Auditing Technology Transfer

Here's one way to find out if transfer has occurred.

By DAVID C. WIGGLESWORTH

It is more than 20 years since Mel Schnapper, at the Society for International Development conference in Costa Rica, made this remark: ". . .The history of international development efforts is strewn with the wreckage of many projects. One of the major conclusions that emerges from this history is the lack not of technical skills but of interpersonal and intercultural skills." Recent World Bank studies confirm that little has changed and that a large number of bank-funded technology transfer projects have become part of that wreckage. The problems still appear to be the same.

The providers (whether Western private-capital corporations or Communist state organizations) generally have some technology the developing nations need which the provider nations want to market. However simple that seems, problems continue to occur in the transferring process. While a providing corporation may make the effort to provide bilingual instructors, train their personnel in the taboos of the specific culture and provide some historical frame of reference for their

and methods to their perceptions of the needs of the host nation's trainees. Unfortunately, these perceptions often are less than accurate and are based on insufficient data or on gross generalizations. Whatever effort they make to ascertain the effectiveness of their technology transfer programs is wasted because their people need to "look good." In addition, evaluation can become difficult when the client's personnel who helped select the contractor also want the contractor to look good.

Worse, the client may not understand that the program is not meeting needs because, in many countries, evaluations simply aren't done. In cultures where the only word for "no"is "yes," where host nationals, after years of foreign imperialism, criticize foreigners with difficulty, and where politeness, concern for the feelings of others and saving face are valued, contractors who provide new technology will find it hard to rate the success of their technology transfer programs. Provider and recipient suffer from a lack of feedback, though the loss for the latter is more costly.

Using, where appropriate, vertical slice techniques to acquire hard data, the audit design consists of three phases. The first phase may include:
■ a review of all contracts;
■ an analysis of expenditures in relation to the budget's definitive estimate;
■ highly structured interviews with key personnel in the home (generally U.S.) offices of the contractor.

The second phase of the audit may include:
■ on-site inspections;
■ review of the technology transfer documents, training materials, methods of training, casualty and dropout statistics, facilities and equipment, on-site observation of the technology transfer process, and on-site interviews with project management and technology transfer personnel such as engineers, plant/equipment operators and training personnel.

An integral part of this second phase of the audit design involves culturally and linguistically researched, in-depth structured interviews with the trainee participants and the host national managers on site.

The interviews can enhance the audit's accuracy and create a fuller understanding of the perceptions the client's personnel hold.

The third phase of the audit may conclude with briefing and debriefing sessions.

This technology transfer audit can give us emotional information, hard data and a sense of the whole. Both parties can express themselves non-confrontationally. Without becoming ombudsmen, the auditors act as neutral observers who can provide assurance that technology transfer is taking place successfully or recommend change in its design and process.

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people, seldom is anything done (from an interpersonal and/or intercultural approach) to ensure that the technology itself is being transferred.

Some providers of technology transfers modify and adapt their training materials

One solution to these vexing problems has arisen from the way the engineering and construction industries monitor the project management of their programs: technology transfer audits. Our firm usually represents the host recipient nation when applying these audits. At the pre-audit level, we first attain agreement on the goals and specific objectives of our audit and the level of our authority and our lines of communication.

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