CRITICAL REFLECTION ON PRACTICE DEVELOPMENT

Creating a rose garden: showing links between cause and effect in practice development evaluation

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My aim in this reflection is to show how using an action research process can help practice developers to demonstrate that their actions have achieved their desired outcome. I reflect on my experience of helping practitioners to understand how a process of creating action hypotheses guides the development, implementation and evaluation of a practice development plan.

What is an action hypothesis?
Over the years, I have shared with fellow practitioners and practitioner-researchers the usefulness of informed imagination or developing action hypotheses to show causal relationships between context, actions and outcomes (see Titchen, 2000). Action hypotheses which I first met in qualitative action research (Brown and McIntyre, 1981) can help to focus, shape and hold together a practice development plan. They also help practice developers to demonstrate that the outcomes are linked to what they have done, rather than related to chance or anything else going on at the time. Let me show you how they work through the analogy of creating a rose garden.
Funded by a local charity, a gardener and stakeholders from a residents’ association have agreed a vision for creating a rose garden. Their first step is to explore the landscape in which the garden is to be created. This is guided by their vision and they share out tasks of tapping into available sources of evidence, like Wikipedia, local government information, talking with local gardeners, establishing whether the soil is acid or alkaline and the kind of plants that will flourish in such conditions. They discover that the climatic conditions and soil in this locality are not particularly well-suited to roses, so they use this information along with their collective knowledge and gardening skills to imagine or hypothesise actions that will help them to create the right conditions and achieve their desired outcome of a garden in which roses can flourish. To inform preparation of a garden project plan, they decide what sort of evidence they need to collect as the garden develops, so they can check if their actions are working or not. When the actions are successful, the information helps them to hypothesise what to do next to move towards their outcome. When not successful, they hypothesise about what might work instead. Gathering evidence will also help them, at the end of the project, to demonstrate to the charity that its investment was justified. They need to provide evidence that the strategy they adopted in these somewhat adverse conditions achieved the desired outcome. They are keen to do this because they want to go back to the charity to get more funding for another garden project.

Practice developers and stakeholders are similarly guided by their shared vision as they decide what information and evidence they need to gather to understand their landscape (i.e., carry out a baseline evaluation of the starting point of their practice development journey). They need to thoroughly understand the starting context that they will be working in and what they will need to change to deliver the desired outcome. They have to gain a better understanding of the influences that have shaped the way they deliver care today, for example: the historical and current workplace culture; social relationships between patients, families, colleagues and leaders and; the way power operates in their workplace. They think about sources of evidence available to them, like audit data, and how it needs to be supplemented by collecting additional evidence, like gathering patient and staff stories of care and observing workplace practices. This baseline evidence is used for creating a practice development plan and action hypotheses about how they will get their desired outcome. Each hypothesis is likely to have several links in a chain of causation that will take them to their outcome (see examples below).

**A rose (action hypotheses) by any other name**

I can claim some moderate success in helping practitioners to grasp the idea that action hypotheses are created when they have an understanding of the context and that hypotheses will inform their action and its evaluation. However, there is often an initial resistance to the idea. Or if people want to go with the idea, it tends to dwindle away. I am wondering, therefore, whether the potential and/or practice of demonstrating causal relationships (cause and effect) through chains of causation is not fully understood or not seen as possible or attractive. In the first place, is the terminology off-putting or misleading? The terms, ‘hypothesis’, ‘causal relationships’ or ‘chains of causation’ are associated with a positivist or experimental worldview, in which quantitative evidence is gathered and analysed statistically. Whereas, action hypotheses in action research and practice development are used with qualitative evidence. Are practitioners put off because they think it means doing statistical analyses? Or do they feel it is too restrictive because researchers stick to their hypothesis testing whatever happens? For example, Alison Binnie, my action research partner to whom I refer below, did not feel comfortable with the terminology. She felt that it did not capture her practice-thinking, that is, her immediate and fluent response to situations as they arise: Her initial reaction was, ‘I’m not doing that. It just feels like a lot of long words’ (Titchen and Binnie, 1994, p.9). However, when I explained that we would be creating a series of hypotheses, each one with only one or two links in a chain of causation, she could see that we were not tying ourselves up too tightly. We had flexibility and room to think on our feet in the mindset of an actor and we could
change our hypotheses according to what happened and use the systematic, analytical thinking of a researcher. With experience, Alison came to value the steer that action hypotheses provide (see Titchen and Binnie, 1994).

Picking up on this notion of being systematic, another question is: are people aware that qualitative, holistic evidence if gathered systematically and in a focussed, but open way can be used to check out hypotheses? Do they see that this systematic way of working frees up time to be creative and to gather evidence in the busyness of daily practice?

In the examples which follow, I show where these reflective questions have come from and how I adapted the use of action hypotheses in practice development.

**Examples**

The purpose of the first example is to show how an action research hypothesis worked in a study I was involved in with nurses in a medical unit who were transforming their task-focussed nursing care to a patient-centred service.

