

Logic Models: Tools to make us better at what we do

My name is Catherine Bisset and I'm an analyst in Justice Analytical Services at the Scottish Government. I wrote this blog to describe how logic models can make us better at what we do.

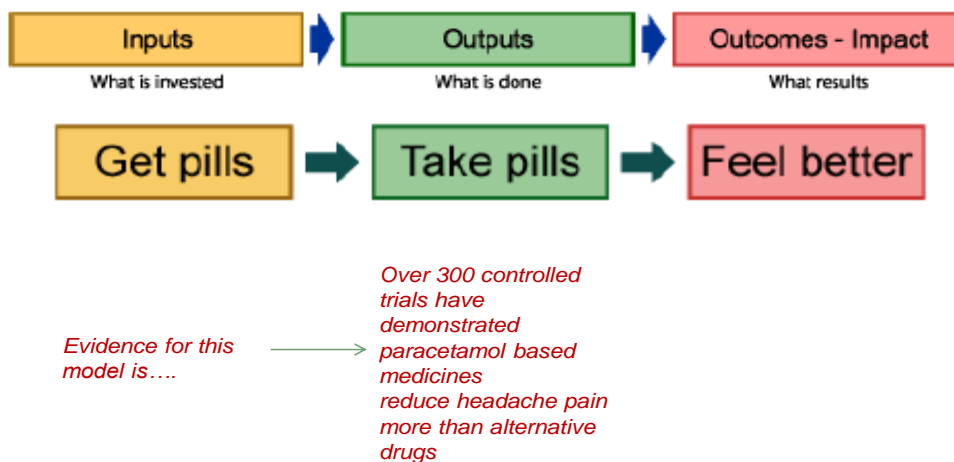
What is a logic model?

A logic model is a graphic showing how a set of actions should lead to a result. No matter how complex they are, the basic principal is as simple as that.

Here's a simple logic model for curing a headache which is grounded in strong evidence. This means that it should work if I take the right pills and follow the instructions on the leaflet – in other words, implement the model well.

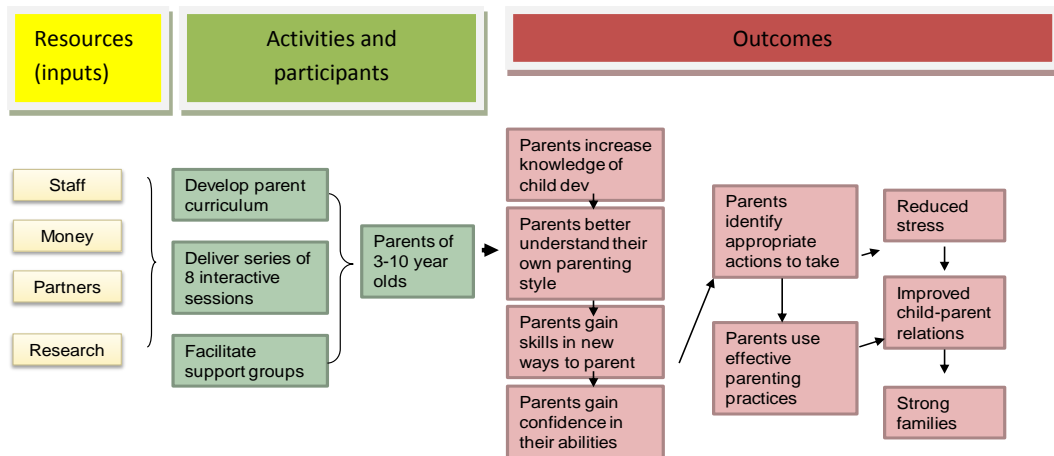
A VERY SIMPLE EVIDENCE-BASED LOGIC MODEL

E.g. Logic model for headache:



In the world of work, logic models are often used to describe how a service or interventions should contribute to outcomes and much more....

Here's a very simple model of a parenting intervention:



SOURCE: University of Wisconsin

Some of the benefits of logic models

Logic models can illustrate that even the smallest role is meaningful in the bigger outcomes picture.

Scotland is a small country with a proliferation of services, interventions and individuals who are all trying to make a difference. By linking even simple tasks to bigger outcomes it should focus what you're doing on helping to achieve an ultimate goal and in doing so, make what you're doing more meaningful.

