Educational Innovation in Developing Countries: Some Considerations for the International Consultant

James A. Brown

The successful implementation of educational innovation projects in developing countries has often not occurred. There are obvious difficulties relating to lack of sufficient resources of various types. Not so obvious, but at least as important, reasons have included: (a) the unsuitability of the innovation for the particular developing country, (b) the error of viewing innovation or change as an event rather than an ongoing process, (c) ignoring the importance of managing the change process in general and the implementation stage of that process in particular, and (d) the utilization of an inappropriate perspective on, and approach to, the innovation process by project managers, particularly experts from more developed countries. In this paper I examine these areas, with some specific reference to curriculum projects and then offer some guidelines for international consultants attempting to bring about educational change in developing countries.

Cet article analyse différentes raisons qui entravent la réussite dans la mise en oeuvre de projets éducatifs à caractère novateur, notamment l'élaboration de programmes, dans les pays en développement. L'absence de ressources, peu importe le type, est une raison fréquemment évoquée. Bien qu'elles soient moins évidentes mais demeurant tout aussi importantes, il y a aussi d'autres raisons comme: a) le caractère n'est pas approprié d'une innovation par rapport aux caractéristiques d'un pays, b) l'erreur d'associer l'innovation à un événement plutôt qu'à un processus continu, c) l'ignorance de l'importance de la gestion du changement et de l'étape de la mise en oeuvre, d) une vision et une approche n'est pas appropriées du processus d'innovation par les gestionnaires de projet et en particulier par les experts étrangers. L'auteur conclut en présentant quelques lignes directrices pour les consultants internationaux impliqués dans des projets de changements éducatifs dans les pays en développement.

This book originated from the concerns of many people within the World Bank about the effectiveness with which its educational projects are being implemented in developing countries.

(Rondinelli, Middleton, & Vespoor, 1990, p. vii)

Many of the large-scale educational reforms sponsored by the United Nations during the 1970s ran into serious implementation problems. . . .

(Rondinelli et al., 1990, p. 11)

The majority of projects [had] less than satisfactory outcomes, often resulting in reductions in project scope and benefit streams.

(World Bank, 1983, p. 27)

It appears to be the rule, rather than the exception, for efforts to implement educational innovations to be less than wholly successful.

(Hurst, 1983, p. 7)

The vast majority of curriculum development and other education change "adoptions" in the 1960s and 1970s did not get implemented in practice, even where implementation was desired.

(Fullan, 1982, p. 54)

Our findings paint a rather dismal picture of international and national efforts to innovate.

(Havelock & Huberman, 1978, p. 19)

Well over a decade ago, in their extensive analysis of innovative educational programs in developing countries, Havelock and Huberman (1978) acknowledged that "research literature in the field of educational innovation was woefully lacking in most respects" (p. 19). Even well-documented case studies of innovative projects were not available to the extent to which innovations were actually being attempted. More frustratingly, even what was known, although incomplete, was not being utilized in practice by consultants and others involved in educational innovations. Havelock and Huberman went on to suggest that international consultants should become much more up-to-date regarding the existing knowledge of the process of educational innovation and revise their strategies accordingly.

Recently, more than a decade later, Rondinelli et al. (1990) examined several decades of international assistance programs funded by the World Bank and other major agencies. They concluded that the gap between educational reforms being proposed for developing countries and the ability to put them into practice was widening. Tambo (1990) also comments on the "gap that now exists between planning at the centre (Yaounde) and implementation at the periphery (provinces)" (p. 33) in curriculum development programs in Cameroon. In spite of strong government support, "curriculum development in Cameroon does not appear to have significantly achieved expected goals" (p. 19). Difficulties involved with putting new policies into practice are still standing in the way of effective implementation of major educational projects.

Change in organizations in general has been difficult to effect. Add to the difficulties of accomplishing innovation in general the further complications of attempting innovations in education. Teachers work in organizational settings which are unlike offices, factories, or hospitals. They have little contact with colleagues or supervisors and are under little ongoing supervision. They have, however, almost constant contact with their students. Educational administrators may have contact with one another, but are usually physically removed from the school setting and the teacher. In spite of these variations from other types of workers, it has been pointed out that "teachers do not respond to new ideas in a way that is fundamentally different than anyone else" (Hurst, 1983, p. 13).

Dealing with educational innovations in developing countries adds further complexity to the already daunting challenges of innovation in education and other fields. "Promoting change is difficult under any circumstances, but it is especially challenging in developing countries with uncertain and unstable economic, social, and political conditions" (Rondinelli et al., 1990, p. 10). Teachers in developing countries who are expected to implement educational innovations are "often inadequately trained, underpaid and enjoy relatively low status" (Hurst, 1983, p. 13).