Through my gathering of interview and observational data involving patients, families, nurses and their colleagues and then interpreting the data with Alison Binnie, the clinical leader in the setting, we came to understand the historical, cultural, social and political influences at work in the context. For example, there was a very strong *getting through the work* culture in existence that was getting in the way of our desired *learning in and from practice* culture (see Binnie and Titchen, 1999). I also knew from observing Alison that although she was a very skilled, patient-centred nurse and person-centred facilitator of learning outside the ward setting, she had yet to transfer those facilitation strategies to helping staff nurses to learn in and from practice during the busy working day. I also observed that she was sustaining the existing culture by responding to problem-solving requests by giving advice, rather than helping nurses to think through their own problems and find their own solutions (see Titchen and Binnie, 1995). So Alison and I formulated the following action hypothesis that has two links in its chain of causation:

**In a ward context where a task-focussed culture exists, the outcome of patient-centred nursing care can be achieved by a skilled facilitator (me) helping a clinical leader (Alison) with expertise in patient-centred nursing to create a learning culture by working as a team member:**

- Looking after patients with a clear intention to role-model and articulate the practical know-how of person-centred practice to the nurses (link 1)
- Facilitating, in the midst of practice, nurses’ experiential learning of the practical know-how of being person-centred in the care of patients/clients/residents/families and in working with their colleagues (link 2)

We agreed that I would collect qualitative data, over time, on how the actions were carried out and their impact on those involved. Every few weeks, we had a reflective conversation about the evidence and used it to develop and refine our plans for further action and data collection. Having these conversations enabled me to gather focussed, yet open evidence to show how the actions turned out. For example, I deliberately acted as a role-model for Alison by working with her as a facilitator of her experiential learning. The she learned how to create spaces in the busyness of practice to help the nurses become more patient-centred by critically reflecting on and theorising their work with patients (Titchen and Binnie, 1995). I collected data to see if and how our intentions were realised and if they were effective. So I asked the nurses, ‘How do you find it working alongside Alison?’ I also asked patients, relatives and colleagues how they were experiencing nursing care on the ward.
At the end of the study, we analysed the data by identifying our starting points, the endpoints we achieved and the strategies that we used to get there. Without naming it as such, these were chains of causation which we used to share our findings. These chains provided extensive evidence that we achieved the desired outcomes of patient-centred care (Binnie and Titchen, 1999; Titchen, 2000). After this study, I recognised that such extensive evidence gathering cannot realistically take place in practice development programmes and that the idea of action hypotheses with their links in chains of causation needed to be simplified. So, I used the opportunity of a practice development support programme I was facilitating. Working with senior nurses in a large general hospital I introduced them to the idea of an action hypothesis, but I did not use that terminology. Instead, I suggested that the group draw on their knowledge and skill to discuss and agree: where they were at now; where they wanted to go; and how they imagined they could get there. I put the template shown in Figure 1 on a flipchart. Using the template helped the nurses to agree an action plan for getting a better understanding of their starting points and achieving their end points. This simplification was very successful. Not only did it release a lot of positive energy, it also enabled them to think logically and critically and bring about significant changes in terms of outcomes.

<table>
<thead>
<tr>
<th>Starting points</th>
<th>Strategies</th>
<th>Endpoints</th>
</tr>
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<tbody>
<tr>
<td>In the context of ...</td>
<td>We will use the following actions ...</td>
<td>To achieve the outcome of ...</td>
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Figure 1. A template for setting out action hypotheses.

In the next example, this template was developed in collaboration with consultant nurses to show links within a chain of causation and the various intermediary endpoints that have to be reached in order to achieve the desired outcome (or final endpoint).

Kim Manley and I were working with consultant nurses across England early on in the implementation of the British government’s consultant nurse initiative (Manley and Titchen, in press). We accompanied the consultant nurses as they became individual practitioner-researchers of their own practice, as well as members of a critical research community. They investigated what was important to them in their everyday practice, including putting the role of the consultant nurse into practice, developing their effectiveness and demonstrating their impact. The nurses used the template to set out their action hypotheses and keep track of changes and newly emerging links or hypotheses. They followed the adapted template right through to its logical conclusion to demonstrate their findings (Figure 2).

Figure 2. Action hypothesis presented by the consultant nurses at a national conference (Manley and Titchen, in press).
Figure 2 can be thought of as the first link in a chain of causation towards the outcome of consultant nurses putting their role into practice. Imagine a series of such diagrams representing further links. The starting point of the next link would be therefore ‘Shared perspectives of CN role’. The new endpoint might now be ‘CN involved in decision-making at executive level’ and a different set of practical strategies or actions are agreed to meet this new endpoint. So chains of causation break down action into smaller manageable steps to achieve intermediary endpoints.

**Resting a while in the rose garden**

Creating a practice development garden is very messy and complex, but working with perhaps several action hypotheses at a time, with each hypothesis having several links in a chain of causation, can keep us on track and free us up for creativity. They keep us focussed in planning, acting, sorting and analysing evidence and sharing it with others. They also show stakeholders, especially patients/clients/families, leaders, decision and policy-makers and funders that practice development works and should be supported. I conclude that although there might be some initial resistance to their use, perhaps for some of the reasons outlined above, it is worth pursuing the development of action hypotheses, even if you call it a rose by any other name.

**References**


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