THE ANALYSIS OF EDUCATION SYSTEMS OF DEVELOPING COUNTRIES

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Summary

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The study demonstrates the ineffectiveness
of applying theories of educational planning derived
from developed countries to developing countries,
and suggests the possible use of systems concepts
for a certain type of limited comparisons among
planning activities of developing countries.

Available data were assembled in terms of
inputs into the education system and in terms of
outputs designed to change the environment of the
system. Patterns that emerged were compared with
patterns observed in western industrial nations,
and an analysis of the data showed pressure patterns
on the systems of the developing countries, unfamiliar
in western countries. Factors influencing decisions
were not educational or administrative but political.
The outputs of the politico-education systems of
developing countries were concerned with a wider
range of topics, and, in quantity they were greater
than in developed countries where a reduction in
the need for decision making was effected by an
existing body of laws, customs and traditions.

Hence, the administrative skills and under-
standings required in developing countries were
different from those taught to educational adminis-
trators in Europe and North America.

Report

The most cursory examination of reports on research into educational
planning in developing countries shows the variety of criteria and approaches
being employed. If there is little agreement in Western countries about the
most appropriate theoretical framework for the study of educational adminis-
tration, the problem is far worse in Asia and Africa. So little formal study
has been carried out in these areas on the basic problems of managing schools,
that it could hardly be expected that time and attention would be devoted to the
seemingly esoteric field of administrative theory.

Yet the need for theory is at least as great in the developing countries
as in more stable situations, indeed it might well be claimed to be much more
necessary where the data are diverse and disorganized. It is true that some
kind of theory is being used whenever any observation of educational planning
is made, inasmuch as theory must direct and control what is observed, how it

is observed, and how the reporting is handled. Observation is certainly based on the assumption that the data collected are important with regard to the problem being studied, and this is an abstract or theoretical assumption. When the observer passes to organizing his material and drawing conclusions for future action these stages are likewise guided by theoretical concepts.

Needless to say, these theoretical frameworks are seldom formalized. They are based on sets of personal values formed during the observer's own education, and on a methodology derived from the traditions of educational literature generally and the assumptions of the system in which the observer is working. No great harm results from administrative research being carried out in this way. Those who use the results are familiar with the values and the traditions on which they are based. The situation is quite different, however, when scholars from other cultures and traditions attempt to make use of the data. There is now no common ground of accepted meanings: every term needs to be explained. There is now no common ground of shared values: the foreign scholar cannot comprehend the apparently illogical prejudices and preferences of his colleague living in a different country. It is thus not surprising that relatively little cross-cultural comparison has taken place in the field of educational administration. International organizations have collected statistics on such quantifiable matters as educational finance and school attendance, and have circulated them throughout the world, but they have proved of little assistance in solving specific problems in individual countries. Data on administrative patterns and school organization have seldom been used outside their country of origin because they could not be fitted into the conceptual framework of discussions in countries with different meanings and values.

It is not to be expected that this problem of comparability of data will ever be completely solved, regardless of the amount of time, money and effort which might be expended on it. One cannot conceive of one grand, over-arching theory of educational administration which could permit the educational problems of countries at different stages of development to be observed and explained in identical terms and by identical methods. It is possible, however, to bring some measure of order into the present chaos and confusion by the use of partial theories. These would be directed towards providing the rationale for limited comparative studies of specific administrative activities in the education systems of countries.

This present report is intended to suggest to those interested in developing such partial theories that systems concepts have possibilities for certain types of comparisons among the planning activities of some of the developing countries. The first experiments with this approach have revealed advantages in the handling of data and in seeking explanations for observed phenomena. It is hoped that from repeated applications of the concepts to real data from the education systems of developing countries partial theories will emerge which will become powerful analytic tools for the research worker and for the administrator.

Systems theory has been employed in a variety of ways in educational administration. Its application to the everyday business of managing schools provides few difficulties: practices developed in commerce and industry for handling man-machine systems need little change when introduced into education offices. Similarly, the use of systems theory for handling education budgets and financial decision-making is relatively easy.

