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**Using logic chain and theory of change tools to evaluate
widening access, student success and progression**



@ProfLizThomas

Introduction

- About me: PhD in evaluation and development management programme.
- Programme theory evaluation tools and the development sector.
- WPLL Journal: Using logic chain and theory of change tools to evaluate widening participation: Learning from the *What works?* Student retention and success programme.
- What works and related projects.
- Current evaluation projects.

Overview of session

- Evaluation challenges and the value of programme theory evaluation.
- Logic chains
- Theory of change
- Indicators
- Evidence
- Baselines
- Unintended consequences



**Sharing and
participation**

Evaluation challenges

- What are your evaluation challenges?
 - Clarity of purpose
 - Time lag
 - Causation/attribution

Why programme theory evaluation?

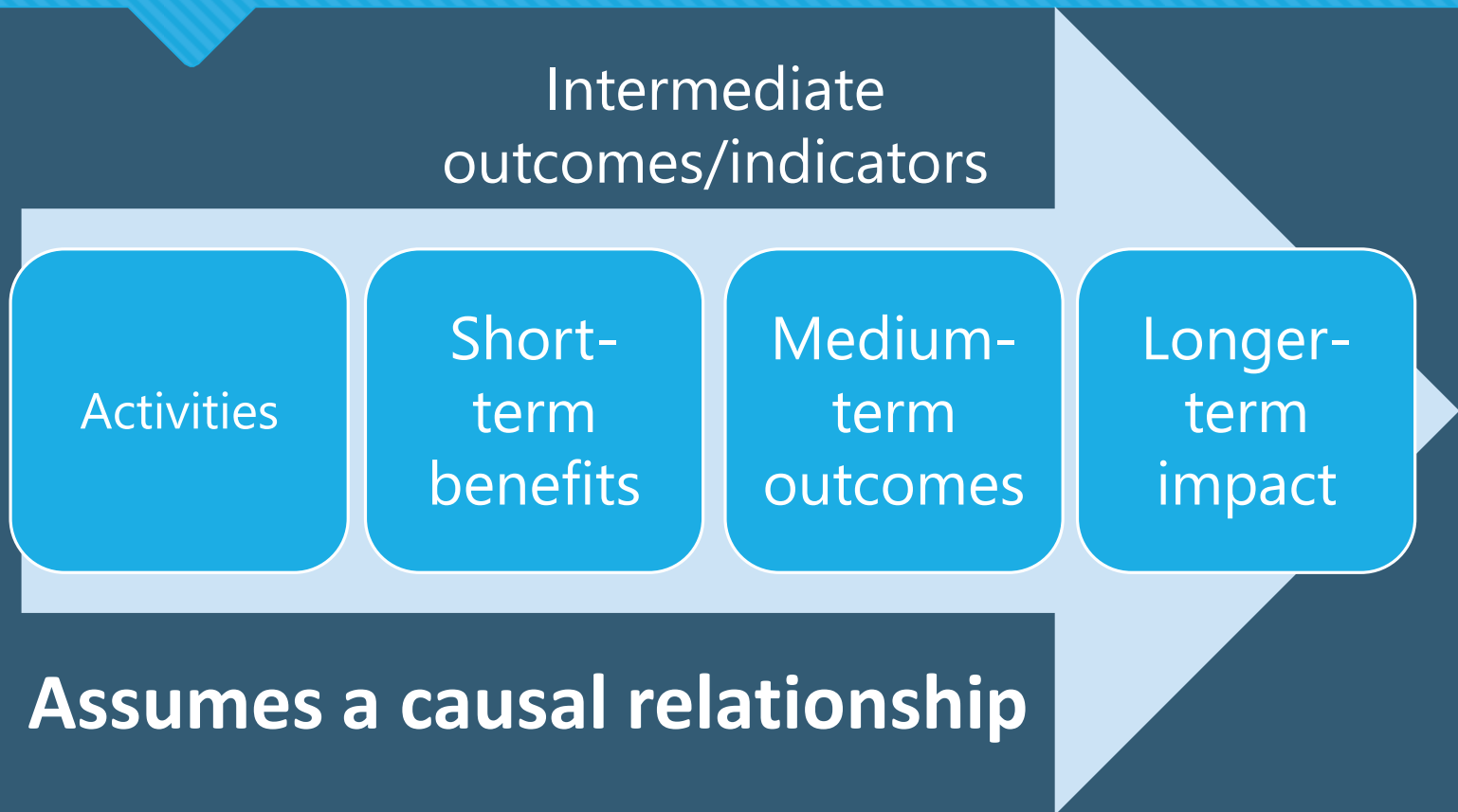
Programme theory evaluation is a group of tools that:

- Have a clear focus on impact evaluation.
- Builds in the 'time-lag' to the process.
- Test whether a programme or intervention is designed in a way that it can make an impact.
- Many of the tools developed in the context of overseas development, addressing complex and entrenched issues.
- Strong emphasis on stakeholder involvement.
- Logic chains and theory of change are two examples.