Lack of resources (money, time, training, materials, etc.) and environmental uncertainties may contribute to the difficulties encountered in promoting

educational change in developing countries. However, there is no truth to the generalization that "people in the industrialized countries are favourably disposed to change while those in the Third World are not" (Hurst, 1983, p. 33). Likewise, resistance to change is no more marked in less educated people (p. 35). Like teachers and other educators everywhere, those in developing countries sometimes will, and sometimes won't, accept change. The determining factor in Hurst's view is the perception of those involved of the valued benefits of the innovation compared to the risks involved. The other keys, it is contended, are the manner in which the details of the change are determined and the process undertaken to implement the desired change.

The focus of this paper will be on educational innovation in developing countries, with some specific reference to curriculum change. In addition to the limited literature with this specific focus, findings in educational changes of other types in developing countries, as far as these are available, will be examined for relevancy. With this background, considerations for external consultants hoping to accomplish educational innovation in developing countries will be discussed, with the ultimate objective of increasing the success rate of such projects.

The Content of Educational Innovation

(a) Overview

The scope of educational innovations discussed in the literature ranges from international aid projects to restructure or expand the entire educational system of a whole country or region, to case study descriptions of limited local innovations. Regardless of its scope, innovation involves both a content element—What change will accomplish the desired outcomes?—and a process element—How will the innovation be brought about?

As Rondinelli et al. (1990) elaborate:

[P]rojects promoting educational change must be concerned not only with the substance of innovation — new curricula, new ways of teaching, new methods of service delivery—but also with the complex process of introducing and institutionalizing change. (pp. 12-13)

The content of innovations described in the literature includes the technological (e.g., introducing educational television), program-based innovation (e.g., introducing a system of comprehensive secondary schools), and curriculum adaptation or development projects. The content of some extensive innovation projects, in fact, consists of not one, but several, multiple content changes of massive scale.

(b) Curriculum Innovation

If curriculum is the content of the innovation, it may or may not be new. It may be an already proven curriculum which is adopted, adapted, or transferred to a new setting, or it may be developed in, or specifically for, that

particular setting. Havelock and Huberman (1978) found that none of the innovations examined in their extensive review of internationally funded reforms was "'original' in the sense of not having existed elsewhere either before or at the same time as the innovation being planned" (p. 124).

Imported or adopted curricula may have been developed and perceived to be effective in more economically advanced countries. Such curricula, usually developed to meet the needs of students from a quite different cultural background, may be very unsuitable for those for whom they are now intended. Many curricula, even in countries which profess to use rational curriculum development procedures, are frequently influenced excessively by narrow political or personal interests. There are thus very strong possibilities that such products would not be appropriate for a quite different culture (Brown, 1989).

Other curricula may have been developed by a logical, social scientific approach (Lawton, 1983), based upon an analysis of universal cultural invariants determined by academic subject specialists and other intellectuals. These invariants are believed to be relevant across cultures and therefore applicable in any country. There are those, however, who believe that curriculum development should begin with a determination of cultural variants, and then work towards the inclusion of universal cultural invariants. Magendzo (1988), for example, points out that the curriculum must begin with those areas with which students are familiar and which meet their specific needs and interests.

Neither curriculum developed for culturally different students, nor curriculum based on universal invariants would necessarily meet the interests, needs, and values of students living in very different cultures. As Magendzo (1988) states, "curriculum is primarily specific to a specific culture" (p. 29). He also believes that unless curriculum is developed in a participatory manner by, and specifically for, all members of a particular subculture, the result will be curriculum "irrelevant for the majority of the population" (p. 25).

Other educational innovations may present the same difficulty as does curriculum change. The danger exists of ending up with inappropriate educational change, or of having spent a great deal of time and effort only to realize that little of the intended reform is actually being practised.

The Process of Change

(a) Overview

At its worst, the traditional change process was based on a quick decision regarding the content of the change, often based on superficial analysis of both the needs and available options (Havelock & Huberman, 1978, p. 15). This was followed by rapid implementation attempts through existing structures, with little follow-up or objective evaluation of the innovation's success. The

discouraging results indicated at the beginning of this paper led to the realization that "we needed to know more about *how* to innovate in addition to knowing *what* to innovate" (p. 19).

