



## Agenda for IEEE Canada – TISP Committee Meeting

**Date: Wednesday January 25th, 2012**

**Time: 8:00- 9:30 PM**

**Teleconference call #:**

**1-866-512-0904**

**access code: 8514573#**

### **1. Roll Call of Participants**

See annotated list at end of report.

### **2. Adoption of Agenda**

Adopted as circulated

### **3. Review of Minutes from November 30th telecom call**

Report from Dirk Werle to be updated and minutes re-circulated.

### **4. Report on STAO 12 Preparations**

- Pat to check with Chuck Cohen on lesson-plan mapping to Ontario Curriculum and any other outstanding work items
- Dave reported that teachers have quite a “free hand” in choice of classroom materials (but not textbooks or lesson plans)
- This is likely true in other provinces, but all sections should check on this
- Dave will add a column to his spreadsheet summary of all lesson plans so that an appropriate notation can be added as to classroom mappings. Chuck will supply these for Ontario curriculum. This gives teachers a quick easy summary of where the lessons fit into the curriculum (i.e. “Gr. 9 Science - Electricity).
- Dave Hepburn is preparing to secure funding and make an application to STAO in January 2012 for the 2012 conference. (Nov . 15, 16, 17).

- Total cost is up \$50 – so section share increases by \$10 to \$15
- TISP Canada share is \$314. Cathie has asked the section chairs for their contributions.
- Cathie Lowell will use her IEEE card to secure the \$500 deposit by March 5.

## 5. Comments on the First Issue of the TISP Canada Newsletter

- All feedback to date has been positive – please send your ideas for improvement to Dirk directly
- Team agreed on a 3-month schedule- next issue target March 31.
- Jennifer indicated she would promote such a newsletter across R8 and other regions at the IEEE EAB.
- Jennifer to provide an article for one of the issues describing EAB TISP activities worldwide.
- Bruce is on-board to help with next issues to continue giving it the professional look-and-feel.
- Sections to continue providing “meaty” items and pictures for future issues
- To add a section on planned activities and scheduled upcoming events
- Bruce to poll **Nancy Battet** for the “teacher feedback” article in next issue

## 6. Discussion on Organizing the Next Section-based TISP Workshop

- Witold would like to hold such a workshop in the Manitoba equivalent to STAO in October 2012.

## 7. Review of all Sections TISP activities:

- Section activities (**encouraging the inactive sections!**)
- Plans on teaming with school boards and promotional activities
- Plans for the rest of the year activities.

## Canadian Atlantic

- Dirk reported he will participate in “Engineering Month” especially an event at the large Mall in Halifax for week of March 24. This would involve students and Science teachers. He continues to seek funding from IEEE Canada and IEEE TISP to support this. His section is also supportive.
- Dirk is ready to receive articles for the March 31 issue of the TISP Canada’s *newsletter # 2*.

## Calgary

- No Report. Anis is organizing his annual tour with his students of research facilities in Eastern Canada and the U.S.

## Montreal

- Anader will contact Samir, to check on progress and plans for TISP Montreal team building and activities.

## Ottawa

Janet reported:

- Ottawa section TISP has been quiet for the last couple months but we are ramping up activities for the coming year. We have been invited to participate in the Museum of Science and Techs Teacher’s Institute. Last year we ran a TISP workshop for the teachers who attended from across Canada and the plan is to do that again, not sure yet how many teachers will be invited.
- We also have found a contact to help us get teacher time to present a TISP workshop for a PD day. Our attempts from the school board perspective have not been success as they seem to be fully booked for the year. We have not yet been in contact but hope to see if this can get us into a regular time slot for running TISP workshops. Will keep you posted on how things progress

## Edmonton/Northern Canada

- Rossitza reported:
- On February 13, 2012 we plan to present at the University of Alberta Faculty of Education Technology Fair 2012 (<http://www.educ.ualberta.ca/technologyfair/>)

Title: Engineer your classroom!

Presenter: Mooney Sherman

Co-presenters: IEEE Northern Canada Section Teacher In Service Program (TISP) Team

### Description of Presentation

- IEEE is an international professional association dedicated to the theory and practice of electrical, electronics, communications and computer engineering, computer science, the allied branches of engineering, and related arts and sciences. It is the largest volunteer run professional organization with over 400,000 members representing over 160 countries.
- IEEE Teacher-In-Service Program is a result of IEEE Sponsorship as well as collaboration between IEEE and TryEngineering. This presentation will illustrate how engineering concepts and the design process can be used to reinforce content in traditional subject areas while building students' problem solving skills and motivation to learn.
- Through the TISP program, IEEE volunteers work with teachers and provide them with mini hands-on integrated engineering, technology, science and mathematics lessons that they can use with their students. It is based on approved lessons plans prepared/reviewed by TISP volunteers, tested in classrooms and designed to highlight engineering design principles.
- Lessons featured on Tryengineering.org apply the engineering design process, which is a multi-step process used by engineers to efficiently create solutions to complex problems
- This presentation will guide the attendants how to get started.

Teachers do not need an engineering background to share these lessons with their students. Each lesson provides everything teachers need to easily and effectively implement the lesson. The presentation includes a demonstration of a sample lesson.

