How can you attribute when you don't know what to look for?

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Abstract

Attribution is a Community engagement is a significant activity across rural and regional Australia in both the public and private sectors. It involves thousands of extension officers and facilitators and tens of thousands of landholders and community members. Having undertaken a comprehensive review of a range of community engagement projects in Australia, we found that in general, these projects fit into one of five models of engagement and that each of these models has unique features that can be assessed in an evaluation. When it came to the attribution of the effects of the models of engagement, we found that there was a gap in knowledge in service providers about the basic elements of these models and therefore, what they needed to be looking for with regard to evaluation. We took workshop participants through a stepped process of what to look for with each of the models to ensure that causal links were established between each of the steps from resource allocation to outcomes. The research findings presented in this paper are based on a project undertaken for the Cooperative Venture for Capacity Building in Rural Industries and the results of workshops delivered nationally.

Key words: Evaluation, engagement, community engagement, extension, education, rural communities, attribution.

Introduction

The purpose of this paper is to provide some insight on how to look at attribution of projects and programs with regard to:

1. The logic of the project/program
2. The specifics of its intended outcomes
3. Its legacy

In this paper I discuss briefly the notion of attribution and when and where it can be sought. Particularly, I look at contribution to building human capacity. The definition of human capacity we use here is "the process of engaging with individuals, groups and communities so that people are more able to deal with issues affecting them and opportunities open to them" (Coutts et al 2005). Extension is a broad reference to those activities also referred to as community engagement but with a specific aim of education. The area of operation we looked at was largely in the agricultural industry.

The research that led to this paper was funded by a Co-operative Venture partnership for capacity building group interested in building capacity in rural industry in Australia. The co-operative venture was made up of individuals from the organisations: the Rural Industries Research and Development Corporation, the Department of Agriculture, Fisheries and Forestry, Meat & Livestock Australia, Dairy Australia, Land & Water Australia, the Murray-Darling Basin Commission, the Grains Research and Development Corporation, the Sugar Research and Development Corporation, the Grape and Wine Research and Development Corporation, Australian Wool Innovation, the Cotton Research and Development Corporation and Horticulture Australia Limited.

Attribution with regard to the logic of the project/program

Attribution can be planned for and begins in the planning phase of a project/program (see Mayne 1999 p6). It is also in this phase that ideally evaluation starts as well so if there are any problems with attribution they can be identified.

A logical framework such as the one in the table below identifies the levels of evaluation and assumes that there are casual links between each of the rows in the table.

Evaluation Levels	Logic of the project/program (causal links between the steps)	Objectives/ Indicators	Information needed to measure/monitor	Evaluation methods to capture information
Broader impact	Social-economic-environmental outcomes			
Direct effects	Practice changes			
	Knowledge, skills Biophysical, physical changes			
	Reactions			
	People Involvement,(how many, gender, age)			
Internal project factors	Activities/ Process			
	Resources			
Outside project control	Context/ Related projects			

Attribution with regard to the specifics of intended outcomes

The focus of recent research was to seek out and review a range of engagement and education projects directed primarily at the rural sector to find out what works and why. In doing this, we used on-line lists, networks and other means to gain as wide a coverage as possible of the individuals working in extension and their projects. A common framework was developed to guide the data collection and analysis of the different projects and a typology (or categorisation) of projects was tested to see if it was useful in collating and analysing projects.

In looking across these various activities, we found that all the activities fitted into one of five overarching models. These models are:

- The Group Empowerment and Facilitation Model provides a facilitative framework for groups seeking their own learning
- The Programmed Learning Model provides specific packaged training when it is desired/required
- The Technological Development Model uses a range of hands on processes to tackle a specific technological or management need

- The Information Access Model -provides a storehouse for on-going information that is easy to access and supports individuals and groups with information they need for making decisions
- The Consultant/Mentor Model is about consultants and mentors working with clients and forming long term commitments and relationships (Coutts et al 2005).

We extended our research on what works and why in extension/education to also include how it should be evaluated (Roberts and Coutts 2007).

The Group Facilitation/Empowerment Model

In the Group Empowerment and Facilitation Model, participants work in groups to increase their own capacity by seeking their own education and training based on their situation. The main focus is *to build the skills of individuals so that they can fulfil their own objectives*.

