Teaching Skepticism at the University: a personal account

A successful demonstration of skepticism as an educational tool.

I paused outside the lecture theatre — I took a deep breath, and swept inside. “Welcome to Skepticism, Science and the Paranormal, a new course at Griffith University.” I announced. My radical experiment in education was under way. What was I doing? How did a lecturer in Science, Technology and Society come to be putting on a course like this?

The reasons were a mixture. I'd known for some time that university students — along with nearly everyone else — have a high level of belief and interest in the paranormal. I also knew that skeptical ideas are little taught in higher education, outside a few courses in philosophy. Finally, in the brutal competition for student numbers, my area was losing out. In the new, corporate universities, numbers matter as much as they do in theatres. So, I thought, I could kill several birds with one stone: boost numbers, propagate some good ideas and throw light on paranormal claims. But what would the University say?

I designed an official course outline and submitted it for approval. This is a legal document describing the content of the course, how it's to be delivered, assessment and other odds and ends. It wasn't difficult to put together a passable course, though I wondered whether any of my fellow academics would hit the roof if they saw what I was proposing to teach.

In the event, the proposal for a new course was passed easily. One scientist did some muttering about why I spelt skepticism with a 'k' instead of a 'c', but didn't think it was important enough to worry about. In fact, there are good reasons for referring to modern skepticism with a 'k'; it distinguishes the modern movement, which focuses on the paranormal, from the ancient sceptical tradition, which has rather different concerns. The two are not completely distinct, but I find it useful to have a different term for each.

Intellectual structure of the course.

So, late in 2002, I was committed to the course. It would run in first semester of 2003. But I faced a problem: what exactly was I going to teach? It took me six months to grope my way to an understanding of exactly how I wanted to run the course. In the end, two considerations showed me the way, and any skeptic could point them out.
The first point is simply that the paranormal is a huge, diverse area and even paranormalists will often agree that large parts of it are rubbish. If I simply gave a lecture or two on each topic outlining its major features I would take up a year. So any kind of a survey, or guided tour, was simply out. It wouldn't reach an appropriate standard and it was not feasible in terms of the material.

The second point is that skepticism has something to say about every single area of the paranormal. Skeptics ask questions about the adequacy of the evidence to support the beliefs. These questions, applied in various ways, can be used to assess the adequacy of all paranormal claims.

So, because of its enormous applicability and importance, skepticism was a necessary and central part of the course. I decided to outline the major tenets of skepticism and show some of the tools skeptics use to seek natural explanations of the paranormal.

What were the main tools of skepticism? I found a useful article in the *Skeptical Inquirer* (Caso 2002) which spelled out Burden of Proof, Occam’s Razor and Sagan’s Balance. They were a good start. I’d look at a few paranormal areas in detail, and the students could pick out others if they chose. I got permission to copy some articles from the *Skeptic* onto the course website, and provided lots of links to other sites.

A key point was this. Skepticism would be the focus of the course, and all the students would be required to show an understanding of the skeptical approach. However, their conclusions were their own business. If they could handle the skeptical tools, they would do well in the course: they did not have to become skeptics.

My wife pointed out a consequence of this over breakfast. She’s a much harsher skeptic than me, and put her finger on the main point quickly. “Doesn’t that mean that a student could show they understand the skeptical approach completely, but come out supporting the paranormal? And you’d have to give them good marks!” I gulped and admitted that yes, it meant exactly that. As it turned out, this was much less of a problem than I expected.

With this philosophy in mind, I put the course together. There’d be an outline of skepticism, of course, and a discussion of the meaning of the term ‘paranormal’. Before these, I’d put a couple of lectures about science, since skepticism and the paranormal are both defined partly in terms of science. Then I’d focus on some key skeptical concepts and strategies — things like the placebo effect, the importance of coincidences and the unreliability of eyewitnesses. Then I’d talk about some important cases of paranormality — parapsychology, creation science and so on.

I’d need publicity, I knew. Within the University this was no problem: I stuck up posters and distributed leaflets. Then I used our external relations people to give out a press release, and ended up talking to about a dozen radio stations, right across Australia. This was all very fine, but it had a consequence: the cranks zeroed in on me!

**Cranks Incoming!**

With the publicity blitz I expected some cranks and oddballs to come forward. And they did, in droves. There was a mysterious fellow on the Gold Coast who had hundreds of hours of amazing evidence on videotape, if only I wanted to see it. He was very vague about his organization: it sounded alarmingly like a cult, and I dodged. Then there was the bloke in Melbourne who waffled on for hours about his family’s amazing psychic experiences. I finally discovered ‘people knocking at the door’ and had to terminate the conversation.

A well-known paranormalist asked to give lectures on my course. I declined until I knew exactly how it would all go, and a bloke from up North sent me a couple of CDs packed with communications from God. I looked at a few. ‘God’ seemed a terrible waffler without much to say. How on earth did he manage to create such an interesting universe?

One character talked himself into the lectures. He phoned up and introduced himself as a SETI researcher from UQ. That turned out to be wrong on several counts. Still, I have a soft spot for SETI, so I invited him along. He turned up to a lecture, asked a crunchingly irrelevant question and presented me with a couple of videotapes and some articles he’d written.

