ABSTRACT
              Differences in training in developing countries can
be traced to the experiences of colonization, industrialization, and
advancing technology. Since decolonization after World War II,
developing countries have had to cope with depleted primary resources
and unprecedented and unexpectedly rapid industrialization.
Industrialization has taken the form of technology transfer, which
has contributed to the loss of indigenous technologies. The
developing world is becoming aware that the key to its development
lies not in transfer of capital-intensive technologies designed for
use where labor is comparatively scarce, but in industrial
development that uses those technologies that advance the
socioeconomic objective of development. Training and development
efforts in developing countries should relate to an industrialization
that uses technologies appropriate to specific environments. From a
developing country's perspective, training and development have an
important role in developing the capacity to use and control
appropriate technology. Training and development must be dynamic and
focus on an understanding of the respective country's culture in its
transition from a low to a higher technology base. Implementation
problems include cultural and linguistic diversity of the audience,
poor communication, and limited or out-of-date instructional
materials, facilities, and training and development personnel.
(YLB)

TRAINING AND DEVELOPMENT

IN DEVELOPING COUNTRIES

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Introduction

"Things are different over here!" That's the type of comment that you would expect to hear about almost anything in third world countries. The topic of training brings no different response. This paper will attempt to determine reasons behind the differences through a review of history relating to colonization, industrialization, and appropriate technology. The importance of systematic training and development in elevating cultures from a low technology base to a higher technology base is stressed.

Historical Focus

Prior to World War II, the experiences of colonization, imperialism, and exploitation left many developing or Third World countries with limited industrial capacity due to the depletion of "primary" resources, which were extracted to fuel the industrialization of the Western "colonial" powers. According to Hughes (1980), in many cases the "former colonies" were abandoned, leaving behind a tottering social and physical infrastructure supported by limited capital, technical skills, and entrepreneurial and managerial capacity.

Within the ongoing forty-year period cf decolonization which began at the end of the war, developing countries, however, sought to gain political and economic national independence. The implementation of this goal to varying degrees has resulted in countries with different levels of industrialization, which

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in sum, have "created a second industrial revolution that is transforming the world economy even more radically than did the changes that took place in Great Britain in the late eighteenth and early nineteenth centuries" (Hughes, 1980).

The unprecedented and unexpectedly rapid industrialization among developing countries has not necessarily benefited the developing or third world proportionately. Taking the form of "technology transfer", such industrialization has created a "black hole" for many indigenous technologies, which are often lost forever. Skills are forgotten or not passed on, while links with those providing support inputs, techniques, or raw materials are lost, thus leading to the dependence upon foreign technologies. Further, these "imported" technologies are often linked with private direct foreign investment which, by utilizing technological advantage, have been able to, according to Sen (1980), derive a great deal of profit, very often without making any substantial contribution to the technological capability of those disadvantaged economies.

Conscious of the economic dependence, which plagued their colonial and neocolonial past, the developing world is becoming aware that the key to development does not lie in the transfer of already known and tested technologies from the highly developed nations; these technologies are generally capital-intensive, and designed for use where a scarcity of labor relative to capital exists. Applied in an environment where, generally speaking, there exists an abundance of labor and shortage of capital, such technologies not only result in unemployment or a slow growth in employment; they snap

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"initiative and enterprise", and foster, according to Clark (1979), a "type of development wholly inappropriate". Industrial plants are often created when basic water supplies first need to be improved. In essence, what is needed is, in Schumacher's (1975) perspective, an improvement in "the lot of the poor with a system of technologies whereby the workplaces are located in the areas where people live, and dependent on the locally available labor supply, and are directed towards the satisfaction of basic needs."

Adhering to the United Nations General Assembly Resolution 2626 (XXV) of October 24, 1970, which states that "the ultimate objective of development must be to bring about a sustained improvement in the well-being of individuals and bestow benefits on all. [That] if undue privileges, extremes of wealth and social injustices persist, then development fails in the essential propose," (Ghosh, 1984) developing countries are beginning to focus on industrial development that utilizes those technologies, which advance the socio-economic objective of development. Referred to as "appropriate technology", these technologies, according to Reddy (1979), are primarily directed towards:

a.   the satisfaction of basic human needs (starting with the needs of the neediest, viz., the urban and rural poor);

b.   endogenous self-reliance through social participation and control; and

c.   harmony with the environment to ensure long-term sustainability of this development process.

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The focus training and development efforts in developing countries, therefore, should relate to an industrialization that utilizes technologies appropriate to specific environments.

Importance of Training and Development

From a developing country's perspective, training and development has an important role in growth and development. Not only does it meet the individual's needs for more skills and knowledge, but it is also a tool used in developing group and team skills. Being "action oriented", training and development is essential for the successful accomplishment of the following developmental goals:

a. Human development (managerial, technical, and educational);

b. Local management of transfer of technology;

c. Building a self-sufficient managerial infrastructure;

d. Increasing planning skills;

e. Appropriate industrialization, using local [personnel];

f. Agricultural development and modernization; and

g. Any development where new skills, attitudes, or increased knowledge is important. (Murrell, 1984, 25-32).