Just by way of illustration, I'm a backroom analyst who spends most of my time sending lots of emails and trying to make sense of research reports, so it's easy to lose sight of what I'm doing and why. For my own sanity it's important to connect what I do with a higher purpose. I'm basically paid by the taxpayer to reduce reoffending, but what exactly is MY role – my contribution to that goal? I'll let you know when I figure it out, but it must be something to do with promoting the use of robust evidence which should make interventions work more effectively, and that should contribute to reducing reoffending in the longer term?!

Why logic models are really useful

A highly attractive aspect of logic models is that we'll already be familiar with them. We use them every day without realising it.

If you've ever asked yourself the questions 'what am I doing, why am I doing it and have I succeeded?' then you're doing a logic model in your head - all the diagram does is **MAKE IT EXPLICIT**.

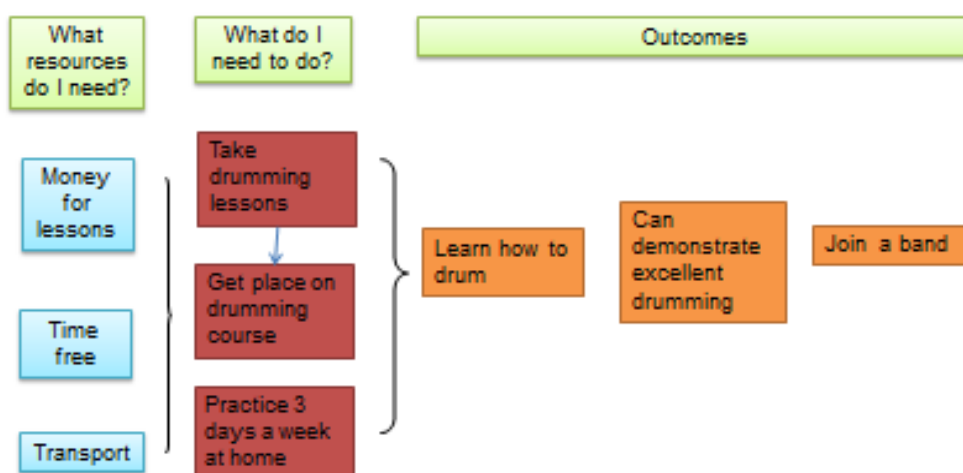
Let's take a real life example. My daughter decided (this week) that she wants to be a drummer in a band. Like most kids, she seems to think this will just happen naturally.

If she could sit still for five minutes, I would explain this to her:

- So you want to be a drummer, huh? (This is called an outcome in logic model jargon)
- So, you can't be a drummer unless you can play the drums, right?
- So it follows that you need to know how to play the drums.
- So we need to book you onto a course to study drumming
- But you need to get onto the drumming course (which is highly competitive) in the first place
- So I need to take you to drumming lessons to get onto a course because this will give you a better chance of passing the entrance exam
- So for any of the above to happen, I need to have the money to pay for these lessons, a car to drive you there, and the time to fit it all in

I can easily turn this sequence of events into a logic model:

Logic model for my daughter's plan for rock superstardom

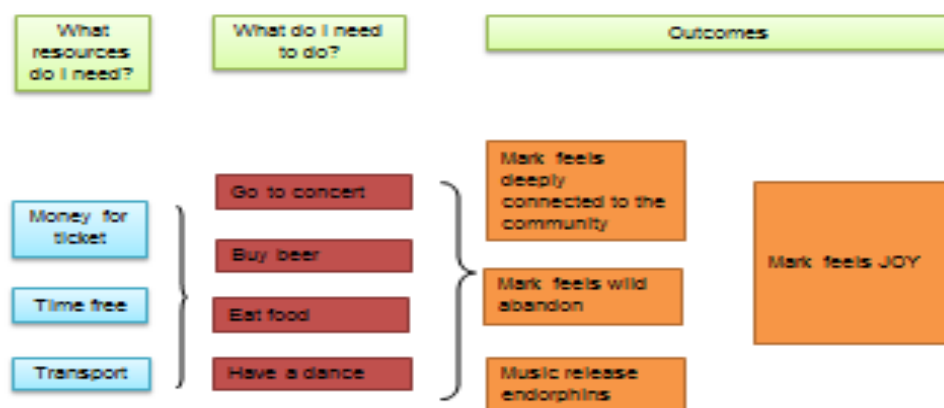


Let's get the criticisms of logic models out the way

Criticism 1: Logic models are too simplistic

A fairly common criticism, and one expressed by a creative academic pal of mine is that logic models are 'too reductionist and simplistic to capture complex human experiences and emotions. How can a logic model capture how going to a concert can create feelings of intense joy?' Always up for a challenge, I gave it a go.

