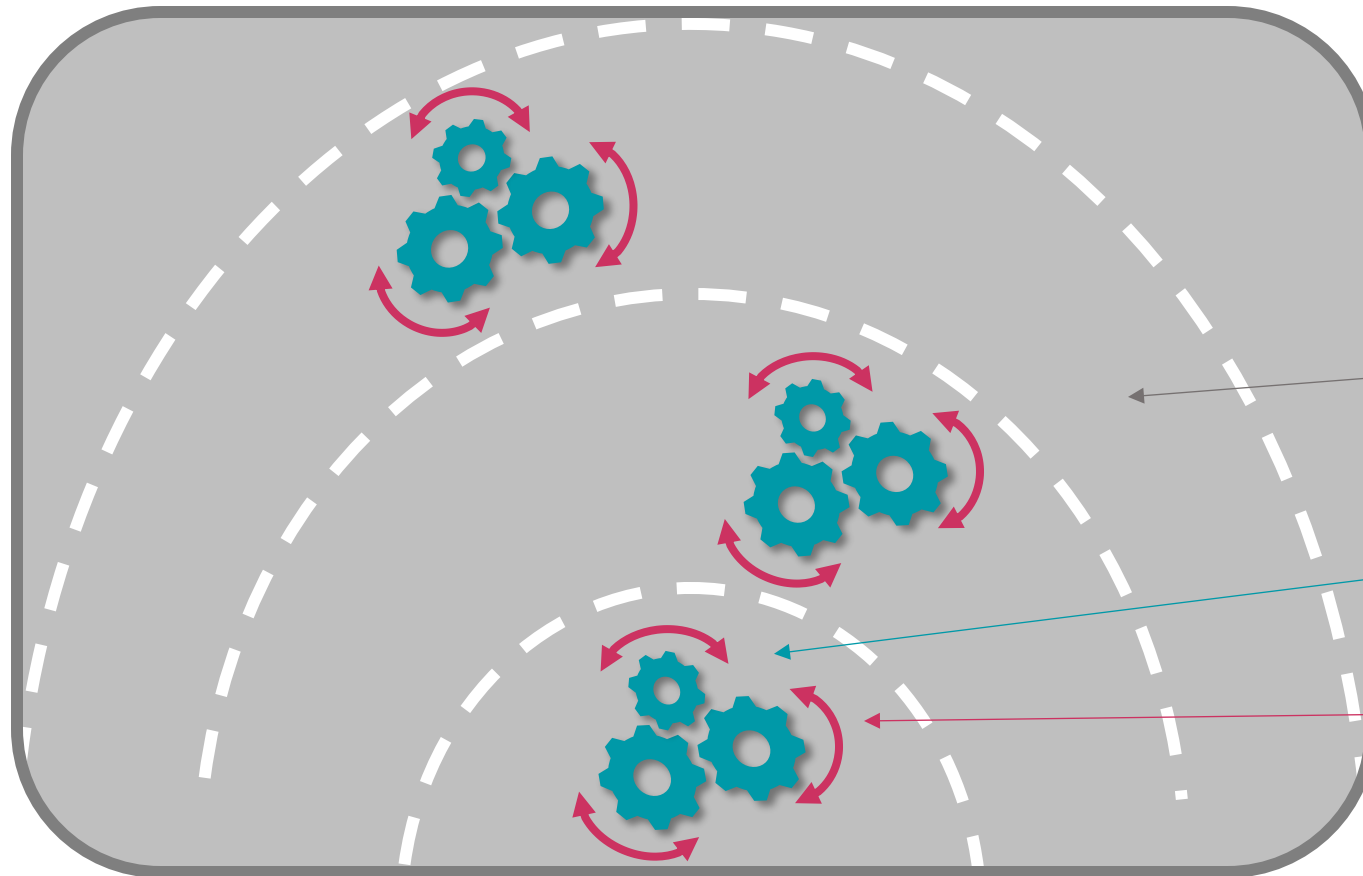
Use expertise of both internal and external evaluators to design and deliver evaluations that can tell a story of impact at the system-level

