



## I TEACH TECHNOCRACY IN CURRICULUM

## Pedagogical Science

Dr A. Magalingam

Assistant Professor, Department of Pedagogical Sciences, Tamil Nadu Teachers Education University, Karapakkam, Chennai – 97

## ABSTRACT

The transgression of the technocratic culture of technology education. The socialization of technology education teachers, common sense understandings of technology, technology education curricula, and technology education teaching practices. Knowledge is gained through life-history de/construction, socially critical examination of orthodox understandings of technology, technology education curricula, and classroom research in teaching social aspects of technology. The culture of technology education, from one teacher's perspective, is informed by the interpretative frames of technology educators, a technocratic consciousness within society, historical practices of industrial arts, and current political forces that shape technology education curricula. As a classroom teacher, comes to a critical consciousness of personal and professional saturation in technocratic ideology. The paper is told of the author dislodgement from technocratic metanarratives and the growth of a heightened social consciousness of self, technology, curricula, and teaching. Such accounts infringe upon, or transgress, the near totalizing grip of technocratic consciousness within the culture of technology education. The paper concludes that there is strong evidence of ingrained technocratic orientations within technology educators, common sense understanding of technology, curricular emphasis, and teaching practice and of the necessity to challenge such dominance. Possibilities are discussed for pedagogical practices that emphasize a critical, social, and cultural intelligence, rather than just a technical intelligence, in technology. While a technocratic culture for technology education may contribute to the goals of a technocracy, it is detrimental to the growth of an informed and critical democratic citizenry.

## KEYWORDS

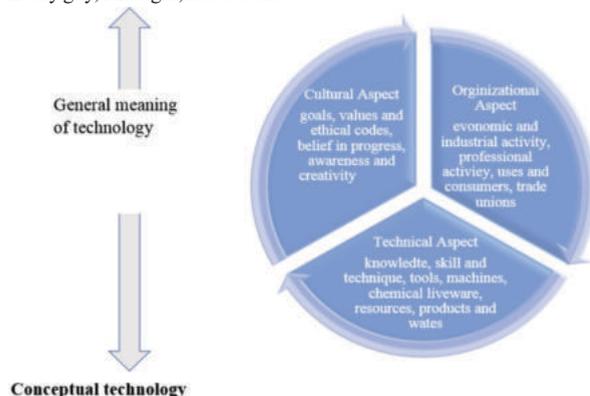
## INTRODUCTION

In recently years there has been growing concern about technocracy as a problem, "both in modern industrial societies and in developing or third world countries. However students have confronted a difficulty in studying technocracy: the analysis of the phenomenon, the definition of the problem, and the prescription of remedies have been both informed and constrained by variations of an image that has a long history in western thought. There has been not so much a short age of empirical information as an absence of adequate conceptual connections between the technocratic image and political facts.

## Teacher Beyond dominant techno activities

Understanding the socialization of an industrial /technology education teacher is an important dimension of the culture of technology education. Teachers are the only people that interact daily with students and it makes sense to learn something about who they are and what they think. The theory and practice of teaching are not isolated from a teacher's inner spaces. "For a teacher, there is no possible separation of life and practice.

They were technically oriented men with whom I could identify. They were the only teachers who helped me connect my personal and family experience to the content of schooling. Industrial arts teachers, as adult males, had a strong influence on extending and formalizing my technical abilities. Just as "IA" teachers helped us in our school projects, several students took an interest in our teachers' projects. For instance, I remember helping one of my junior high industrial education teachers, Lingam over several weekends with electrical work on his sailing boat. Later, in my grade twelve year, with the guidance of another industrial education teacher, I completed the construction of a replica of a quarter-cut oak antique liquor cabinet. Every guy, I thought, needed one!



