International Journal of Education and Development using Information and Communication Technology (IJEDICT), 2008, Vol. 4, Issue 4, pp. 183-184.

Review of *Efficient learning for the poor: Insights from the frontier of cognitive neuroscience*

Ed Brandon
The University of the West Indies, Barbados, West Indies

Review of *Efficient learning for the poor: Insights from the frontier of cognitive Neuroscience*, Helen Abadzi, Washington, The World Bank, 2006 (ISBN-10: 0-8213-6688-2, US$39.95).

This is a curious but valuable volume, combining a comprehensive review of the problems and opportunities facing school systems in the poorest developing countries with the findings of cognitive neuroscience. Its author works with the World Bank and frequently refers to its often pessimistic evaluations of various educational projects in the Third World. For readers of this journal, its value lies more in clearly setting out basic strategies for Education for All; it hardly considers to what extent ICT could be used to implement its recommendations.

I say "curious" because the recommended strategies seem eminently sensible, irrespective of the neuroscience. (I am grateful to Professor Ronald Young, of the UWI Mona Campus, for comments on the neuroscience, which he assures me is presented correctly.) There are so many steps from what is revealed in cognitive psychology experiments to what will work in a school without text books or teaching children in a second or third language, that one doubts that a solid bridge can be constructed from one to the other – not to mention the changes and contestation endemic to an advancing science. This is not so say that there are any conflicts between the neuropsychology and the pedagogical recommendations but merely that we don't really need to know the details of the cognitive psychology to know that people, even very young children, learn less well when taught in a language they barely comprehend than when instructed in their mother tongue.

It is platitudes like these that Abadzi mainly focuses on. She identifies "seven pillars that support basic skills and efficient learning for the poor" (p. viii). The priority, it seems to me, is not so much to disclose the neuroscientific bases for these policies as it is to unmask the forces that hinder their wider acceptance and implementation. There is perhaps a somewhat naïve optimism in stressing the scientific findings that support, say, mother tongue instruction as if they will move elites whose continuing grasp on power is in part a matter of excluding others from the benefits of literacy in an international language.

Abadzi's seven pillars are:

- "Supporting children's brain development for efficient learning," which, despite the reference to brains, is mainly a matter of straightforward health care.
- "Using every moment of available instructional time." Her discussion here of the gross inefficiencies (and, one might add, boredom) of institutionalised schooling reminded me of Ivan Illich, though perhaps wisely she does not refer to that politically incorrect source. Lest this seem like an endorsement of "battery schooling," let me add that, in my experience, one learns as much from informal chat with one's friends as one does from the formal instruction on offer, and at almost all levels of the educational system. "Free" time is, then, of the essence.

- "Ensuring that all have text books to take home." Of the two issues here, it is not so much having textbooks, as the opportunity to take them home and use them outside of specific classes that Abadzi stresses.
- "Learning fluent reading and calculation in grades 1-2." Here Abadzi draws attention to the lack of achievement, compared to European norms, of so many of the world's countries. She suggests that most school time in the first grades should be devoted to reading and maths, since impoverishment here "*creates inefficiencies that reverberate all through the educational system*, up to university years" (p. xi, her italics).
- One enormous obstacle for young children hoping to read could be overcome if people adopted her fifth pillar: "teaching basic skills to young students in their mother tongue". She recognizes, but hardly offers strategies to overcome, the many political obstacles to this recommendation.
- "Basing educator training on a few well-researched learning principles" rather than the dictation of theoretical surveys and the discouragement of critical reflection that so often constitutes teacher "training". This is one context in which Abadzi recommends using multimedia presentations (pp. 129-130) to display successful and unsuccessful approaches to classroom management.
- Abadzi's last pillar again raises political issues: "ensuring effective teacher incentives, goals, and oversight," especially since she recommends a large role for the community, not just the Ministry of Education, in monitoring effectiveness.

Abadzi's sixteen chapters expounding these pillars review a large number of studies, evaluation reports, and relevant cognitive science literature. While the entire discussion should help teachers and teacher-trainers, she gives a useful breakdown of what topics may be especially pertinent to "busy" policymakers or school supervisors, and she provides in effect a frequently asked questions list with an indication of where to find the beginnings of an answer (p. xii). Her book concludes with a sixty page annex on cognitive psychology and over forty pages of references. Given the urgency of her recommendations and their manifest good sense, it is perhaps a little too well-researched!