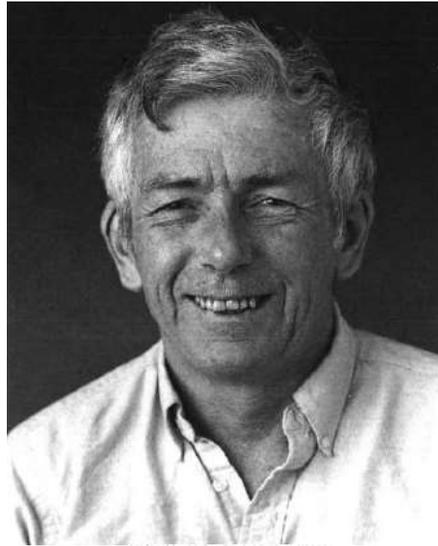


ASLA HISTORY - *Patrick Ryall*

The Atlantic Science Links Association (ASLA) has metamorphosed through various configurations in response to changing pressures. This project was started by Mike Keen.



Michael J. Keen
F.R.S.C., Ph.D., F.G.A.C.
1935-1991

Mike had been Chairman of the Geology Dept at Dalhousie, had been Assistant Dean of the Faculty of Arts and Science, and then became Head of the Atlantic Geoscience Centre at BIO. Somehow, he had become aware of the need to make available to teachers at various levels, scientific expertise beyond their training.

The reality is, that in many cases, teachers were finding themselves in situations where they were dealing with subject matter with which they were not fully familiar. Many of them felt that they and their students would benefit from the expertise of a scientist who worked in the area concerned, someone who would have the background to cover the topics in depth.

Some of this demand may have been fuelled by the introduction of plate tectonics into science programmes in the years before.

Mike ran a pilot programme in the city of Dartmouth in 1989 using the expertise of people known to him. This programme was well received and so he got a group of people, about a half of them geoscientists, together to explore the possibility of establishing a long-term programme. My involvement dates to that time, since I

was Chair of our Geology Department, and I had known Mike since my student days.

After a few meetings, the group resolved to form an organization, and thus Scientists in the Schools (SITS) was born. From that day to this, Dalhousie has provided the space for SITS and its allied organizations, at no charge.

Unfortunately Mike died in 1991 from a heart attack. He was succeeded by Paul Robinson who led SITS until 1995 when he left Dalhousie and went to Hong Kong. Then Patrick Ryall, who had been Treasurer, took over as President.

SITS operating philosophy was, and still is, very simple:

1. ASK TEACHERS WHAT THEY WANT
2. ASK SCIENTISTS WHAT THEY WOULD BE WILLING TO TALK ABOUT
3. BRING THE TWO TOGETHER

Every year we send out notices to schools across the province, making known that the service is available.

Periodically, we canvass the scientific community to find out who is willing to go where to talk about what.

We are fortunate in Nova Scotia to have a number of Universities, Government research laboratories, and various private companies which are willing to allow their employees to take the time to go to the schools.

We are fortunate to have a strong concentration of expertise in HRM and Sydney. The biggest difficulty is in the rural areas. It is a double difficulty, because schools in these areas have the biggest problem in accessing facilities such as the NS Museum and the Discovery Centre, which are located in HRM.

I should point out that the whole process costs the teachers and the schools nothing! We raise money to support the administrative operations of SITS and the volunteers who go to the schools cover their own costs, or their employers do. We have to hire a co-ordinator to make it work, and that takes MONEY!

Therein lies the challenge, not in hiring the co-ordinator – we have been fortunate to have a series of extremely capable and resourceful people, but in finding the money to pay them.

Initially, we had some money from the Canadian Geoscience Foundation, and we did a bit of fundraising – it's hard work.

However, before too long, lady luck smiled upon us and the federal government, through the Department of Industry, established a programme to promote innovation in the country and encourage the establishment of organization like SITS across the country. Oddly enough, the other main centre in Canada, turned out to be Calgary - could there be a geological connection? The government programme had a broader mandate than just Science, so we became:

Scientists and Innovators in The Schools (SITS)

We continued quite comfortably until 1996, when that programme terminated. Governments seem to have a habit of providing resources to start something, but then expect things can continue magically on their own!