The schedule is here:

[https://docs.google.com/spreadsheet/ccc?key=0AvJVIRUDtr\\_ldFJIRkkxVEJMMVlGdWgySDlwSy1iM2c#gid=0](https://docs.google.com/spreadsheet/ccc?key=0AvJVIRUDtr_ldFJIRkkxVEJMMVlGdWgySDlwSy1iM2c#gid=0)

### **Toronto**

- Pat reported he is working on a lesson plan for “Electric Motor”

### **Hamilton**

- Dave has prepared a condensed spreadsheet of lesson plans from [tryengineering.org](http://tryengineering.org) including separate list of French lessons

### **London**

Murray reported:

December and January were pretty quiet in London with boards completely shut down.

I have three “irons in the fire” but not much to report on progress:

- 1) attempting to schedule a workshop at Althouse, the education college at Western
- 2) contacting VROC (Virtual Researcher On Call) to see if we can work on something (STAO contact)
- 3) TechAlliance in London is setting up displays at London's Children's Museum and I am exploring what that might be and whether there is a useful role for us.

### **Saskatchewan**

- No Report.

### **Vancouver**

- Nina reported that they continue to try and “piggy-back” TISP activities onto their existing good WIE outreach program.
- Zahra reported:

### **“Meet an Engineer” Classroom visit**

IEEE WIE held four classroom visits in November and December 2011. The visits, which aimed at introducing students to careers in engineering and building female role models, were made to the four sessions of the Planning 10 class at the university hill secondary school. The session included a talk that was given by a female engineering graduate student or engineer in training and a classroom activity that was planned and supervised by the teacher and two IEEE WIE volunteers.

During the activity (Tryengineering "Ship the Chip") students were divided into teams and were assigned the task of designing a suitable packaging to ship a single wedge of potato chips that can survive the shipping conditions using the supplies provided. At the end of the session, the packages were tested by IEEE WIE volunteers and the winning team received a prize.

Surveys were made before and after the talk to measure the students understanding of the contents and all speakers were requested to follow pre-defined guidelines in preparing their talks.

### **Survey Results**

In the questionnaires, which were handed out before and after the talk, the students were asked to name up to five different disciplines within engineering. Our survey results show that:

- \* On average, students were able to name 5 additional engineering disciplines after the talk**
- \* The maximum numbers were at 5 disciplines before the talk and 10 disciplines after the talk**

The students were also asked if they are willing to consider a career in engineering and sciences as one of their choices and if they knew what the high school requirements to apply for engineering are. From the surveys it was observed that:

- \* 58 % of the students were interested in a career in engineering/sciences before the talk**
- \* 22 % of the students who were not interested in engineering, changed their minds after the talk**
- \* 28 % of the students knew the high school requirements to apply for engineering before the talk**
- \* 85 % of the students who did not know before, learned the high school requirements from the talk**

Pictures:

Some of the pictures from the activity are available for viewing at:

<https://plus.google.com/photos/111206034871235580260/albums/5691953950880585777?authkey=CNKY7taFnJbbrQE>

- Note: If you plan to use any of the pictures on above link please let us know so that we can make sure we have signed photo consent forms form students.

### **Victoria**

- No Report

### **Peterborough**

- No Report

### **Winnipeg**

Witold reported:

- He is working hard preparing for the Engineering Education conference in Winnipeg June 17-20

### **Kingston**

- Umar Igbal indicated he was happy to join the team.
- No plans for Kingston section as yet – but they have existing relationships with local schools which they will be re-visiting.

## **8. Time for the next meeting?**

March 7th, 8:00 PM (Wednesday)

## **9. Varia**

- Add Cathie Lowell to circulation list for minutes.

## **10. Adjournment.**

9:10 PM.



## IEEE Canada – TISP Committee Members 2011:

Chair, **Anader Benyamin-Seeyar**, **Attending this meeting**  
 Secretary, **Patrick Finnigan**,  
 Treasurer, Kaveh Moezzi,

### Sections

- Calgary :
- Canadian Atlantic :
- Edmonton/Northern Canada :
- Hamilton :
- **Kingston:**
- Kitchener/Waterloo :
- London Ontario :
- Montreal :
- Newfoundland :
- Ottawa :
- Peterborough:
- Quebec:
- St. Maurice:
- Saskatchewan :
- Sherbrooke:
- Toronto :
- **Vancouver :**
- Victoria:
- Winnipeg:
- Other :

### Section Champion(s) / Guests

Anis Haque/....  
**Dirk Werle**  
**Rossitza S Marinova / Mooney Sherman** /Musa Hassan  
**Dave Hepburn**  
**Umar Iqbal** / Shahram Yousefi  
 Hamid /Amir Khatibzadeh  
 Murray MacDonald / Maike Luike  
 Samir Kharaf / Hamadou Saliah-Hassane /Geoffrey  
 Alleyne / Youness Farah / Ildiko /Nancy Battet  
 Amy Hsiao / Paul King / Brian Kidney  
 Janet Davis  
 Sean Dunne / Luc Matheau  
 André Morin  
 Adel-Omar Dahmane  
 Wahid Khan /Craig  
 Witold Kisner is working on this  
**Patrick Finnigan** / Dennis Cecic  
**Nina Selak** /Ljiljana Trajkovic / Zahra Ahmadian  
 Amirali Baniyasi /Kelly /Alexandra  
**Witold Kinsner** / Shaahin Filizadeh/ Bruce (report email)  
**Bruce Van Lane** of Communication Matters,  
**Jennifer Ng** IEEE EAB (Ottawa)