

My Earth Science educator story – Ashvin Wickramasooriya

What I did, why I did it and what happened



During fieldwork at the Victoria Dam, Sri Lanka, 2006.

How did I get the opportunity to study Geology?

Sometimes a dropped catch in a cricket match will be the turning point of the match. The batsman whose catch was dropped may go on to make a century and win the match. I feel I faced the similar situation when I studied at high-school, where I was very keen on Mathematics. I was selected for the Physical Science stream at high-school (Pure and Applied Mathematics, Physics and Chemistry) hoping to become an Engineer in the future. However, in the University entrance examination, I was not selected for an Engineering degree (being a few marks short). However, I was able to take a Science degree at the University of Peradeniya, Sri Lanka instead (which gave me another chance to 'bat' after the 'dropped catch' of my Engineering Degree hopes). After publication of the university entrance results we had to wait before entering university. During this period, the Faculty of Science of the University of Peradeniya had organized their 50th anniversary exhibition. When I visited this exhibition, my eyes were drawn to the minerals and rocks, models of landslides, plate tectonics, solar system, and other exhibits displayed in the Department of Geology. I never knew anything about Geology before I went to see this exhibition. So the exhibition became an eye opener for me and led to my studies of geology at university. I used the opportunity to complete the special degree in Geology in the Science Faculty, and to become a geoscience educator. Now I feel that I got a century in the 'cricket match of life' as a result of a dropped catch.

How did I step into my role as a Geoscience educator?

After I completed my BSc degree in 1997, I joined the Geological Survey and Mines Bureau of Sri Lanka as a temporary trainee Geologist. My trainee period was completed in July 1998. As I did not get any permanent geology-related job, from August 1998 I joined the Coastal Geographic Information Systems project conducted by the Department of Geography, University of Peradeniya funded by the National Science Foundation of Sri Lanka, as a temporary research assistant. I undertook research activities until the completion of the project in August 2000. While I was engaged in this project, I joined the Technical College, Kandy as a visiting lecturer in Geology and Soil Science for the National Certificate in Technology (NCT) Civil Engineering weekend course. After end of the project, I became a temporary lecturer in Earth Science at the South Eastern University (SEUSL) (the youngest University in Sri Lanka at that time; established in 1996 and situated in a remote area affected by civil war). While I was working as a visiting lecturer at SEUSL, several advertisements appeared for permanent geologists in institutes in Sri Lanka and also for a permanent Lecturer position in Earth Science at the SEUSL. I applied for these positions and was offered three posts at the same time, i.e. a Lecturer in Earth Sciences at SEUSL, a Geologist position at the Geological Survey and Mines Bureau and a Hydrogeologist position at the Water Supply and Drainage Board. It was as though I had lost my way at a triple junction and wanted to find the best path to reach my goal! Following my desire to become a Geoscience teacher, I accepted the Lecturer position in Earth Science at the SEUSL and moved closer to my goal of teaching and promoting geoscience. In 2008 I completed the Master of Philosophy (MPhil) degree in Earth Science and was promoted to Senior Lecturer in Earth Sciences. In July 2013, I joined the Department of Geography in the University of Peradeniya, as a Senior Lecturer in Geology.

International Conferences

The GeoSciEd V conference, which was held in Bayreuth, Germany from 18 – 21 September 2006, was a special event for me as a geoscience educator. During this conference I met the pioneers of the International Geoscience Education Organisation (IGEO) and became the first Sri Lankan family member of the IGEO. Since then I have continued to work with IGEO. I had the opportunity to meet more IGEO members and to strengthen the relationships between us all, by attending GeoSciEd VI, held in Johannesburg in 2010, and GeoSciEd VII in Hyderabad in 2014. I am impatiently waiting to attend the next GeoSciEd conference as well.

The International Geological Congresses - a precious stone to me

The 33rd International Geoscience Congress (IGC) held in Oslo and 34th IGC held in Brisbane, were two key international events which greatly supported my geoscience educator role in Sri Lanka. I often think of the events and important people I met during the 33rd and 34th IGCs, where I was nominated as a commissioner for the International Union of Geological Sciences – Commission on Geoscience Education (IUGS-COGE). Later I contributed to drafting the international geoscience syllabus introduced by IUGS-COGE and IGEO.



IUGS-COGE Commission meeting at 34th IGC in Brisbane, 2012.

At the 33rd IGC I met Prof. Chun-Yen Chang and he invited me to bring a Sri Lankan team to the International Earth Science Olympiad (IESO) in 2009 in Taiwan. I was able to initiate the Sri Lankan Earth Science

Olympiad competition in 2009. Then I became the founder Chairman of the Sri Lankan Earth Science Olympiad committee and served as the coordinator of this event for seven consecutive years. The main aim of organizing this competition is to select the best four students to take part at the IESO competition. I saw this event as a means of promoting geoscience among school students. In 2009 the competition ran for the central province only, but since then, has gradually expanded to other provinces. Since 2013 the completion has run in all nine provinces in Sri Lanka. Based on their performances in the written examination, the best students are interviewed and four are selected to take part in the IESO competition.



Sri Lankan team at 3rd IESO, Taiwan in 2009.

Since then the Sri Lankan team has participated in four IESOs held in Indonesia (2010), Italy (2011), India (2013) and Brazil (2015). Now the Earth Science Olympiad competition in Sri Lanka is becoming well known and many students participate in the selecting examination.

When I met Prof. Chris King at the IGEO meeting in 34th IGC, he told me about the Earth Learning Ideas developed by his team. Later when I had access to the website, I found it contains hundreds of excellent activities related to geoscience. I have used some of these activities in my lessons as well as in teacher training workshops.

I became one of the 12 founder members of the World Young Earth Scientist network and had an opportunity to make a presentation at the 1st YES meeting, scheduled parallel to the 33rd IGC in Oslo in 2008. This is a forum

for educating young Earth Scientists. As an outcome of this meeting we were able to organize the 1st World Earth Scientists' conference in Beijing in 2009.



1st Young Earth Scientist (YES) Conference, Beijing, 2009.

Since this conference many young Earth scientists from different countries have joined the YES network. As the network is for young scientists, I could only be involved in the network for a short period. However, I was actively involved in organizing the 2nd YES conference which was held parallel to the 34th IGC in Brisbane, 2012. At present YES has more than 1000 members representing nearly 140 countries (www.networkyes.org).

Teaching

Other than teaching at University, I have been teaching geology and soil science for 15 years as a visiting lecturer to the NCT Civil Engineering weekend course at the Technical College, Kandy.

Every year the Geological Society of Sri Lanka organizes teacher training workshops on "Earth Science for Schools". (<http://www.gsslweb.org/>). The society aims to promote Earth Science among school teachers in three to four districts per year. I have contributed to many of these workshops since 2003. Meanwhile, I have also been invited to deliver lectures at my former university, the South Eastern University of Sri Lanka.

I hope to contribute much more to the promotion of geoscience education in the future.

References

<http://www.gsslweb.org>
<http://www.ieso-info.org>
<http://www.igeoscienced.org>
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