Those who have examined large numbers of international assistance projects agree with Fullan (1982), who examined educational change in North America, that "change is a process, not an event" (p. 41). Change is usually considered to consist of at least three stages. The first stage, adoption or initiation, refers to the period of the change process from the awareness that change is needed, through examination of alternatives, leading up to and including the decision to innovate. The second stage, implementation, involves the first attempts to put the innovation into practice — "translating ideas into action" (Hurst, 1983, p.7). Institutionalization or continuation, the third stage, refers to the acceptance of the innovation as a routine aspect of the educational setting.

This change process can take up to several years, contrary to the focus in the past on speed as a primary objective. In fact curriculum development and change may be seen as a continuous process of planning, implementation, feedback, adaptation, further planning, etc. Tambo (1990), for example, concludes with regard to Cameroon that "curriculum improvement in a school system is a continuous process" (p. 33).

(b) The Implementation Process

"The problem of inadequate consideration of the problem of implementation is frequently encountered in all sources of data" (Havelock & Huberman, 1978, p. 17). Accordingly, it is usually considered that "implementation is the big hurdle at the level of practice" (Fullan, 1982, p. 76). If overall change is to be seen as a process, it is crucial that implementation, the most important stage in the change process, is likewise viewed as a process to be carefully managed. Without an effective implementation process, the promise of improvement is lost.

Even where the innovation is part of a national or regional project, the importance of the school level must be acknowledged. It is the classroom teacher, in the context of the school and local community it serves, who implements or does not implement the innovation. The best chance for successful implementation of innovations is in fact a teacher committed to the change (Zaltman, Duncan, & Holbek, 1973).

Supervisory personnel, including the school principal and inspectors as well as Ministry officials, are not involved in the ongoing day-to-day implementation of the innovation. However, strong leadership at the local, regional, or national level, supportive of the innovation improves the likelihood of implementation. In their analysis, Havelock and Huberman (1978) found the "consistent theme that innovations must receive support from

leaders in order to survive" (p. 16), and that this support must be active, vocal, and public.

With curriculum change in developing countries, it is equally important to consider the first stage, initiation, as a process. If the new curriculum is developed specifically for a particular cultural setting, it is not difficult to conceive of this development as a process. If curriculum is to be transferred from another location, it may be easy to assume that no "process" is involved. The curriculum has been proven in another setting and the focus may be on its implementation. Nevertheless, initiation in this case should be considered as a process of refining and adapting the ready-made curriculum to the specific cultural setting. The process undertaken to either develop or adapt the new curriculum and the process of implementation are both at least as important as the specific content of the curriculum end product.

(c) Relationship Between Content and Process

The content of the innovation and the implementation stage of the change process are related in that the more isolated the decision-making process regarding *what* to teach, the less likely implementation will occur. So even decisions regarding the content of any educational innovation should be viewed as a participatory process involving those who will be expected to implement the changes.

Content and process are related in yet another way. While it is reasonable to expect a consultant involved in a change project to be an expert in the content area of the innovation, commitment to a particular change is seen as an impediment to the implementation of educational change. Fullan (1982) sees such a committed expert to be less likely to see the necessity of working through the change process, or less willing to accept feedback which would lead to alteration of the proposed innovation.

The International Consultant and Curriculum Content

Curriculum reform in third world countries has involved the importation of curriculum "experts" as consultants, often provided by donor agencies or countries. Even if it is assumed for simplification that the external consultant has undertaken extensive preparation personally and professionally for the cross-cultural experience, is flexible, has good interpersonal skills, a high level of sensitivity to others, and linguistic expertise, there are still a number of difficulties which may arise.

Many educational consultants involved internationally on curriculum projects have received their education and training in western societies. Whether or not their own academic area of university study was in the social sciences, until very recently their curriculum studies would very likely have been heavily influenced by the social scientific approach to knowledge production and problem solving. In this century educational theory and

practice have been dominated by the social science perspective. The sciences by their very nature, compared to the humanities and the arts, attempt to develop and explain societal functions in terms of tested generalizations. The process used is assumed to be value-free or culture-free and the knowledge content universally applicable. Thus much status is attributed to the "truths" of the social sciences and to those who adhere to its methodologies — more so it seems than to those who seek answers from alternative approaches (Brown, 1989).

However, as the theories and procedures used by the social scientist (as well as other types of scientists) are human constructs, they are embedded in the cultural background of the investigators. The social sciences are therefore ethnocultural institutions which to a large degree reflect the privileges of those who have raised them to such status — namely, the Euro-Americans (Stanfield, 1980).

