

DESIGN AND EVALUATION: THE DEVELOPMENT OF A PARTICIPATORY PROGRAM

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ABSTRACT

In 1999 Primary Industries and Resources South Australia (PIRSA) and Adelaide University developed the NAVIGATOR extension process to assist producers in determining areas in their businesses that needed improvement and from this develop strategies to make change. The principle objectives of NAVIGATOR were to promote cultural change, self-reliance, develop strategic planning skills and new thinking patterns, to assist producers in dealing with their constantly changing circumstances, in the areas of production, market, natural and social environments, business and finance.

Qualitative evaluation has been undertaken to develop the NAVIGATOR process and determine if the program outcomes are being met. To achieve this, close collaboration between the program designer/manager and an evaluation practitioner, together with inputs from facilitators engaged in presenting pilot versions of NAVIGATOR to groups of producers occurred. Qualitative evaluation data, including outputs from group activities together with focused facilitator feedback on group process were gathered. These data were systematically analysed in light of overall project objectives, as well as desirable and grower determined outcomes for participants. The development of the program increasingly focused on participatory processes, active grower determination of direction and activities for groups.

The “Stand and Deliver” style of information delivery was progressively removed, except where particular groups specifically identified it as desirable for specific purposes, in favour of process oriented participatory modes of learning. Features of the role and nature of facilitation emerged as significant for the delivery of NAVIGATOR, though the NAVIGATOR processes have shown themselves to work with, or in spite of, a variety of facilitation styles.

KEY WORDS: Agricultural Extension, Participation, Self-direction, Qualitative Evaluation, Cultural Change.

1. BACKGROUND TO NAVIGATOR

Throughout the 1990s the wine industry in Australia has been expanding. In particular this period has seen both an expansion in vineyard area and the number of new players into the winegrape production end of the industry. This expansion occurred as a result of an increased demand for Australian wines, reds in particular, in both domestic and international markets. South Australia is identified as the major wine producing state in Australia with an image of distinctive, 'clean and green' product embodying innovative wine styles tailored to the demands of particular markets and market segments (Boon et al, 1999). Primary Industries and Resources South Australia (PIRSA) recognised that if the state is to maintain this image, and continue to meet market demands, it must assist new and existing winegrape producers to acquire more knowledge and improve their skills in running their business. This would maintain the environmental and financial sustainability, and stability of the wine industry, while extending benefits to both the regions and the state.

The rapid expansion in the wine industry had highlighted the increased complexity of all aspects of the industry, but particularly at the winegrape production end. Here, traditional reliance upon government and large wineries for market and production information was recognised as no longer sufficient. The speed and complexity of changes in both the market and production through the 1990s, together with the importance of matching production practice outcomes to market demand, has meant that producers need to be much better able to handle complex information. They needed to be much more 'savvy' than has been the case in the past. In addition, the 1990s saw increasing community awareness of and concern about increasing salinity, both dryland, in the major river systems and in ground water in Australia. Again, this has impacted on the options available to winegrape producers in their businesses.

NAVIGATOR, an agricultural extension program, was response to this situation. It was innovative both in the program that was ultimately devised and it was innovative in that the program was developed using qualitative evaluation approaches to program logic. The NAVIGATOR brief was to facilitate among winegrape producers the development of the wide range of skills necessary to both the continued international success of the industry and to the sustainability of the individual winegrape producer and the environment.

The importance of a sustainable agricultural sector cannot be overestimated. For most of regional and rural Australia agriculture is an important element of the economy. However the promotion of sustainable agricultural practices in general has been recognised to be more demanding than 'traditional' extension programs advocating the adoption of 'add on' technologies (Bart & Campbell 1999, Pannell, 1999; Marsh & Pannell, 1997). Indeed Röling and Jiggins (2000) have suggested that sustainable agriculture involves a complete transformation in the manner of farming. This transformation, moreover, requires considerable changes in the way farming and land management are approached. They advocate "fostering discovery learning" which involves the acceptance and development among farmers of new complex behaviours. None of this bears much resemblance to traditional agricultural extension.

