ATLANTIC SCIENCE LINKS ASSOCIATION

ANNUAL NEWSLETTER

2017



NOVA SCOTIAN TEACHERS ENGAGE IN ASLA'S FIRST SCIENCE CONFERENCE

The Atlantic Science Links Association (ASLA) held its first free conference for science teachers on Friday August 25th, 2017 at the Life Sciences Centre, Dalhousie University. ASLA is a charitable science promotion organization which coordinates outreach programs for students in grades primary to twelve. This year's conference was specially focused on the junior high science curriculum and helping to bring science back into the classroom, through a day full of hands-on activities, and gave every participant multiple teaching aids from each lab.

Thirty-one teachers from across Nova Scotia came to the university, forgoing a bright summer day to take part in this special event. The day began with opening words from ASLA's president Arunika Gunawardena stating ASLA's commitment towards science, and was followed by a special speech from the dean of science, Chris Moore, who thanked ASLA's continuous effort to enhance science in schools and put Nova Scotia in the national spotlight. He praised the teachers and noted their dedication to their work.

After the opening, the teachers were split into two groups and continuously interchanged labs throughout the day. The workshops opened with teachers attending either a cell biology lab or an ecology lab. The cell biology lab was led by Arunika Gunawardena with the support of her lab members Adrian Dauphinee and Nathan Rowarth, Department of Biology, Dalhousie, in which teachers got to study animal and plant cells under a microscope. Each teacher took home a poster summarizing the learning objectives of the lab and a USB stick with supplementary videos. Everyone also had a chance to take home samples of the lace plant and sea monkeys to keep and grow in their own labs in the schools.

OUR SERVICES AND RESOURCES

Classroom presentations
Speakers for career fairs
Science fair judges
Science mentors
Workplace visits
Field trips
Climate Change Action Pack
Workshops for teachers



"I greatly enjoyed this experience and exposure to more branches of science. Your time, resources and presentations are greatly appreciated. Thanks for the great day"

- Junior-high Teacher





The ecosystems lab was led by the ASLA's executive director Rajesh Rajaselvam, Department of Biology, Dalhousie, who took teachers out into the "field" to compare micro ecosystems by collecting environmental and soil data for the workshop. It was a lovely chance to also enjoy the beautiful day! After a morning tea, teachers then switched to complete the lab that they had not attended first thing in the morning.

After lunch the teachers again separated into two groups to begin with either Earth Sciences or chemistry labs. One group was treated to an Earth Science lab led by Richard Cox with the support of his chair James Brenan, colleague Lexie Arnott and undergraduate student Kate Gonzalez-Woods, Department of Earth Sciences, Dalhousie. They took home a box of samples to their schools, including many rocks, minerals and a hardness kit, to share with their students. The other group began with a chemistry lab held by Jason Masuda, Department of Chemistry, Saint Mary's University, where teachers used eggs and fruit punch to explain important chemistry concepts. After a tea break, the teachers switched to enjoy the other lab they had not yet attended for the remainder of the afternoon.

During the afternoon tea-break, Paul Bentzen, Chair, Department of Biology, Dalhousie delivered the vote of thanks. He expressed his happiness over the success of the conference and praised ASLA's services as great contributions to the community. He proudly mentioned that the conference was a great reflection on the Department and the Faculty of Science. He concluded his speech by thanking enthusiastic science teachers who dedicated the day for the conference. Finally, the labs for the day closed with all of the teachers performing a fish dissection lab led by Neil Ross. Many teachers personally thanked the volunteers and the board of ASLA before leaving or sent emails in the days that followed to express their gratitude for the conference.

Dalhousie's Biology and Earth Sciences departments also donated much time, energy and space to help bring our conference together. ASLA would like to show its appreciation to Dalhousie's undergraduate students Michaela Kember, Georgia Denbigh, Meredith Fraser, Yayra Gabotsyo and Chad Simmons for their help in lab activities. ASLA extends its appreciation to Julie Walker, Karen Smith, Doug Mitchell, Amber Peck, Rod Stewart and Andrew Schofield of Biology, Dalhousie University and Norma Keeping and Darlene Van de Rijt of Earth Sciences, Dalhousie University for their support. Finally ASLA would like to thank all the volunteers and funders (NSERC's PromoScience, The Dalhousie University Faculty of Science, and Engineers Nova Scotia) that contributed to make this conference a successful event.

