Joe L. Kincheloe (ed.) *Multiple Intelligences Reconsidered*. New York: Peter Lang, pp. 261, ISBN 0-8204-7098-8

Multiple Intelligences Reconsidered contains criticism and comments by a group of scholars who examine Multiple Intelligences (MI), a concept of intelligence first introduced by Howard Gardner (1983/1993). The volume made many observations with respect to a wide range of perspectives, including cognitive psychology, consciousness theory, Buddhism, neuroscience, capitalism, feminism, dance and movement studies, mathematics and many more (see Sew 2006 for a short review). The discussions are relevant for teachers to explore practical learning theory for progressive learning. At the same time the discussions also provide critical reflections either about the functions or malfunctions of MI.

For twenty years, MI as an intelligence theory has been adopted in teaching and learning by schools in America, China, Singapore and many European countries. A cause of MI was to challenge the notion of intelligence couched in the standard measurement of Intelligence Quotient (IQ). Gardner proposes a pan-cultural universal set of intelligence, which was categorized in the following areas: linguistic, mathematical, musical, visual spatial, bodily kinesthetic, interpersonal, intrapersonal, and naturalistic.

The claim that various types of intelligences exist created a lot of excitement and offered plenty of hope to students who had been rated with a low IQ score and labeled as having low intelligence (cf. Gardner 1991, Sew 2003a). Books on the relevance and application of MI were written with much conviction (cf. Armstrong 1999, Lazear 1999a, 1999b). Teaching practices based on MI were devised and applied to classroom lessons in many schools around the world. Malay and Mathematics, for example, have been taught and shared in MI workshop with favorable response from both teachers and students in Singapore (Sew 2003b, 2004).

This is an important volume that consists of direct challenges to MI. Pertinent epistemological issues were raised and each of the intelligences of the MI advocacy is revisited. There are three parts in this volume. Part I contains an introduction that raises many critical questions, and introduces the papers in the collection. In the introduction, Joe L. Kincheloe claims that Gardner has failed to address many sociopolitical issues that confront an individual and the mechanics of schooling:

> Gardner's epistemological foundations shape a form of knowledge production that separates individuals … from the cosmos surrounding them. These individuals stand alone as *things*-in-themselves abstracted from their multiple relationships with the structural forces of the lived world…(p. 21-22) … A student's socioeconomic, cultural, and linguistic background must be addressed even to reach the starting line … Gardner fails to question the ways schools are used to "regulate" students for the political needs of business and government…to use schools to domesticate students in order to perpetuate the status quo (p. 24).

In Part II, Kathleen Nolan challenges Gardner's linguistic intelligence because the notion favors one or more dominant discourses. The dominant discourse constructs other discourses and their embedded values as marginal. In order to attain linguistic intelligence in a particular discourse style, children from the marginalized discourse community must gain access to the dominant school-based discourse style, as part of which they will have to accept the dominant ideology that frames their own culture and language as inferior. *Thus, in school, the child struggles between maintaining her own sense of self worth and learning to "speak and write correctly"* (p. 41). Following Leistyna (1999), Nolan suggests a selective appropriation of dominant languages and their interactive styles not just as survival devices but tools to challenge dominant discourse (p. 41).

In a way, Nolan is also championing for my rights as a non-native English speaker and writer wanting to be heard. I have to craft/reconstruct/deconstruct (depending on which frame you choose to use) my writing style to an acceptable standard if I want to be given respect and

attention in a journal. It is part of good writing and publishing rules. Nonetheless, the authors in this volume offer a hope to challenge the dominant discourse style. (Alas, a hope is just a hope! You are still reading me the way you want me to express myself). In this case, Nolan is apt in her criticism of injustice on the subordinated cultures, disfavored by linguistic intelligence, through the practice of false generosity (p. 40).

