

ASTEN NEW HORIZONS for A&NZ Science Centres

Scitech, Perth

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Fellowship Report by Jonathan Ridnell, GM, Discovery Science and Technology Centre

Twenty eight years in the media is both a great and a terrible preparation to take on management of a Science and Technology Centre. Sure, I know the ins and outs of balancing the holy trinity of communication – inform, educate and entertain – but how to prioritise those three in an exhibit design? Forget it!

So it was a wonderful opportunity to travel to Scitech for a couple of days of listening, learning, planning and networking, and also having a chance to have a small input into the conversation about ensuring science and technology centres stay relevant to their communities and make a measurable difference in inspiring and nurturing scientific curiosity (which is also Discovery's motto) .

Day one, session one. Demographics. Diversity. Difference. Social Researcher Mark McCrindle not only pulled apart Australia's social structure, he also demonstrated (not always to the complete satisfaction of his audience) that reams of data are much more effectively presented as info graphics. Information streams warning of audiences that were Post-Literal, Post-Logical, Post-Linear and Post-Truth threw a gauntlet to a room full of committed science communicators. The advice was Keep it Real, Relevant, Responsive and Rational.

Following Mark's presentation, a chance to do some reflection on his presentation, and learn a bit more about other science centres in Australia and New Zealand.

The most memorable snippet of information came from Andrew Hannah who introduced me to the three types of visitors to a science and technology centre – the streakers, the strollers and the studiers. The knack in identifying them is not by what they are wearing.

Session Two: Craig Bloxsome and his team on training presenters. Discovery is a centre with two qualified science communicators working at around 1.2fte, so the advice on training and nurturing casual presenters was invaluable. The chance for participants to rise to the challenge Scitech gives some of their presenters was fun and thought provoking. We had to identify innovative uses of existing exhibits to add value to the visitor experience. Strangely enough, it IS a challenge.

Session Three: Rachael Hughes discussing the philosophy behind the design of exhibits and exhibitions. It was a good add on to what was already discussed during the day, with a revisit of how to create a good experience for those three stereotypes – a message at a glance for a stalker, a more detailed explanation for the stroller, and the opportunity for more information for the studier. The ultimate aim of creating Exhibitions with Power was useful, and the exercises (yes, there was butchers paper) to both get the brain thinking about who a science centre visitor is, and then how to get through to them were good for focusing on not just the science, but the message.

At the end of the day there was the chance to watch Scitech CEO Alan Brien and his team swing into major launch mode. The Bionic Me exhibition was a blend of the formal (lovely brief speeches with

partners and stakeholders present) to the informal (pizza and beer for catering, and a “let’s go play” invitation to staff and visitors alike).

Day Two started in a similar vein to Day One. Some powerful messaging from Dr Karen Murcia about community science literacy, the role of science centres, and measuring the relevance of centres. In a competitive world, the challenge to stay necessary to the community is real, and Karen’s thoughts were very useful.

Similarly, Karen asked the audience what STEM is, and there are a diverse range of definitions of what STEM is and can be. What caught my ear as a challenge in my community was the idea of eSTEM – not just knowledge and understanding but the skills and confidence to innovate and look at entrepreneurial outcomes from Science, Technology, Engineering and Mathematics education.

The day paused for twenty minutes for the ASTEN AGM – where from the unanimity of voting, everyone seemed to agree that ASTEN has plenty of scope to develop, both as a networking and collaborative organisation and potentially as an agency to promote the relevance of our work.

Workshop 4A: Effective outreach and incursions. Since Discovery has gone through different waves of commitment to reaching out to regional and rural central Victoria, the observations and philosophies of the Science Works and Scitech teams were invaluable. Some take home messages on program design, working with places you visit before, during and after the incursion as well as things like staff safety were all useful. Also useful was the thought that external funding will be necessary to properly resource incursion work.

The final workshop of the conference brought everyone back to the main theatre – and a conversation (and challenge) about how science centres can inspire people working in the education sector. It was a little disconcerting hearing Discovery being used as a case study around giving preservice teachers confidence in teaching STEM. But it was also an important wake up call that we work in an area where definite answers to “what difference do science centres make in increasing science literacy” and “how are students inspired to pursue STEM subjects after visiting a science centre” are difficult to give.

Alison Kevan gave useful and practical insight into Program Theory, and the idea that how you measure the outcome of a program must be built into a model at the very outset, and gave some examples of projects large and small that utilised this model.

Nick Tran from ReMSTEP finished with a proposal that a linkage project between science centres and universities could over a number of years measure the effectiveness of preservice programs – we can measure teacher confidence, but does that correlate to competence?

Having had some time to absorb and start to process the presentations at ASTEN, there are a couple of lessons and messages which are going to be very valuable to me in the next year or so:

- customer service is critical to engaging and inspiring visitors. One bad experience can potentially switch a visitor off from science
- developing ways to measure effectiveness is imperative to Discovery.
- programs to engage teachers in both formal and informal settings are imperative to both Discovery’s future, but more importantly to supporting teachers in their work.

- Discovery is a very small, community run social enterprise but that doesn't stop the ASTEN family from offering support for everything from performance management to sharing exhibits and programs.

Thank you again for the opportunity to get to know some of you better.