Unfortunately the social sciences focus more on dominant groups for their universal generalizations and tend to perceive minority groups or subcultures as anomalies of lesser importance. If curriculum experts have been immersed in the social science perspective there is a strong possibility that they will approach curriculum development from that perspective. But good curriculum development, as has been previously pointed out, should begin with an analysis of the specific subculture rather than with the imposition of universal cultural invariants. The social science knowledge base may thus have limited relevance to the development of curricula which can meet the specific needs and interests of students from a particular country, region, or subculture.

The International Consultant and the Change Process

External consultants must combine curriculum content expertise with knowledge and theory about the process of managing change (Fullan, 1982). In fact the consultant in international projects seeking to promote change may find that "knowledge of the process of change is far more relevant and useful than . . . special knowledge of the content area" (Havelock & Huberman, 1978, p. 186). The manner in which the change process is handled is crucial to the success of the innovation. In particular, the style with which the international consultant handles the various management activities is a major determinant of the success of educational innovation in developing countries. Ineffective strategies or approaches for managing change were seen as the number one reason for failure by Zaltman et al. (1973). Rondinelli et al. (1990) indicate that the importance of using the correct management strategies is "one of the major lessons of experience with education reform in developing countries" (p. 12). Havelock and Huberman (1978) also stress the importance of how the management change process is undertaken. Depending to a large extent on the consulting style and perspective of such experts, the innovation developed or adapted may or may not be relevant and, regardless of relevance, may or may not be implemented.

Rosensweig, Austin and Otterstatter (1988) outline three consulting styles common to overseas consulting. These are the directive, collaborative, and facilitative styles. Unfortunately the directive style usually results from an underlying belief that the consultant "knows what is best" for the client and does not result in involving local people in the project to a desirable extent. This attitude and the concomitant process followed prevents the "expert" from gaining an insider's view of how the culture should influence the curriculum. In addition the host educators are often alienated, thus reducing the implementation possibilities. This approach has quite similar results to the importation of curricula — the beliefs and values of a foreign culture are still the dominant influence on the curriculum.

The collaborative style, where the hosts or clients are involved at all stages with the outside expert, allows for input of the needs and aspirations of the hosts' culture to become a significant part of the curriculum content. In the facilitative approach, the consultant merely serves as a catalyst while the hosts become the experts in the selection of the cultural content. This latter style provides the greatest possibility for the cultural relevance of the curriculum. Since it also ensures involvement by local people in the development phase of the project, implementation is more likely to occur.

Alternative Management Strategies

A recent classification of strategies from which the consultant or supervisor on educational change projects in developing countries can choose is shown below. The most appropriate strategy is determined by considering the degree of innovation of the task and the uncertainty of the environment.

P R O J E C T	E N V I R O N M E N T	INNOVATIVENESS OF TASKS	
		Routine	Highly Innovative
	Low Uncertainty	mechanistic	professional/adaptive
	High Uncertainty	open/mechanistic	adaptive

(Rondinelli et al. 1990, p.75)

Without commenting on the matrix as a whole, or the contingency approach which the authors advocate, the adaptive strategy seems to be consistent with the facilitative style described above. The authors, although advocating a contingency approach to deciding on the most appropriate type of strategies to use, in fact conclude that "adaptive management strategies seem to be the most appropriate for education reform projects" (Rondinelli et al., 1990, p. 88).

A review of Rondinelli et al.'s (1990) adaptive approach to what they consider to be the most important managerial activities undertaken in educational innovations provide a sense of this style.

- (a) Planning and decision making. The adaptive approach involves informal, incremental planning and trial and error, interactive decision making. Decision making is participatory and delegated to the lowest level possible. Everyone involved is encouraged to take responsibility and initiative in the identification and correction of problems.
- (b) Leadership. The adaptive style of leadership is subordinate-centred and collegial, facilitates interaction and learning, and provides the freedom to participate.
- (c) Communication. This high-priority activity is undertaken to elicit cooperation and participation. Vertical communication encourages feedback from teachers who design and test possible alternative innovations.
- (d) Monitoring and evaluating. This activity is focussed on providing feedback so corrective action can be taken, rather than on external control. Focus is on a few, important variables selected in consultation with local implementers.

Such an adaptive approach stimulates people's voluntary participation, involves experimentation and flexibility, and requires learning about and responding to local needs. Design may be done elsewhere, but implementers must have the opportunity to feed back their reactions and the consultant must have the flexibility to adapt the innovation based on this feedback.

Feedback about the "conditions of acceptance" (Hurst, 1983, p. 57), without which implementation is unlikely to take place, is recommended as part of the ongoing "implementation analysis" of educational change projects. These conditions include having adequate, accurate information about the innovation, and from the implementer's point of view, whether the innovation is relevant, effective, efficient, and capable of being tested and adapted to the local conditions.

