The national Blue Sky project, as quite a number of you will know, was designed to 'put teaching and learning back on the VET agenda'. Of course, for many lecturers and trainers it had never fallen off the agenda. But this was ANTA and the States/Territories/Commonwealth realising that learning and teaching just may be central to vocational education and training.

What to do with this realisation?

Moira Scollay and Rod McDonald had a plan which they labelled the Blue Sky initiative. If you think about it, this is a curious label – as if thinking about this was way out there, a bit out of reach. But ‘Blue Sky’ turned out to be a good strong image. In any event, the Blue Sky plan they devised had three stages:

- first to commission half a dozen ‘think pieces’ about the advances that have been made in understanding how minds and brains work, along with fresh ideas about learning and teaching that might challenge assumptions that practitioners were operating from;
- then to workshop these think pieces with practitioners around the country to see what, if any, interest or use they found in the think pieces;
- finally a series of educational leaders forums to consider the think pieces and about the response to them – and ask these leaders what implications, if any, there were from those ‘findings’ for their own work.

In sum [hand waving here]: (1) there were the think pieces …. (2) what they meant (or might mean) to practitioners … (3) then what all that meant (or might mean) to sector leaders. It seemed to me, on being invited to talk here this morning, that we could take another step and ask: what, if anything, in that whole trajectory might be of use to VET researchers. Perhaps I should explain my role in all this: I was invited to manage the Blue Sky project – that meant commissioning the think pieces, conducting the workshops and, with Rod, the final forums.

This morning’s exercise then is to explore that trajectory through the lens of VET researchers. It will follow, roughly, the same order of the three phases – because my proposition is that there might, indeed, be some implications for our approaches to research in VET in all three: in the think pieces themselves – in the response of practitioners to the think pieces – and in the round with educational leaders.

from the think pieces (first)...

The piece on implicit knowledge focused on the singular fact that the best estimate amongst cognitive scientists is that 95 % of our thinking is unconscious and that memories (and memory)
are not little dollops of fact perched on a neuronal hook waiting to be retrieved – but these patterns, packets of energy flashing through particular neuronal networks – each pattern or flash stimulating another electrochemical pattern to fire... Two rather poetic ways of imagining this:

“Memories don’t sit in one place waiting patiently to be retrieved ... they drift through the brain, more like clouds or vapour than something we can put our hands on.”

that what is going on in our minds is: “a shifting stream of signals: reinforcing, correcting, congregating into ideas of things and of ourselves...”

In fact, the old language of ‘storing’ something in memory and ‘retrieving’ it is wholly misleading... Memories are reconstructed each time we call them forward into consciousness. And they emerge in response to some stimulus, and the particular stimulus will alter what is called forth.

I need to point out that this way of conceptualising memories is not undermined by the fact that very specific sites in the brain that are involved in certain processes:

- a lesion can defeat a person remembering adjectives
- the person who cannot hold more than two numbers or random letters (in short term memory) when spoken, but no problem producing and understanding speech or strings of letters and numbers presented visually
- face agnosia (person deprived of the ability to recognise familiar persons by sight but not by sound – including self! woman standing in front of a mirror, but when a recording of her voice
- when parietal lobe damaged through stroke (parietal lobe is essential for tasks requiring imagination) – the person loses the ability to dream

These block a process, it doesn’t alter the mind’s fundamental architecture of distributed memory

The stimuli (contexts) that reshape the memory as it is reconstructed when needed seem unimaginable in their subtlety:

- a major European retailer discovered that the use of a particular product recalled by survey respondents depended not only on the way the survey questions were sequenced but even on the colour of the paper it was printed on
- actually this ‘subtlety is down right scary: People were shown an advertisement – a photo of someone being helped at a service counter. If the setting included a wall clock, people were more than twice as likely to evoke the notion of speedy service than the same image without the wall clock. ... the one about being primed by someone mentioning ‘doctor’ – then the jumble of letters: the word nurse is found quite quickly

I should say that those examples come from a book that I find fascinating: as both attractive and downright scary: How Customers Think by Gerald Zaltman from Harvard where he runs a laboratory called ‘Mind of the Market’ in which Harvard’s gun cognitive scientists collaborate with Harvard Business School’s gun marketing specialists to push back the frontiers of increasing the market share of corn flakes against rice bubbles... But they do amazing and quite compelling experiments exploring our minds.

