My Earth science educator story – What I did, why I did it and what happened



Gary and the dike - close to the very first EarthCache in Australia.

My journey into Earth science education started early. My parents loved holidays to the beach where they surfed. I was not a water-baby, and so loved to walk around the rocks. Here I found some fossils and became fascinated with all the geological things I could see. Around the same time my grandfather would take me gold panning and visiting old mines. He was not trained in geology and so wished I could know more about what we were seeing.

At high school two young teachers gave me the next burst. They both had a passion for geology and so I took their classes in my senior years. I found the topic exciting, interesting and easy - a trinity of things to have to make you fall in love with any topic.

When it was time to decide what I wanted to do at university I was sure that I wanted to be a teacher. My grandfather and those two young teachers had shown me how fun it could be to share a passion with

others. I ended up with a Science degree in Geology and then took an extra diploma in Science education. During this time I had an honors year in which I had to undertake a large in-field research project. This had me mapping hundreds of old mines in an area close to where my grandfather and I had gold panned years before. I just loved that time discovering old workings and collecting minerals from the dumps. I loved to take people to the area and show them around - and I think it was this that pushed me into the desire to lead field trips for people with little geology to show them the wonders beneath our feet.

After a small time helping to run a boarding school, I took my first full-time teaching job in a small country school in NSW, Australia. I loved teaching, but the curriculum just did not give me enough Earth science. So after a few years I started looking for other education opportunities.



Showing footprints preserved in volcanic ash in Hawaii.

I managed to get a wonderful position at the Commonwealth Scientific and Industrial Research Organization (CSIRO) in their expanding Education Programs in Canberra, Australia. Here I helped to run a science club for students and coordinate seven hands-on science education

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centers around Australia. I learned here how to manage projects and people (the good, the bad and the crazy). After around 9 years my longing for more Earth science made me look again for another position.

This was the real turning point for me. I now had project and people management skills (raw and new but skills none the less) and a passion to get involved in Earth science. So I decided to arrange a meeting with the management of the Australian geological survey (then called AGSO). The person I met with told me that they were just not interested in having or running an education program, but that they had a position that they could not fill helping to evaluate programs and, if I was willing to do that, they would let me spend a day a week 'playing in education'. I eagerly accepted!

Within a short time I had managed to turn this position into a full time job working on education. I developed a number of teaching resources and ran professional development sessions in Canberra. Teachers seemed to love what I was doing - helping them to have more confidence to teach Earth science by providing classroom activities for them that really worked with students. Five years later I had a team of educators working for me, and with the move to a new exciting campus, even a hands-on education center in the portfolio. We had more than two dozen teaching resources and ran professional development sessions around the country. It was a dream. During this time I became deeply involved with the international Earth sincere efforts and even co-convened GeoSciEd III in 2000 in Sydney, Australia.



A very young Gary after GeoSciEd II in Hawaii.

However, like all dreams, at some stage you have to wake up. For me it was being promoted to more management positions and further away from education. At the same time, education was always seen as a 'side event' and so after ten years I started to look again.



A group of college students leaning about the Big Island of Hawaii volcanoes.

This time I knew I was going to have to leave Australia to pursue my career. I noticed an advert for a position with the Geological Society of America to look after Education and Outreach and applied. Almost a year later I was heading to Boulder to head up this unit. An exciting new country and new challenges was just amazing. My passion for Earth science continued to grow as I worked in this amazing institution that supported my ideas and opportunities. We redeveloped teaching resources, ran field trips for teachers around the globe, started new

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outreach programs (EarthCaching for example) and expanded offerings in every area of outreach. Again, another amazing opportunity.

However, after 12 years it was time for me to look for new opportunities in Earth science education. For me it is always being able to work with teachers - developing materials and running field and professional development sessions. And so GEOetc (www.geoetc.com) was born just this year.

Looking back through all this I believe I have come up with a few lessons and tips for people wanting to have a successful and impactful life in Earth science education:

- 1. Find your passion and keep within it. When the job moves away from your passion, move along to another job.
- 2. Don't be scared to spread your wings. New opportunities may mean a new life
- If you have an idea go ask someone to support it. Don't hide your Earth science passion under a bushel. Find supporters (and move away from the people/groups that don't)
- Build your networks at home and away. There is so few of "us" we all need to work together to make the impact.

Let the Earth be your teacher.

Gary Lewis, aged 52, November 2015. gary @geoetc.com



A young class learning about Earthquakes after a small quake took place a day before.