

# THE USE OF WI-FI IN SCHOOLS

#### **ROLE OF CTF**

- Act as the collective voice of teachers at the federal level
- Action resolution 3: That the Canadian Teachers'
  Federation lobby the Federal Government to
  review Safety Code 6 with respect to lowering the
  current Threshold Limit Values (TLV) regarding
  electromagnetic radiation, especially in the
  microwave Wi-Fi frequency band. (2012)

# **PURPOSES OF CTF ADVOCACY**

- To develop CTF's advocacy profile in accordance with the direction given by the Board of Directors and the Annual General Meeting.
- To continue to advocate for a safe work environment for teachers and their students.

## **KEY MESSAGES**

- The CTF is concerned about the lack of definitive research regarding the adverse health effects of Wi-Fi radiation. Decisions regarding exposure to Wi-Fi should be based upon sound science. Given the relative "newness" of broad Wi-Fi coverage and the difficulty in controlling variables in this type of research, we propose a prudent approach to the use of Wi-Fi, especially where children are present.
- Pedagogical needs could be met in schools with an approach that limits exposure to Wi-Fi. For example, many schools use a mobile cart of laptop or tablet computers. That cart could include a wireless access point that is powered on when necessary and turned off at other times.
- Schools could continue to be "hard wired" and wireless internet access could be provided as needed.
- Teachers and school communities have not been informed regarding the implementation of Wi-Fi and any inherent potential hazards. In the absence of a definitive statement regarding the safety of Wi-Fi that addresses concerns raised through social and regular media, teachers are rightly concerned for their personal safety and the safety of the children in their care.

# RECOMMENDATIONS

- That Safety Code 6 include a recommendation for prudent use of Wi-Fi whenever possible including the recommendation to limit consistent exposure in schools by turning off wireless access points when not in use.
- That Safety Code 6 exposure thresholds be based upon both thermal and biological effects of exposure to Wi-Fi.
- That an education program regarding the relative safety of Wi-Fi exposure be implemented and that appropriate resources be developed to educate the public regarding ways to avoid potential exposure risks of Wi-Fi access points and devices.

### **CURRENT CTF ACTIVITIES ON THIS FILE**

- ✓ Communicate with Industry Canada and Health Canada
- ✓ Brief to the Expert Panel of the Royal Society of Canada reviewing Safety Code 6
- ✓ Presentation to the Expert Panel of the Royal Society of Canada reviewing Safety Code 6
- Monitor developments from the Royal Society of Canada

#### **CTF POLICY ON THIS TOPIC**

# Policy Section 1, subsection 2

Therefore, we, the teachers of Canada, believe:

- 2.4.2. that the best interests of all children and youth must guide each decision that society and its institutions make on their behalf.
- 2.4.8. that the conditions under which teaching and learning take place have a direct impact on what teachers and students can achieve together.
- 2.4.13. that change in schools is natural and healthy provided it is based on sound research and reasoning and in consultation with teachers.

## Policy Section 3, subsection 23

23.1. CTF believes that technology can be an effective support for teaching and learning when:

- a) it is properly resourced and equitably provided:
- b) it is used at the teacher's discretion;
- c) it is supported with adequate professional development.

CTF supports the use of electronic communications in ways that do not harm students and/or teachers or the educational process. (2013)

- 23.2.3. Both elementary and secondary curricula must reflect the needs of students who must function in a technology-dominated workforce and culture. Teachers should encourage student choices which best prepare them for this changing world. (1989)
- 23.2.4. The role of technology in supporting the acquisition of knowledge, the exchange of ideas and the development of skills will change over time. To guide and react to these changes, multisectoral involvement which recognizes the central role of the teaching profession should be supported. (1989)
- 23.3.3. The Council of Ministers of Education should encourage and financially support:
  - a) further research on the potential educational applications of research on communications technology; (1983, 1988)
  - b) the efforts of educational associations to promote greater interprovincial consultation and cooperation in the sharing of information about communication technology; (1983, 1988)
  - c) the development and adoption of technical standards to promote compatibility of courseware, software and hardware used in education in Canada. (1983, 1988)
- 23.3.5. Federal and provincial/territorial governments should inform the education community, on a regular basis, of the types of communication networks and databases they will be making available. (1983, 1988)
- 23.6.1. The federal government should:
  - a) promote and regulate Canadian technological capabilities; (1989)
  - b) stimulate research and development into the social, environmental and economic impacts of technology; (1989)
  - c) ensure interprovincial consultation and coordination; (1989)
  - d) establish health and safety standards related to technology in the workplace; (1989)

- e) collect and analyze demographic and workforce data and trends to assist provincial/ territorial authorities in establishing priorities and programs; and (1989)
- f) consult widely, and in particular with those most affected by technological change, in formulating short-and long-term social and economic strategies. (1989)
- 23.6.4. Boards of Education should:
  - a) ensure their schools are utilizing microelectronic technology to support educational goals consistent with the guiding principles identified in 23.1; (1989)
  - b) ensure the provision of funds and time within the regular school day and year to provide ready access to short-term and extended professional development for staff; (1989)
  - c) ensure the provision of adequate hardware, software and courseware; and (1989)
  - d) ensure that health and safety standards are met in schools. (1989)
- 23.6.5. Teachers and their organizations should:
  - a) encourage the implementation of the guiding principles described in 23.2; (1989)
  - b) acquire additional skills and knowledge regarding the use and impact of technology on education and society; and (1989)
  - c) participate in the decisions which affect the role of technology in education. (1989)

Policy Section 5, Health and Welfare, subsection 8

- 8.1. CTF believes that the federal government has an obligation to:
- 8.1.1. Respect international environmental standards;
- 8.1.2. Protect the environment from future degradation;
- 8.1.3. Reflect these positions in its discussions and agreements with other governments. (2013)

#### REFERENCES

Canadian Teachers' Federation. *CTF brief to the Expert Panel of the Royal Society of Canada reviewing Safety Code* 6, October 2013.

WHO website http://www.who.int/peh-emf/publications/facts/fs304/en/index.html

Presentation to the Royal Society of Canada http://www.youtube.com/watch?v=qZX7y-yGZPU