

Book Reviews

Research with a view to implementation, DJ Gouws, Human Sciences Research Council, Pretoria, 1994, 231pp, and

Case studies in research with a view to implementation, DJ Gouws (ed), Human Sciences Research Council, Pretoria, 1994, 248 pp (HSRC, P Bag X270, Pretoria, South Africa 0001, Fax: 27 12 202 2892).

These two books, directed at people actively involved in research or research administration, 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 due to mounting concern that the expected benefits from state-supported research were not being realised due 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 organisations 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% of the assessed projects were regarded as highly successful, 23% as partially successful, and 36% as unsuccessful. (It is noteworthy that 8 of the 55 projects originally registered never got 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 this group of researchers. This would seem to support one of Gouws' main contentions in designing and conducting the programme, ie 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. There 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 team work, 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 due 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, eg public health, education, and even in-house industrial research establishments. While 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 organisation (eg, a business firm targeted as the most promising candidate for utilising 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 quite 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.

Reviewed by Dr R G A Boland, c/o Dr Catherine d'Arcangues, Special Programme on Research, Development and Research Training in Human Reproduction, World Health Organisation, 1211 Geneva 27, Switzerland.

The Situation of the Elderly in Botswana: Proceedings From an International Workshop, Frank Jarle Bruun, Mbulawa Mugabe & Yolande Coombes (eds) , Gaborone: National Institute of Development Research and Documentation, University of Botswana. Oslo: Centre for Development and the Environment, University of Oslo, 1994, ix + 136pp. ISSN 0805-3251.

The papers in this volume are based on contributions to an international workshop on 'The Situation of the Elderly' which was held in Gaborone, Botswana, from March 29 to April 1, 1993.

Ageing is a process that has begun to attract increasing scholarly attention. What is popularly termed the "greying of the population" constitutes a major problem for many societies. Changes in the number and proportion of older people in the total population have implications for, inter alia, the social structure, family health care, housing and poverty. The multi-disciplinary team which participated in the workshop was composed of individuals who were technically well-positioned to tackle aspects of this neglected subject.

The volume is divided into four parts. The papers included in Part I – "Information Needs and Policy at the National Level" – introduce readers to the subject of ageing and also explore the policy dimension. Alex Kalachi's paper serves as a backcloth in which he discusses the process of ageing in a regional and global framework. This contribution should help the reader to contextualise the more specific papers covered in the rest of the volume.

Mbulawa Mugabe's paper focuses on the health and social policies related to elderly people in Botswana. He argues that the structure and organisation of existing health and social services are inadequate to deal with the multiplicity of problems associated with ageing. Coombes, Khulumani and Ngome's paper presents a profile of the elderly in Botswana. They examine the aged from a demographic dimension and highlight related factors. For instance, they show that the number of elderly people who are economically active had dropped from 8,5 percent in 1971 to 7,5 percent in 1991. Their findings also reveal that elderly people tend to be resident in rural areas, and have low levels of literacy and formal education. They point out that the extended family network remains an important dimension in the lives of the aged.

Part 2 of this volume focuses on the cultural and traditional factors affecting the elderly at the village level. Ingstad's paper deals with various aspects of the lives of elderly people in Mankodi, a small village in the Kweneng District. She draws