

## Chapter 17

# Successful Cases in Technology–Enabled Active Teaching and Metacognitive Learning Strategies in Blended Learning for Globalization

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### ABSTRACT

*This chapter draws from actual accredited graduate programs. It is essentially a reflection piece drawn from actual experience of successful teaching and blended action learning practices and principles that utilized online discussion forums. The classes were in Malaysia, the USA, and South Africa. The experience of teaching and learning involving metacognition and active online discussion internationally is described in terms of the cognitive literacy value chain developed by the author. Active discussion was seen as part and parcel of the process to nudge insights, critical thinking, and other expressions of higher order thinking that also facilitated peer bonding in very short, six-week semesters. The critical role of fluid intelligence in higher order thinking in a globalized knowledge economy is discussed in terms of the development of wisdom through the experience of transcending conventional thinking while sustaining refined thought processes and cultural values through metacognition. Sample comments and reflection journals are presented.*

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## INTRODUCTION

### The Need for Novel Thinking and Capitalizing the Opportunity in Education

In my experience as a professor from academia bridging the corporate consulting space I appreciate the need to highlight the emergent learning trends that have resulted from globalization and technology. A recurrent complaint from CEOs as friends, and students in my graduate programs is that MBA's and for other graduate management graduates the mere competency to comprehend texts, articles, and subject matter is inadequate. What then is deemed paramount and urgent? Perhaps the importance is the ability to connect pertinent business and industry themes inductively in order to effectively respond to global and industry drivers. Given a rapid obsolescence of knowledge it is no longer enough that learners comprehend texts, articles, and concepts. The ability to '*learn how to learn*'; to reflect and synthesize critically, and to process unfamiliar content is the future. Such intelligence is dubbed '*fluid intelligence*'. Metacognition is mindful thinking often involving fluid intelligence with reflection leading to 'wisdom'. This chapter aims to highlight the salience of higher order thinking as an emergent theme in terms of the various strategies deployed to invoke reflection and metacognition. It is as such a *position paper* and not a specific controlled study partitioned into a one-to-one linear particularistic tracking of a specific methodology. In short, it is drawn from a constructivist paradigm of over 50 classroom cases of immersion into a *milieu* of teaching and learning procedures where online discussion is a major reinforcing component albeit not the only component in the process of active learning. The conclusions and samples are drawn from several classes over 4 years in 3 countries. The samples of reflection and discussion selected represent the typical content. A formal system-

atic content analyses of each component and the coding of responses beyond rubrics is of course welcome. Nonetheless the overall emergent theme represents the prominence of discussion that occurs as an expressive opportunity from personal metacognition along with meditation in short 2-6 week time frames. The real world case based discussion may be difficult to control for in pre-and-post-tests because of social facilitation effects in any specific methodology with control groups. In addition. These classes presented themselves as rare and valuable international classroom settings with intact, formally enrolled learner populations on actual accredited courses.

## THE SCIENCE OF INTELLIGENCE AND WISDOM

'*Fluid intelligence*' is the critical ability to learn new content and consider novel conditions. '*Crystallized intelligence*' is the retrieval or recall, and acquisition of prior content (Cattell, 1963). In the knowledge economy, fluid intelligence involves processing data into information and then into knowledge through to higher order cognitive activity results in both knowledge and wisdom (Gurubatham, 2005a). In cognitive psychology, wisdom may be operationalized into higher order and wider intelligence (Sternberg, 1985). Sternberg defines wisdom as creativity synthesized with intelligence, and empathy. Sternberg's balance theory of wisdom (Sternberg, 1998b, 2001), defines wisdom "as the application of intelligence, creativity, and knowledge as mediated by positive ethical values toward the achievement of a common good through a balance among self-interests (intrapersonal) with the interests of others (interpersonal) and of other aspects of the context in which one lives (extrapersonal), such as one's city or country or environment or even God" (Sternberg, 2009). Interestingly Sternberg's long and distinguished career in psychology began with his poor test tak-

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