Chapter 6
An Indigenous Perspective on Technology Education

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ABSTRACT

This chapter raises the need to consider the indigenous perspective in Technology Education. The cultural aspect that undergirds indigenous technology is prominent in the discussion to abase thesis of the chapter. The author confronts the dominance of western knowledge in the subject, revisits the definition of Technology, explores indigenous technologies in South Africa, and factors in the indigenous perspective in the subject of Technology Education. Scholars and practitioners (teachers) should begin to appreciate the alternative forms of knowledge, which the subject of Technology Education presents the opportunity to accommodate. The consideration to integrate the indigenous perspective will facilitate the reconceptualisation of the subject and its teaching. Indigenous learners cannot afford not to be taught the technologies existent in their communities. Non-indigenous learners, too, cannot afford to be naïve of alternative perspectives of technology. Additionally, scholars and researchers have a scholarly mandate to discourse about alternative perspectives.

INTRODUCTION

Technology as "the use of knowledge, skills, values and resources to meet people's needs and wants by developing practical solutions to problems, taking social and environmental factors into consideration" (Department of Basic Education, 2011, p. 8). Hence, this chapter is not concerned with Educational Technology or Science except in instances where the author explains the differences between Technology and Science. The chapter is concerned with Technology Education as a school subject. The issue that this chapter is raising is the need to consider the indigenous perspective in Technology Education. The indigenous perspective on Technology Education is direly under-researched hitherto. Part of the reason for this under-researching is the fact that Technology Education has been conceptualised from the west. The work of Williams (1996), *Introduction to Technology Education,* spells out England and

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Wales, United States of America and United Kingdom as forerunners on the development of Technology Education. These forerunners have not embraced the indigenous perspective in their conceptualisation of Technology Education. Australia seems to have joined in this conceptualisation bandwagon. A closer analysis of the Australian Technology Education curriculum from Williams' (1996) work and Department of Education (1997) in South Africa, as reported in Gumbo's (2003) work, shows a western thought's dominance in the Technology Education curriculum development in South Africa. The findings from Gumbo (2003) are relevantly shared later on in the chapter.

The reason that Technology Education is void of the indigenous technological perspective is exacerbated by the global western knowledge (mostly referred to as science) and technological developments at the expense of other knowledge forms such as indigenous knowledge. O'Riley (2001, p. 5) cites the Third World Network declaring in this regard:

Modern science and technology has dislocated Third World societies, destroyed traditional cultures and played havoc with the environment of Third World nations. It has also replaced a way of knowing, which is multi-dimensional and based on synthesis, in Third World societies, with a linear, clinical, inhuman, and rationalist mode of thought. Western science and technology has systematically plundered Third World countries in the name of scientific rationality.

According to O'Riley (2001), the west portrays the technologies that fall outside the mechanical model of reality, and technologies associated with the non-western cultures as antiquated.

This chapter challenges the current linear view of Technology Education, which is informed from the west and turns the focus to an alternative perspective, i.e. indigenous perspective. In this way the chapter contributes towards scholarly discourses and practice in Technology Education. The chapter proceeds by focusing on discourses about the western knowledge that is being universalised via the current linear conceptualisation of Technology Education. The chapter then proceeds with the consideration for the basis of the alternative to the western orientation. Next, the chapter discusses the implications for Technology Education and provides recommendations about future research.

THE APPLE DOES NOT FALL FAR FROM THE TREE: WESTERN KNOWLEDGE IN THE TEACHING OF TECHNOLOGY

Western knowledge drives Technology Education in South Africa since it was influenced by curriculum developments in Australia and New Zealand, which are predominantly Eurocentric. The South African curriculum was framed from the Constitution and thus recognises inclusive principles such as indigenous knowledge systems. The Technology Education curriculum makes an attempt to include indigenous technology in its third aim (Department of Basic Education, 2011, pp. 7-8):

Wherever possible, learners should be made aware of different coexisting knowledge systems. They should learn how indigenous cultures have used specific materials and processes to satisfy needs, and become aware of indigenous intellectual property rights.