

Technology Transfer: From Researchers to Users. Herbert F. Lionberger and Paul H. Gwin. August 1991. Columbia, Missouri: University of Missouri, University Extension, 189 pages, including overall references, glossary, and index, \$12.50. Order MX-381 from Extension Publications, 2800 Maguire, University of Missouri, Columbia, MO 65211. Discounts of 10, 15, and 20 percent are available for purchases of 10, 100, 1,000 or more, respectively.

Diffusion researcher, Herbert Lionberger, and information specialist, Paul Gwin, draw on their decades of consulting regarding Cooperative Extension and Agricultural Experiment Station projects, international communications, and diffusion to produce *Technology Transfer: From Researchers to Users*. While this, their second collaborative work, is clearly based upon findings about information use in global agriculture, the communication concerns and recommendations presented in *Technology Transfer* have implications for those who would manage change. Lionberger and Gwin have assembled a compendium of research findings from information diffusion and adoption, interpersonal communication, mass media impact studies, group processes, and systems of doing research and extending its findings to users, all with an eye toward what will be most useful for change agents.

Boxed comments from Paul Gwin, Sr., a pioneer in extension work in Kansas, keep even the authors' most theoretical concerns in tune with human considerations and in touch with the day-to-day practice of disseminating information.

Technology Transfer, although based upon the same content and approach as Lionberger and Gwin's earlier book, *Communication Strategies*, is totally rewritten. It is a new and more sharply focused work. The authors go beyond their earlier guidebook look, providing a far more readable and well designed text for studying the successful dissemination of information.

Since the focus of the book continues to be the extension agent, *Technology Transfer's* nine chapters stress involving, and learning from, local people in the planning process.

The book is divided into two main areas. Chapters 1 through 6 examine the many processes that influence how change takes place. Chapters 7 through 9 examine successful approaches to speeding the trial and adoption of new information and technology. The following chapter highlights suggest the book's usefulness.

Chapter 2 examines five broad variables that affect the adoption of new ideas; personal (values, education), situational (social groups and resources), support agency variables (available credit, fertilizer, hybrids, and markets), and behavioral (changes farmers must make specifically to use new approaches). Lionberger and Gwin see another variable, *intervening*, broadly, as encompassing the variables involved with the support agency, (including obtaining needed information, supplies, services, and transportation, and the adopter's own behavioral changes). They are *intervening variables* because they are involved between the time the adopter starts toward new goals and the time he or she completes them.

Chapters 4-6 detail the development, application, and facilitation of the adoption process; consider the linking process of the change agent, as the social systems of researchers are joined with the social systems of those who use their research; and help improve the change agent's understanding and skill in interpersonal communication, respectively.

Chapters 7 and 9 establish the importance and place of mass media as an assist in the change process and discuss approaches for the effective development of programs that allow persons to function as information links between users and sources of new information and technology.

Each chapter includes recommended change strategies and annotated references. A new series of four worksheets help guide the planning process. A glossary defines diffusion and communications terms. A complete index provides the text greater utility as a reference.

Diagrams, like the communications system they represent, can be quite complex, but improve the clarity of Lionberger and Gwin's message in every case. The international flavor of their presentation is enhanced by illustrations that remind us that all national development processes are not the same.

Several ACE members contributed to its production. Besides Gwin, they include Harlan Lynn, Don Esslinger, Delmar Hatesohl, and George Laur.

In their earlier text, *Communications Strategies*, Lionberger and Gwin translated the research experience of information practitioners and change agents "into a body of knowledge that the general public can put to practical use." In *Technology Transfer*, the authors have sharpened their analysis of what causes people to accept or reject new ideas and technology. For much too long, research findings have languished because practitioners of change did not have the time or skill to bridge the gap between research and its practical applications. Lionberger and Gwin successfully provide that bridge. For those who would cross it, *Technology Transfer* provides provocative and useful reading that invites reader applications.

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