

CHAPTER FOUR - INFLUENCE DIAGRAMS

Influence Diagram is a generic name for a group of systems diagrams that illustrate the different influences operating on a particular situation.

It is important to point out at the beginning that these diagrams do not infer 'causality'. Causal diagrams imply an 'if/then' dynamic, whereas Influence Diagrams are less deterministic, more intuitive, more static. A rough analogy would be the difference between a video and a snapshot. Influence Diagrams are freeze framed pictures of what is influencing a situation right now, not a diagram of how the dynamics of a situation may operate over time. For instance, right now I'm seeking to explain to you the value of Influence Diagrams. If you wanted to open up my head and peer into what's going on you will observe many influences. That includes my experience with facilitating these exercises and seeing the benefits of them, or the fact that I've quite a bit of time on my hands because I broke my leg a month ago and then along came COVID19 which has had an influence on my mobility. The view of the harbour from my house on a glorious spring afternoon may well have contributed to the tone of this chapter.

You can probably already spot several influences at play. My restricted mobility; the disruption to my work; my wish to share some experiences and knowledge; my splendid view; my need to keep myself occupied; the time of year None of these are causing me to write this book – I could be doing many other things, such as improving my Spanish. Nor will they will over time cause me to complete the book. Sometimes you just need to know what's going on right now – a snapshot of the situation rather than a video that depicts how a specific chain of events and decisions caused me to sit down and write the book.

Hang on, I hear you think, what's the difference between a Rich Picture and an Influence Diagram? That's a good question. Simply put a Rich Picture seeks to display everything and anything that might be relevant to a situation that interests us for some reason. Once we have identified what that reason is (or reasons are), we can then extract and diagram key forces are influencing how that situation behaves from that particular perspective at a particular moment in time. An Influence Diagram.

Another way of putting it is that a Rich Picture will help you identify what you should focus on, and an Influence Diagram can identify the particular influences that operate on whatever that focus is. So in my case, the situation of interest is about the understanding and use of systems diagramming. I could draw a great Rich Picture about that. However, I've already decided to address this situation by writing a workbook about systems diagrams. I'm now much more interested in what may influence the sales of the workbook and what that means for the way I write and market it.

Indeed here's a possible influence diagram of that focus.

[Insert diagram]

So how did I construct this diagram?

Like Rich Picturing, it's possible just to start – once you have decided the aspect of the situation you are wanting to diagram. However if you are facilitating a group it's a good idea to be more structured. This can help overcome the tension of system diagramming; managing the tension of the diagram being detailed enough to ensure that the major factors are included vs creating a massive wiring diagram so complicated that you cannot gain any insights from it. When you are working individually you can keep yourself in check, but groups that reflect many different perspectives can easily drift into the overcomplicating the diagram.

Step One – Decide the focus and scope of the diagram

Compared with Rich Pictures, Influence Diagrams tend to focus more on what influences a particular decision (eg "selling a book") or state of affairs (eg "a situation that encourages book sales). You also need to be more focused – in other words decide where the boundary lies; what ought to be included in the diagram and excluded from the diagram. In my book selling case it may be aspects that only influence technical books rather than novels. Or books that will be only available on-line. Or influence the expressed needs for such a book rather than doing an iPhone and trying to sell people something they didn't know they needed. In contrast you may want to understand what in general promotes book selling, or what influences your particular decision about the style of the book.

Recently I was working on literacy issues in an African country. As we talked to people and read the research it was clear that students dropping out of school in large numbers affected the overall literacy rates. And as we looked more deeply we came across research that said that one of the three main reasons why students dropped out was because they disliked school. Yet nobody had actually explored why students disliked school. So rather than focusing on what influenced literacy broadly, or even what influenced students to drop out of school, we focused our diagram workshops on students attitudes to their school. And given that the major drop outs occurred in the first three years of schooling, we further restricted the boundary of the diagram to that age group.

