

Book Review

The Economics of Cooperative Education: A Practitioners Guide to the Theoretical Framework and Empirical Assessment of Cooperative Education (2015)

Yasushi Tanaka (author)

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This book provides an economical perspective of cooperative education and work-integrated learning. Students entering tertiary education today are informed enough to understand that tertiary education is an expense investment that requires an outcome where the benefits (including financial) should outweigh the cost. However, the issues around cost of investment and potential benefits are complex, poorly understood, and difficult to measure. Since the turn of this century, scholarly discussion of potential benefits of cooperative education has been dominated by qualitative approaches. These discussions have been well-founded, informative, and significantly furthered our understanding, however, the voice of quantitative reasoning seems to have lessened over that time.

This book presents a quantitative analysis around the economics of cooperative education, in essence it asks the question 'is there an economical advantage?' and if so 'let it be measured'. This book brings the discussion back to the first two of the three fundamental questions; what, when, and why. Quantitative research in cooperative education is particularly effective at answering questions around 'what and when', in contrast where qualitative research in cooperative education tends to be more effective at answering the difficult question of 'why'.

The book is divided into three parts: a brief background to cooperative education; a theoretical overview of the economical analysis; and the empirical assessment of cooperative education. The latter two parts are divided into a series of chapters around topics of significant importance.

The first part reminds the reader that cooperative education has its roots in the United States, particularly concerning University of Cincinnati and the work by Herman Schneider, and that significant early developmental work occurred in North America. It further discusses the development of cooperative education in different countries, the use of different models of practice, and clarifies terminologies used to describe cooperative education and similar types of activities.

The second part explores an aspect seldom discussed in the last 30 or so years, that is, the exploration of cooperative education from an economical perspective. It initially discusses key concepts around human capital, education as an investment, earning functions, and wage profiles, and mathematically explains the income profiles of school leavers compared to university graduates. The second half of this part is dedicated to exploring the economics of cooperative education. Treating cooperative education as a human capital investment, it begins by explaining how an economic analysis could be undertaken, using the example of

the 'sandwich model' where students undertake an extra year for work experience to complete their studies (which in effect delays earning potential as a graduate by a year).

The last part of the book includes six in-depth chapters on empirical analysis of the economics of cooperative education. It initially points out that cooperative education programs need to be cost-effective. No doubt most readers have encountered the cost-effectiveness argument as the harsh measure used to determine the program's viability and future within a climate of increasing financial restraints common in tertiary education institutions. The chapters usefully explain in helpful stages the various mathematical tools needed to empirically analyze the effectiveness of cooperative education. Relevant literature on comparisons of cooperative education students to non-cooperative education students are brought to attention, including some prior statistical modelling work linking cooperative education experiences with academic performance. A series of staged, real-life examples within from Japan and Hong Kong are explored using several different statistical approaches around key questions. These examples are carefully presented with explanation on the statistics used and then continued on to provide very insightful findings that further our understanding of the benefits of cooperative education. The chapter titles indicate the core questions asked within the analysis, such as the link between undertaking cooperative education and academic performance, employment outcome, and uncovers an interesting correlation between high GPA and low job satisfaction. In the analysis, consideration was given to other contributing factors and found that cooperative education effectiveness, at times, could be overestimated because academically able students tended to favor enrolling in cooperative education programs. However, despite this bias effect, participation with cooperative education still positively correlated with student academic performance at university and their employment outcomes.

This is a well-written book, where the heavy emphasis on economical perspectives and statistical modelling to analysis cooperative education outcomes makes this book unique within cooperative education literature. The book is well-informed with established cooperative education literature and draws in relevant economics literature to support the arguments presented. The book makes a very useful and valuable contribution to the cooperative education literature around a difficult to comprehend subject and it, encouragingly, does so in a way that even the less mathematically inclined can follow this challenging topic. It was particularly notable that each of the examples, and the explanations on how these mathematical models were used, were presented using gentle and easy to understand steps. This book should certainly sit alongside other literature that informs our thinking on methods for effective cooperative education research. I recommend that all cooperative education and work-integrated learning researchers, as well as program leaders, familiarize themselves with this work.

Dr Karsten E. Zegwaard
Editor-in-Chief
Asia-Pacific Journal of Cooperative Education
C-/ Cooperative Education Unit
University of Waikato,
Hamilton, New Zealand.