

# Cartoons in numeracy: A laughable idea

Brian Kogler

TAFE Sydney Institute, Ultimo Campus

briankogler@optusnet.com.au

*Numeracy classes are well-subscribed within adult basic education, but mathematics may not be the best-loved part of the course. Learners often approach the subject with tight-lipped anxiety. Cartoons can enhance the mood of the numeracy classroom by fostering “off-task” exchanges on mathematical themes. Laughter dispels student anxiety and improves interpersonal relationships. Cartoon images can also be used as icebreakers for new or difficult concepts, triggering a kind of dialogue that is more relaxed than “on task” discussion. But more importantly, cartoons can assist in the teaching of critical numeracy by presenting absurd or “dislocated” situations that show how interest groups may use numbers to persuade or deceive. When selecting material for any of these purposes, it is important to remember that cartoons, like numeracy, are culturally based and socially constructed.*

## Background

I was a staff cartoonist with *The Sydney Morning Herald* for ten years before joining an Institute of Technical And Further Education (TAFE) as an ABE numeracy teacher. My mathematical skills at that time were undeveloped, having loathed the subject at school, but during a graduate diploma course I was inspired by Betty Johnston to renew my acquaintance with the beast. I now teach numeracy at Ultimo TAFE and Gosford TAFE, where many students have low literacy or are of non-English-speaking background.

My “paper” at this conference consisted of one hundred and seven slides of cartoons with a numeracy theme. I began with an assumption that cartoons—or, for that matter, any stimulating pictures—can be used in the numeracy classroom to aid the learning process. Here are some of the ways I imagine they can be used:

- as pure entertainment
- as metaphors for good and bad maths experiences
- as icebreakers for new or difficult concepts
- as an aid in the teaching of critical numeracy

### How do students see cartoons?

My opening cartoon was not mathematical (unless it was topological). It showed a gentleman dining *alfresco* and attempting to serve himself pasta from a bowl, clearly unaware of an interposing umbrella. I presented it in order to point up some of the problems in using cartoons with adult learners, especially those who are culturally disadvantaged and have not been exposed to the cartoon as a text.

I showed this cartoon to a RAWFA class many years ago, asking “Why is this funny?” Not everyone thought it was. Those who did thought it funny because the man was eating beneath an umbrella. Some thought the joke was that he was eating outside on the street. One student laughed, because the man had clearly ordered too much pasta. Nobody made the connection between the spaghetti and the umbrella pole.

I never again asked a student why a cartoon was funny. Most cartoons do not work as well as we would expect in the adult classroom, especially those with captions or embedded language.



## Cartoons as entertainment

The social purpose of cartoons is to entertain. They do this by distorting reality, and by overturning our expectations of familiar situations. The best cartoons entertain visually and intellectually, bending reality in order to reveal a hidden truth.

Cartoons can enhance the “solemn” mood of the numeracy classroom by encouraging students to speak “off the task”. Mike Baynham (1996) in his discussion of the dynamics of the numeracy classroom draws attention to the complex interpersonal relations of the participants (student/student, teacher/student). Above all, he reminds teachers that while students are busy managing the power/knowledge inequality that exists between learner and teacher, they are also managing a conflict of identity between themselves as returning numeracy students and themselves as adults/parents/workers. Baynham goes on to assert that humorous exchanges in the classroom help to acknowledge these interpersonal conflicts and contribute to important identity work. Cartoons can assist this process by introducing a little disruption into the social order of the classroom.

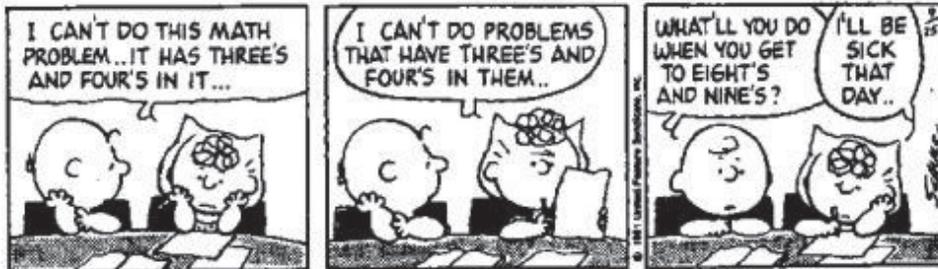


"Your head weighs 16 kilos — same as your feet."

