The relationship between culture and the development of critical thinking abilities of prospective teachers

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Abstract

The emphasis placed on the individualistic and universal nature of cognitive development in some cognitive development models has resulted in the neglect of the cultural context in the development of cognitive abilities. Consequences of this approach for cognitive development are the strong emphasis which is placed on age-dependent patterns of growth and uniformity. Furthermore, the occurrence of changes in the relationship between an individual and the surrounding environment as crucial for the development of cognitive abilities are neglected. In this paper, a cultural approach to the development of critical thinking abilities is proposed in contrast to the traditional, individualistic approach.

The linked purposes of this paper are:

- to elucidate the critical thinking abilities of a mixed cultural group of 114 prospective first-year student teachers studying for a BEd degree at a South African university by means of the Watson–Glaser Critical Thinking Appraisal; and
- to provide insight into the relationship between the critical thinking abilities of the group of prospective teachers and their various cultures.

The study found that (1) a considerable number of the sample of prospective teachers are not yet functioning on Grade 12 level with regard to the execution of critical thinking skills. The sample's apparent inability to execute critical thinking skills is clear from this research and (2) it seems as if the various cultural worlds of these prospective teachers have not prepared them for the execution of critical thinking abilities.
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1. Orientation

One of the challenges of education transformation in South Africa is to ensure that South Africans have the knowledge, values, skills, creativity and critical thinking required to build democracy, establish a system of lifelong learning and promote

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social development and growth in the 21st century (Odora Hoppers, 2001, p. 1). To fulfil the need for this kind of transformation in education in South Africa, the National Department of Education has identified Critical Outcomes that would assist learners in achieving the above-mentioned ideals (South African Qualifications Authority, 1997, p. 7). One prominent element that emanates from the Critical Outcomes is an emphasis on the development of critical thinking skills and the notion that learners should no longer be treated "…as empty vessels that have to be filled with knowledge…" (SA, 1997, p. 30). This implies that educators have to base their teaching on constructivist principles that will provide learners with the opportunity to develop as thinkers (Green, 2006, pp. 310–327; Pienaar, 1999, p. 125; van den Berg, 2000, p. 96).

In addition to the above, the emphasis placed on the individualistic and universal nature of cognitive development in some cognitive development models has resulted in the neglect of cultural context in the development of cognitive abilities (Hong, Morris, Chiu, & Martinez, 2000, p. 709). Consequently, age-dependent patterns of growth and uniformity are of particular importance in these models. Furthermore, the occurrence of changes in the relationship between individuals and their surrounding environment as crucial for the development of cognitive abilities, are also neglected.

2. Problem statement

The development of critical thinking skills is regarded as a prominent outcome on the South African education agenda, but it also gives rise to a range of concerns. The central questions which this article wishes to address are:

- Are prospective teachers from a mixed cultural group able and empowered to think critically in order to initiate the cultivation of critical thinking skills among learners?
- Is there any relationship between culture and the development of critical thinking abilities of a mixed cultural group of prospective teachers?

3. Critical thinking defined

Thinking critically is a defense against a world of too much information and too many people trying to convince us (Epstein, 2006, p. 1). It is also widely accepted that the development of critical thinking skills is a top goal of higher education (Browne & Keeley-Vasudeva, 1992). Despite efforts to transform South African education into a dynamic instrument capable of promoting positive learning outcomes, the current national education policies' focus on the enhancement of critical thinking skills is vague and needs further elaboration.

There is no uniform, clear-cut and concise definition of critical thinking, and an overwhelming number of definitions can be found in the literature. Dewey's (1933, p. 12) definition of "reflective thinking" is one of the forerunners of what has come to be known as critical thinking: "reflective thinking, a distinction from other operations to which we apply the name of thought, involves (1) a state of doubt, hesitation, perplexity, mental difficulty, in which thinking originates, and (2) an act of searching, hunting, inquiring to find material that will resolve the doubt, settle and dispose of perplexity."

Richard Paul, one of the leaders in the field, views critical thinking as "learning how to ask and answer questions of analysis, synthesis and evaluation (Paul, 1985, p. 37), and "the ability to reach sound conclusions based on observations and information" (Paul, 1988, p. 50). Brookfield (1987, p. 229) asserts that critical thinking comprises two inter-related processes: "…identifying and challenging assumptions, and imagining and exploring others." Beyer (1988, p. 61) states that critical thinking "involves precise, persistent and objective analysis of any claim, source, and belief" and "to judge its accuracy, validity or worth." According to Chaffee (1992, p. 3), critical thinking involves a variety of cognitive activities which include solving problems and making informed decisions, developing evidence and arguments to support views, critically evaluating the logic and validity of information, applying knowledge to various contexts and new circumstances and exploring issues from multiple perspectives. Freely (1993, p. 1) and Paul (1993, p. 22) share the definition that critical thinking involves the ability to "analyze, criticize, advocate ideas, reason inductively and deductively, and to reach factual or judgmental conclusions based on sound inferences."

Pithers and Soden (2000, p. 239) concur that critical thinking includes the following abilities: identifying a problem and its associated assumptions, clarifying and focusing the problem,