TEACHERS' COMMENTS

I cannot believe I was able to have this experience – and at no cost to me. I am truly inspired by the passion showed by everyone today! It is wonderful to see the scientists showing such interest in bringing this high-quality knowledge into public schools. This was energizing and useful. Please keep this conference going – it was excellent!

Great presentations and generous resources. Today's activities were interesting and ageappropriate. I will recommend this event to my colleagues.

I appreciated that the presenters each chose on specific aspect of the curriculum to show. Each presentation included practical ideas and lesson to bring back to the classroom.

Very organized, applicable to the classroom; awesome resources, friendly/knowledgeable presenters. Loved it! One of the best conference I've ever been to. Thank you!

"Thank you for the wonderful opportunity to refresh in the various scientific disciplines"

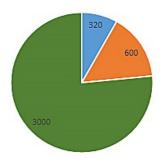
"Very useful 'hands -on' activities – useful in terms of engaging students"

- Junior-high Teachers



Topics of the activities at the conference and presented in the work-book; A & B. Cell and organism biology , C. Ecology and environmental science , D. Fish dissection, E. Earth sciences, F. Chemistry and physical sciences

ACTIVITIES OF ASLA IN 2016/17



■ Classroom Presentation ■ Sciencefair Judging/Mentoring ■ Coferences/Workshops

ASLA's reach of students in 2016/17

SITS volunteers evaluated the science fair projects of nearly 600 students throughout the year. This year too; many new volunteers showed interest in science fairs and volunteered in judging and mentoring. ASLA 's scientists participated in only 8 classroom presentations (3 geology, 2 physicsengineering-technology, 2 biology and 1 science careers) due to the work to rule by the teachers in Nova Scotia. All the activities of ASLA (covering all the school boards involving at least 45 schools) reached nearly 3900 students in 2016/17.



ASLA's volunteers did presentations with hands on activities in Geology (Earthquakes with an emphasis on human induced ones), Biology (Biodiversity Crisis) and Health Sciences (Microbes and Health), in addition to the Geology field activities. 70 teachers registered and took part in the activities conducted by ASLA at the conference. Furthermore, around 160 electronic teaching resources were distributed among the teachers who visited the ASLA booth.

ASLA WELCOMES REQUESTS FROM SCHOOLS AND MORE VOLUNTEERS TO JOIN

SITS provides several services (listed on the front page), but our most popular by far is the Speakers' Bureau. Through the Speakers' Bureau, we assist schools in finding volunteer scientists and innovators to speak to students across the province. And the best part is, **it's completely free!** So you can bring exciting, hands-on science learning into your classroom at no charge. To get a Request Form or to find out more about the Speakers' Bureau go to http://atlanticsciencelinks.dal.ca or contact us by phone or email

Strong volunteer commitment helped us to contact nearly four thousand students in Nova Scotia. Science outreach initiatives at universities, federal and local government departments, research organizations and industries added some strength to our volunteer base as new groups linked with SITS to strengthen their ability to connect to P-12 teachers. With the increasing demand we still need more volunteers (especially in rural areas of the province) to reach many more students. To register yourself as a volunteer, please go to http://atlanticsciencelinks.dal.ca or contact the Executive Director at sits@dal.ca.

Contact Us

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We are on the web and Facebook http://atlanticsciencelinks.dal.ca

BOARD OF DIRECTORS, ASLA

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Rajesh Rajaselvam, Teaching Faculty (Biology), Dalhousie University.

ADMINISTRATIVE ASSISTANT, ASLA

Michaela Kember, Biology undergraduate, Dalhousie University

OUR SPONSORS

ASLA continues to receive funds from NSERC's PromoScience grant, Dalhousie University and Engineers NS. We display our funders' logos here to thank them for their generous support and encouragement of science literacy and outreach in Nova Scotia. If you are interested in becoming one of our sponsors, please contact the Executive Director at sits@dal.ca.







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