

Book Reviews

Title: *Cognition and Computers — Studies in Learning*

Authors: R. W. Lawler, J. B. H. du Boulay, M. Hughes and H. MacLeod

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This book comprises three studies of experiences with *LOGO*. Much has been claimed for the mathematical and other problems solving benefits of exposure to *LOGO* and these studies add positive and negative data to such claims.

Lawler's contribution is based on experiences with his son in very intimate circumstances. The observations and anecdotal evidence show that one-to-one personal sharing of learning can be very rich and rewarding, for both learner and mentor. But the question must be asked as to whether the outcomes have value for the reality of learning in less than ideal circumstances. Can one generalize about cognitive development in children from such experiences, not that Lawler himself attempts to?

Again, one might ask, what can be extracted from the experiences of du Boulay and colleagues when working with student-teachers? The learning resources available, both human and material, were extremely rich. But sample size was somewhat greater and it is in this respect that one may begin to appreciate the cognitive barriers faced by a wider community. Add to this the painstaking observation and the perceptive analysis undertaken and one gains an insight into the potential of *LOGO* experience and learning.

The work of Hughes and MacLeod with very young children has less of a case study approach. Their evidence albeit on a small sample over a short time identifies ability gains which could be attributed to *LOGO* experiences. It is important to note that these are in specific domains and no gains are found in other areas.

The feature in common with all these studies is that they were undertaken by dedicated researchers in rich educational environments. Also, as pointed out by du Boulay, those involved were researchers, teachers and evaluators, all rolled into one (or into a close team). The question therefore arises, that given rather less technological tools (maybe chosen to address specific learning tasks) could not those same dedicated educationalists have come up with the same if not more impressive outcomes?

The reviewer is aware that these observations are more a review of the work done rather than of the book itself. Perhaps this is permissible as the book is a clear report of research undertaken. Whatever questions are raised here, there is no doubt of the value of this book to teachers and future researchers. Too often the outcomes of research remain in academic papers; here we have them exposed to a wider public. The spirit of du Boulay's 'confessions' carries messages from which we can all learn.

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