A key underlying philosophy of this model of engagement is that participants are best served by a facilitative framework which allows them to define their own problems and opportunities and to seek their own avenues to address these issues. This is about ownership and responsibility – but it is also a pragmatic understanding that it is the people in a specific situation that are best able to understand and act on issues directly concerning them. It is assumed that by encouraging people to work together in this way, more lasting and sustainable solutions will result. This is because participants develop problem-solving, planning and reflection skills which they can apply to new situations that emerge. This can be described as stronger *human capital*. Likewise, the increased networking, stronger relationships and group skills further develop *social capital*.

Attributing impact to the Group Empowerment/Facilitation Model

To be able to evaluate the impact that this model has we need to refer back to its elements and as a first step. We ask to what extent did this group:

1. Express/or endorse a need for assistance
2. Select its own members
3. Select their own facilitator
4. Have a plan
5. Receive training in empowerment skills
6. Meet regularly.
7. Negotiate boundaries for use of funder resources
8. Share experiences.
9. Benchmark their knowledge, attitudes and practices.
10. Contribute an increasing level of their own resources to group activities.

There are two key areas of impact for projects operating under the Group Facilitation/ Empowerment model:

- Impact on empowerment
- Impact in areas defined by the funding source and are usually to do with economic, environmental and social factors.

Our later research on empowerment (Roberts and Coutts 2007) found that empowerment relates to those areas covered in the following table. Participants will need to show skills in some or all of these to be on the way to being empowered.

SKILLS NEEDED FOR EMPOWERMENT	ABILITY TO
Critical thinking	Analyse and reflect, to think 'outside the square'. Synthesise and provide examples of how problems/ issues can be addressed. Evaluate and make judgements on about situations.
Planning skills	Understand the planning process. Take oneself or a group through a planning process and cycle.
Communication skills	Listen Be assertive Manage conflict Communicate with others – institutions, community, government etc Transferring information. Level of comfort/ confidence/ competence interacting with others
Networking skills	Contact with others – individuals and groups. Have a diversity of the contacts
Facilitation skills	Understand the principles and processes of facilitation Taking a lead in facilitating family/ group/ industry/ community processes
Leadership	Understand and implement leadership principles

Indicators of empowerment (as found in the literature) are that people:

- Have faith in own capabilities and approach difficult tasks as a challenge rather than a threat
- Have knowledge of self
- Recover after failure
- Have a commitment to truth
- Are collaborative and open in communication
- Respect others
- Have the capacity to make choices and to transform those into desired actions and outcomes (Roberts and Coutts 2007a)

Impact on economic, environmental and social elements should primarily relate to those areas that the groups decide to focus on based on their problem assessment and planning. The funding bodies for this type of project are usually not too specific about the areas of improvement but may well have general or 'hoped for' outcomes, for example, increased use of the latest marketing techniques; increased productivity; decreased environmental damage and the like.

Benchmarking is a key to measure change (in both the empowerment and economic, environmental and social areas) and because of the range of directions which the groups can take, broad benchmarks are needed. Benchmarking in this context is about measuring the levels (of communication skills, productivity etc) at one point in time to compare against levels at another point in time. It can also be about comparing those involved with the empowered/facilitated group against those who are not in such groups.

The Problem Solving Model

In the Technology Development/Problem Solving Model, individuals work together to develop specific technologies, management practices or solve problems that will then be available to the rest of the industry or community. It often involves local trials, demonstrations, and site visits. The focus is *to work together to do something such as develop a product, carry out a trial, solve a problem*.

Where this model differs from the *Group Empowerment and Facilitation* Model (even though both involve groups and are participative) is that here a specific management/technological outcome is envisaged. This may be to have improved water use efficiency in the irrigation industry, to have a cleaner river catchment, or to have improved management of greenhouses for horticulture production, for example.

The analysis has indicated that extension/facilitator skills are critical in addressing technological development issues in a region or industry. Facilitating information sharing between participants is seen to be a critical element of acceptance and adoption of new approaches and technologies as was producer leadership and ownership of projects in obtaining broad support and acceptance. On-farm and local trials emerged as important in aiding understanding and acceptance of new approaches and benchmarking was important in documenting change and providing on-going encouragement and motivation. Another element of success was linking in with local commercial expertise is important in terms of bringing about sustainable change processes.

A key underlying philosophy is that specific technological (including managerial, landscape and environmental) change requires a focused effort and should involve all stakeholders in the process. The technologies or practices that can be effectively developed in isolation and handed down to a waiting industry or community are rare. Participation and multiple approaches appear to be fundamental to projects in this model.