Theory of change and logic chains

- These tools assume activities are implemented to create a positive impact (e.g. on access or success), rather than simply for compliance.
- Logic chains and theory of change are intended to help make the relationship between activities/outputs and impact explicit, and to identify interim outcomes or steps that indicate progress towards longer term goals.
- It begins with a prediction of how you will reach your longer term aims, mapping progression from activities to outcomes to impact.

Logic chain



Logic chains and Theory of Change

- The **logic chain** sets out how change is expected to happen.



- The ToC works in a similar way, identifying a series of '*if...then...*' statements: activities and outcomes which you think will lead to longer term outcomes.

Theory of change narrative

If the activity is delivered as planned then students can participate. If students participate in this activity then they will gain the following immediate benefits. If they have these benefits then they will have [medium term outcomes]. If they have these medium term outcomes then they will have the following longer term impact(s).

Benefits of this approach

- Makes ideas, relationships and assumptions explicit, so they can be shared and tested, and you're all working with the same view of the intervention.
- Review whether activities make sense, given your goals;
- Ensure that the activities together achieve your longer term goal;
- Identify if there are activities that are not required;
- Identify term outcomes and indicators of intermediate success.

Let's practice...

- Mentoring of school students by university students
- How does this widen access?
- Can you create a theory change statement '...if this..., then this...' for your own work?

Theory of change narrative: Mentoring

If school students are mentored by HE students 'like them', then they will view HE as a possibility. If they continue with the mentoring, then they will understand the requirements and benefits of HE entry. If they view HE as a possibility, and understand the benefits and the requirements then they are more likely to apply to HE. If they apply to HE some of them will be admitted.

Theory of change narrative: Mentoring

If school students are mentored...

What happens if their
parents don't think
there is any value to HE
participation?

What happens if they
don't get the academic
grades?

*...and the students then
they go on to apply to HE. If they apply to
HE some of them will be admitted.*

Logic chain: Anticipated causal relationship

Mentoring
school
students

Awareness
& under-
standing

Students

Students

What happens when
they get to HE if the
transition is too
difficult?

How do we support
these students to be
successful in HE?

tutor

ve

Students
get the
entry
grades

Students
admitted
to HE

What works? Student retention and success

Phase 1



Phase 2



What works process

Implement-
ation
(activity)

Engagement
and belonging
(outcomes)

Retention and
success
(impact)

S t r a t e g i c e n a b l e r s

Logic chain: Anticipated causal relationship

Inter-
ventions

Changed
attitudes/
behaviour

Engage-
ment &
belonging

Retention
& success

Make data
available

Staff use
data to...

Engage-
ment and
belonging

Retention
and
success

Transition
activities

Students
make
friends

Engage-
ment and
belonging

Retention
and
success

U n i n t e n d e d c o n s e q u e n c e s

Indicators and methods

- Indicators are a way of testing whether your theorised change(s) have occurred or not, and understanding progress towards your longer term impact, or understanding why things have not worked.
- Indicators must relate to the change you are expecting (often people measure outputs not outcomes, i.e. that activity has occurred rather than the change/benefit it is expected to result in).
- Indicators should use evidence and information that is available as far as possible, and only collect essential new evidence.

Indicators: Dials or tin openers?

“It is helpful to think of performance indicators as being used either as dials or as tin openers. Implicit in the use of performance indicators as dials is the assumption that standards of performance are unambiguous, implicit in the use of performance indicators as tin openers is the assumption that performance is a contestable notion.” (Carter, 1989)

Using indicators as tin openers allows us to understand more about what is happening and why, to improve practice and to build the evidence base for other interventions, including positive action

Sources of evidence (examples from learning enhancement)

Think creatively about the evidence you already have. During interviews a wide range of suggestions were made, including:

- Module evaluation forms and student feedback on courses
- Institutional surveys, including additional questions, free responses
- Minutes from staff-student liaison meetings and other committee meetings
- Staff applications for promotion or AdvanceHE fellowships
- Institutional data: attendance, continuation, progression, number of submissions, attainment, resits, VLE engagement
- Staff annual monitoring / review of own performance, course, etc
- Course documents, periodic review, quality processes, TEF narratives
- Withdrawal reports
- Student-led teaching award nominations

What evidence do you already have?