Logic model for Mark's Joy



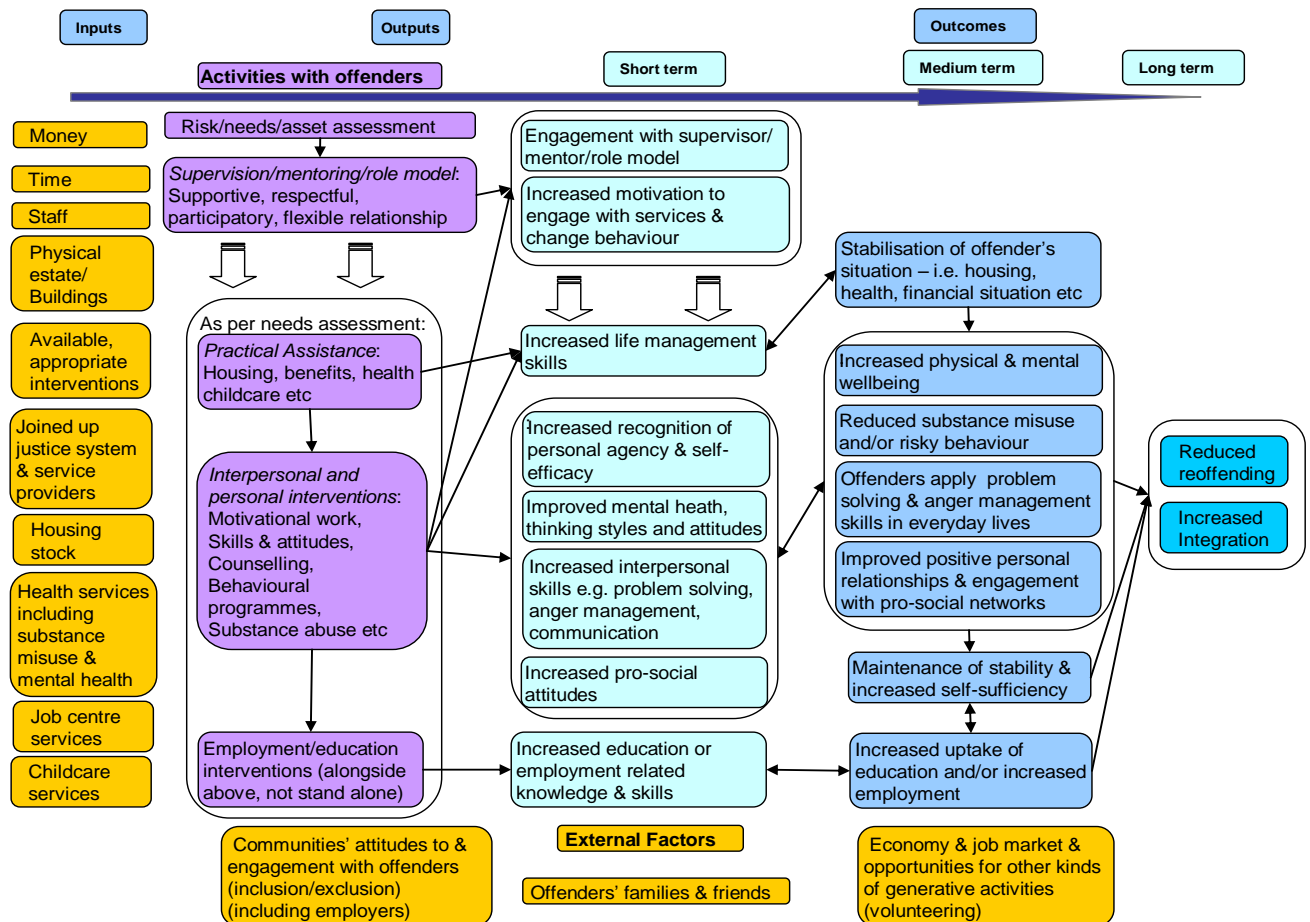
Criticism 2: Logic models are bureaucratic and just add to our mountain of paperwork

I absolutely used to believe that too. The sheer volume of paperwork in the public sector is mind-boggling and I've always been in favour of stripping it back. But here's the thing: Logic models should actually be able to reduce some of this paperwork.

Logic models are often done and dusted on one to two pages and you know what they say – a picture can speak 1,000 words. So, could they reduce pages and pages of text to just one? Yes they can - I've done it.

I know the logic model below looks terrifying but it's just an illustration of how a 60 page document (a review of the evidence on 'what works' to reduce reoffending?) can be distilled into one page and still make sense. In fact, you could argue that by expressing the link between activities and outcomes, it makes more sense than a rambling 60-pager!

