## **Discussion group 10: Public perceptions and understanding of mathematics and mathematics education**

## Websites related to the public's perceptions of mathematics:

Experiencing Mathematics—An International Exhibition supported by UNESCO, http://www.mathex.org

Culture Math—Ressources pour les enseignants de mathématiques, <u>http://www.dma.ens.fr/culturemath</u> (Note that this site is in French.)

Figure This! Math Challenges for Families, http://figurethis.org

European Research Consortium for Informatics and Mathematics, *Mathematics Everywhere*, <u>http://ercim-news.ercim.org</u>

A list of additional resources on the public understanding of mathematics reported by the Math Forum, <a href="http://mathforum.org/social/math.perception.html">http://mathforum.org/social/math.perception.html</a>

Math at Work—in construction, health care, aerospace, and manufacturing; brochures also available at no charge from Achieve, a policy organization focused on standards, accountability and support for American states raising their academic standards, <u>http://achieve.org/MathatWork</u>

"We all use math everyday." A collection of high-quality mathematics activities to accompany episodes of the successful United States television program "NUMB3RS," a drama about a mathematician who helps his FBI brother to solve crimes. <u>http://www.weallusematheveryday.com/</u>

## **Other resources:**

The Mathematical Association of America (MAA) has published two reports (including a position statement in the first) on the need for quantitative literacy among the broad population. These reports are available for download by chapter without restriction or fees at the MAA site in pdf format as follows:

Mathematics and Democracy (2001), http://www.maa.org/ql/mathanddemocracy.html

The 2003 sequel: Quantitative Literacy: Why Literacy Matters for Schools and Colleges, <a href="http://www.maa.org/ql/qltoc.html">http://www.maa.org/ql/qltoc.html</a>

National Council of Teachers of Mathematics Past President's Message: Johnny Lott: Students, Families, Communities, and Mathematics Teachers, April 2003 (see <a href="http://dg.icme11.org/tsg/show/11">http://dg.icme11.org/tsg/show/11</a> for this)

Dimensions: Une Promenade Mathématique, http://www.dimensions-math.org

Dandelin Spheres—a case of three planes and a cone, <a href="http://www.clowder.net/hop/Dandelin/Dandelin.html">http://www.clowder.net/hop/Dandelin/Dandelin.html</a>

The following two videos of old American movies show interesting (and incorrect) computational algorithms, demonstrating the kind of public entertainment that create confusion, while being accepted as everyday entertainment:

Ma and Pa Kettle with a different algorithm to solve a percent problem, <a href="http://www.youtube.com/watch?v=Bfq5kju627c">http://www.youtube.com/watch?v=Bfq5kju627c</a>

Abbott and Costello with a different algorithm to solve a division problem, <u>http://www.teachertube.com/view\_video.php?viewkey=93b89d8fbee5667d077f</u>