Attribution of Impact to the Technological development Model

The key focus of impact assessment for projects operating under the Technology Development/Problem Solving model relates to the:

- Issue or need identified by industry or community or endorsed by its representatives.
- Facilitation provided to mobilise and assist in process.
- Process to inform and involve stakeholders in problem definition and determining approaches to tackling it.
- Committees and/or forums to provide on-going local input and feedback apart from hands-on participants in process.
- The process is designed to allow researchers/experts and producers/ community participants to work together.
- There is a strong hands on component.
- Other supporting mechanisms are available to assist development and integration – such as incentives, policy etc.
- Training in relevant areas is made available..

Benchmarking is a useful tool to evaluate these activities. .

The Programmed Learning Model

In the Programmed Learning/Training Model, specifically designed training programs and workshops are delivered to targeted groups of landholders, community members, government personnel and others to increase understanding or skills in defined areas. These can be delivered in a variety of modes and learning approaches. The main focus of the model is *to deliver learning*.

'Programmed' refers to the fact that the learning event (seminar/workshop/course) has a specific set curriculum and learning objectives in comparison to the open objectives of the *Group Empowerment and Facilitation* Model. In contrast to the notion of extension as informal education, we found that 'Programmed Learning/Training' projects in Australia were increasingly coming under the formal Vocational Education and Training (VET) system where participants can seek accreditation for learning undertaken and build towards awards of certificates and diplomas.

The rationale for developing such courses is a belief they can be developed and packaged in such a way that they can be taken across regions/states and be applicable to a large number of participants. Most extension projects developed for this purpose also incorporate an 'adult learning philosophy' which acknowledges the knowledge already held by participants and encourages experiential learning as they engage with new information brought to them through the learning event.

Attribution of the Impact to Programmed Learning Model

The key focus of an assessment for projects operating under the Programmed Learning/Training model relates to changes in the specific knowledge and skills being addressed through the training event. As already stated, the main elements of this model are:

- The defined learning outcomes have been achieved
- There are participant booklets
- The training is gender sensitive
- A range of media inputs are available presentations.
- Adult and experiential learning is incorporated into the delivery.
- Participant feedback is provided for and made available to funders.
- Provision is made to support participants between workshops/and or at completion.
- Local examples/field trips are incorporated into content.
- Direct opportunities to relate learnings to own businesses/situations are included.

Benchmarking undertaken would relate to these specific knowledge and skill areas. For example, what was the specific level of knowledge and skills held by participants prior to the training event and immediately post the training event? Have they applied the new knowledge and skills in their own situation so many months after the training event?

Methods used to benchmark and evaluate such knowledge and skills would include pre and post questionnaires and follow-up interviews or surveys. In some cases tests of knowledge and skills are used pre and post – and in other cases, changes in observed competencies. Care should be taken when asking participants to rate their level of knowledge in some areas pre and post – they may "not know what they don't know". One way to overcome this is to have people rate their before and after levels at the end of a training event.

The Information Access Model

The Information Access Model, is where individuals and groups can access a broad range of information from a distance at a time that suits them. It can be based on a website, information centre or other centralised locations. The main focus of this model is *to provide a storehouse for information so that it can be easily retrieved.* Its main elements include:

- Reach – to as wide an audience as is needed.
- Accessibility of the information to its target audience
- Use of the information by the target audience.

A review of information exchange mechanisms by Woods et al (1993) identified the need to have an information storage system for project results for use by others. Projects in the *Information Access* model to some extent mirror this need. A key underlying philosophy is that people require different information at different stages of their decision-making processes in a form that suits their individual needs.

Our analysis indicates that despite the variation in size, type and clientele of information access projects, there are some common practical considerations that assist in success. This includes developing clarity about the clientele, providing pathways for individuals to search for their own specific information needs

and continuously monitoring and responding to needs and feedback from those who seek and access information provided. This cross-analysis of projects has also shown that projects under this model do not need to be expensive or complex and that there are creative ways to link people with information relevant to their needs.

Attribution of Impact to the Information Access Model

The key focus of impact assessment for projects operating under the *Information Access* model relates to the ability of users to gain information when and in the form they want it to support or stimulate changes they are making.

Methods used for this assessment includes surveys (for example web surveys on sites being accessed; short surveys with incentives included with hard copies of information products), surveying (mail, phone, email/web) those who have sourced or requested information and who have left contact details, or generally surveying client groups to whom the information is targeted.