Through SITS volunteers go to schools, offering a variety of services:

- Classroom speakers and demonstrators
- Field trip leaders or advisors
- Science club advisors
- Information resources
- Workshops for teachers

Over the years SITS has developed &/or assimilated a number of other programmes.

ADVENTURES IN SCIENCE

This was a programme based on kits from the Let's Talk Science programme based at University of Waterloo. The initial goal was to get young girls interested in Science. The initial audience was Brownies – the girls would complete a set of exercises to get a “Science” badge.

The initial set of exercises were:

Go North!	magnetism
Weaving a Web of Life	food chain
The Orphaned Alien	classification

After the first year, this programme was expanded to include other groups.

And then our funding disappeared.

Since that time Let's Talk Science has been taken over by a group of Graduate Students working directly with the Waterloo group under the title, Let's Talk Science. Their approach is somewhat different in that they offer the programme to classes during the daytime, rather than in the evening, as we did.

Another project is:

THE CLIMATE CHANGE ACTION PACK

Climate change is perhaps the most important environmental issue facing the world today.

It has significant impacts on: the environment
 the individual
 the economy

As a northern country, Canada may be especially vulnerable.

I am dealing with this project primarily as a case study in the development of teaching materials. The approach used here would be relevant to any other issue.

1. NEEDS ANALYSIS
2. METHODS OF INCREASING UNDERSTANDING
3. WHAT ALREADY EXISTS
4. DEVELOP A PILOT PACK BASED ON ASSESSED NEEDS

5. HOLD A SERIES OF PROFESSIONAL DEVELOPMENT WORKSHOPS

As a result, we determined that

1. Materials are required at grades 4-6 and 10-12.
2. No existing resource is available for grades 4-6.
3. Society, Environment & Energy Development Studies (SEEDS) Foundation is developing material for High Schools.

From our discussions with educators we discovered:

1. Nova Scotia teachers are interested in receiving materials about Climate Change.
2. Teachers must be trained to use the materials, or they are unlikely to be used properly and/or at all.
3. Teachers are tired of receiving materials which have been designed without the input of teachers
4. Teachers seek out and welcome “expert” scientists and environmentalists, and hands-on curriculum materials.

With this approach, we were able to secure funding from:

Economic Diversification
Environment Canada, Climate Change Action Fund
Sable Offshore Energy Incorporated
Shell Canada
Xerox

As a result the Climate Change Action Packs (CCAP) were developed, tested, taken to workshops, revised and are now in use.

The initial printing and teacher workshops were in 2001. With the availability of additional support, the pack was reprinted in 2002. Additional workshops were held including one to the 35 teachers at EdGeo 2002.

The CCAP were updated in 20XX, translated into French in 20XX, and made available on DVDs.

The CCAP is a major product.

In order to discuss climate change students must have a grasp of the basic science. The issue of Climate Change is considered in three sections:

EARTH SCIENCES

ENERGY

HABITAT

Each section has a number of topics.

For each topic there is a “Backgrounder” which is information for the teacher.

This is followed by the instructions for the activity - the goal is to have the students do as much “hands on” learning as possible.

We also became involved in other activities such as the Science and Technology Awareness Network (STANET). STANET was involved in National Science and Technology Week, reaching out to the public through Science Connection Mall Events, and setting up a website and “Ask-A-Scientist”.

With all of these activities running out of the same small office, and with SITS and STANET being in theory two separate organizations, we decided to consolidate; and so the Atlantic Science Links Association (ASLA) was formed in 1999.

Initially the funding prospects looked good – we were encouraged by ACOA to apply for a major grant. However, ACOA dragged out the approval process for over a year. It was only thanks to a significant grant from Shell that we were able to keep going until the ACOA money finally came through – which they then made clear was a one shot deal.

Since then, we have been able to participate in NSERC’s PromoScience programme, from which we were awarded a 3-year grant.

For the past year or so, we have been operating at reduced funding levels, so we have reduced our coverage, and concentrated on SITS.

The demand is still there, increasing outside of HRM.

For a few years in the early 2000's we organized volunteers for "ENRICHMENT CLUSTERS" where schools host science workshops for one afternoon a week for four weeks.

That's a heavy commitment from our volunteers – BUT THEY KEEP COMING!

We hope to see SITS continue and ASLA to broaden its activities again.