Bauer et al. 2007

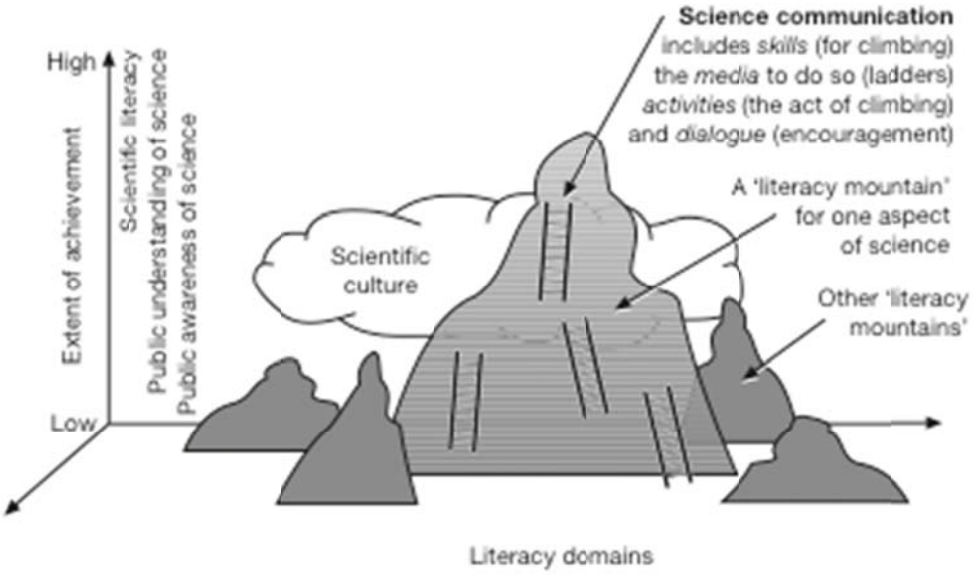
Identifies three paradigms in public understanding of science:

1) *Scientific literacy*. Jon D. Miller articulated perhaps the most influential concept of "science literacy", which relies critically on the public having a deficit of knowledge. It included four elements: a) knowledge of basic textbook facts of science, b) an understanding of scientific methods such as probability reasoning and experimental design, c) an appreciation of the positive outcomes of science and technology for science, and d) the rejection of superstitious beliefs such as astrology or numerology.
2) *Public understanding of science (PUS).* The PUS paradigm "shares with the previous phase the diagnosis of a public deficit. However, this time round, it is public attitudes that are highlighted (Bodmer, 1987). The public is not positive enough about science and technology; there are dangers citizens will become negative or outright anti-science, and this is of natural concern to institutions of science."
3) *Science and society*. "The critique of the literacy and PUS paradigms as "deficit models" ushered in a reversal of attribution. The diagnosis of "institutional neurosis" has been widely heeded: the deficit is not with the public, but with the scientific institutions and expert actors who harbor prejudices about an ignorant public. Henceforth, there can be several deficits: public deficits of knowledge, attitude or trust, but also deficits on the part of scientific and technological institutions and their expert representatives. Now, the focus of attention shifted to the deficit of the technical experts."

The paper then explores research methodologies used within each paradigm, solutions to the main problems, and critiques of each. A good summary of the different perspectives.

Burns et al. 2003

Authors define science communication "as the use of appropriate skills, media, activities, and dialogue to produce one or more of the following personal responses to science (the AEIOU vowel analogy): Awareness, Enjoyment, Interest, Opinion-forming, and Understanding." They then visually represent science communication as ladders in the "literacy mountain" of science or a scientific issue. Good for definitions but not much else.



Darzentas et al. 2007

Authors make a push for science communication among scientists to move away from manuscripts and into other media, especially videos. It is a commentary, and a weak one at that.

Davis 2008

Specifically written for scientists studying in Antarctica. Author deplores current state of science communication by specialized journals and yearns for return to old days when anyone could understand an article in a science journal. Explores ways in which some stuff he did on penguins could be popularized. A lame article, in my opinion.

Lowrey et al. 2007

Convened a panel of 26 renowned journalists and public information officers and surveyed them on the most pressing problems in communicating natural and human-induced disasters. Findings (and suggested solutions) are summarized in table below.

Table 2: Barriers and solutions to improve journalist and public information officers (PIO) communication in health-related emergencies

Barrier	Solution
1. Media stories are too often hectic and do not provide much contextual information	1. Develop case-based learning opportunities to illustrate best practices
2. Media stories fail to reflect the complexities of health-related emergencies	2. Invite journalist to participate in emergency and disaster drills and exercises
3. Media personnel lack access to information and experts	3. Facilitate contact and relationship-building between journalists and PIO's at the local level
4. Lack of training to convey information about likely risks and threats in appropriate manner to the public	4. Provide experiential learning opportunities for both journalist and PIOs
5. Journalist lack of cooperation for information dissemination with colleagues across other media types	5. Use the Internet and other mobile technologies to disseminate information
6. Lack of government agencies and media organizations in promoting and publicizing emergency response plans together	6. Coordinate with public health and other government agencies in developing emergency response plans.
7. Lack of consensus between journalists and PIOs related to resource development, availability, and dissemination for responders	7. Bring together the various entities that are developing resources and publish information through trade publications and professional meetings

von Storch 2009

Explores the relationship between climate science and politics. Advocates for the position of a scientist as an "honest broker" (term coined by Pielke Jr's "The Honest Broker"): a scientist who "broadens the scope of the options he draws from his findings, rather than constricting it. Thus he enables the political process to choose the 'solution' that society desires".

* I read *The Honest Broker* and thought it was a pretty good book (mostly because I agree with it).

Rajput 2009

Main goal of this short paper is to highlight some science and technology courses in India (whose constitution has a special provision "to develop the scientific tem- per, humanism and spirit of enquiry"). Websites to the various Master's and Certificate degrees are provided.