

Media stories as a Numeracy Resource

- Madison (as cited by Schield 2008) argues that class materials which provide the contexts for the maths and statistics, among other things
 - must be authentic
 - source articles must be fresh
 - have few formal algorithms
 - have an emphasis on number sense

Schild, M. (2008). Analysing Numbers in the News: A Structured Critical-Thinking Approach. In *WM Keck Statistical Literacy Project*. Retrieved 13 July 2010 from www.statlit.org/pdf/2008SchieldNNN.pdf

Media stories as a Numeracy Resource

- Collect human interest stories which have some numeracy impact (though these impacts may not always be visible to participants)
- Ensure the story is brief (perhaps 1+ pages)
- Check that the language is accessible to most of your adult learners.
- Invite your learners to share their own stories or perspectives (vote?).
- Unpack some of the figures
 - ask how these were derived
 - look for instances with proportional reasoning
- An example from 2008 . . .

Supermarket Fuel Discounting

- Regular shopper at the same place for over 15 years
- Always stops the checkout operator every \$100, 'visa's up', and gets a fuel voucher each time, usually 4c /litre
- Has several adult children drivers so shares the fuel discount vouchers among them
- One afternoon she'd spent \$486, but she hadn't used the "stop the operator every \$100" routine.
- She got her voucher, was exiting and suddenly saw this week it was 10c/litre.
- So she asked for more (vouchers) at the service desk ...

At the Service Desk then the Store Manager

- Initial response was to say no, one voucher per customer
- Writer countered with
 - her 15 year history at the store,
 - spends at least \$300 / week there,
 - so far her custom was \$234,000 (how?)
 - potentially a \$500,000 customer (how?)
- Another voucher emerged and two more later from the GM

Then to the author's website

- Has 20,000 registered readers
- After airing the article on her site, she received 700 replies
- Replies were 2.5 to 1 in favour of her actions
- *This enables us to promote some strategies for proportional thinking by posing:*
 - *what percentage replied?*
 - *how many people were for and against?*

Ratio / Proportion Tables - 1

- With the percentage, some will know how to work 700 replies out of 20000
- Others may need a 'leg up' in understanding how 'to do percentages'; a ratio table is one entry point, e.g. a knowledge of place value and multiplicative (dividing) thinking

Replies	700	70	7	3.5
Total readers	20000	2000	200	100

- So a 3.5% 'hit rate' (apparently good in this field)

Ratio / Proportion Tables - 2

- With the ratio, some will have an algorithm to work out both for and against
- Again a ratio table could be an entry point,

For	2.5	5	50	500
Against	1	2	20	200

- So 500 people were positive about the author's stand while 200 were opposed
- Where do you stand?

The Lotto Winners?

- Won 17 Million (a quarter of the pool)
 - how big was the pool?
- Money had been part of a 'party fund'
- Spent \$34 from the party fund on a ticket
- Should they have split it in thirds or as a percentage of their contributions?
- Finally settled out of court though lawyers had been paid at least \$2 Million by that stage.

The Bus Lane – Civic Sting?

- \$150 fine if your car is in a designated bus lane
- Council has collected \$4.2 Million over a year since the lanes began.
- Article states that 77 people per day have been 'stung'. (How?)
- Drivers have had to estimate a distance of 50m from an intersection before they make a left turn (only some are marked)
- Revisiting this as they realise the sting is hurting!

Media stories as a Numeracy Resource

- We have found
 - that the brevity of the article is important for learner engagement
 - some tangents do emerge when people contribute and though these should be given air, some cut-off point is essential
 - adult learners do discuss and question the sense of number which is involved, among themselves, and how these might influence their own decision making
 - these provide teachers with an adult resource from most of their learners' backgrounds (and expertise) and also creates useful starting points in topics (e.g. %), but don't 'overcook' the resource