Your ideas

Baselines

- **Historical**, i.e. with previous years, ideally an average from 2 or 3 years previous. This is useful for whole institutional changes, or if no suitable comparison can be made.
- **Comparative**, e.g. with other courses or student groups or staff groups. The comparative group needs to be sufficiently similar, e.g. entry criteria, background characteristics etc.

Logic chain, evaluation methods and indicators

Activities
delivered

Attitudes/
behaviour
changed

Students
engaged
and
'belong'

Improved
retention
& success

Monitor or
observe

Staff/
student
feedback

E&B
survey

Institution
data

No. of
activities
delivered

Quantity
or quality
of change

Levels of
E&B
increase

% change
in specific
indicators

Transition example: Narrative

If the induction activities are embedded into the core curriculum at the start of the academic year, then all students will have a clearer understanding of the expectations on them, and they will develop the skills they need to be successful. If students understand what is expected of them and have the skills, then they will be confident and capable and they will attend and engage in sessions and assessment. If they engage then attainment and retention will improve.

Transition: Logic chain, methods and indicators

Embed
induction
into core
module

Expectat-
ions and
skills

Students
confident,
capable,
engage

Improve
retention
& success

Module
handbook

Staff
feedback
& module
evaluation

Staff and
student
feedback,
data

Institution
data

Number
of sessions
delivered

Report
improve-
ment

Attend-
ance and
engage-
ment

Attain-
ment &
continu-
ation rates

U n i n t e n d e d c o n s e q u e n c e s

Transition example

Delivery of induction information and academic literacy takes place throughout a core module

Students confident, capable, engage

Improved retention & success

Staff and student feedback

Institutional data

Number of sessions delivered

Report improvement

Attendance and engagement

Attainment & continuation rates

U n i n t e n d e d c o n s e q u e n c e s

Transition example

Embed
induction
into core
module

Module
handbook

Number
of sessions
delivered

The module was really effective – based on feedback from staff and module evaluations from students. They said that it was very useful.

Report
improve-
ment

Attend-
ance and
engage-
ment

Improved
retention
& success

Institution
al data

Attain-
ment &
continu-
ation rates

U n i n t e n d e d c o n s e q u e n c e s

Transition example

Embed
induction
into core
module

Expectat-
ions and
skills

Improved
n

Module
handbook

Staff
feedback
& module
evaluation

ed

Number
of sessions
delivered

Report
improve-
ment

Attend-
ance and
engage-
ment

Attain-
ment &
continu-
ation rates

Attendance was
excellent because there
were 5 formative tasks
that had to be handed
in during the sessions.

U n i n t e n d e d c o n s e q u e n c e s

Transition example

Embed
induction
into core
module

Expectat-
ions and
skills

Students
confid
ca

The pass rate was
pleasing (only 30 out
of 278 registered on
the module failed =
10.8%).

Module
handbook

Staff
feedback
& module
evaluation

Continuation
improved from
84% to 91%.

Number
of sessions
delivered

Report
improve-
ment

Attend-
ance and
engage-
ment

Attain-
ment &
continu-
ation rates

U n i n t e n d e d c o n s e q u e n c e s

Transition example

Embed
induction
into core
module

Expectat-
ions and
skills

Students
confident,
capable,
engage

Improved
retention
& success

Smaller groups worked well but a few students complained about inconsistency between groups. We are addressing this.

Staff reported improved standards of work in other modules, but some students didn't transfer what they had learned to other modules.

U n i n t e n d e d c o n s e q u e n c e s

Your examples of indicators, methods and baselines

	Short-term benefits (indicators, methods, baseline)	Medium-term outcomes (indicators, methods, baseline)	Longer-term impact (indicators, methods, baseline)
Access			
Success			
Progression			

Conclusions

- Programme theory evaluation tools help to focus on impact, address the time-lag problem and provide an explicit focus on causality.
- They also provide a way to test and improve your approach or intervention.
- The concepts are straight forward, putting them into practice is more difficult, but dialogue is really helpful.
- Hopefully this conversation and the examples are useful.

Thank you

- Thank you for listening.
- Please get in touch if you would like to discuss anything:
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