I read a couple of his papers, and my outlook was transformed. The writing was worse than the very weakest student work. Even the worst students were groping towards some idea of sorting out good from bad evidence. This writing, though, was a mish-mash of poor quality creationism, ufology and fulminations, without much in the way of coherence, logic or critical thought. We parted with a mutual lack of regard.

The experience convinced me of something important. From now on, whenever I interact with these oddballs, it’s going to be on my terms. My responsibility is to my students, not to self-appointed gurus. These people seem to want your time, your respect and your support without actually meriting any of it.

**Teaching the course.**

The course attracted an initial enrolment of about 30: distinctly better than most other courses run in my area. The final number of active students was 25. Of course, there had been jokes about what the class would look like. Would it be full of little green aliens? Would their notepads and pens float before them in the air? Would Nessie be stretched out along the back row of seats? In fact, they were a resoundingly normal bunch of students — which is to say they looked everything from totally conventional to downright weird!

Above all, the students were active. There was a constant barrage of questions and comment. These people were interested in a way I had rarely met before. They were inter-
Skepticism at University

estered in the subject matter, and quite prepared to have a look at the skeptical position.

I leaned heavily on sceptical resources. Barry Williams’s (1993) analysis of a ‘filmed UFO’ was a good example of skepticism in action. So was Rosemary Sceats’s (2000) account of testing water diviners (To jump ahead a bit, in 2004 I used the Skeptics divining video. The students loved it, though one thought it was rather cruel.). For a more complex case I went into Marks and Kamman’s debunking of remote viewing (Marks 2000), and also used their analysis of coincidences.

In week five, the students started giving seminars. I’d stressed skeptical ideas, and most of them picked up on this quite well. Occasionally someone started wandering off into the minutiae of Chinese medicine or whatever, and I could pull them back with the question “Well, what would the skeptical position be on this?” It worked every time.

I found I was learning as much from the students as they were from me. The seminar system invited them to find weird topics of their own, and then apply skeptical ideas to them. So I often found myself listening to explanations of paranormal phenomena I’d never heard of before.

The seminars varied widely in quality, but were mostly reasonably good. At the end, I’d opted for a take-home exam. I glossed through the marking and added up the marks. And the astonishing fact struck me: nobody had failed: the marks ranged from bare passes to high distinctions. Later, our administrator pointed out one student in particular. “Look,” she said, “He’s failed everything else — got one percent here, three there — but he passed your course.” Yes, because he was interested.

I made mistakes, of course. I crammed far too much into some lectures, and missed key points in others. Still, the student evaluations were terrific. “I’m having to re-think fifty years of belief,” one student told me (he was mature!). Another said, “This is the only course I’ve ever really learned anything from.” I was shattered at the end, but resolved I’d do it again.

Of course, a silly politician had to get into the act. The Minister for Education, no less, told Alan Jones that you could do a degree in the paranormal. I wrote a restrained little article for The Australian (Bridgestock 2003) pointing out the mistakes. He didn’t apologise, but at least he shut up about it.

What next?

So 2004 rolled round. I was better prepared. Paranormalists were not going to be invited to sit in on the course (unless they enrolled). Too much content would not be packed into each lecture. The key points would be spelled out more clearly. I started to prepare reading lists and assignment forms, and my wife pulled me back from a disaster.

“Check how many people are on the course,” she said, “I think there may be more than you expect”. I did, and nearly had a seizure. “Fifty,” I gasped. “The numbers have doubled!”

Apparently word had got around that this course was ‘cool’. The lively excitement of the first year was there, but with a much larger class. People queued up to ask questions in the middle of lectures, argued and joked in seminars — and produced some terrific work. The whole course went far more smoothly and, as far as I am concerned, it is here to stay.

What comes next? A book, I think, spelling out the key principles with an Aussie focus. Maybe a teaching kit, and an electronic version of the course. I am starting to think that there may be a real hunger for the intellectual tools that skepticism provides. And I want to help provide them.

Notes.

1. I am building two arguments for skepticism into the course. One argument seems to be going from Socrates via Descartes to Paul Kurtz, and stresses that doubt is a necessary component of gaining knowledge. The other is W. K. Clifford’s argument that it is unethical to believe on the basis of insufficient evidence.

2. My wife is a skeptic of the “Hocus-pocus? Fiddlesticks!” school.

3. Search for Extra-Terrestrial Intelligence, University of Queensland.

4. He didn’t have a research position, he was not on the staff at UQ, and he wasn’t a SETI researcher.

5. Roswell Rods, the Mozart Effect, cattle mutilations, therapeutic touch. How much weirdness is there in the world?

6. Sigh. It isn’t a degree, it’s one-twenty-fourth of a degree. It isn’t in the paranormal, it’s in skepticism, science and the paranormal, with the accent on the former.

References.


Caso, Alvaro (2002): “Three skeptics’ debate tools examined: Occam’s razor, assigning burden of proof, and Sagan’s phrase about extraordinary claims are often misunderstood. In a debate it always pays to know why these tools work”, Skeptical Inquirer 26:1, pp 37-41.


Williams, Barry (1993): "UFO was IPO". the Skeptic, 13:1, pp 10-11.