As researchers, it is very important that we understand the susceptibility of our interviewee’s neuronal patterns to change which they may be wholly unaware of. An example that brought this resoundingly home to me:
very early in my career at the ABC doing Science Bookshop – interviewing an author who had written a book about shorebirds. Now I promise you this was a totally non-controversial subject. And I recorded a 20 minute or so interview on-line with the author – which was the luxury pre-produced programs always had: we could over-ask and then edit. First question... then meandered ... then came back to it, and – something I didn’t recognise either till I got back to the studio and started editing – was that the bloke had completely contradicted himself! ... not lying (if he had been he would have been more consistent) – but the context was just that little bit different....

Interviewers assume (or act as if they assume) that the views of their interviewees are stable. Let me give one more example because I think it is an exceedingly important point that our questioning must correct for – yet I have never read a book on social science research methodology which actually gives it any weight:

In a diary entry by novelist Dawn Powell in 1956: “I have been denying for years that there is any basis in [my book] A Time to be Born [published in 1942] to say it is about Clare Booth Luce. I swear to people it is based on five or six girls, some known to me personally, some by talk and that often I changed facts that I knew to avoid any possibility of libel. I have been insisting it was a composite (or compost!) for more than a decade. But then I find a memo from 1939: ‘why not do a novel on Clare Booth Luce?’ . So who do I believe: me or myself?

Good interviewing then, good questioning, has to cope with the fact that our memories are malleable. They change, basically, each time they are re-visited, re-constructed. I won’t labour the point. But would remind you that this is not faulty memory, or ageing ... it is the natural condition of memory.

Another aspect of our cognitive condition that impinges on the research interview process is Alice’s ability to think of six impossible things before breakfast .. I would amend that to say we can all think of six contradictory things – or, at least, inconsistent things in front of a question. An example

Women being interviewed (for a market research firm interested in selling daytime television) were invited to bring in pictures of how they see their day. One participant brought in a picture of a solitary tree growing in a barren landscape. Initially the interviewee used the picture to describe her sense of loneliness - lack of help in raising a pre-school age son and the absence of recognition of her struggles. But later, when the interviewer revisited the image in a different context – a dramatically different interpretation arose: she saw the tree as representing her sense of achievement and her courage in facing difficult odds. In other words: it was a lonely tree and a strong tree...

You can see where I am headed here. The think pieces about our minds – about what knowledge is (these flickering neuronal patterns) – and about what happens when we reflect on our knowledge, triggers whole cascades of patterns. This has serious implications about the way we try to extract knowledge from research subjects. I’ll briefly indicate what I think the implications are – although you may well find others. To me they say:

- don’t ask everyone the same question. I have debated this point with academic researchers and others. They are horrified, for example, that when I do case studies, I
don’t have a set list of questions. I am horrified that they do: how could anyone expect to understand the learning culture of a fish finger factory in Bathurst and a high pressure steel fabrication engineering firm in Newcastle by asking the same questions?

I have a particular passion against asking the same set of questions in selection panels. The same tasks for all applicants, yes. The same questions. Why? How are you going to plumb their strengths (forget their weaknesses).

