Cleaner power keeps schools healthy?

By Dr. Magda Havas

Last January I received a phone call from Michelle Illiatovitch in Toronto, who told me that both she and her daughter, Kestra, were electrically sensitive. Shortly after some renovations, Kestra began to feel ill. She noticed that the lights in her bedroom were flickering so they called in an electrician who corrected a problem with loose wires in the fuse box. Kestra’s health improved dramatically but she still felt tired and had frequent, headaches, fuzzy thinking, depression, chest pain and nausea.

Michelle’s niece, Catherine, developed chronic fatigue shortly after moving to a farm in Wisconsin. She read that some farmers in her area were experiencing health problems and they were also having difficulty with their dairy herds and that Dave Stetzer was helping the farmers solve their problems, which were electricity-related.

Catherine contacted Mr. Stetzer, who told her to turn the power off in her home. She did this and began to feel better almost immediately. She then purchased some of his equipment to measure her home and to filter out the dirty electricity. Shortly after installing the electric filters, also known as capacitors, her health began to improve. She was so impressed she contacted her Aunt Michelle to share the good news.

Michelle also bought some filters, which plug into an electrical outlet, for her home. Not only did her health improve, so did her dog's and her husband's.

Kestra was feeling much better at home but when she went to school she became ill again. Michelle got permission from Joy Kurtz, the principal of Willow Wood School, to install some filters there.

That's when Michelle phoned me. She wondered if I would do a study to determine the effectiveness of these filters. My understanding was that a very small percentage of our population is likely to be electrically-sensitive and because the symptoms are so vague it's difficult to know if electrical-sensitivity or something else is causing the problem.

The symptoms vary. Some sufferers develop headaches when shopping in stores with bright halogen lights. Others become tired or can't think clearly. Some develop skin rashes after using a computer. In severe situations people can even lose consciousness. Generally those with electrical sensitivity prefer incandescent lighting to fluorescent lighting.

I was skeptical this study would show anything, partly because I was skeptical about the effectiveness of the filters and partly because I felt the population of teachers and students was too small. But I was also intrigued and agreed to design a questionnaire.
Only the principal and the head custodian knew what we were doing. It was necessary to keep the teachers in the dark initially so that psychological bias would not play a role in their answers. This is referred to as a "blind" experiment.

We measured the electromagnetic environment in the school with and without the filters. The filters removed many of the microsurges on the electrical wiring but did not change the electric or magnetic fields, which were already low. Microsurges consist of high frequency energy on an electrical wire and are generated by various appliances and equipment.

After three weeks without filters and three weeks with them, I received several boxes of completed questionnaires. The real work began.

I analysed the teacher results first and was amazed by what I found. Twenty-six of 40 teachers responded regularly. Of these 26, four did not change, four were slightly worse and 18 improved after the filters were installed. We found that 46 per cent of the teachers experienced less fatigue, 42 per cent were less frustrated, 35 per cent were more satisfied with their work, 35 per cent had a greater sense of "well-being", 27 per cent were less irritable, 23 per cent had more energy, 23 per cent experienced less body pain, and 19 per cent had fewer headaches. And all of this occurred during February, a month we normally associate with the "blahs."

Preliminary analysis of the student results shows that both high school and elementary students improved more during the afternoon than in the morning. In elementary school, student disruptions were reduced by an average of three to four minutes per class, which allows more teaching time. The high school results were less conclusive.

While the results are encouraging and suggest that these filters can improve the school environment, it's necessary to repeat this study at other schools. If the results prove to be consistent then we may have a tool to improve our electrical environment at home and at work.

While these filters are not the answer to all of our electrical problems, they may make living more tolerable for the small percentage of the population who are truly electrically-sensitive. And, if our results are correct, they may improve the quality of life even for those who aren't.

Magda Havas teaches in the Environmental and Resource Studies Program at Trent University. For more information or to have your school tested contact

mhavas@trentu.ca.