3

Key design elements



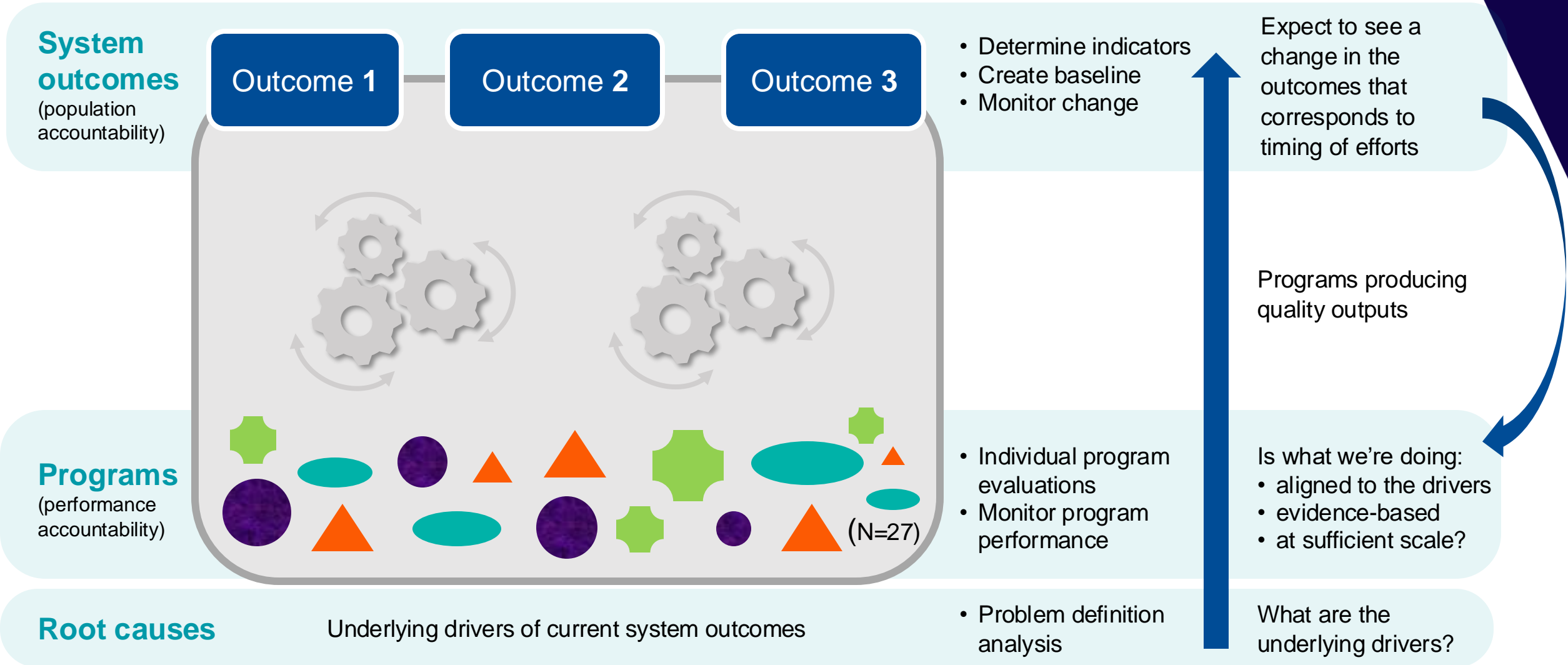
Systems thinking – start with defining the system



Define:

- Boundaries – Victorian Government School System
- Levels
- Actors
- Relationships
- Level of complexity - complex

Identify and monitor the system outcomes want to change – Results Based Accountability



Understand the interplay between interventions and the system – complex system approaches – (McGill et al 2020)

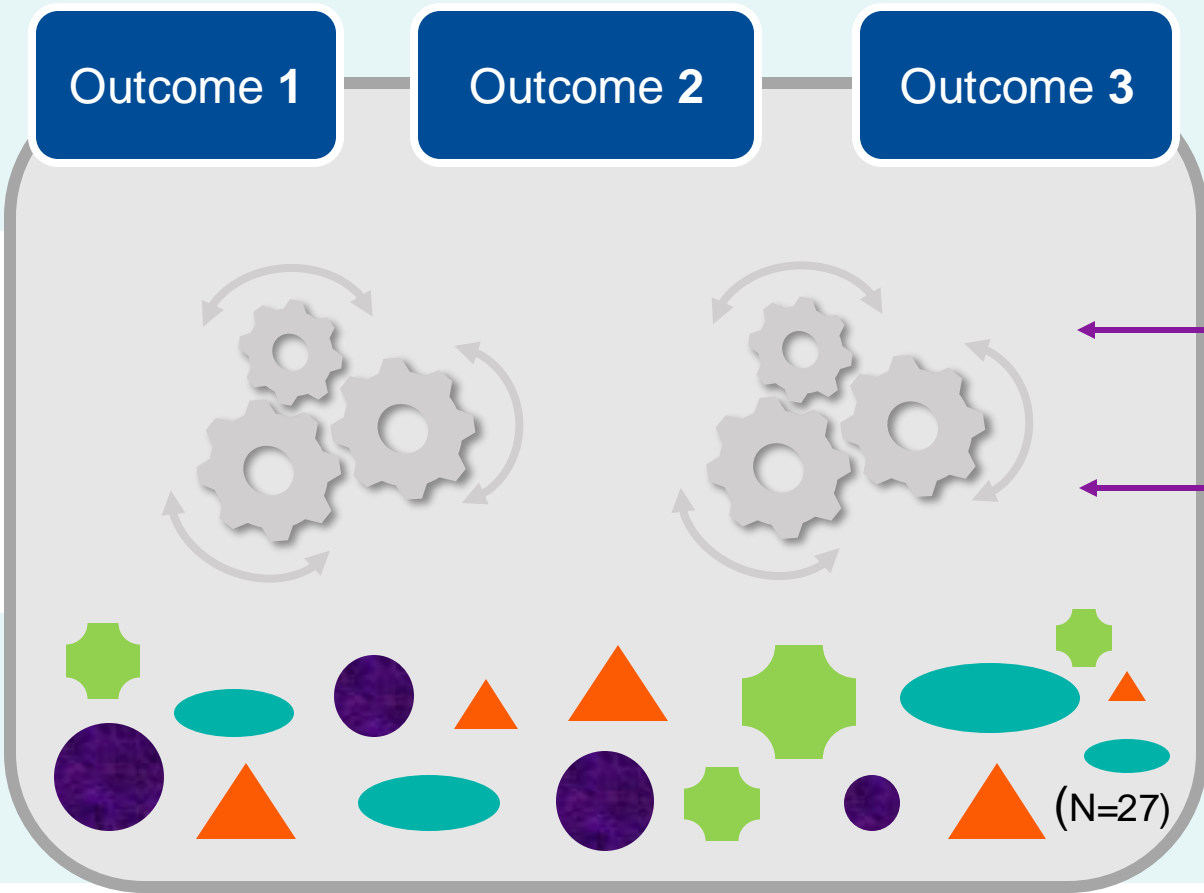
System outcomes
(population accountability)