Step Two : Decide stakeholders and grouping

As discussed elsewhere, if you are working in groups where the conditions are safe then mixed groups are desirable. If unsafe or controversial then have single stakeholder interests and arrange a process where different stakeholders can safely share their diagrams.

Step Three : Decide the Starting Point

I find it useful to have a starting point. Partly because it's just an easy way to start, but mostly because it's the opportunity for a discussion that might shape the focus and content of the influence map.

There are two sets of decisions.

The influences :

The influences can be anything that might influence a state of affairs or event. For instance :

A state of affairs (eg feelings, features, resources, organisational culture, salary levels) : The kind of books in a school library; students dislike of school, a policy of corporal punishment, distance of home from school, season of the year

A particular event or activity : Book purchase; students attend school; salary negotiation

People ; Teachers, Parents, School inspectors

Things ; Type of desk, available teaching technology

In most cases it doesn't matter very much, and the various influencing factors can be a mixture of both. More important is

The tone :

Positive, appreciative framing – students like school (state), children attend school (event).

Negative, deficit framing – students dislike school, children refuse to go to school.

This is an important decision because a diagram based on a deficit framing may be different from one based on an affirmative framing. Things that influence negative framings may not just be the mirror image of positive framings. Think about a TV program. The things that influence you to watch it may not be the same as the things that make you turn it off.

The decision also depends on what you are trying to do with the diagramming process. It could be as simple as generating solutions or defining problems. It could be political. In one piece of work we were mapping the ability of teachers to use their skills in a classroom. We were concerned that if we framed it negatively (ie what prevents teachers using their skills) could promote teacher blaming rather than explore some of the factors beyond teachers' control.

Step Four - Constructing the Diagram

Once you have decided the scope, focus, and tone you are in a position to start drawing.

This suggested process is based on a group of four to six people. It assumes a mixed group of different stakeholder roles, although an optional 'promenade' is included if the groups are not mixed. Feel free to modify process depending on your experience and the topic.

In the centre of the paper, or whatever medium being used for the map, write down the focus of the Influence Diagram. In most cases it should be an end state or outcome (eg children dislike school) or an event (children refuse to go to school), but it's not essential.

Option One - Drawing A Simple Diagram

There are two ways in which I have drawn Influence Diagrams. One is suitable for 'simple' diagrams and the other for more complicated diagrams. It's important to note that 'simple'

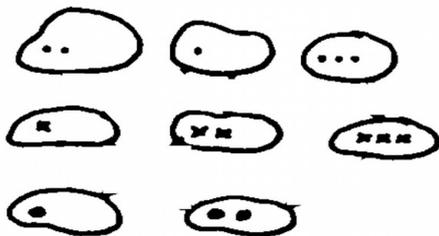
diagrams can illustrate highly complex issues. As discussed in the introduction to this workbook, 'simple' diagrams are useful when you want to gain insights into a situation, whereas more complicated diagrams are useful when you want to understand the dynamics.

This simpler process is drawn from Soft Systems Methodology and occurs a couple of stages after the Rich Picturing process described in the previous chapter.

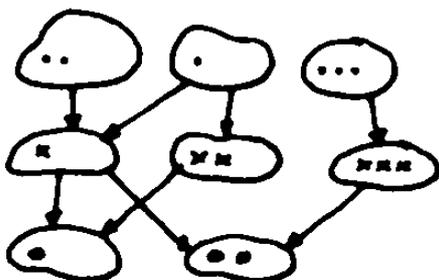
1. **First list all the major influences that relate to the issue that interests you.**
2. **Out of that list select between 7±2 influences** that you believe are significant influencers. If those influences are activities or events, then use a verb in the imperative form. So, "walk to school", 'present an award for best behaviour'.
3. **Select influences, that do not influence each other or are not dependent on each other.** Place these in a line.



4. **On a line below place all of the items that are influenced by these first items.**
Continue until all are accounted for.