Conceptualizing technology in the more general sense of technology-practice (Pacey, 1983) provides a more complete portrait — a picture that places the highly visible technical aspect in context. Bijker et al., (1987) refer to larger portrayals of technology, such as Pacey's (1983), as "thick" (p. 5) descriptions. "A thick description results in a wealth of detailed information about the technical, social, economic, and political aspects" (Bijker et al., 1987, p. 5). Such "thick" approaches draw attention to the social complexity of technology. We might call the new picture more "complete", "holistic", "general", "whole" or "in context". Regardless of how we name it, a view of technology that incorporates the social/cultural and organizational aspects provides a means of understanding technology and people together.

## Gaining A Cultural Perspective

Gaining a sense of the practice of technology is crucial to understanding the meaning of technology in our lives. Technology as practice situates technical processes, products, and knowledge as only one component within a wider frame of interpretation. Dictionary definitions of the word "technology" focus on technical methods and means and generally make no mention of cultural or organizational aspects. Definitions focus on the meaning of a single word "technology" from a technical perspective. Dictionary conceptions of "technology as practice" are non-existent. Understanding what technology means can never be obtained through studying definitions. We should not assume we can understand the meaning of techno focusing on the term "tech

## Contextualism

A consistent theme of many pessimists is that much of the negative consequences of technology happen as a result of preoccupation with technique. The real danger for society in technology may not be the risks and threats through technological catastrophe, such as Chernobyl, but in the mindset and the subtle ways we can let it order our lives. Stanley (1978), for example, recognizes limitations that develop from a chiefly positive view of technology and defines "parochial technicism" as unconsciously taken for granted assumptions that contribute to a "common state of mind in which the world is viewed myopically through the lens of some particular technique" (p. 10). Widespread parochial technicism becomes "pan technicism" (ibid) which is the domination of the world's social order wholly by technique

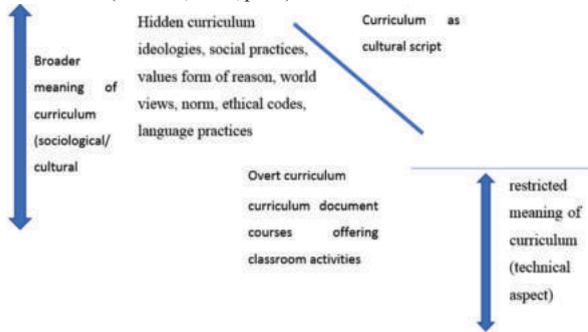
## Technology as a Social Construction

The instrumentalist viewpoint, often embodied by the optimists of technology, "is based on the common sense idea that technologies are 'tools'" and are value free (Feenberg, 1991, p. 5). Such accounts are the common sense view of governments and industry (Barbour, 1993; Mander, 1991). In contrast, the substantive view frequently held by pessimists represents a minority position (Barbour, 1993) "that

attributes an autonomous cultural force to technology that overrides all traditional or competing values" (Feenberg, 1991, p. 5). Both instrumental and substantive accounts of technology provide food for thought for the traveller attempting to understand the meaning of technology

**Technological Contextualists**

- acknowledge that technology can be socially determined and that society can be technologically determined technology as: context dependent, a diversity of interactions with society, "an ambiguous instrument of power" that can become the "servant of human values" (Barbour, 1993, p. 15)



**CONCLUSION**

Unless technology education teacher education programs address the dominance of technocratic consciousness, there is little hope for the profession to do anything but compulsively repeat technical portrayals of technology. The issue here is not one of changing content but of addressing ingrained technical fixation and technocratic idea Teacher education programs need to educate teachers in a broad understanding of technology in order to enable them to educate students similarly. Teacher candidates need to be sensitized to broader meaning of technology both in theory and teaching methodology. The inclusion of social and cultural education for technology education teachers may be helpful. However, it is also possible that such a change in teacher education will only be at the level of overt curricula. The hidden technocratic ideology of technical training may be left intact.

The assumption that a technical predisposition is a highly desirable quality for technology education teacher candidates is offset by the notion that dominance of such a predisposition maybe problematic in acquiring a social/cultural understanding of technology. Technical specialists from male technical cultures may be likely to have only common sense understandings of technology.

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