High Level Reducing Reoffending Logic Model



So to summarise, you might hate the idea of reducing this magical world to a one page summary of boxes and arrows, but if you believe in strategy then you believe in logic models.....after all, as someone once said - a goal without a plan is just a wish.

How can logic models make us better at what we do?

Make sure you use them!

Before I share my ideas on how logic models can help us in our work, I have to say something up front. If you create a logic model then leave it on a shelf and forget it exists, then your stunning logic model is about as useful as a chocolate microwave. But I have seen logic models used as invaluable tools when it comes to focussing organisations on doing things that should make a difference. On the flip side, it is equally as important to use them to strip out existing activities that won't make a difference to outcomes - basically logic

models could also give you a rationale to STOP doing things altogether, or improve what you're doing by aligning your work more closely to outcomes.

I've run a number of logic modelling sessions with organisations over the years and one recurring theme is that practitioners often find it difficult to clearly define/describe the activities they carry out. Activities are often a bit 'fluffy' and amorphous making it tricky to connect them (either by logic or evidence) with a clear intended result. If you find this to be the case, it signals that you need to think about injecting more structure and purpose to what you do with people, and consider the impact your work is having or may not be having.

Logic models and contribution to outcomes- we can't do this alone!



Logic models have helped me appreciate something more fundamental about complex social concepts - that long lasting social change cannot be achieved by single organisations. We are only likely to improve lives in the longer term through a collaborative effort from a range of parties who all have a distinctive role to play. Some jurisdictions still require individual funded organisations to 'prove' they have 'reducing reoffending' but when you draw a logic model and look at the international evidence, it's obvious that a range of organisations, communities and individuals (even me) are involved in achieving that goal. A logic model not only sets out YOUR contribution, but in setting out the actions/activities it describes explicitly what OTHERS have to do to contribute to help us achieve long lasting social change.

Logic models can be used to help individuals too

Feedback from evaluations have lead me to speculate whether logic models could make individual needs assessments shorter, more outcome-oriented and **more explicit about what needs to be done to help people**. In other words, they could assist practitioners to analyse the information rather than just present it descriptively. Needs assessments often generate masses of critical information about a person - their circumstances, background and needs - but I do worry that decision-makers sometimes struggle to know how to interpret or act on all the detail. Irrespective of what tools are used to identify need, perhaps the information could be presented in the following structure, which is a variation of a typical logic model:

1. **Need or issue identified**
2. **Action required to address need**
3. **Is action feasible (are resources available?)**
4. **When action needs to happen (date)**
5. **Short term desired outcome or result (e.g. attitude change or increased awareness or knowledge)**
6. **Longer term outcome that action will contribute to (e.g. reduce risk of reoffending)**

Strengths can also be incorporated into this sequence. For example, certain positive factors can help mitigate need so practitioners can describe exactly how these strengths will be mobilised under the action heading.

The main thing is that the person reading the assessment and making decisions based on the content can clearly see what the issue is, what needs to be done, by whom and what outcomes are expected.

Logic models can be used by funders as well as interventions

There is now a wide-spread understanding that we need to target funds on activities that should contribute to achieving outcomes. To this end, funders and commissioners are getting much better at asking applicants to demonstrate how their proposed activities will contribute to outcomes. However, I've often thought that funders themselves who often have strategic oversight and topic expertise could themselves work out exactly what kind of projects they'd like to fund to achieve social outcomes by using a logic model approach. This would mean that individual interventions don't have to second guess what the funders fundamentally want, which could potentially save hours in preparing proposals that miss the mark. Of course, interventions can come up with their own creative ideas and if there is a strong rationale for them, funders should be willing to depart from their own models.

Translating logic models into practice

So - back to my daughter and her aspiration to become a rock goddess. I need to make another important point before signing off. Just because my logic model and the evidence base (practice makes perfect) suggest that my plan to turn Amy into a rock sensation should work, it might be dead in the water if the actions are not implemented properly. What if the quality of the instructor is poor? What if the class is too big? What if the lessons are too short? In terms of achieving outcomes, the quality of implementation is EVERYTHING.

I've always believed that poor implementation strategies can be the un-doing of a strong logic model so it would be fruitful if strategists and practitioners on the ground set out exactly what needs to happen to make the model work in practice and what resources and support will be required to do it well.

A final word

If you're interested in learning more about how logic models can improve your work, please don't hesitate to get in touch. [There's also guidance on developing logic models here.](#)