Peter Appelbaum cautions against the danger of associating mathematical intelligence as an isolated quality. Mathematical intelligence seems to assume a given logic that prevents the possibilities of exploring mathematics in daily living, questioning the mathematical assumptions and testing its logical foundations (p. 72). This in turn locks out the self from the realm of mathematical experience contrary to the introspective and social mathematical learning (p. 73)

Appelbaum's appreciation of MI as a theory of learning reflects the qualities of refined education. His analysis of MI is relevant to Mathematics education and his discerning remarks on MI within the context of education psychology form a scholarly strength (p. 78):

> The theory may be treated badly, made hideous and unapproachable …The theory has been misinterpreted ("confounding a human intelligence with a social domain") and wrongly applied ("describing racial or ethnic groups in terms of their characteristic intelligences"). Such monsters are no longer Gardner's baby…He is surely no longer personally responsible for the life it has on its own … MI theory apparently should never be treated as an ethical or moral living theory, but instead as a description of the present moment …

Also important is his application of MI in his teaching practice. Appelbaum's conviction to apply MI for the betterment of the students in the mathematic lesson is laudable (p. 75-76):

> …I find the best use of multiple intelligences to be in supporting students' understanding of their own learning. I can create rubrics in which they must think about each form of intelligence and find examples of how they have used that intelligence. I ask them to suggest new intelligences of their own that they have been using in their mathematical explorations…My other favorite use of multiple intelligences is in encouraging students to choose their own format for demonstrating their understanding of the material. They reflect on each of the intelligences and combine two or three in a project …If students develop a profile

> of themselves as learners then use the profile to understand the ways in which they seem to learn easily, then they can determine how to use their strengths to help themselves be more successful in other endeavors.

For Appelbaum MI is a means of approaching (school subject) knowledge. Appelbaum has cleverly demonstrated that mathematical intelligence is not about mathematics or problem solving but the relationships one can draw from engaging in discussion and sharing ideas (personal and personal intelligences), sensitivity to space, shape and the manipulation of objects (self and visual intelligence), and logical relations in relation to the natural world (p. 74, 80). In short, intelligence never existed by itself bounded from the rest of the cognition (see discussion on personal intelligences below).

Donald S. Blumenthal-Jones attempts to show that genius should not be a deterministic notion and cautions that MI might be interpreted to presuppose genius tendencies and discriminate against possible potentials. Blumenthal-Jones' criticism stems from Gardner's use of icons such as Martha Graham in his case studies, that may consequently prevent access for those who do not measure up to their exemplary standards (p. 128). The attempt to suggest that Martha Graham's success has as much to do with her ability to search for financial support (personal intelligence) and choreograph (spatial intelligence) as Graham's dance skills (bodily kinesthetic intelligence is questionable (p. 127). It can be argued that Graham's choreography skill hinges on dance acumen and the financial trust shr engenders is due to the recognition of her dance prowess. This is the only antithesis that bodily kinesthetic intelligence is a single individual trait behind the success of a dance icon.

Kincheloe highlights and discusses major flaws in personal intelligences (Intra- and Interpersonal) of MI. The major worry on personal intelligences is their isolation from the rest of the environment and Gardner's ignorance of power dynamics that shaped these intelligences

(p. 145-146). Furthermore, Gardner has failed to incorporate the social domains in relation to the formation of personal intelligences. *The self cannot be separated from language; cultural values; socioeconomic influences, ideological, discursive and other modes of power; the thought processes; and the nature of consciousness* (p. 147). Based on the Santiago theory, Kincheloe offers the notion of structural coupling embodied in the individual while the individual experiences and processes these social-cultural commodities as part of the personae architecture underneath the personal intelligences.

Another interesting question raised is how personal intelligences are separated from linguistic intelligence (p. 144). In fact, it remains a puzzlement if we can actually separate intrapersonal intelligence from interpersonal intelligence neatly. I recall one of my students, who refused to speak to other teachers and looked embarrassed because of her body weight. She had to struggle with herself and in turn found the rest of the world including her teachers and friends threatening. It became worse when the education system rushed by her and she lost control of her learning and the attention of her friends and others. Self and interpersonal intelligences cannot be bounded as separate entities.

Marla Morris re-examines the notion of naturalistic intelligence with the notions of ecology of mind and Mahayana Buddhism. Morris finds these ideas offer a much better explanation. The ecology of mind appeals to the notion of interconnectedness between the mind with the flora and fauna in the world (p. 166). The notion of co-arising in Buddhism is clearly explained and related with theories chaos and complexity, process thought, and system theory (p. 169). Morris' paper is important in terms of accountability because not only does she criticize Gardner, she brings an alternative to the argument clearly. Buddhism, that contains an eastern perspective, provides a non-western worldview that upholds the initial spirit of Multiple Intelligence against

the standard European view of intelligence. MI has not delivered the alternative discourse it promised, as is made clear in this volume.