5. **Then indicate the influences**
See later for how to do this



6. **Rearrange to avoid overlapping arrows where possible.**

Option Two - Drawing A More Complicated Diagram

1. *Identify major direct influences*

Working initially as individuals, identify the most important factors that influence the core issue. Then identify the three most important. Once that is complete, the group shares the key influencers and decide the most important five. These can be written on Post-Its (only one item per piece of paper) and surround the focal statement. Don't draw any lines yet.

Advice for this stage

The critical issue here is not to fall into the trap of confusing 'cause' with 'influence', but at the same time not to be overly strict. It is often enough to ask people to think about what is influencing them when participating in this task and what caused them to participate in the first place; one is a sequence of events, the other is a state of affairs. But of course 'cause' and 'influence' may have different meanings in different languages or cultural traditions, so it is important to be aware of that.

The purpose of starting with individual working is to prevent one person taking over the process. It also slows things down a bit and allows a bit of thought about the influences. If you have trouble deciding the five, then use a voting system of some kind.

Try to avoid terms that are too vague (eg 'quality of the school') since different people will have different ideas what that is. If you get those kinds of statements, then see they can be broken down into more tangible statements.

Encourage statements that are a direct influence (ie don't have important intervening components). So school books imported from the USA may contribute to children's dislike of school, not because they are from the USA but because they use examples that don't resonate with children based in Rwanda. And that may influence whether children find the books boring, which may influence whether they find the lessons boring, which finally may contribute to their dislike of school. Another might be 'weather' and 'dislike of school' where 'ease of walk to school' might be an intervening influence.

2. *Identify secondary influences*

The group as a whole goes through each of the five influences, and identifies what influences each of these five.

One these have been agreed by the group, write them on Post-its or whatever is being used (again one item per piece of paper) and place them around the original five – close to the relevant influence. Again don't draw lines quite yet.

Process advice

Leave a reasonable amount of time for people to do this. It has to be thoughtfully done. However, allow each influence to be written - it is easier to remove things later than add them.

3. *Identify the relationships between the influences*

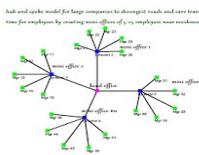
The group identifies more broadly how the influences relate to each other by linking the influencers, generally with lines, with or without arrows (and like Rich Pictures, remember not to double head lines where influences go both ways). Remember that arrows identify flows of influence **not** resources, or a sequence in time.

There is an option here to see if there are influences in-between influences. This can sometimes tidy up a situation where the gap between influences are a bit large. Another useful option can be to identify influences that are outside the agreed boundary of the diagram. Again this needs some time for discussion about whether to include these in the diagram or that they are things perhaps that are beyond the ability of the project or participants to do much about. They are in effect 'givens' (and are relevant to the next step).

Process advice

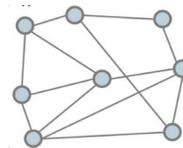
This is the messy part of the process. If you are working in a group, there will be disagreements and arguments. This is where pre-planning is important, since you want to allow people to be able to move things around and change. On one occasion I was working in a room that had a wall 10 metres long made of whiteboard surfacing. So shifting things around and erasing lines was easy. On another occasion in a rural area in Africa the relationships were represented by different coloured ribbons (less likely to curl up than string).

Another risk is that the influence map begins to look like a hub and spoke map (ie the influencers radiating outwards, each influence just being linked to one other influence).



Like this

Rather than this



If that happens then take a second look at the diagram and consider if there are cross linkages.

