

# Chapter LVII

## Who has the Ultimate Control?

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### ABSTRACT

*There are many different philosophies of technology and probably just as many interpretations as to what these philosophies actually mean. This chapter summarises the leading philosophies, and their proponents. It does not spend time on the semantics of each philosophy but rather provides an overall explanation and historical placing of each notion. Although this chapter focuses on adult education, it is also important to make links with the classroom. In doing so it provides the valid justification for inclusion and application of the theory it contains. This will enable teachers to reflect on their own philosophy of technological innovations. In doing so it is hoped, they will gain the confidence and ability to expose their children to these ideas. Children need to understand that technology has a key role in our society, and as members of society people have an important role in managing the development and use of technology. By studying the philosophy of technology, children will recognize the interaction between technology and society and enable them to be fully technologically literate citizens.*

### INTRODUCTION

Technology means different things to different people. The one thing that is universal is that it is part of our lives (Pitt, 1995). Pitt believes it is important to be aware of how technologies make us what we are and what we can be. In New Zealand a new strand within the technology education curriculum was developed to do just this. It was designed to ensure children understood

the discipline of technology as a subject and to emphasise the importance of technology on and by society. Although these notions were included in the previous 1995 curriculum they were rarely taught. Now that it is a compulsory strand teachers are expected to understand these influences in order to develop lessons to ensure students also question the role of technology within our society. How does technology influence society? Is the technology developed in order to solve problems

or is technology the driving force behind a lot of our societal problems/issues or is it capable of being both?

Hylomorphism, Technocracy, Phenomenology, technological determinism, technological somnambulism, social constructionism, and constructivism, deconstruction, post-modernism and post-structuralism are philosophical concepts which focus on these issues. This essay will explain each of these terms and give a brief historical basis for their inception and use. Why these philosophies are important to technology education will form the concluding section of this chapter. It is hoped that teachers and their classes will be able to see the multiple perspectives of technology's influence on, over and by us and thus give some power to the students so that they can determine their own destiny, rather than being mere pawns or players in an already established game.

## **BACKGROUND**

Technology is a large part of our lives. Many countries have recognized this importance and have developed a technology education curriculum to ensure that their citizens become technologically literate.

The original New Zealand technology curriculum was developed in 1995 and fully implemented in 1999 (Brown, 1999). This curriculum contained three strands, which were titled; Strand A - Technological Knowledge and Understanding, Strand B - Technological Capability and Strand C - Technology and Society. It was expected that all students from the ages of five to 14 years old, would "develop awareness and understanding of the ways the beliefs, values and ethics of individuals and groups: -promote or constrain technological development; -influence attitudes towards technological development...and develop an awareness and understanding of the impacts of technology on society and the environment" (Ministry of Education, 1995, p. 41). Although this

was seen as an important part of the curriculum and actually formed one third of its basis- it was rarely taught (Mawson 1999).

When reviewing the 1995 curriculum Compton and Jones (2004) argued that understanding the complex relationship between technology and society was essential for the subject and its students. They proposed that a new strand titled the 'Nature of Technology' was needed to ensure students knew what technology education was and understood the interrelationship between society and technology. The new 2007 curriculum reflects these findings and contains a strand titled the Nature of Technology. Technology education in New Zealand requires children to design products to meet client and stakeholders needs. The impact of these products needs to be considered prior to and during design and manufacture. The new Nature of Technology Strand requires children to be aware that technology has a huge impact on their lives and that there are varying views as to the control society has over the path of these new technological developments. The following sections outline a few of the many different philosophical views on and of technology and our ability to control it or be controlled by it.

## **PHILOSOPHIES OF TECHNOLOGY**

"It is only recently that technology has attracted the attention of philosophers or technologists have become interested in philosophy" (Williams, 1996, p. 30) yet in other guises the philosophy of technology has been around for centuries. The following sections form an approximate historical progression of various philosophies related to technology. In no way are these philosophies linear as many have evolved over decades and centuries. The following is a brief summary of each philosophy, as the author sees it, from the culmination of many philosophers' viewpoints. Even within each philosophy the proponents debate vigorously as to the actual basis for their beliefs.

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