Other authors in Part II include Yusef Progler and Richard Cary. Each re-examines an intelligence of MI, namely Musical Intelligence and Visual Spatial Intelligence, respectively.

Part III contains critical overviews of MI. Similar to Morris' skepticism that there are only a few core competencies in human intelligences (p. 161), Jay L. Lemke questions the political reason to set a finite number of intelligences (p. 180). The effort to confine intelligence into a universal set of abilities may be seen as a vested agenda and leads to the marginalization of those who do not fit into the *a priori* intelligences proper. It is important for teachers and students to note that intelligence should not and could not be quantifiable within Lemke's semiotic strategy of divide and multiply (p. 182-183).

Kathleen S. Berry points to the similar standardization effect of intelligence measurement in MI, which creates a grand narrative of intelligence that perpetuates the hegemony of western capitalism (p. 241). She informs that the policy and practices of Western education will remain stagnant should the capitalist agendas and theories of intelligence continue to rule formal learning in tandem (p. 242):

> Recognition of capitalist agendas is progressively liberating when we challenge the mechanisms, such as intelligence theories, that ensure the continued disabling of large segments of the global population. However, what can't be ignored or shuffled to a theoretical sideline is the continuing practice of connecting intelligence as a legitimate means to a capitalist vision of education.

Other authors in Part III include Gaile S. Cannella who analyses MI in Early Childhood Education from a post-structural/feminist lens, and Danny Weil who offers a post-formal redefinition of educational Psychology based on MI.

A few thoughts came to my mind at this point. Before I express my views, it is important to bear in mind the relationship between theory and practice. Theory and practice cannot be seen as separate entities. This is very true especially for MI to be pedagogically instrumental. To criticize MI outside the context of a classroom is to frame the theory other than a pedagogical practice. It is important to note that the affinity or distance between theory and practice has every thing to do with the political conditions of the time, and within the classroom context, has very much to do with the social purposes and missions defined for the public school (Goodson 2003: 10).

The criticism of discourse marginalization on MI's linguistic intelligence is not new. Linguistic hegemony is a phenomenon that occurred long before the advocacy of MI. Linguistic hegemony occurs in Mother Tongue or Second Language education and examination in many countries. The need to speak according to certain dialectal speech styles is part of the examination parameters. As long as language lessons and assessments exist, the polarization within dialectal variants and between inter-linguistic speech styles will persist (Sew 1996). The most dominant discourse medium in the world is English, and speakers of other languages are either struggling, or convinced that their own native cultures and languages are inferior when education assessments and jobs are concerned (see Sew 1996). It is not clear if these students of English are struggling to maintain their self worth and learn to speak correctly, or if they actually surrender willingly to raise their socio-economic status and competitiveness.

While it is true that an individual brought along a unique cultural and sociolinguistic complex to the classroom the national education system is funded with a nation building agenda that entails economic practicalities and patriotism for the nation. No single learning approach can accommodate each individual learning style. Teaching a few dozens of students within a

period of 30 minutes in school is hardly conducive for individual attention on each and every single student.

Capitalism is not a bad agenda. Proper management of business and economy will ensure the generation of wealth, which in turn will create affordable subsidized education for the nation. It is more critical to governments such as in Australia and New Zealand for funding tertiary education, especially the arts and humanities. The equal learning opportunities created on the back of sound capitalism could at least provide the basic reading and writing skills to acquire knowledge for all by means of compulsory education. This will lay the foundation for individual learner to cultivate a critical voice.

From reading this volume, I am mindful of a few other things excluded from MI, namely, that intelligence is not quantifiable, intelligence is not something pertinent to human brain or does it exist in isolation, intelligence does not consist of bounded entities, intelligence is part of the interconnected social and cultural institutions of the human experience, naturalistic intelligence is better understood within the teachings of Buddhism, and there is a need to integrate individuals in their social cultural and political contexts before any form of intelligent judgment on their cognitive abilities can be appropriately assessed. In the advocacy of emotional intelligence, Epstein (1998) has questioned the validity of the different intelligences in MI and asked if kicking a football well entails to having superior kinesthetic intelligence. With the publication of papers edited in this volume, discussions and doubts about MI will continue among academicians at the tertiary level, perhaps less so among teachers in schools.

The attitude towards MI will not change much in the primary and secondary schools within the Southeast Asian societies that adopts MI, perceived as a stereotypical western intelligence theory. MI is part of an engaging teaching and learning repertoire in the classroom.