Leading wine companies have also identified that producers need to become more self-reliant as more specialist knowledge is required. Companies such as Orlando-Wyndham have clearly identified this through a study performed by Wine Industry Consultant

Bronwyn Halliday in conjunction with Ernst and Young. They have noted the importance of increasing the levels of communication between the company and its contracted producers, referring technical enquires to specialists as the producers' knowledge and sophistication has increased to produce a consistent and quality product (Gifford et al, 1997).

All this, as noted above, was the spur to NAVIGATOR'S development, however, NAVIGATOR was not limited to a particular industry or narrowly production focussed in its objectives, the project evolved into much more. A structured process that enables producers to identify their own areas of need and develop projects to meet these needs, which empowers the producer giving them responsibility for their own future. This evolution was due in large part to the program logic, qualitative methodology that underpinned the program development process.

NAVIGATOR, which began its life as Better Practice Winegrape Production, has been evolving over the past two years. The approach taken, applying a modified qualitative evaluation methodology to the development of the program, and basic rationale of the program were such that the extension process that emerged was neither exclusively production focussed, nor did it appear to be only suitable for wine-grape producers. As a result the name was changed to NAVIGATOR, as this name was held both to more closely mirror the breadth of possibilities opened to participants, as well as being a process that enables them to chart a course that addresses the needs they have identified.

Essentially the developed NAVIGATOR process was looking at stimulating a cultural change from dependency on government and larger industry players to well-informed and independent winegrape, or other agricultural, producers. Thus as producers increase their knowledge and learn where and how to access resources, information, funding for projects and resources outside the traditional government services, they will become more "empowered".

2. BASIC RATIONALE OF PROGRAM

NAVIGATOR uses and builds on principles and approaches that are not new, such as adult learning and action learning principles, but it does not just follow these. In both adult and action learning the facilitator or instructor takes a more active and directive role than is the case in NAVIGATOR. Indeed in NAVIGATOR the facilitator is merely a guide who will take participants through the process once, or perhaps twice, but always with the view that the participants will become independent of the facilitator and the process.

Adult learning proposes that people learn by doing, while action learning states that people learn by working on real problems. In the latter meta-learning is occurring, in that with action learning people are 'learning to learn' by 'doing learning'. The learning is at two levels in the NAVIGATOR process, on the one hand producers are finding and using information they have determined will be useful to them in their business, thus they learn about strategies and activities that enable them to find and manage information.

Zemke and Zemke (1984) note that for adult learners there must be a use for knowledge sought. Adults are interested in concept application rather than a survey of the field. They will seek to integrate new knowledge into existing knowledge and tend to conservative

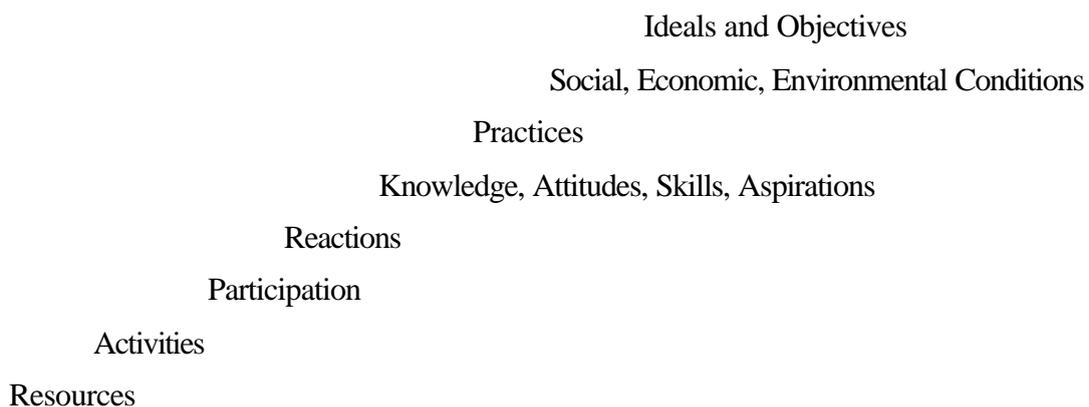
by consumer preference, which can be fickle and unpredictable beyond a quite short period.