In 2005, the Wimmera Catchment Management Authority ran a media advertising campaign to raise awareness of water quality issues and the link between stormwater and waterways. Star Sydney Swans footballer Adam Goodes (from the Wimmera) and his mother Lisa May featured in the campaign. The campaign consisted of 15 and 30 second television advertisements and print and radio advertisements. In addition, images from the TV advertisements were used on posters, brochures and fact sheets for the following 12 months.

The campaign took a fun and relaxed approach to pushing home the key message of being careful about what reaches stormwater The campaign worked well. Over 70% (71.5%) remembered the advertisements and it made a difference to the way individuals think about storm water and drains in 26% of cases and to what they will now do. Using Adam Goodes was important according to 42% of those interviewed.

The Consultant /Mentor Model

The Consultant/Mentor Model, can be defined as a mentor or consultant working over time with an individual or community to improve their managerial, technological, social or environmental situation. The main focus of this model is *to build a relationship* between the consultant/mentor and the client.

The tentative conclusion in the national extension review (Coutts et al 2005) that agricultural consultants play a critical role in assisting managers to integrate wider learnings into their specific farming system appears to be borne out. Those producers who are seeking to remain at the top of their industry and be sustainable in an increasingly competitive and complex business as farming are finding high value in having an outside professional provide expert input into strategic and operational planning and management in their enterprises.

The profession, however, largely relies on the informal advisory approach that is the legacy of the public extension system. Few consultants appear to have formal written agreements with their clients, although many negotiate and renegotiate their services and role on regular basis. Likewise the reliance on informal networks and personal recommendations mean that many potential clients do not get to hear about the profession or how to engage with an appropriate consultant.

The consultant provides support for individual clients so that they can make the difficult decisions and be confident that they are basing those decisions on good advice. The client makes the decision (not the consultant) but the consultant is expected to provide the advice. The consultant is expected to be there for the long term and build a relationship with the client. The consultant is expected to be a sounding board for clients and help develop good ideas. It is expected that consultants' advice is are paid for. This expectation is not so strong for mentors.

Issues of cost, quality of advice, and building a strong, long lasting relationship were the factors mentioned most often with regard to the practicalities of this model.

Attribution of Impact to the Consultant/Mentor Model

The key focus of impact assessment for projects operating under the Consultant/Mentor model relates to changes made as a specific result of input from/interaction with the consultant or mentor and the effect of the relationship of the consultant and client has on this.

Sources of benchmarking data are mainly on-farm/business records of management changes, productivity, economic returns and environmental indicators as well as interviews with the consultant/mentor and their client.

The Legacy

To be able to attribute impact sometime after a project or program has concluded relies on memorable features or permanent changes that were produced. Mayne (1999) talked about discriminating indicators to track the impact. He warned that we need to make sure that we are only looking at indicators that can be associated with changes that were brought about by the project or program and not more generally.

An example I have with regard to a discriminating indicator is the story of the waterway health media campaign involving the star footballer, Adam Goodes. He was remembered by 70% of respondents and his message by 57%. The success of this awareness campaign can be directly attributed to using him as a trigger for memory.

New words that people use can also be attributed to certain projects and programs. In our work, the term 'riparian zone' to mean the zone in which a river meanders (or has influence) is new to most community members who begin work in environmental groups. They are often able to tell us when they first heard the term and now use it themselves.

Kemmis and McTaggart (1988) in their work in action research mention that other changes besides the different words people use that can be observed. These are changes in affiliations and actions. There are different associations that people now make; there are different people now in their networks for example or they do something different.

Changes in action and behaviour are what government auditors look for with regard to attribution. Promise of this can be asked for at the time that a project or program is running and then followed up on later. But this needs an evaluation to collect data at this level.

Conclusion

Attribution is easier to make the more closely it is associated with the event. The causal links between the steps in the logic of a project or program can be measured for attribution to the impact of the project/program in a very direct way.

While many impacts can be attributed to an intervention, it is first those that were intended that need to be accounted for. For example, if we take engagement, it occurs in a number of ways as I outlined by describing the various models. What matters is that the impact of each of the different models at least has an effect in its intended area. For example, people working with the empowerment model need to become empowered first and foremost, people working with the problem solving model need to be able to solve problems and so on. Therefore, while a project or program can be successful it also has to be successful in its intended area.

The legacy left by a project can be measured in several was. As discriminating marker of some sort is the easiest way to track impact. Other ways can be the permanent change that is left behind by the way that people speak, act or with whom they affiliate. There are other changes of a physical or biophysical nature also depending on the project or program objectives.

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