

Book Reviews

Research with a View to Implementation. D. J. Gouws. Human Sciences Research Council. Pp. 231. 1994.

Case Studies in Research with a View to Implementation. D. J. Gouws. Human Sciences Research Council. Pp. 248. 1994.

These two books, directed at people actively involved in research or research administration, recount the history of and provide some interesting case studies from a five-year programme of investigation into the implementation of research sponsored by the (South African) Scientific Advisory Council, and directed by the author under the auspices of the Human Sciences Research Council. The programme was launched as a result of mounting concern that the expected benefits from state-supported research were not being realized, owing to poor implementation.

The investigation consisted of two phases. In the first, a group of 58 researchers from a wide variety of disciplines and an assortment of state, university, industrial, and private research organizations were brought together to consider retrospectively the critical factors contributing to the implementation success (or otherwise) of research projects they had undertaken. In the second phase, another group of 50 researchers – with 55 research topics that had already been approved, but which had not yet been started as formal projects – participated in a two-day implementation workshop, based on the results of the first phase and on general principles of change management such as stakeholder analysis and involvement, before proceeding with their research projects. In this investigation, ‘research with a view to implementation’ (R/I) meant:

‘the assumption of personal responsibility by the researchers for attaining their chosen implementation objectives, by appropriate, collaborative involvement of the important stakeholders in team action to identify the relevant problems and opportunities, formulate the goals and plans, and execute the project – all within an action research framework. ‘Implementation is (regarded as being) achieved to the extent that the chosen objectives are attained, as evidenced by changes in the target group’s knowledge, skills, perceptions, beliefs and finally: by their actions – especially by their results in the stipulated effectiveness areas’ (p. 188).

A consequence of this approach is that it also makes good sense to talk about the implementation of basic research – as is demonstrated by one of the examples described in the first book.

An important feature of the implementation workshop was that participants were divided into small, heterogeneous groups in which they took turns to explain their research objectives, rationale and method to six or seven fellow researchers from other disciplines, with an opportunity for questions followed by lively discussion. Participants subsequently reported favourably on this experience, mentioning in particular the freshness and originality of the comments from researchers in other disciplines. Many significantly revised their research plans.

The progress of the various research projects was then monitored over the next few years, with some visits by programme staff and with such moral support and advice as proved feasible. After three years, participants were asked to submit reports on the course and degree of implementation success of their respective research projects. (The progress of some projects which were of longer duration was assessed up to six years later.) The final tally was that 40 per cent of the assessed projects were regarded as highly successful, 23 per cent as partially successful, and 36 per cent as unsuccessful. (It is noteworthy that eight of the 55 projects originally registered were never started in any significant way.)

Gouws constructed a 17-item implementation effort assessment scale with satisfactory inter-rater reliability. Degree of implementation effort – as measured by this scale – showed a very strong association with implementation outcome for his group of researchers. This would seem to support one of Gouws’ main contentions in designing and conducting the programme, i.e. that a major determinant of implementation success is the degree of personal responsibility taken for it by the researcher. Gouws sets out his approach to research with a view to implementation (R/I) in more detail in Part II of the first book, where he discusses the notion of implementation in contrast to more passive concepts such as diffusion and dissemination, the role of mindsets and other individual differences – with their implications for R/I teamwork, the importance of considering and involving the stakeholders in innovation, factors that promote or

hinder implementation, a methodological framework for R/I, and finally, a critical overview of the R/I notion, with a consideration of common objections against the view that researchers should seriously concern themselves about implementation.

This valuable conceptual analysis is supported and supplemented by the case studies in the second book, which provide the telling, concrete examples of R/I in action. The contributions by Augustyn, van der Spuy, Barnard, and du Plessis, for instance, demonstrate the power of a deliberate, proactive implementation R/I strategy in four widely different fields: wine-making, the collection and use of national medical trauma statistics, the teaching of high-school mathematics, and the introduction of water hydraulic power into the gold-mining industry. An important point arising from these case studies is the potential economic significance of early implementation. For example, Augustyn's results, by being made available and implemented early, probably averted a wine industry loss of R3m owing to stuck fermentation in 1989 alone (a sum, by the way, five times as large as the Scientific Advisory Council's grant for the entire implementation programme). Not all the case studies selected represent implementation successes. Some help to demonstrate how and why implementation so often goes wrong.

The approach to research implementation set out in the first book and demonstrated by the case studies may be more appropriate in research situations where there is little emphasis on intellectual property rights, e.g. public health, education, and even in-house industrial research establishments. Although Gouws' approach would still be relevant to hi-tech situations where the intellectual property stakes are very high, it will need to be complemented by adequate measures to protect intellectual ownership – an aspect not mentioned by him.

Another feature missing from the South African programme is formal early involvement of the staff of the receiving organization (e.g. a business firm selected as the most promising candidate for utilizing the particular research findings) in implementation attitudes and skills training – something hinted at in the conclusion of the first book.

We urgently need representative information on the base rate of implementation success for different categories of research projects in different settings. The author's suspicion that such base rates could be low may well be right, in which case the claim of a demonstrated strong connection between implementation effort (on the part of the researchers) and implementation success warrants serious consideration.

This ambitious programme and its results are a valuable contribution in an important and relatively

neglected area. In these days of ever-tightening research funding and increasing demands for researcher accountability Gouws' recommendations at the end of his first book certainly provide policy-makers with food for thought. He proposes that it will be beneficial to all concerned if:

– Submission of a sound implementation plan and budget were to be required as an integral part of every application for research funding.

– The implementation track record of a research team and organisation were to become one of the important criteria for the allocation of research funding' (p. 206).

With allowance for their inevitable local colour and biases, these two books could form a very worthwhile basis for a short course or workshop in research implementation.

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An Atlas of Contraception. Pramilla Senanayake and Malcolm Potts. Parthenon. Pp. 139. ISBN: 1 85070 387 6. £35. Hardback.

This book is beautifully produced and well written. It gives a global view of the problem of population control and a world-wide perspective on the current provision (and lack of provision) of education and services that enable people to control the size of their families. The social, cultural, religious and political aspects of the subject are incorporated well throughout the book. The many explanations of historical facts give added interest for the reader. All available methods of fertility control are described, as are the topics of service delivery, AIDS and the development of new methods. The book examines why family planning has developed as a 'medical' issue, and is refreshingly free from any mention of the professional arguments which try to claim family planning as the prerogative of any one group of doctors.

The language and style of the book, and the depth of the debate, are aimed at non-specialist readers. Although the authors give little clue as to who they regard as their audience, my guess is that this book would be of interest to students in a range of health and