As a consequence of the difficulty in ‘measuring’ cultural change, a number of concurrent objectives emerged, many of which are subsidiaries of cultural change. Prominent among these is the call for increased self-reliance. Again there has been an absence of a clear definition. Moreover, in light of the history and practice of agriculture in Australia, it is hard to see Australian farmers as anything but self-reliant. However, historically, the self-reliance of Australian farmers has been of a highly practical nature. Contemporary circumstances require that some of that ingenuity be turned to the less overtly practical matters that impinge on farming practice, often matters whose origin is off-farm. The market and the environment are two; there is also increased pressure for improved financial and business management. Focus on these relatively abstract factors, together with their off-farm origin for many winegrape producers constitutes a significant change in direction indicative of a cultural change.

3. PROGRAM LOGIC AND THE DEVELOPMENT PROCESS

Funnell (1997) suggests that as the use of a model can be beneficial in the evaluation of a program, so the use of a model can also be beneficial in the design phase of a program. Bennett’s Hierarchy is a model that is quite commonly used in the evaluation of agricultural extension programs. It proposes 8 levels (figure 1 below) at which evaluation can occur. Achieving at any one level (except the lowest) is dependent on the outcomes of the preceding level. Thus the objectives, understood in terms of the prevailing social environmental and economic circumstances, are achievable if certain practices are undertaken, to undertake these practices, then knowledge, attitudes, skill and aspirations may need to change, and so on.

Figure 1: Bennett’s Hierarchy



Modified from Bennett (1979)

As a design tool, the hierarchy was used both ‘top down’ and ‘bottom up’. Careful attention was paid to the relationship between the various levels. Activities were designed with the overall objectives in mind. An iterative process of trailing activities, analysing outcomes in light of overall objectives and adjusting activities and clarifying objectives was undertaken. Outcomes of activities were considered in light of the participation they

generated, the reactions of participants and the knowledge, attitudes, and so on that were implicated, and the key question always was: were the objectives addressed?

3.1. Evaluation and development

Because of the process focus of NAVIGATOR, qualitative evaluation has been undertaken. This has been done as part of the development of NAVIGATOR processes, with a view to ensuring outcomes of cultural change and development of human capital, which are at the heart of NAVIGATOR. Evaluation in this project has not been a *post hoc* examination of outputs. Rather an active evaluation process has been developed which has contributed strongly to the development of the NAVIGATOR process.

Formally, the process evaluation has involved a report from the facilitator after each group meeting in which the facilitator comments on how well (or otherwise) each section or activity went and some explanation of the indicators that have lead the facilitator to reach these conclusions. Thus the facilitator is asked to say whether the process was Poor, okay, Good or Excellent, this judgement is then supported with observations of the group during the session. Facilitators are thus encouraged to observe closely such things as how many of the group are actively participating, the level of discussion and what was discussed, and body language of participants. Basically where the facilitator felt something went well, they were asked to look for and note concrete points that explain why they felt it went well. They were also asked to look for 'counter instances': if the discussion went well, was everyone involved, or was it just a few, were the others listening, or just putting up with the discussion? And so on. This is not only a useful exercise for evaluation purposes, but resulted in improvement in facilitators' skills in working with groups, making them more observant and responsive to nuances in group behaviour.

The second strand of the evaluation data has been the outputs from the sessions. Thus any points or information that were generated in sessions was preserved and used in conjunction with the facilitator's comments to develop, systematically, a picture of the process. This picture was then used to identify points that address the overall objectives of NAVIGATOR, and was fed back into the developing process. Where the objectives were not addressed, careful analysis was undertaken to identify reasons for the failure. The point and value of activities was scrutinised and changes were made, or in several instances the activities were dropped.

