

## Water: Media and Science

Some media content bluntly presents fallacies regarding water and water products, while others contain inherent values of water that result in over-consumption. The challenge lies in providing students with a framework to recognise these issues and allow critical thinking to develop outside of an academic context, particularly when it comes to forms of media that people often interact with recreationally.

Media should be consumed consciously, as it can deliver biased and potentially distorted images of water usage and water as such. Queiroz et al. (2012) analysed the influence of newspaper reports on bottled water consumption. Their study suggests that controversial reports about tap water quality impact the overall consumption of bottled water, illustrating that media content has broad implications for consumption.

Once the students become aware of the way media frames water usage, the next step towards behavioural change is critical thinking. Media discourses are often based on fallacies (e.g. exotic bottled water is better for you than tap water) and the way to avoid integrating their discourse into our mindset is through critical thinking (Haskins, n.d.). In addition to this, increased media literacy has been associated with developments in critical thinking in general, which makes it a valuable teaching tool (Feuerstein, 1999).

After thinking critically, students can make more conscious decisions and segregate the biased discourse from the media and our own independent thoughts. They will be able to move towards a more environmentally aware, logical, science-based, and unbiased system of behaviour. Even with exposure to advertisements that suggests bottled water as being healthy, they will be able to come up with the conclusion that the water in the advertisement is not as healthy as tap water. After thinking critically, they will be able to decide not to buy bottled water if they have access to tap water because it is illogical, uneconomical, and environmentally detrimental. Critical thinking becomes crucial, especially during the teenage years, since it is when students are most exposed to media messages without having fully developed a mature, individual mindset. Learning critical thinking at this age will help their future cognitive development and identity.

In order to raise awareness for water consumption and waste in particular, we must first begin with raising awareness concerning human consumption in general. This lesson employs advertisements that would be seen every day in the lives of teenagers in order to expose the ubiquity of human consumption in our everyday lives. Consumption in the context of water is important for the following reason: less than 1% of the world's freshwater is available for human use, but can be renewed if it is not contaminated. The notion of water limitation can be applied on a general level, if one recognizes that increased human consumption results in increased waste

(Kotler, 2011), as portrayed in the “Super-Soaker” commercial with using fresh drinking water for leisure.

A significant reason for individual water mismanagement is ignorance about how our daily activities affect the water supply (Howarth & Butler, 2004). From physically consuming water in drinks and food products to using it to clean (ourselves, dishes, cars, clothes etc.), conduct leisure activities, and grow food and flowers, there are many different processes where water can be wasted, contaminated or over-consumed. In order to increase the students’ knowledge of the possible impacts of their daily activities on water usage, it is necessary to raise awareness of how their activities can harm the quality and quantity of freshwater (Hultman, 1998; Pahl-Wostl, 2002) through practical examples.

## References

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## Open Source Information

National Resources Defence Council - How to Clean Up Our Water: Ten Simple Ways You Can Help Reduce Pollution and Runoff. <http://www.nrdc.org/water/pollution/gsteps.asp>

Media literacy and the politics of identity - Resources for educators  
<http://criticalmediaproject.org/about/site-overview/>

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