Outcome 1

Outcome 2

Outcome 3

- Determine indicators
- Create baseline
- Monitor change



- Develop theory of change – preconditions/emerging hypotheses for system change
- Gather data on preconditions and hypotheses to test, refine and adapt understanding

Programs
(performance accountability)

- Individual program evaluations
- Monitor program performance

Root causes

Underlying drivers of current system outcomes

- Problem definition analysis

Theory of change - How we intend to use it:



Develop hypotheses

about how change may occur in the system to test through data collection



Support thinking about system conditions

and how they influence outcomes – e.g. assumptions, external factors



Understand how the programs relate

to one another and interact in the system

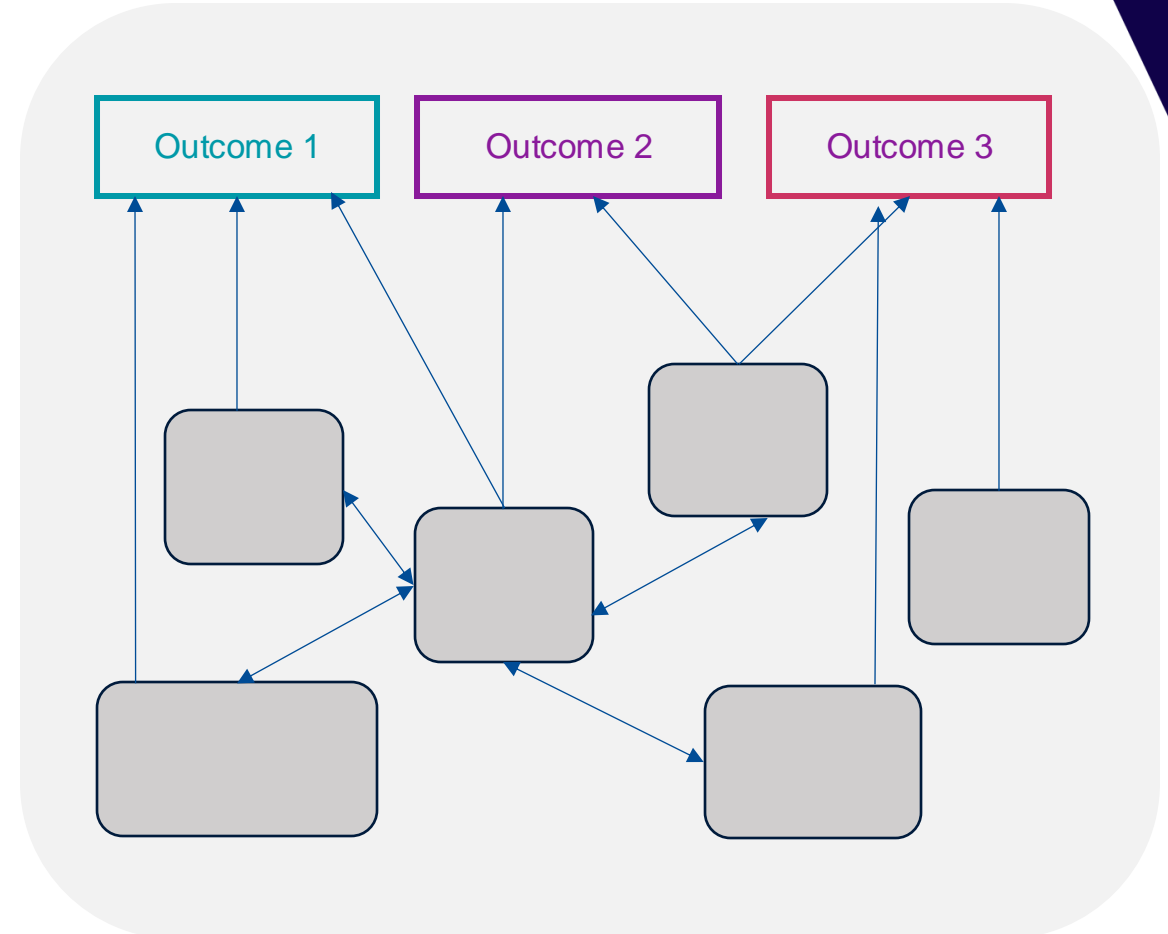


Identify common outcomes

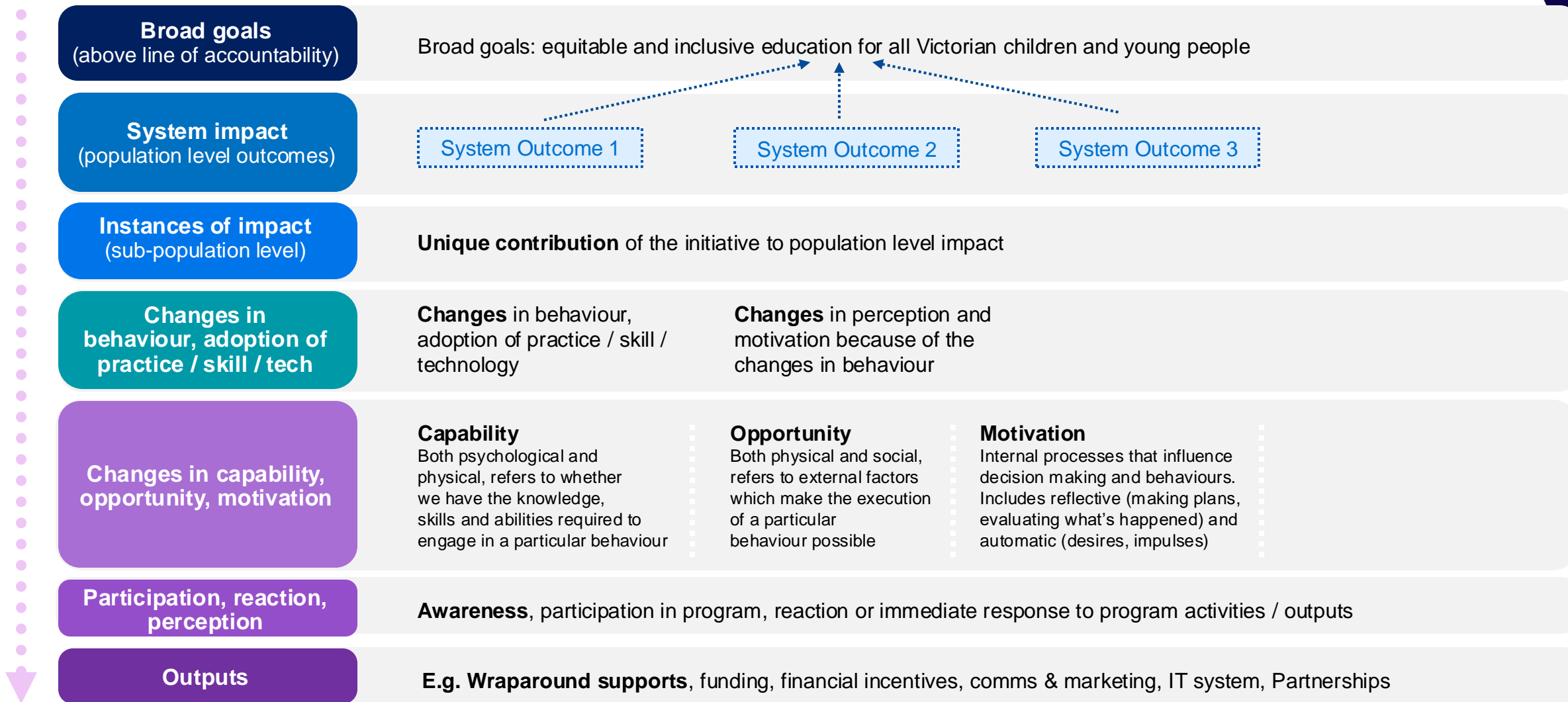
and measures to build into program-level evaluations to support synthesis