- second what kinds of questions best surmount the cognitive barriers to reliability?
  - don’t always avoid leading questions: “do you mean X...?” I recognise that this is considered infra dig - and I can see that you do not want to force an interviewee to follow down your line of thought rather than their own. It is, I guess, a balance between checking that you really understand what they’re meaning and not distorting their meaning by asking particular ‘checking’ questions.
  - there is an issue also about asking people questions that make them uncomfortable. Let me give you an example: in trying to decide what the think pieces should be thinking about I spoke to a couple of dozen people. The purpose was to think about what assumptions people in VET might be making about teaching and learning that needed to be challenged. The way I phrased this to people I knew well (not to people I didn’t because it is a very confronting question) was this: With the stolen generations and the report bringing them home it is clear that people were making assumptions about what was best for Aboriginal children - indeed, the assumption was that they would be better off away from their Aboriginal environment. Thirty years later that looks morally reprehensible. My question was: what are we doing now that will look morally reprehensible 30 years hence?
  - some of you here, I know from your work, get around the instability of our thoughts and thinking by taking real concrete materials in to have people talk to and about. The quote or exemplar is demonstrably in common across all the interviewees and then you are asking for an interpretation of it quite up front.

- a third implication from our current understanding of minds, memory and thought is actually to question the value of focus groups. Zaltman makes a convincing case that what you are witnessing in a focus group is how people influence one another - actually watching them rearrange people’s memories and thoughts. Now this can be good: we held the workshops with practitioners precisely to watch people’s thinking develop as they challenged and talked with one another. But we were not using the groups to establish evidence of some outside ‘reality’. And, indeed, in Blue Sky workshops – the pieces people liked most had quite different patterns in what seemed to be otherwise quite similar groups

[possibly talk about our experience with co-venturing groups. arose from this new phase .. purpose to explore next steps. But how different the groups are – the tone set, the dynamics – wine or coffee].
I should make it clear that I love interviewing (and, indeed, running workshops) – it’s basically what I have been doing on almost a daily basis for the past 20 years. One reason I like it so much is exactly because of the dangers it skirts, the risks it takes. And I think we need to be conscious (!) of this when as researchers we go out to collect information that is embedded in people’s minds: we are trying to extract and collect thoughts from out of those flashing mental electrochemical patterns to which our subjects have less access than they (or we) dream of.

So that is one implication, I think, from the think pieces for VET researchers.

There is another think piece that may have some implications for VET researchers:

It is the one on the real world of work which very honestly confronts the complexities and contradictions – indeed, as Ann Whyte describes them, the paradoxes – of the workplace. In the workshops – in fact, it was in the workshop with VET professionals held in this very building – one of the participants made this comment in relation to this piece. He said:

*At work I become the person I need to be, not the person I want to be.*

This sent a shock of recognition round the room. And it was interesting, of course, because the piece had meant to be thought about in terms of the VET students who would be going out into that world of work. Here people were applying it to themselves. When I repeated the comment in other workshops, the reaction was similar.

*well, maybe we should do something about this.*

For researchers may I propose another implication. That when we go into workplaces (including, of course, into RTOs which are workplaces for some) we need to understand that the person we are questioning has assumed an identity. One of the things we do as interviewers by the way we approach the interview is to suggest to the person we are talking to what identity he or she is supposed to adopt. You can see this most immediately if you are recording the interview (whether for broadcast or research): the person always changes when the microphone is switched on and when it’s switched off again – this is often quite wise on their part, but it is their putting on their ‘interviewee persona’

Jean Converse in her book called *Conversations at Random* gives a great example of this. It’s a wonderful book which recounts (and analyses) the experience of graduate students at University of Michigan who, as part of their training in survey research, actually have to do 15 door-knock interviews for the annual Detroit Area Study (and then write up their experiences). Some of it is very funny:

the interviewer who was let into the kitchen – the interviewee sat at the kitchen table drinking beer and absolutely bleary-eyed, muttering and slurring his words. At the end of the hour interview he – to quote her notes “congratulated me! He said I was surely lucky he had been drinking because he never would have given me the interview if he had been sober. His wife heartily agreed: “When he’s sober he hardly says a word”!

