Using structured self-assessment to improve cross cultural extension in the vegetable industry of the Northern Territory

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Introduction

Vegetable production from the Darwin rural region is valued at around $20 million per year (NTG 2010) with major commodities including cucumber, snake bean, okra and "Asian" melons (e.g. long, bitter, hairy and winter). The industry is growing, fuelled by demand in eastern Australian population centres for these vegetables in the winter months, which corresponds to the 'dry' season in Darwin. Most vegetable production in Darwin is by growers of non-English speaking backgrounds (NESB), primarily Vietnamese and Cambodian. There were three distinct geographic districts for the vegetable growers, Marrakai; Humpty-Doo / Marrakai and Berry Springs/Darwin River. The Department of Resources (DoR), of the Northern Territory Government, is currently running an extension program with these growers. The objectives of the program are to:

1. improve the quality of vegetables that the NT is growing for eastern markets, and;
2. enhance the sustainability of the industry.

Working toward these objectives, the staff involved in the program sought to engage with this farming community through one-on-one visits, distribution of translated literature, e.g., integrated pest management posters, product description languages and Agnotes; and group meetings. Growers suggested leading grower sheds on which to hold the meetings in each growing area. Meetings were held during the dry season of 2011 (May-August). The technical focus of 2011 was to change grower behaviours toward best practice in irrigation management, integrated pest management and post harvest handling of vegetables.

This program was the first engagement with this sector in a non-regulatory way for the Northern Territory Government in many years. It did offer a number of cultural challenges that had been highlighted by other authors such as Bradley (2008) and Morgan (2003). These challenges include:

1. Establishment of effective working relationships with NESB growers.
2. Developing understanding of the issues and factors that drive and influence grower practices.
3. Identifying growers framing and information needs (Morgan 2003).
4. Determining ways to work effectively with NESB growers to foster a culture of sustainability (Bradley 2008).

Other important issues that were considered included:

5. Growers rarely consulted with NT Government agencies or personnel.
6. Their preferred sources of information were friends, neighbours, relations and agribusiness (Bradley 2008).

A number of different extension approaches were taken to engage with the NESB vegetable growing sector. These included:

One-on-one visits where staff would visit growers on their properties during the day, to establish relationships, discuss current issues and distribute translated resources such as posters and Agnotes.

Demonstrations where wetting-front detectors and tensiometers were installed on leading grower properties for demonstration at grower meetings.

Group meetings were also in farmer's sheds in each of the main growing areas in the Darwin rural region.

This paper describes some of the initial interactions with the NESB vegetable sector in the Darwin rural region, and how the use of a structured analysis techniques (i.e., ORID) during a periodic review, has helped refine and improve the extension initiative.

Method

Extension practices

A process of structured analysis - the ORID (objective, reflective, interpretive, decisional) technique (Ross 1994; Stanfield 1997) was employed to analyse the process and efficacy of the group meetings. This focussed conversation method was developed by the Canadian Institute of Cultural Affairs as part of its technology of participation program. A facilitator guides a conversation which flows from surface to depth (Stanfield 1997). Table 1 gives a summary outline of this process.

Table 1: Outline of the ORID process of focussed conversation

Type of question	Purpose	Example
Objective (O)	Begin with facts / data and external reality	What did you actually see, hear or read?
Reflective (R)	Evoke immediate personal reactions, internal responses, sometimes emotions or feeling, hidden images and associations with the facts	What was your gut level reaction?
Interpretive (I)	Draw out meaning, values, significance and implications	What new insight did you get from this?
Decisional (D)	Bring the conversation to a close, eliciting resolution and enabling the group to make a decision about the future	What do you think we should do?

This approach closely mirrors the normal process of moving from observations to beliefs called the "Ladder of Inference" (Ross 1994). The Ladder of Inference describes the thinking processes that most people logically go through, often without realizing it, to get from a fact to a decision or action. Starting at the bottom of the process are reality and facts. From there, we (Mindtools 2011):

- Experience these selectively based on our beliefs and prior experience.
- Interpret what they mean.
- Apply our existing assumptions, sometimes without considering them.
- Draw conclusions based on the interpreted facts and our assumptions.
- Develop beliefs based on these conclusions.
- Take actions that seem "right" because they are based on what we believe

Beliefs have a major influence on how we select from reality, and can lead us to ignore the facts altogether. Soon we are literally jumping to conclusions – by missing facts and skipping steps in the reasoning process. Using ORID is a way to make sure each step in the thinking process is well considered before conclusions are drawn. This structured approach was used specifically to analyse the process of a particular group meeting in the Humpty Doo district held one mid-afternoon during the dry season, but its findings have equal applicability to other group meetings, one-on-one visits and demonstrations conducted in the extension initiative.

Results

The analysis revealed several important issues in how the extension work was being conducted.

Issue 1: Meeting time

Objective	Reflective	Interpretive	Decisional
The meeting was held at 2.30 pm at the request of the hostess. There was good attendance (16 growers).	We thought the growers might be asleep and were apprehensive that no-one would come. We were surprised that growers attended.	We were wrong about growers' priorities and the importance they placed on attending meetings over afternoon sleep. Taking note of the host's preferences for meeting times should be considered.	In future we will consult growers before determining meeting times and adjust accordingly.