Development of theory of change

- ▶ Development of **individual outcome hierarchies** (bottom-up process)
- ▶ Development of **framework for the overarching Theory of Change** (top-down process)
- ▶ **Populated** framework to consolidate:
 - Categories of outputs
 - Sufficient and necessary common outcomes, and any critical assumptions linking preconditions across groups of initiatives
 - Drawing (solid and dotted line) 'causal' pathways
- ▶ **Initial output:** PowerPoint and Word versions of vertically oriented theory of change



Skeleton theory of change (top-down)



Overall goals (above line of accountability)

System impact (population level outcomes)
(May be out of scope)

Business of Impact (intermediate level)
What is the nature, contribution of the initiative to system level outcomes?

Prevention
How do we prevent or support avoidance of the target outcome?
What are the key risk factors, what are the protective factors, what are the key enablers?

Management
What capability and support structures are in place to deliver the initiative and support the system level outcomes?
What are the key enablers, what are the key barriers?

Implementation
What are the key enablers, what are the key barriers?
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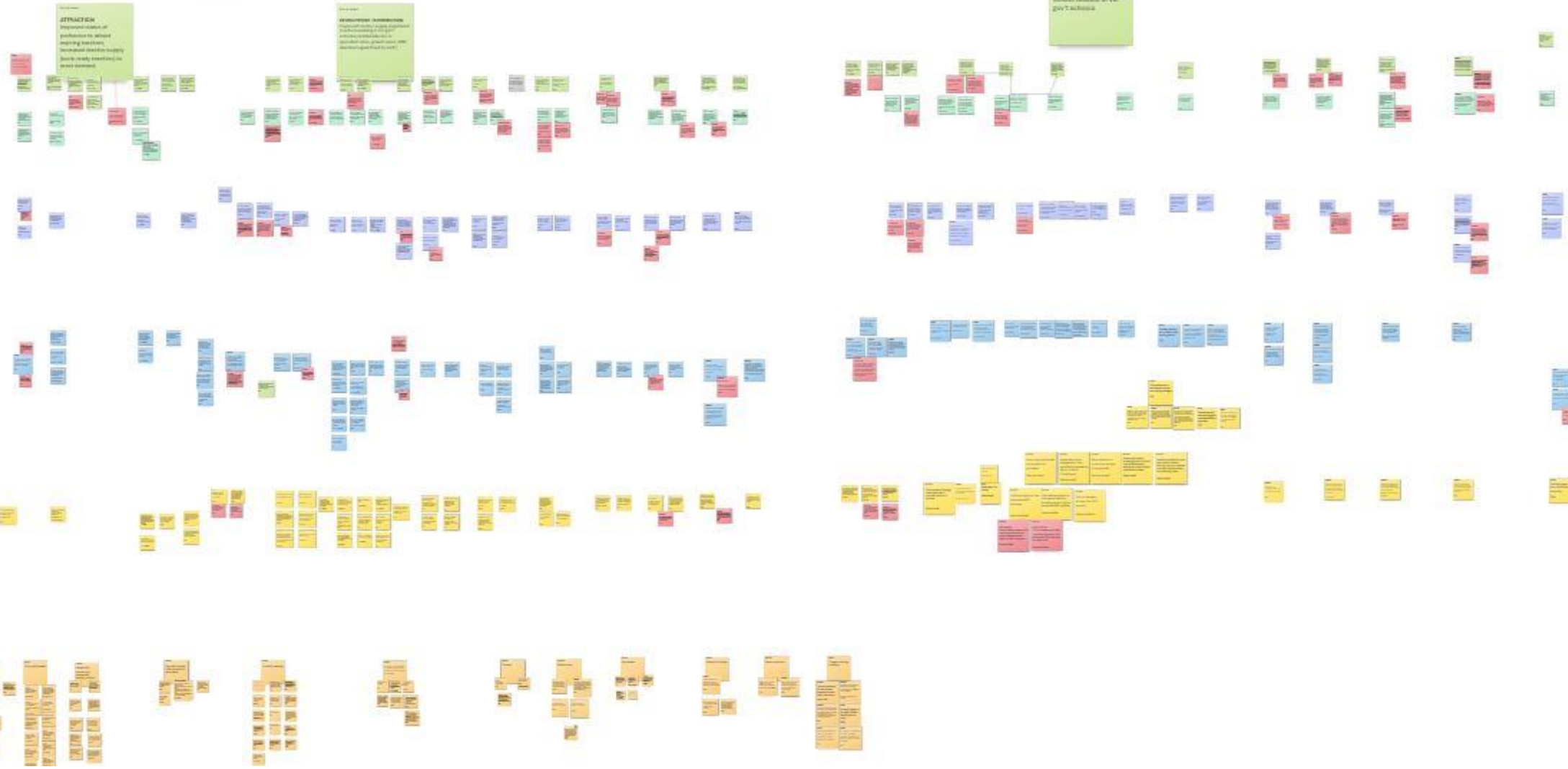
Outcomes
What are the key enablers, what are the key barriers?
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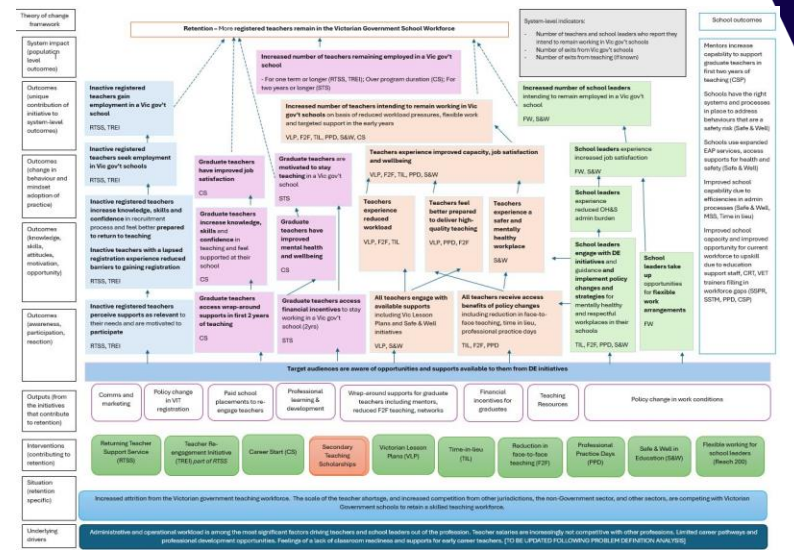
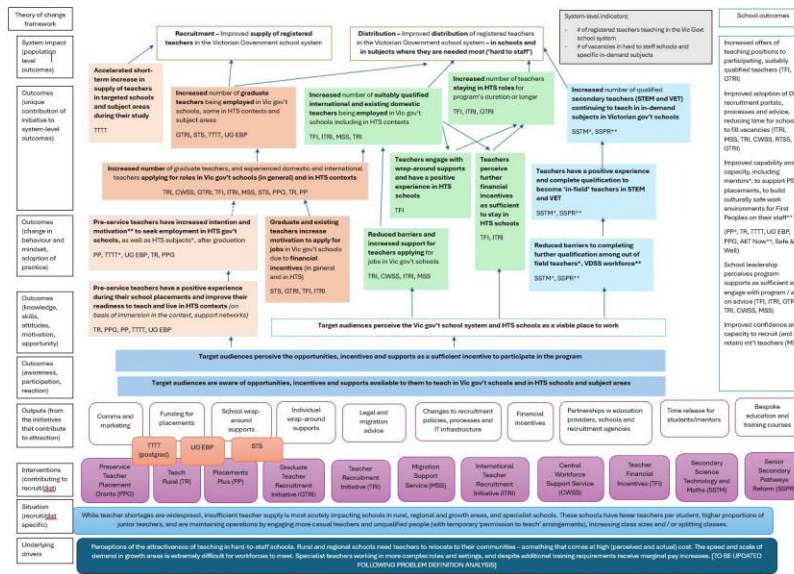
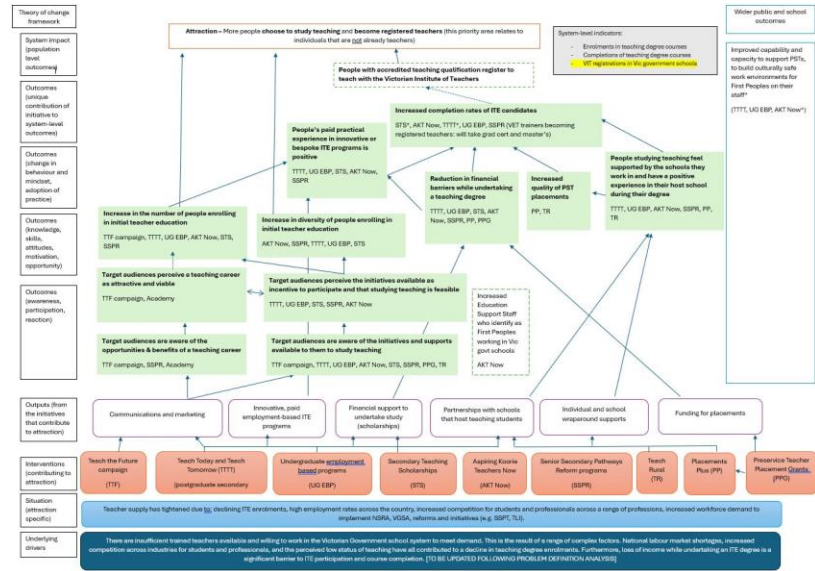
Output categories (types of interventions)