But the Converse story I really wanted to tell was where the interviewer sets the mood through establishing the interviewee’s identity: The woman who answered the door was unwilling to be interviewed because, she said, “I’m just an uninformed housewife”. The interviewer with
lightning wit explained that she could *represent* all the people who were not terribly interested in politics or public affairs. And the interview was on!

The most remarkable identity-transformation I’ve witnessed was Chris Patten when he was being interviewed by Maxine McKew as he was leaving Hong Kong. He clearly assumed (probably this was his squillionith interview) that this was another royal performance on his part just producing pat answers. She was asking solid knowledgeable questions and all of a sudden you could see him visibly pull himself together and turn into an thoughtful intelligent engaged interviewee.

I expect many of you have been asked by an interviewee ‘which hat should I put on?’ …

I might summarise all of this with a quotation from Hans Eysenck, the IQ researcher, who originally did not view qualitative research as anything other than a method for producing anecdotes, but later came to say, and believe: “sometimes we have to simply keep our eyes [and, I would add, ears] open – not in the hope of proving anything but rather in the hope of learning something.”

Now let me move away from the messages the think pieces themselves might suggest about research methodology to the next step of the Blue Sky journey: the workshops with VET practitioners about the think pieces.

The response to the think pieces uniformly across the 147 people involved in the ten workshops was of genuine enthusiasm – of real appreciation. I had been a little concerned that the discussions could degenerate into a blaming game with participants saying they would enact the fine ideas in the think pieces “if only we were given more time … more resources … fewer students … etc.”. That was not at all the way the conversations progressed.

I have thought long and hard about why the response was so overwhelmingly positive because, as I’ve said publicly before, the think pieces were okay but not brilliant. And lots of the ideas not new. In fact one of the favourite lines was the quote from John Dewey in the think piece about learning environments. In 1916 – almost 90 years ago – Dewey wrote:

*Methods which are permanently successful in formal education give the student something to do – not something to learn. But the doing is of such a nature as to demand thinking.*

The conclusions I have come to about why the response was so enthusiastic may simultaneously hold some messages about VET research.

First, the whole ambience of Blue Sky was to treat the VET practitioner with respect. It was not ANTA telling people what to do – a highly unusual (if not unique) experience in itself. Let me read something to you from the preface to the original Blue Sky booklet:

The authors of the think pieces have been specifically directed to be interesting and informative and *not* tell you how to do your jobs. You neither need nor want admonitions from outsiders advising you to “do this” or to “not do that”.

Leaving the paradoxes and complexities in left open the space for practitioners to discover the contextual nuances for themselves … in a formal sense it afforded them agency. The simple truth
of this is that people don’t like being dictated to and, in my experience, rarely like being handed signed-sealed-and-delivered dictums.

Respect for the practitioners was also conveyed by the quality of the think piece package. And that may be the second ‘lesson’. The booklet was professionally designed and done well. [Hold it up]. We commissioned Ron Tandberg to do cartoons (with fingers crossed, we didn’t know whether he even took commissions like that. But he did. And not at great cost either. They added a bit of humour – actually, I think what they added was a lightness of touch.

Lightness of touch was helped by the title of the think piece Blue book in that initial round of workshops. It is now titled Fresh Thinking about learning and learners but at the time we called it Sorry No Title Yet. That was actually the inspiration of Leonie Doyle at ANTA who worked on the project for a while. In fact, in the workshops when we asked participants what the permanent title should be, many people wanted it left as is or perhaps as Sorry, still no title. The appealing aspect of this is that inside the back cover the post-title: Sorry, no answers either could be placed! Then there could be a series of Blue Sky booklets: Sorry, Still No Answers followed by Here’s One Answer … It was quite tempting exactly to keep in the lightness – that this was serious stuff but not ponderous.