An interesting and counterintuitive observation has been that sections of the process identified by the facilitator as being 'Good' or 'Okay' have in general produced better and more numerous responses than those sections identified as 'Excellent' by the facilitator. Tentatively, it seems that where the process is 'Poor' or 'Bad', getting anything out of a group is like pulling teeth, the process is not working for some reason. Where the process is seen as 'Excellent' by the facilitator, there is lots of animation and enthusiasm evident, but the output of the group in these circumstances is not always very impressive, though of course there are exceptions. It seems that the more subdued, 'Good' or 'Okay' indicates that the group is actually working hard, and advancing their learning in solid and measurable ways.

Further as NAVIGATOR groups identify and carryout ongoing projects, this information was gathered over periods of up to two years. Changes in group function and output were tracked, providing evidence of changes particularly in approach to problems. Finally as groups have come to the end of their first projects, further data has been gathered direct

from participants regarding their experience of the process and their perceptions of changes in the way they deal with information and handle problems. This has so far strongly endorsed the process and reinforced inferences about improved self-confidence, holism and cultural change made on the basis of outputs from sessions.

3.2. The Process and the Participants

Overall participants in NAVIGATOR groups have been drawn from a range of backgrounds. Participants ranged in age from mid twenties to mid sixties, there have been both men and women in groups, but a preponderance of men has been noted. Participants have had a range of educational backgrounds, including some with tertiary qualifications, and some with much less formal education. There have also been participants whose entire working lives have been in winegrape production and participants whose experience is only a couple of years. Participants have also come from a range of cultural backgrounds, though all have been English speakers.

NAVIGATOR is strongly process oriented. That is where ever possible participants are active in exploring ideas, gathering information, making decisions, and so on. The process pushes participants to the fore front and facilitators into a more covert helping role. High levels of overt energy generated by a facilitator are not important for this process, indeed they may have a negative effect.

The process has been presented by a number of facilitators with quite a range of experience and given that early in the development of the process training was not offered to facilitators, these facilitators sometimes had imperfect understandings of NAVIGATOR principles and objectives. The process stood up well to this range of presentation styles and understandings, which has demonstrated that the process is robust, it has worked well 'despite' the facilitator. This robustness we speculate is because the process is strongly participatory. Inexperienced facilitators may try to 'talk at' participants, but the process rarely allows much opportunity for this. Where facilitators attempt to remain 'in control', as long as the process is broadly followed as described, the process itself empowers the group, such that the group has sometime seemed to be 'in advance' of the facilitator in their actions.

3.3. Cultural change

Mirowsky and Ross (1998) describe human capital as comprising the skills and knowledge, motivation and creativity, and simple labour-power of the people involved in an activity. They, among others, also note that the theory of human capital converges with the theory of personal control in many ways. Through formal education people learn to solve problems and to be active and effective agents in their own lives (Mirowsky and Ross, 1989). Following Coleman (1988), private effectiveness that is developed with human capital is facilitated by social capital, which exists as a collective public good. Social capital then is those aspects of a social structure that facilitate action (Coleman, 1988). Thus, social capital is to be found in any sort of social relation that provides a resource for action which "inheres in the structure of relations between persons and among persons" (Foley and Edwards, 1998). Thus rather than create or develop self-reliance, the notion of developing human or social capital then seemed to be more appropriate.

The central point here is that in the iterative developmental process, the identification and clarification of features that either contribute to, or are indicative, of cultural change and

human or social capital emerged gradually. For example, we consistently found that the more participatory and non-directive as to outcome processes and activities were, the more strongly did outputs indicate evidence of cultural change. In response to this we came to recognise first, the importance of the facilitator as facilitator rather than as leader or information provider or organiser of the group or any of the myriad other tasks 'facilitators' have traditionally taken on in agricultural extension. We further recognised the importance of non-directive learning strategies and developed processes that enable groups to take control of the direction and content of their learning. The linked processes of developing increasing clarity in regard to the objectives and devising strategies should be understood, not as circular, but in terms of a spiralling maturation of concepts and activities.

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