## Cartoons and mathematics anxiety

Our students are usually adults who were never confident with calculation. Mathematics “scares” them. In particular, many fear being made to look stupid in front of their peers. Students typically recall that mathematics was a “serious” subject delivered by cool, detached teachers of whom questions could not be asked.

PEANUTS By Charles M. Schulz



Cartoons can help dispel mathematics anxiety by providing visual metaphors for frustration, fear, mental blankness and uncertainty. When students become aware that others feel as they do, interpersonal relationships in the classroom can only improve.

## Cartoons as icebreakers

A cartoon can introduce a new or bridging topic. For the student a cartoon can open discussion and build the field; for the teacher it can indicate gaps in basic understanding or mathematical vocabulary.

It is quite a good idea to collect cartoons on a theme, such as finance or health. Present the cartoons at different stages of a topic to elicit increasingly independent responses from learners. Sometimes these responses can indicate surprisingly new directions in which to take a stock topic.

Cartoons are a great way to get some written expression out of students in the numeracy classroom. All teachers know that a good picture helps students to concentrate their minds on the task of writing. Follow the “prewriting” discussion with an extraction of vocabulary, and then an attempt at explanation. Students may be asked to write about:

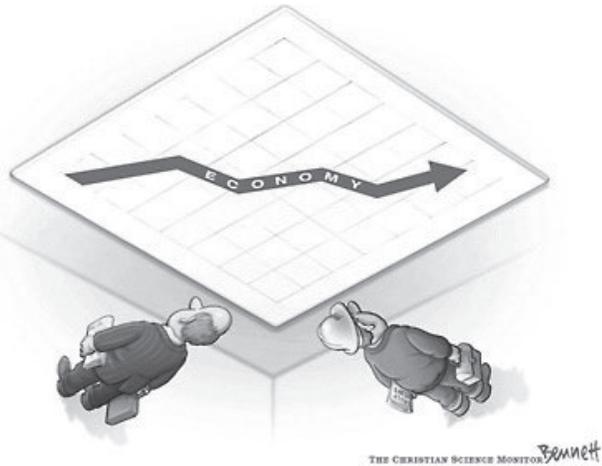


- How safe is my PIN number?
- What are the chances that I will win Lotto?
- Is there a law of averages?
- What expenses in my life can I do without?
- Are calculators good for me?

### Cartoons and critical numeracy

All images are a kind of problem solving. They need to be decoded and their elements reassembled in some meaningful way. The task becomes more complicated when the subject of the image is mathematical; another level of decoding is introduced. Some cartoons can take the challenge even further by asking “in whose interest” this mathematics is employed.

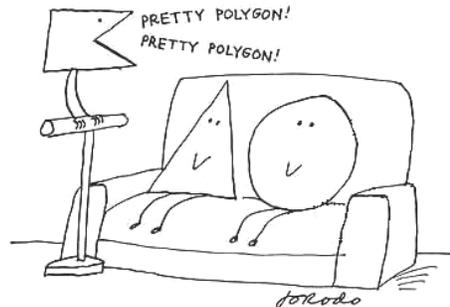
Critical numeracy concerns itself with heightening students’ awareness of maths abuse in all forms of social discourse. Learners need skills that will enable them to decode everyday maths in ways with reveal underlying agendas and power patterns. The end point of any investigation into the abuse of mathematics is a raised sense of social justice and greater confidence in dealing with the forces of social control.



### Using the Cartoon

Each teacher will know how best to introduce cartoons into the numeracy lesson. Here are some guidelines that hardly bear repeating:

1. Choose cartoons with familiar content.
2. Explain any language or cultural references before presenting the cartoon.
3. Present the cartoon (handout or OHT).
4. Mind-map all responses.
5. Have students write a sentence that captures the meaning (or one of the meanings) of the cartoon.
6. With a little effort, teachers may create a wall board display of the stimulus cartoon and the written responses of the students.



### References

Baynham, M. (1996). Humour as an Interpersonal Resource in Adult Numeracy Classrooms. *Language and Education, Vol 10, No 2 & 3*, 187-200.