4. *Identifying the importance between influences*

Which ever drawing option you choose, once the line drawing is complete, it is critical to have a discussion about the importance and nature of the influence. The importance of the lines can be signified by different thicknesses of the lines; the nature of the influence (eg powerful influence, political influence, cultural influence, motivational influence) can be identified using different coloured lines, or like Rich Picture by writing the information

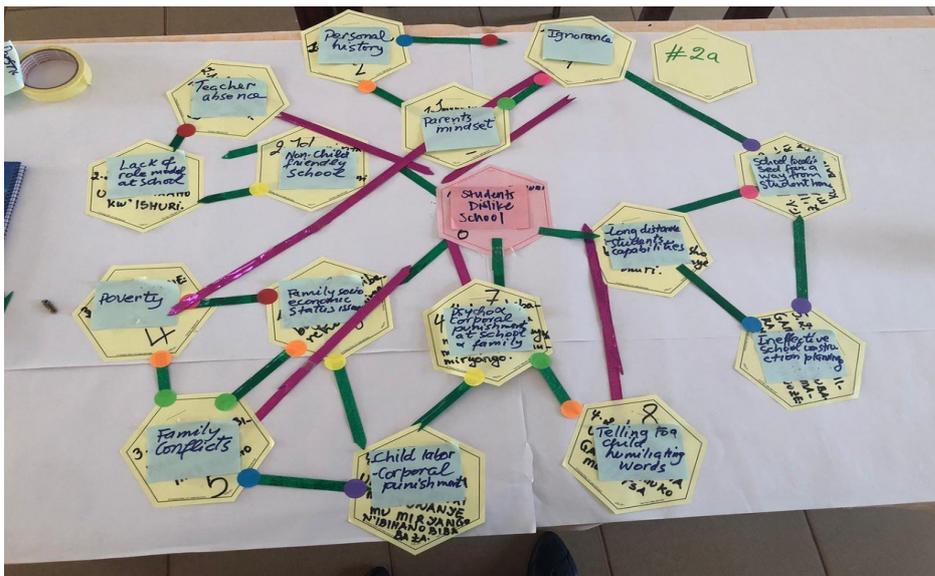
alongside the lines.

Process advice

Diagrams can get overcomplicated and lose focus. The good thing about this process is that they can be simplified by removing any unnecessary or unimportant lines, to prepare for the final stage - the analysis. However, it is a good idea to take a photo of the map before starting to remove items.

If this is being done as part of a large group process, where several maps are being produced, it is a good idea to have a promenade process. This was described in Rich Picturing where people walk between different diagrams, with one person remaining with each diagram to explain the diagram to people, and then return to make any new additions or changes to their own diagram.

Here is an example of an influence map about factors that influenced students liking school developed in a rural part of Africa where we were limited to very basic tools. The colour of the ribbons depicted influence, the colour of the dots indicated the direction of the influence.



Step Five - Analyse the diagram and prioritise responses

Whichever of the two options you choose – the simple or more complicated approach, the analysis is the point of the exercise. There are many ways of analysing Influence Diagrams. Here are some suggestions :

Force Field Analysis

For each of the influence pairs (or perhaps even chains) that lead to the desired outcome (eg children not disliking school sufficiently to stop dropout):

- What is reinforcing/strengthening the influences? How can those helping factors be made stronger or weaker (ie less influential if they are promoting dislike of school, more influential if they are enabling teachers to be able to use their knowledge and skills)?
- What is reducing the chain of influences? How can those minimizing factors be made stronger or weaker (ie more influential if they are promoting students liking school, less influential if they are enabling teachers to be able to use their knowledge and skills)??

Chuck, Create, Change, Keep

To turn each of the 'strong links into weaker links (in terms of kids disliking school or teachers unable to apply their knowledge), or to what would have to be kept, chucked, created or changed? [Note this would have to be the other way around if we went the affirmative route]

The Rs

From each of the key chains

- Who plays important **roles** in this influence relationship? How would they have to be altered to make the relationship more or less powerful (depending on whether we take the appreciative route or the deficit route).
- What are the implicit and explicit **rules** that influence this relationship or these chains of relationships. How would they have to be altered to make the chain more effective in creating the desired outcome?
- What kind of perspectives and values do these influence relationships **represent**? How would they have to change to create the desired outcome?