

**THE SOCIALLY RESPONSIBLE-MATHS EDUCATION
PROJECT**

The Teachable 'Moment'

John Hogan

Introduction

Teaching mathematics in the Socially Responsible approach aims at

1. Develop numeracy skills of choosing and using mathematics through engaging with data of social and personal relevance.
2. Realise that mathematics can provide a lens and a vehicle to help understand big issues in society
3. Realise that while mathematics is powerful for problem solving in the real world, decisions about socially responsible action cannot be answered by mathematics alone.

This approach does not only achieved by a series of lessons, a course or a long-term project. Our goal is to help students see that mathematics can help us better understand the world and sometimes then take action. Opportunities abound for mathematics teachers and teachers generally to use whatever is topical and relevant in the moment to show students the connections between mathematics and real world around them.

Below are three such examples. Of course these examples 'date' very quickly. But there are always events going on in the world that impact on students and come up in conversations with them. A good teacher who is interested in this approach is always on the look out for opportunities to infuse social issues into his day to day teaching .

1. The scale of events eg the NZ and Japanese earthquakes

We get to understand the scale and impact of such events using quantitative measures. Do the students understand the measures used? For example the Richter scale? Even a brief class discussion for a few minutes can reveal the measures and how they work.

Be ready for interest to be tweaked. Be ready for the students to want to pursue the discussion further. And if the interest is strong be ready to create a longer study of the topic(s).

2. The Boat People

Much is made of the refugee 'boat people problem' in Australia. It remains topical. It creates headlines on a regular basis. It is likely to generate discussion at some point. When it does the teacher can explore the topic with their students – just for the moment. How big a problem is it? A study of the numbers will help us understand the 'problem'. A comparison with other numbers will help us understand the 'problem' (eg like how many refugees come by other means? Eg like the numbers of refugees that other countries experience landing on their shores or crossing their borders). Again be prepared for this discussion to become more than a 'moment'!

3. The Greek Debt Problem

At the moment it is Greece. At any time it might be another country and another problem. We see or hear the headline. Someone might ask about it. A teacher might refer to it.

What is the problem? What is the solution? What is happening? What are the consequences? Do we know?