Havelock and Huberman (1978) found that participative problem-solving was believed to be the most important factor in the projects they examined. This factor involved local control, participation, and decision making, with wide latitude for individual initiative locally. Participative decision making strengthened the beneficiaries' ability to solve their own problems. The second strongly advocated factor was "open input", which saw the project undergo adaptations as new ideas were solicited from as many participants as possible.

Not only will the consultant be most effective when using flexible adaptive strategies, but indigenous subordinates, especially those who will be dealing

most directly with the implementers, must be convinced, and trained if necessary, that these are the most effective types of strategies. Rondinelli et al. (1990) base their approach on identifying the type of management strategies necessary for the project and the current status of the abilities of the indigenous managers. Much time is then spent in training so that local educators have the skills necessary to use the required type of approach.

Guidelines for the International Consultant

Several comprehensive, well detailed sets of guidelines on educational change in general (e.g., Fullan, 1982), and on educational innovations in developing countries specifically (e.g., Rondinelli et al., 1990; Hurst, 1983; Havelock & Huberman, 1978), are available and recommended. Common themes among these seem to be the following:

1. Educational change in general, and the implementation stage in particular, must be regarded as processes, evolving over a longer-than-expected period of time and requiring a particular method of managing.
2. The planning of educational innovation and the decision making involved, especially throughout the implementation stage, are best regarded as an experimental, trial and error, process, involving learning by experience and adapting as you go.
3. A recurring theme is the involvement of those affected by the proposed change, particularly the teachers who will be the implementers. Participation should extend not only to their supervisors, inspectors, and regional/national staff, but to community members as well. Such involvement is seen as crucial to arriving at an innovation which will be valued and seen as beneficial by those involved. Only then is implementation and institutionalization over the long term more likely.
4. To accomplish incremental change allowing wide input necessitates a system of ongoing monitoring, evaluation, or "implementation analysis" (Hurst, 1983) which encourages feedback from those affected and allows adaptation of the innovation based on that feedback.
5. To manage the type of implementation process suggested here requires a consultant with an open, "adaptive" (Rondinelli et al., 1990) style, who in all management-related activities is flexible, comfortable with ambiguity, adept at two-way discussion, and able to facilitate interaction and learning among project members.
6. The overriding philosophy of the consultant with regard to the indigenous educators involved in the innovation is to see and understand events, problems, and outcomes of the change from the perspective of these involved others. Their perceptions about the risks and benefits of changing are the major determinants of the success of innovation projects. This more

phenomenological approach in which the consultant gains a personalized understanding of the innovation as it is experienced by the indigenous people themselves would increase both the relevance of the innovation and the likelihood of its subsequent implementation.

The consultant does not "underestimate the minds of potential adapters" (Hurst, 1983, p. 55) and accepts that unless the various individuals involved see the incremental net benefits *they* believe will accrue from the innovation to be substantial compared to existing practice, there will be no long-term change in practice. As Fullan (1982) summarizes: "[I]ndividual concerns come with the territory; addressing these concerns *is* educational change" (p. 295).

References

- Brown, J. (1989, June). *International educational assistance for curriculum projects: Some cultural considerations*. Paper presented at VIIIth World Congress of Comparative Education, Montreal, Canada.
- Fullan, M. (1982). *The meaning of educational change*. Toronto: The Ontario Institute for Studies in Education.
- Havelock, R. & Huberman, A. (1978). *Solving educational problems: The theory and reality of innovation in developing countries*. Paris: UNESCO.
- Hurst, P. (1983). *Implementing educational change: A critical review of the literature*. London: University of London Institute of Education.
- Lawton, D. (1983). *Curriculum studies and educational planning*. Harmondsworth, UK: Penguin.
- Magendzo, A. (1988). The application of a cultural analysis model to the process of curriculum planning in Latin America. *Journal of Curriculum Studies*, 20(1), 23-33.
- Rondinelli, S., Middleton, J., & Verspoor, A. (1990). *Planning education reforms in developing countries: The contingency approach*. Durham: Duke University Press.
- Rosensweig, F., Austin, J., & Otterstetter, H. (1988). Consulting overseas. *Performance and Instruction*, 27(2), 23-25.
- Stanfield, J. (1986). The ethnocentric basis of social science knowledge production. *Review of Research in Education*, 12, 387-415.
- Tambo, L. (1990). Strategic concerns in curriculum development for Cameroon schools. *Canadian and International Education*, 19(2), 18-39.
- Zaltman, G., Duncan, R., & Holbek, J. (1973). *Innovations and organizations*. New York: John Wiley & Sons.