Enablers and support structures (organisational, financial, human resources)

Strong evidence (highly effective interventions)

INITIATION
Reduction of Year 12 school leavers in Victorian schools





Uses of theory of change (so far)



Understand

how the programs interact and relate to one another

Emerging use. Mechanisms, common outcomes at target cohort and school levels require refinement. Need to better represent interactions



Identify

common outcomes and measures to build into program-level evaluations to support synthesis

Yes, being used to align initiative level ToCs, and as framework for feasibility study



Develop

hypotheses about how change may occur in the system to test through data collection

In early stages. Need to better map system elements and relationships to test and refine thinking



Support

thinking about system conditions and how they influence outcomes – e.g. assumptions, external factors

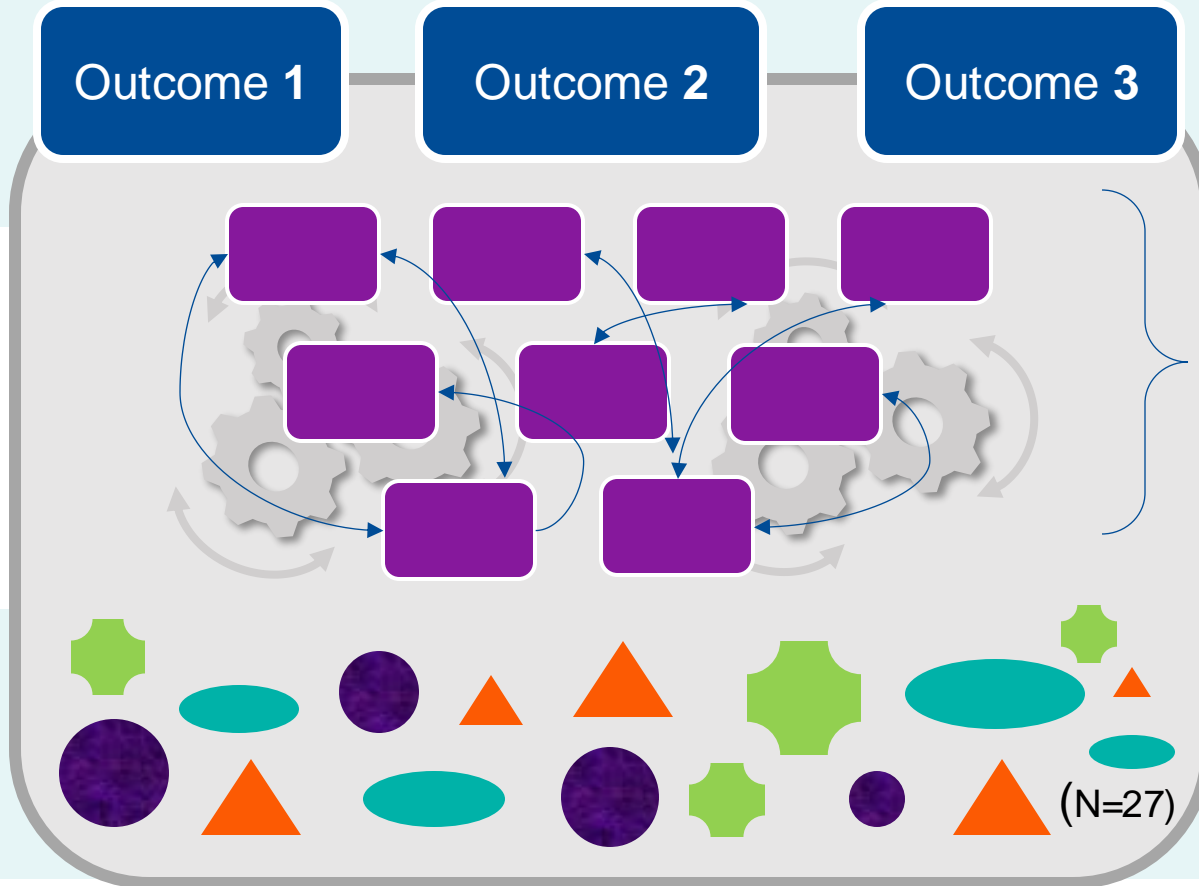
Complex Systems Approaches – Quantitative methods

System outcomes
(population accountability)

Outcome 1

Outcome 2

Outcome 3



- Determine indicators
- Create baseline
- Monitor change

- Theory of change
- Interactions between interventions and the system

- Individual program evaluations
- Monitor program performance

Programs
(performance accountability)

Root causes

Underlying drivers of current system outcomes

- Problem definition analysis

Quantitative impact and value for money methods

Quantitative modelling and value for money

- Feasibility study to identify what quantitative methods are possible and which are recommended to assess impact and value for money

Quantitative Scenario Modelling

Modelling impact of interventions compared with different scenarios

Quantitative meta-analyses

Combining quantitative data from program evaluations

Economic evaluation

Value for money analyses

- CBA?
- Cost-effectiveness analysis?

