Minutes of the APICS Science Education Committee Meeting held 2:00pm, Monday, June 25, 2001, in Halifax, Nova Scotia

Attending: Jim Foulds (Past Chair, UCCB), Zoe Hayes (APICS Chair of Council), Merzik Kamel (UNB Saint John), Vincent Leung (Acadia), Leo MacDonald (SFX), Maurice Muise (APICS), Paul Munro (UNB Fredericton), Graham Pearson (NSAC), Doug Ralston (NSAST), Fred Smith (Treasurer, MUN), Dennis Tokaryk (Secretary, Mount Allison), Marilyn Webster (NS Dept. of Education), Dave Wedlock (Centre for Geographic Services), Lois Whitehead (APICS)

The meeting was chaired by Fred Smith.

- 1. Welcome and introductions: The committee was pleased to welcome Maurice Muise, who had been hired as the Coordinator of Phase I of the Youth Education and Communications Program, and Lois Whitehead, Executive Director for APICS since June 2000.
- 2. Approval of the agenda: Approval of the minutes from the last meeting was inserted as item #3. Item #9 (Youth Education and Communications Program) was moved to item #4. The agenda was approved as amended.
- 3. Approval of previous minutes: Doug Ralston (second: Jim Foulds) moved to approve the minutes of the Aug. 11, 1999 meeting. Dennis Tokaryk commented that an item arising from the minutes relating to sponsorship of a session in a workshop for journalism students did not likely take place. The motion was carried.
- 4. Youth Education and Communications Program

Comments by Zoe Hayes: Zoe mentioned how links could be established between the APICS Science Education Committee and those doing research in instructional development at SFX. She also discussed an NSERC-funded initiative called PromoScience, which is designed to promote hands on experiences in science for youth. The application submitted by APICS followed from two recommendations made at the last Education Conference: to examine the transition phase that students experience between high school and university or college, and to encourage students entering post-secondary education to consider careers in science.

A large changeover in staff at APICS has taken place, but with the relocation of its head office to Halifax it is now far easier for the upper administration of the organization to attend committee meetings, allowing them to better coordinate APICS activities.

Comments by Lois Whitehead: Lois, who had fairly recently taken on Executive Directorship of APICS, mentioned that she had started to attend committee meetings, and had met in excess of 200 people on behalf of the organization. She hopes to improve communication within the organization with initiatives such as a listserv for the membership, and to strengthen the committee structure within APICS. She commented further on PromoScience. APICS submitted an application for \$25,000/year for three years to establish a new Science Education and Communications (YEC) program, and was approved for funding of \$17,900/year for three years. ACOA has been approached for additional funding. The initiative will proceed in two phases: in the first, the science education opportunities available in Atlantic Canada and the needs of youth studying science at university will be assessed; in the second, an internship program will be established whereby high school students will work in a university science research lab for about eight weeks during the university summer session. Preliminary planning suggests that students in internships will be paid in equal proportion through the YEC program and by their research supervisors. A pilot internship program should be up by the summer of 2002, with maybe one or two students taking part. The selection process has not yet been set, but will possibly be composed of university Deans, and APICS committee chairs. The Science Education Committee may have a role in this process.

Comments by Maurice Muise: Maurice, who is completing his M.A. in Economics at Dalhousie, was hired on a 6-month term to coordinate phase one of Youth Education and Communications Program. He provided the committee with an interim report (dated June 20, 2001), and a provisional paper on science enrollment trends in Atlantic Canadian Universities. His work will provide

groundwork and motivation for phase two of the program.

Discussions took place regarding difficulties in teaching science at the universities. Some members thought that 'new math' in high school had been softened, and oriented to an arts background. Many times teachers were required to teach mathematics without sufficient background in the subject. The requirements that a teacher must teach in a broad variety of disciplines nearly prohibits them from undertaking Honours degrees at university, since they will lose breadth. Concern was raised over the the high school's orientation toward a 'generalist' education, with no specific aim to prepare their students for university. Discussion took place on the pan-Canadian curriculum and on the value of standardized testing.

5. Election of the Executive

Doug Ralston was nominated (V. Leung, M. Webster) for Chair of the committee. The nomination was accepted, and Doug was acclaimed as Chair.

Leo MacDonald volunteered to fill the Vice-Chair position.

Dennis Tokaryk and Fred Smith will continue as Secretary and Treasurer.

The position of Past Chair is declared vacant for the time being.

- 6. Old Business
 - a) Mentorship Program was covered in item #4.

b School Publication - Plans to renew the publication, Atlantic Science, have been included in the YEC program. Further funding sources will be sought, and a web version may be produced. Discussion took place regarding whether its orientation should be to high school or university.

- c) Skeptics Club this initiative has been dropped.
- d) Journalism students workshop this initiative has also been dropped.
- 7. Science Fair Communication Awards: these awards were given out by APICS over the last two years. Difficulties in establishing communications with regional science fairs were expressed. Activity related to these awards typically takes place in March/April. V. Leung and F. Smith volunteered to act as science fair communication award coordinators.
- 8. Undergraduate Science Communication Awards: nominations never reached the Science Education Committee. Terms of reference for these awards need to be defined. Concern that these awards added a third category of presentation (in addition to regular oral and poster presentations) was expressed. V. Leung and D. Tokaryk were named to a subcommittee to look into the terms of reference. An Awards Committee for APICS was suggested.
- 9. The Fifth APICS Conference on Science Education: provisionally, this conference was set for August 2002 at Mount Allison University. It will be the major item at the October 2001 meeting. The coordinator will be Dennis Tokaryk.
- 10. Membership of the committee: Difficulties have been encountered filling the science consultants, science centre, and non-university educator positions, likely because their time is not as flexible as that of university workers.
- 11. Communication within the committee: Discussion regarding file formats (pdf, attachments, etc.) for distribution of information led to a suggestion that a questionnaire be circulated regarding preferred methods for correspondence.
- 12. Future directions for the committee: The committee decided to skip this item.
- 13. Committee web page: F. Smith volunteered to start up a web page for the committee.
- 14. Other business: None was brought forward
- 15. Date and location of the next meeting: A mid- to late October date was suggested. G. Pearson agreed to host it at the Nova Scotia Agricultural College in Truro, NS.

16. Adjournment

Respectfully submitted,

Dennis Tokaryk Secretary, APICS Science Education Committee