

# INTRODUCTION

This is the first in a series of activity booklets intended to help educators from public, private or home-schooling environments to develop skills for third millennium schooling. The ‘third millennium school’ builds on what we have learnt about education in the second millennium and pushes our thinking forward to what the next generation of students will need to know and understand if they are to survive in a rapidly changing political, economic and social environment. It suggests that there should be a new focus for education – the global – and a new scope for education – education for everyone. It identifies four pillars of third millennium learning:

- ⌘ education for survival in the third millennium
- ⌘ education to understand our place in the world
- ⌘ education to understand communities
- ⌘ education to develop personal responsibility

The third millennium schools are made up of what we call ‘the global classroom’ (see Townsend and Otero, *The Global Classroom*, Hawker Brownlow Education, 1999). In the global classroom, relationships drive teaching and learning. You may, therefore, find the global classroom at the kitchen table of home-schoolers, at a work camp to improve housing conditions in a community devastated by a natural disaster, as well as in the more commonly known context of teachers and a number of students. The global classroom is built on relationships. I believe strongly that all learning is relational (see Otero and Sparks, *Relational Learning*, Hawker Brownlow Education, 2000).

Population is a basic environmental phenomenon. So many aspects of our lives are influenced by population and its dynamics. I believe that an examination of human population dynamics and issues is a good place to start in exploring our relationship to the global community. It provides an excellent foundation for building the four pillars of third millennium learning.

My interest in global population issues spans three decades. In the summer of 1972, I attended a six-week institute on population growth, sponsored by the National Science Foundation. Every major

demographic theme was examined in detail. The affective domain was also considered, e.g. how population growth alters perceived quality of life. Environmental issues were scrutinised, e.g. how population growth degrades ecological balance. The material was compelling, and occasionally intimidating, but the question that held me captive was this: *‘Why isn’t this being discussed in every classroom, lunchroom, boardroom and living room around the world?’* In those days, the world population was a mere 3.7 billion. Now we have seen ‘The Day of Six Billion’ (12 October 1999). As I write this introduction a year later, it should be noted that, according to the United Nations, between 76 and 89 million people have joined the global community. Is this in the news? Does this announcement take precedence over the latest killing in a school or a subway? And why not? Yes, we have international conferences on growth, hunger, and ecological degradation. But who hears about them? It is a very sad commentary that the media, worldwide, continues to cast a blind eye upon this most serious global issue. Why? One can only speculate. Perhaps it is because there is no ‘quick fix’. The world community must re-envision itself. And so I offer these Teachable Moments to anyone who is willing to envision something better for our future.

There is a story about a woman who bought a farm (*The Elves of Lily Hill Farm* by Penny Kelly). She had been a successful engineer who desired a change in lifestyle. On her hillside she met, to her utter astonishment, a clan of elves who admonished her in the following way (and I paraphrase): ‘You people seem to forget that the only expendable part of the food-chain is your own species.’ Indeed, who would miss us? The rivers? The ocean? The ozone layer? The animals? The vegetation? The elves? Perhaps it is better for us to see ourselves as the custodians of the world and not its tyrants. Why don’t we talk about this?

Population presents an opportunity for real study of the self in relation to the whole. This is a key theme in learning to live in a global society. Population is a topic that requires an integrated study and interdisciplinary skill. It also emphasises the relevant use of mathematics in our lives.

The importance of this topic and its relevance made an impact on Justin Moore, the editor of these materials.

*It is always a pleasure to work with Dr Otero. I can assume the material is important and relevant, even if I’m editing or updating a piece that was written 20 years ago. And so it is with the current volume. My original thoughts were: ‘Oh yes, I can recall discussing zero population growth as*

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*an undergraduate. I remember the gloomy prophesies of Thomas Malthus, who anticipated difficulties in feeding future generations 200 years ago.' So I began my research. And what did I discover? The issues surrounding population growth are more important now than at any other time in history. In fact, future historians may refer back to the 20th century as 'the century of six billion'.*

There is an enormous amount of information available on population issues. Much of this can be found on the Internet. So what is stifling public discussion? Is the subject simply too big or complex? I honestly don't know. But I am convinced that these concerns will not disappear of their own accord. Ignorance is not bliss. Silence is not a solution. Responsible citizens of the global community must get involved.

George Otero  
Santa Fe, New Mexico  
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# WE HAVE MET THE ENEMY AND HE IS US!

**T**he greatest danger associated with studying population issues is not that there might be controversy, but that students may find their studies deadly boring. A study of population and related issues is an opportunity to engage students in the most basic issue of our global society. Studying population raises important questions – questions about morals, values, policies, and our very sense of identity, individually and collectively. We often avoid these questions, and yet how can we expect young people to maintain interest if they are not allowed to examine the connections between population dynamics and controversial issues?

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**WE HAVE MET THE ENEMY AND HE IS US!**

Ask the participants to study the following charts, which separate population topics by interest. Do they agree with this categorisation of topics? This list was made in the early 1970s in the United States. So much change in technology, culture and values has occurred that young people and adults may find that their attitudes have changed. For example, is human sexuality still a ‘highly controversial’ topic? This list was completed before AIDS was discovered. Where would students place AIDS as a topic? See if the students can add at least one more topic to each category.

<b>HIGHLY CONTROVERSIAL</b>	<b>CONTROVERSIAL</b>	<b>MODERATELY INTERESTING</b>	<b>DULL</b>	<b>DEADLY BORING</b>
Methods of contraception How to use contraceptive methods effectively Human sexuality Abortion _____ _____ _____	Biology of human reproduction ('plumbing') Divorce Sex role stereotyping Pronatalist (birth promoting) institutions The genocide issue Concept of birth planning _____ _____ _____	Family living Effects of population growth Factors affecting birth rates Ecosystem Community Habitat Niche Arithmetic growth Geometric growth Doubling time Limiting factor Natural regulation of populations Carrying capacity Death rate solutions to the population problem Birth rate solutions to the population problem Effects of crowding _____ _____ _____	Basic concept of a population Population growth rate Immigration Emigration Population projection Age structure Taking a census Demographic transition Population growth and economic development _____ _____ _____	Specific statistics on births, deaths, immigration and emigration in different years for various countries _____ _____ _____

**FURTHER SUGGESTIONS**

Have students compose their own arguments for studying population dynamics and issues, especially those subjects that they identify as highly controversial. In their arguments, students will hopefully see that all of these topics are related and subjects that were initially considered boring may not appear to be when seen in the larger context.

As you examine the rest of these Teachable Moments, look for opportunities to connect interest, controversy and values with facts, concepts and understanding.

# HOW BIG IS A MILLION?

**F**or many people, a million is a number with a vague meaning.

It is often difficult to mentally get a handle on the meaning of having a million of something. And when we are told that the world population increases 78 million annually, the situation doesn't become any clearer. An approach I have found useful is to familiarise students (participants) with the concept of a million by utilising their own environment.

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