It is in the broader and more complex areas of general decision-making that systems theory needs to be re-thought and remodelled if it is to prove useful in education. Business administration and public administration scholars have understandably given less attention to these facets of systems theory, and the student of educational administration must turn rather to the writings of sociologists, anthropologists and political scientists if he is to find systems which resemble the models needed in his own field of study.

During the present investigation, the basic model employed was constructed by the American political scientist, David Easton. It has the virtues of clarity and simplicity, and was intended for use with data similar to that needed for the study of educational administration, namely the outputs of influence groups, legal structures, institutions and bureaucracies. The procedure used was to sort data from a few developing countries on the basis of the Easton input-process-output-feedback model, and then to adjust the categories and structures whereever the model seemed inappropriate for educational data.

This intial testing made it possible to formulate some theoretical guidelines for the employment of the systems model in more detailed and thorough studies of educational decision-making in developing countries. One early conclusion was that the systems under study must be referred to as "politico-education systems" rather than simply as "education systems". As data were sorted, it became increasingly evident that decisions popularly supposed to have been made by the educational bureaucracy (or even more erroneously by an individual in the bureaucracy) were, in fact, decisions arrived at by a political process in a political context. Frequently the factors influencing the decision were not wholly, or even mainly, educational or administrative. They were concerned with politically-allocated financial and other resources, with the exercise of political power both inside and outside the bureaucracy. They were concerned with the value systems of politically powerful groups.

The intial step in the preparation of a decision-making model for a politico-education system is the selection of variables (in this case, the individuals or groups participating in the decision-making process). The first response of those asked to assist in this selection was to name education officials in order of seniority. After some discussion, it became evident that those actually responsible for decisions included many advisers, committees and assistants. It was also obvious that other individuals participated informally in decision-making, but experience has shown that it is best in general comparative studies to make use of the formal power structure, and to leave the informal structures which exist in every system for detailed intra-national studies.

When the decision-making system had been identified, consideration was given to the possibility of proceeding with an analysis of the process within the system. This is an interesting and valuable activity. It was decided, however, to turn instead to the input sector. Examination of the internal processes of an education system require such large quantities of detailed empirical data of a kind not ordinarily published that it seemed better in the early stages of systems analysis to treat the processes by the "black-box method". This procedure, which has been used in other areas of systems study, assumes the processes without attempting to identify them. It allows the analyst to concentrate on the input and output sectors of the model.

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The availabe data was therefore assembled in terms of inputs into politico-education systems from the immediate environment, and in terms of outputs designed to change the environment of the system. It was then possible to look for patterns of inputs and outputs and make comparisons with patterns observed in Western industrial nations. In the early results some interesting differences could be observed. In the developing countries, there were more inputs from organized political groups, and particularly from groups with pronounced sectional or partisan interests. Not surprisingly, there was also strong influence from erratic financial fluctuations and from extra-national groups.

When the outputs of the main politico-education systems of several developing countries were examined, it was found that these were typically concerned with a much wider range of topics than those of developed countries, and they showed irregular time sequences. The actual quantity of output was overall much greater than in developed countries. It appeared that in the latter a reduction in the need for decisions was effected by the existence of bodies of law, custom and tradition related to education. It was also apparent that there was some wastage and overlap in the outputs which was occasioned by inadequate feedback into the system regarding the results of earlier outputs.

From the first results emerging from the analysis of politico-education systems in developing countries, it seems that education bureaucracies are being subjected to pressure patterns unfamiliar in Western countries. Administrative skills and understandings different from those sought in and taught to educational administrators in Europe and North America are required of those managing education in Asian and African countries.

The research which has been described here looks to results which will be helpful to administrators in understanding the decision-making processes in their own and other countries. It also seeks to provide a fundamental theoretical underpinning for all the applied research into educational administration which is now spreading in the developing countries. Hopefully, it will introduce a stronger element of logic and better defined categories and concepts into this important field of research.