Occasionally, teachers will deploy the idea in lesson plans to vary teaching practice and offer the students a space that gravitates towards a less language-based learning. Despite the grave mismatches between the epistemological and ontological foundations of MI, which from the beginning started on the wrong reductionist footing of cognitive psychology, the techniques devised from MI remain applicable to the classroom situations.

It takes a whole world of learned Buddhists to understand the notion of co-arising and co-emergence of human intelligence. The current world of learning, unfortunately, works within the boundaries of test scores and examination results. The intelligence system has been pervasive and acquired great functional significance. The Standard Aptitude Test (mathematical and linguistic intelligence) and TOEFL (linguistic intelligence) remain the norms of admission to American graduate schools. Academic results are the main promotional devices in the education system at all levels of education in most parts of the world. Since paper and pencil testing remains the preoccupation of my students and the need for diversified teaching in the classroom is urgent, MI will stay in primary and secondary schools for some time.

Before reading this book, readers should know the basics about MI. It would be ideal if the readers can check the application of MI in pedagogy textbooks and tried out some of the ideas, bearing in mind that MI theory is meant for practice in teaching. I suggest that the readers begin with the overview by Kathleen Berry in Part III. They can then proceed to Part II and continue with the chapter by Appelbaum even if s/he does not teach mathematics. The strength of Appelbaum's work is that he makes mathematical education sounds interesting. The next two chapters to read would be Blumenthal-Jones followed by Marla Morris. The next chapter would be Kathleen Nolan. These authors are reader friendly. Kincheloe should be read last because he offers a dense eclectic knowledge base to examine and dissect MI. The readers will find lots of

cross-references to the authors aforementioned in Kincheloe's chapters. Readers who are not familiar with the literature of MI and consciousness and cognitive psychology might find difficulty in appreciating Kincheloe.

References

Armstrong, T. (1999). *7 Kinds of Smart: Identifying and Developing Your MI*. New York: Plume.

Epstein, S. (1998) *Constructive thinking: the key to emotional intelligence*. Westport, Connecticut: Praeger.

Gardner, H. (1983/1993) *Frames of mind: The theory of MI*. New York: Basic Books.

Gardner, H. (1991) *The unschooled mind: How children think and how school should teach*. New York: Basic Books.

Goodson, I. (2003) *Professional Knowledge, Professional Lives: studies in education and change*. Maidenhead, England: Open University Press.

Kincheloe, J. L (ed.). (2004) *Multiple Intelligences Reconsidered*. New York: Peter Lang.

Lazear, D. (1999a) *Multiple Intelligence Approaches to Assessment: Solving the Assessment Conundrum*. Arizona, Tucson: Zephyr.

Lazear, D. (1999b) *The Rubrics Way: Using MI to Assess Understanding.* Arizon, Tucson: Zephyr.

Leistyna, P. (1999) *Presence of mind: Education and the politics of deception*. Boulder, Colorado: Westview Press.

Sew, J. W. (1996) Hakisan Bahasa Di Malaysia (Language Erosion in Malaysia). *Jurnal Dewan Bahasa* 40:9, 855-860.

Sew, J. W. (2003a) Otak dan Kecerdikan (Brain and Intelligence) *Dewan Bahasa* 3:2, 34-39.

Sew, J. W. (2003b) *MI Lesson Plan for Teaching Malay Vocabulary*. A lesson for secondary two students observed by the Principal of CHIJ ST Theresa's Convent.

Sew, J. W. (2004) *Teaching Photosynthesis with Visual Spatial and Musical Intelligences*, sharing practice with teachers from Farrer Park Primary School and CHIJ Kellog Primary School at CHIJ ST Theresa's Convent on 16 October.

Sew, J. W. (2006) Review of Kincheloe J. L. Multiple Intelligences Reconsidered. *Discourse in Society* 17:4, 554-557.

Jyh Wee Sew
MRL & MT Dept., CHIJ St. Theresa's Convent, Singapore

In addition to his written work in *Dewan Bahasa* and conducting a Drama Workshop for Malay Teachers in 2006, Jyh was involved in the Yellow Ribbon Project that coordinated Convent students' letters in Mother Tongue languages for Prison inmates to encourage them during their difficult moments. Jyh was selected by Marquis, New York for Who's Who in Asia 2007.
email: homemine2@gmail.com