Issue 2: Defining the name of the gathering

Objective	Reflective	Interpretive	Decisional
NESB growers looked confused when we used the word "workshop" to promote our events, but looked satisfied when we used the word "meeting".	We were confused about how to communicate what a workshop was and how it would benefit the growers.	We need to find a word that works with the limited English vocabulary of our sector and we also need to understand that NESB growers probably have a limited vocabulary compared to native English speakers.	We would use the word "meeting" with all our future communication; this word had meaning for most growers. We will review all written correspondence in English and eliminate uncommonly spoken words.

Issue 3: Meeting preparation

Objective	Reflective	Interpretive	Decisional
The presentation structure for the meeting did not follow our initial plan. Our colleagues did not have the presentations ready that we thought they would present. The main meeting facilitator had to 'wing it' when expected presentations were not forthcoming.	We experienced mild panic, embarrassment and disappointment in ourselves for not preparing more thoroughly. We had feelings that our colleagues might not be on the same track as us but did not act on it.	We learned that we need to make sure that everyone is on the same track on our team with what is expected of a meeting, especially guest speakers or 'experts'.	Before every meeting, especially with guest speakers, a rehearsal of the meeting will be held to make sure everyone knows how the meeting will run.

Issue 4: Language barriers

Objective	Reflective	Interpretive	Decisional
During the meeting growers would talk to each other in their native language. Our interpreter would only translate our presentation, and not the discussion from the floor back to us.	We were unsure of the feedback the growers were giving to the group because we could not understand the language. We felt confused, lost and helpless, and were not sure if we were having positive or negative impact because we could not participate in group discussion.	Without language we could not adjust the content of our meetings to the needs of the group. The only feedback we get where there is no language is body language. We also could not tell if the growers were understanding our material or not.	We decided to develop an operating framework for the interpreter, which asks them to give us key feedback from the floor discussion, and understand our need to participate in discussion.

Issue 5: Presence and behaviour of a rural journalist

Objective	Reflective	Interpretive	Decisional
A rural journalist arrived to cover the meeting and took photographs and recorded discussion without asking permission. The growers did not object to this (in English or otherwise by body language).	We felt uncomfortable that this may have been considered culturally rude or unacceptable to the growers.	We need to reconsider our approach with rural reporters at our events.	Make sure we ask (through the interpreter) if it is OK to take recordings during a meeting. Discuss with the reporter before hand that we will expect permission to be sought before taking recordings.

Issue 6: Field walk

Objective	Reflective	Interpretive	Decisional
Growers look confused when asked to move from the meeting shed to the demonstration site in the shade house, and mostly moved off into small groups to chat or smoke instead.	We felt confusion and frustration that they were not participating in what was for us the most important part of the meeting, and, from our experience, the most important part of a grower meeting for native English-speaking Australian groups.	The lack of participation of the growers in the field walk could have been due to several factors; lack of interest, not knowing the structure of the meeting, an issue with the interpretation of our instruction or an uncomfortable feeling about looking at the operation of one of their colleagues.	We decided to write an agenda for the meetings in Vietnamese and distribute / put up on a board during the meeting, so all participants were clear about what was happening at different times during the meeting. We also decided to make sure the interpreter could help us out by letting the group know when the meeting moved from one part to the next. In addition, we will ask the interpreter to ask the growers for feedback on their feeling about field walks.

Discussion

Using the ORID framework for analysis allowed us to slowly move through the "ladder of inference" (Ross 1994) from actual observations and feelings about our extension activities, to sound interpretations and decisions about how we run future activities. It has allowed us to become aware of our own thinking and reasoning (reflection); made our thinking and reasoning more visible to others (advocacy) and allowed us to inquire into how others think and reason (inquiry) (Ross 1994).

The major finding from using this framework was that when working with people from non-English speaking backgrounds, a skilled interpreter is necessary, but not without a framework for operation that extended beyond giving a translation for our presentations to helping us:

- Translate the agenda of meetings and verbally signpost to the group when we were moving from one part of the meeting to the next.
- Be aware of key feedback from the group in 'on-the-floor' discussion, and pass on this feedback to us to help us adjust the meeting to the needs of the growers.
- Participate in activity evaluation.
- Offer cultural advice, where appropriate, translating behaviours as well as language.

We also discovered that some extra work with meeting preparation, such as asking growers their preferred time and venue, preparing non-target meeting attendees like reporters, rehearsal with key speakers and checking our language and vocabulary would all help the meeting to run more smoothly and ensure communication was effective.

Conclusions

ORID allowed us to examine our longstanding assumptions (e.g. growers like field walks) and realise that they might not be true in every cultural context, and our extension approach may only be successful if we test and re-test assumptions about what works with a particular group. This approach will be especially useful with NESB growers to establish effective working relationships, develop an understanding of the issues and factors that drive and influence their practices and identify their framing and information needs.

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Plate 1. Grower workshop in the Humpty doo/Lambells Lagoon area

Plate 2. One of the authors, Stuart Smith (in green shirt) with growers from non-English speaking backgrounds