When ANTA decided that the readings should also be ‘listenings’ and wanted a CD made, the first thing we thought about was what would be the audio equivalent of Tandberg cartoons. Perhaps some of you have heard the decision – but let me play you the bit that follows the reading of the think piece about implicit knowledge

PLAY DISC 1 TRACK 1 at 14’10"

It might be worth adding as a third ‘lesson’ that we were ruthless in editing the think pieces. I had absolutely no remorse in suggesting major revisions (and squillions of minor stylistic improvements). Two of the pieces we commissioned and paid for were not revisable. One I can say was from John Bailey the expert in entrepreneurship. He is brilliant and I have never spoken with him when I haven’t heard a great story and a profound insight. But his piece just didn’t do what was wanted – perhaps I hadn’t briefed him properly – probably I hadn’t. ANTA was a bit taken aback when I said I was simply not going to use his piece. It hadn’t occurred to them you could do that. Partly because what did such a move do in accounting for the dollars spent (paid for but no discernible product) – and also the rudeness of it. As far as I know, John and I are still on speaking terms.

The point was, that we knew the product we wanted and we accepted nothing less. And it paid off in terms of the enthusiasm of practitioners.

I’m not going to insult your intelligence by telling you what I think the implications for researchers are about the way findings are presented to inspire enthusiasm and engagement, but let me just repeat where I think the three messages from the Blue Sky experience lie:

- People don’t like being bossed about, bullied, even if in the case of receiving information and ideas. The writing needs to invite real engagement with the ideas – that means opening up the possibilities not closing off and announcing final meanings. That this is the
answer to the question. Full stop. I am convinced that the excitement of Blue Sky was in
the people, ready to be released, not in the booklet.

- The quality of the writing, however, can bring in a lightness – a light – that makes an
  immense difference to the way the information is received and perceived. The nicest
  comment I heard during the whole Blue Sky work was the person who said that it was
  acting as a *leavening* agent in the VET community.

- Third, people were given an opportunity to talk about the think pieces with colleagues and
  that was what really gave the work legs. I watched as scores of mini- Blue Sky ideas
  bubbled up in the workshops – even witnessing in one case one member of the TAFE
  group put several thousand dollars on the table for the others to have a go at. As far as I
  know a number of those bright ideas are now real initiatives. It may be harder for the
  research community to act on the implications there because those workshops were not an
  inexpensive exercise, but…. I think the message is very clear.

**Finally, there was the stage where we took the think pieces, the responses to the think pieces to educational leaders. Any implications there for VET research?**

There is one point that is at least worth thinking about. But I have to take you back a step because educational leaders forums were not part of the original plan. The original brief was that after the think pieces and after the workshops about the think pieces, there would be a very high-powered RAND policy game – with people like Cathy Stasz from RAND coming to Australia to conduct a couple of days where the policy implications of the findings were drawn out through iterative scenarios where policies were ‘virtually’ applied and evaluated and re-designed.

Well before the practitioner workshop round had finished, we could see that policy was not what was needed to refresh practitioners thinking about learning and learners. Listen for a moment to some of the things people said in the workshops about what they might do with the think pieces:

*I have a staff meeting on Tuesday with 12 part-time teachers. I’ll give it to them then, and we can talk about how they might use it with their mentors – we mentor each person.*

*What I want to do is to put one or two paragraphs up on the white board. Leave them there for a while. The discuss them with colleagues – ask where we’ve witnessed these things. Really home in on them. Then we might follow up with the whole piece or another specific thought.*

*It talks to me about how I should relate to staff. So I’m going to model having real discussions about teaching and learning with staff in the Institute.*

*I’d like to start with the lecturers who have the 15 – 19 year olds. If we look seriously at them through the eyes of this booklet maybe we can understand the attrition rates better, and do something if that’s what we decide.*

*With my 40 teachers, I’m going to take the auditor’s report and this booklet and we’ll sit down and look at the one in the light of the other and see what we make of it.*
We say we’re too busy to reflect. But we need to remember there is a difference between being busy and being productive. I think we should call it Re-igniting Passion.