The idea that people serve technology is inappropriate. People use technology to meet their needs. With the desire to import technology, a developing country must look at its ability to advantageously control and use this technology. In this respect, training and development has a central role - a role so central that it, according to Murrell (1984), affect[s]

dramatically every other developing activity. This critical role is to develop the capacity to use and control appropriate technology.

Implementation of Training and Development

Simultaneous with a respective country's movement towards national independence, the cultures of the developing world are generally in a state of transition from a low technology base to a higher technology base. (Savage and Sinn, 1985). Old values, attitudes, and expectations are changing rapidly. To be effective, therefore, training and development must be dynamic. Its activities must not only keep pace with these rapid changes, but must also help respective countries to manage their transitions. The focus of training and development therefore revolves around the understanding of the respective country's culture in its transition.

Training and development in developing countries requires the application of developmental skills to new and different work settings. For this reason, the same systematic approach involving analysis, design, development, implementation, control and evaluation is equally applicable as in western industrialized countries. However, this approach is even more essential because of increased constraints.

Amidst a different set of variables and differing degrees of constraints that create a new context for each developing environment, the categories of information which are important to the design of any training and development program remain the same. Under the four main informational categories of

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audience[s], instructional resources, logistics, and politics, this information must be carefully gathered and analyzed, for, each major classification contains even more variables and constraints, which are critical to the success or failure of the development and implementation of any program in training and development.

The typical audience of training and development in developing countries is one with cultural diversity. Not only are there differences in values, practices, and beliefs, but there are also differences within these elements that can vary significantly between urban and rural settings. There also exist the phenomenon of linguistic diversity, which often consist of the use of a second language. Predominantly didactic in methodology, education levels vary from country to country, and from urban to rural environments. The illiteracy level is often high, especially among rural communities.

Varying in their availability, instructional materials for training and development in developing countries are frequently limited and not up-to-date. Further, from what is available, few are appropriate in the necessary languages. The availability of raw materials and supplies also vary but typically are scarce and expensive. In addition to limited facilities, which vary between urban and rural settings, and shortages of qualified and trained training and development personnel, the ability to support educational technologies may be restricted by limited accessibility to electricity, equipment, and parts.

The logistical reality in many developing countries, is that all types of communication, for example, mail and telephone, are often slow, expensive, and unreliable. This problem is especially acute in the rural areas. Further, travel is often limited to public transportation with heavy reliance on automobiles, while the availability of hotel accommodations vary. A budget for training and development is not only limited, but is usually tied to other governmental programs for development. In this respect, programs not only hinge on government priority, but also on the political climate; stability of government, complexity of bureaucracy, and differences in formal versus informal power structure.

Conclusion

The growth and development of the developing world is much more than an economic or industrial building process; it is primarily a people or human resource process. In this respect, training and development is critical, but unless its activities are built on relevant or appropriate technology, negative results will most likely result.

The effects of training and development in Third World development are far in excess of the content and ideas it teaches. It can influence how people behave on the job as well as delineate their role as citizens. Success or failure, therefore, not only depends on the ability of the instructional developer to be flexible and adaptable; the influences, which the program should have, must be decided by the country itself.

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Further, a firm commitment to the goals of the developing
country, which include self-efficiency and an ability to manage
its own development is essential.

REFERENCES

Clark, W. (1979). Intermediate technology. In J. G. Burke and M. C. Eakin (Eds.), Technology and Change, (pp. 98-202). San Francisco: Boyd and Fraser Publishing Company.

Ghosh, P. K. (1984). Appropriate Technology in Third World Development. Connecticut: Greenwood Press.

Hughes, H. (1980). Achievements and objectives of industrialization. In J. Cody, H. Hughes, and D. Wall (Eds.), Policies for Industrial Progress in Developing Countries, (pp. 11-37). New York: Oxford University Press.

Murrell, K. L. (1984). Training and development for developing countries. Journal of European Industrial Training, 8(4), 25-32.

Reddy, A. K. (1979). National and regional technology group and institutions: An assessment. In A. S. Bhella (Ed.), Towards Global Action for Appropriate Technology, (pp. 63-137). Oxford: Pergamon Press.

Savage, E. and Sinn, J. W. (1985). The Technology Primer: A Guide for Understanding our Technological World. Bowling Green: Bowling Green State University.

Schumacher, E. F. (1975). Small is Beautiful, (1st ed.). New York: Harper and Row.

Sen, A. (1980). Labor and technology. In J. Cody, H. Hughes, and D. Wall (Eds.), Policies for Industrial Progress in Developing Countries, (pp. 121-158). New York: Oxford University Press.