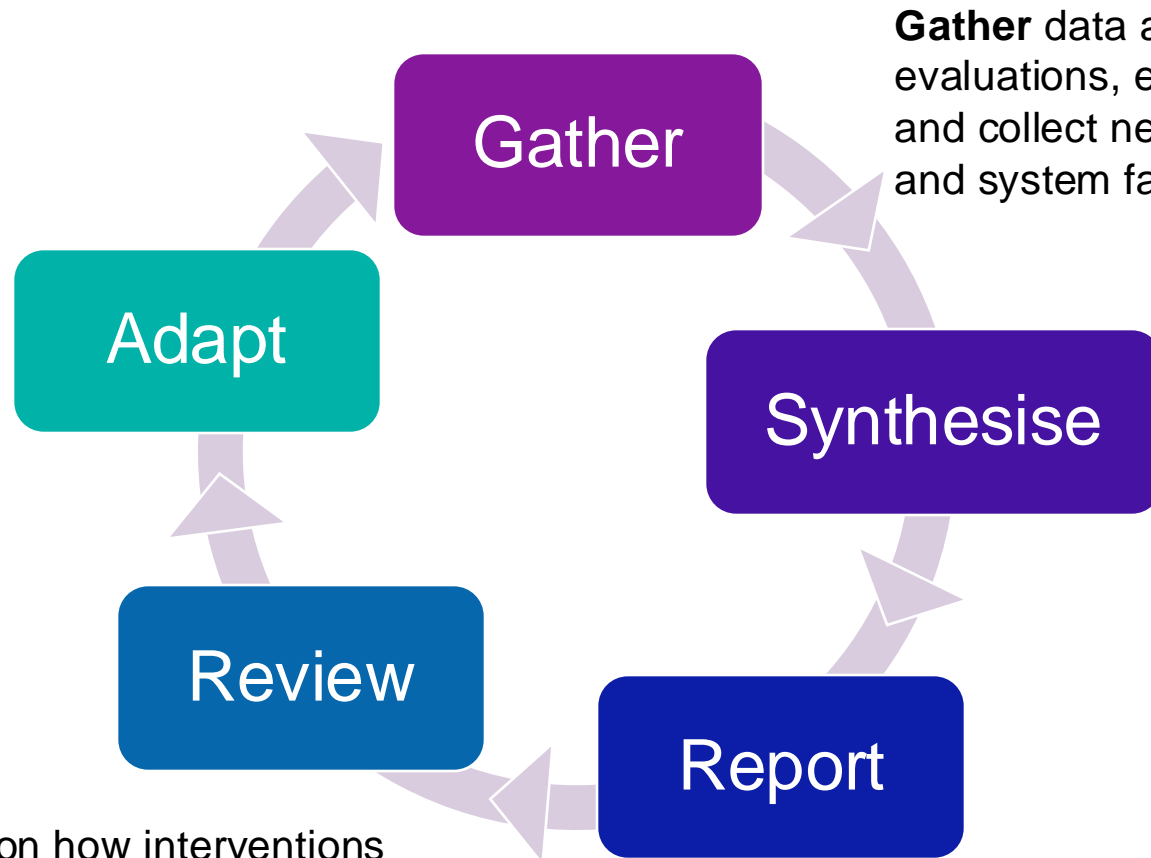
- Report will determine what is and what is not feasible and provide an implementation plan for recommended methods including what data needs to be collected.

Bringing it all together - synthesis and reporting cycles

Adapt and refine approach as we learn more about the system and interventions

Review:

- Learnings on how interventions interacting within the system
- Effectiveness of methods



Gather data and evidence from program evaluations, existing system data sources and collect new data on theory of change and system factors

Synthesise:

- Program data
- System data
- Program evaluations
- Primary data collection on ToC and system factors
- Results of quantitative modelling and value for money analysis

Report on key areas of enquiry:

- Alignment
- Implementation
- Impact

4

Lessons learned and next steps



Lessons learned and challenges

- Representing and communicating complexity
- Integrating strategic evaluation activities in program evaluations
- Stakeholder buy-in and engagement
- Central agency understanding of impact



Next steps

- ▶ **Evaluation plan**
will be finalised once feasibility study is complete
- ▶ **Interim report**
on findings to date – alignment, program evaluation synthesis
- ▶ **Refinement**
of theory of change, including systems map
- ▶ **Delivery of next phase of evaluation**
internal and external



Questions?



References

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