What they wanted to do wasn’t a matter of policy coming down from on high, but rather to make opportunities for themselves at ground level. As we thought about this it became clear that what was wanted wasn’t policy but what we came to call local educational leadership – in their institution or organization someone senior enough to facilitate the making of opportunities – the practitioners could do the rest for themselves.

The point that is – or may be – relevant for VET research is whether research work being valued because it is of use to policy makers in the making of policy hasn’t elevated policy way above its rightful station.

It was interesting, in fact, that what educational leaders (TAFE Directors, even senior Departmental people who are policy-makers) said in their forums were things like:

The real task of an educational leader is to change the culture – the culture for learners and for staff. Hundreds of management books attest to the difficulty of changing a workplace culture.

When I came to TAFE I noticed there was a real fear of speaking out. It was hard for me to get any debate going about learning. I got the idea people were waiting, wondering ‘what am I supposed to say?’ Even inviting outside educational speakers along to talk didn’t free people to speak up.

This is asking for a fundamental shift in management: in our vision, in our interaction with staff... in the pretence on both sides that managers are supposed to act as if they are infallible.

Again, the things that needed to change to refresh teaching and learning was not first and foremost new policy. So maybe one thing for researchers to think about for each part of their research is who really is the audience for this? Is it really a policy issue? Or is it something else? for someone other then the pen-pushers?

[of course, Rod did write the 3-pager for the National Strategy 2004 – 2010]

There is another lesson I learned from this – or, rather, was confirmed for me: about the relationship between consultant and client. Most of you think of your research as research, but as a business woman I tend to call this research work a contract for a client (even if the client is NCVER). The point is that basically – whether as consultant or researcher – someone is paying us to go and find something out. We get the opportunity to learn things. Then we have to give this learning back to the ‘client’.

Fiona Czerniawksa, in her book, Management Consultancy in the 21st century [Macmillan 1999] has an interesting model... the two cogs needing to mesh so that the learning can be handed back. The client has to be a ‘meshable’ cog – which isn’t always the case. And as a consultant I have to be able to disengage even though there are times I haven’t wanted to because I wasn’t sure the client had actually learned!
What Blue Sky was an ideal example of is a good meshing. Where we could change as the project proceeded. I think we actually rewrote each stage of the initial contract — not because we hadn’t been able to achieve what had been intended in the preceding stage but because we had achieved more than we anticipated. Those glorious unintended consequences.

Which takes us almost through this journey through the Blue Sky project and the conundrums it raises for researchers:

- first, from the think pieces, about how our lot is to extract data (people’s experience and knowledge) from a very peculiar paddock: their minds and brains;
- then, from the practitioner workshops, questions about how we present our findings;
- and finally, who the audience is for our findings. Is it always that bland mantra ‘practitioners and policy-makers’ or does it need to be much more tightly specified?

But I want to raise one more conundrum for VET researchers. The final think piece, by David Boud was a great favourite with the practitioners. It is titled ‘Assessment: have we forgotten something?’. Dave’s argument is that indeed we have. What we’ve forgotten in his (and others’) view is that in assessment — even in competency-based assessment — the learners are given the unambiguous message that it is others who understand not only the criteria to be applied to their work but that it is these expert others alone who can judge whether the criteria have been met.

Dave’s argument is that one of the deep outcomes of real learning is that the learner should be able to judge the quality of the effort and performance for him or herself. His provocative call is for an assessment regime that builds the capacity of the learner to be self-judges.

So my final comment, perhaps provocative, is to leave us all with a question — a question I haven’t been able yet to satisfactorily answer for myself: how do we become good self-assessors of our own VET research? What are the messages, the signals, that we attend to?

The song that Bernie Clayton, John Doust and Todd Shilkin invented give voice to the problem:

PLAY DISC 2 TRACK 4 START at 9’07”

If anyone is interested in discussing any of these ideas further (including challenging them), Jane can be contacted through email at j.figgins@aaaj.com.au or by phone on 08 9284 7477