A CASE STUDY OF SYSTEM CHANGE AND THE INFLUENCE OF CHANGE AGENTS

A THESIS

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ABSTRACT

The education system in Papua New Guinea over a three year period, underwent a massive re-organization that was unique in both its scope and the speed with which it was accomplished. The change from a highly centralized, fragmented system of education to a decentralized system that catered for all agencies involved in education, was proposed, legislated and implemented without being motivated by major social crises or revolutionary demands for change.

Studies of change and innovation in education over the past decade, have tended to emphasize quantitative studies with fewer theoretical studies and very few case histories, particularly of developing countries. Much literature on change and innovation is highly technical in language and tends to regard change as an industrial process. There has been a tendency to neglect the historical, political and social framework within which change and innovations operate.

The aim of this study was to provide a case study approach to the conditions and factors that motivated the change process of the innovation. Educational innovation as a complex subject, must be studied at several levels. This study examined the innovation at the level of the individuals involved in changing others and interviewed a sample of the identifiable principal change agents, to analyse the techniques or strategies used to implement the change. The interviews were also designed to provide a storehouse of data for future research.

The data generally demonstrated that the initiative for change in this instance came from within the educational structure rather than from outside which is a significant departure from previous case study findings. The Chief Administrator of the Papua New Guinea education system, emerged as the decisive figure who significantly directed and influenced the change process. External experts were used as legitimizing agents to make the structural innovation acceptable to resisters within Papua New Guinea and to the Australian Government.

Strategies employed by the principal change agents were generally collaborative in style, however, conflict situations were creatively utilized on occasions to reach a change goal. Absence of transactional

influence was observed only rarely.

The implications of the study for further research were discussed. The transcripts of interviews provide an invaluable base for research into future quantitative studies particularly one critical issue identified by all change agents. This centres around the conflict between the Teaching Service Commission, the Department of Education and to a lesser extent the Minister for Education, which, in having its origins in the initial innovation, will affect the ultimate survival of the Papua New Guinea education system in its planned form.

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INTRODUCTION

Major educational reorganization and reforms have in the past, normally tended to follow periods of crisis and overwhelming, often violent, events. For example educational reform in England as instanced by the Education Act of 1944 was directly influenced by World War II. The Kemalist revolution of 1923 in Turkey was followed by attempts to establish in place of the traditional religious voluntary systems, a publicly controlled, secular system of education. The student riots of 1968 in France with student demands for education reform initially at the tertiary level, have had effects at all levels of the education system as well as directing changes towards decentralization.

The complete reorganization of an education system that involves an organizational stance and operational style diammetrically opposed to that in operation before change, is worthy of study under any circumstances. When such change on a national scale is proposed, legislated, and implemented within a period of three years, neither accompanied by nor preceded by any crisis or revolutionary demands for change, then the occurrence is unique to the degree that an analysis and description of organizational change is warranted.

Such reorganization has occurred in Papua New Guinea where the appointment of an Advisory Committee on Education in Papua New Guinea was announced in February 1969, the report published in October 1969, and legislated changes progressively phased into the education system until total implementation was achieved in July 1972. The fact that over a period of three years the change from a fragmented, highly centralized, system of education, to a decentralized national system embracing all agencies involved in education was achieved, cuts across established positions and principles that normally induce stability and what might be termed a proneness to inertia, that organizations exhibit over time.

The study of organization change in Papua New Guinea, the search for explanations and the descriptive base upon which explanations depend, is an example of what might be termed the primary motivation of systematic, scientific enquiry. However the basic assumption upon which this study rests, is that a necessary condition for educational planning or for purposeful explanation of change as a result of educational planning, is that one must think systemically as distinct from systematically.

Research from such investigations as carried out by Griffiths, (1963) Immegart, (1969) Miller, (1955) and systems analysts, (Optner 1965, Berrien 1964) have clearly demonstrated that change in one component will affect the functioning of others within systems, either mechanical or social. Thus awareness of these interactive effects and general systems concerns are at once legitimate and real for both the administrator and the teacher. It is a patent truism to assert that people tend to think in terms of systems, but in more logical terms, the rationale for the use of system theory as explanation can be found in an examination of its relevance over many areas. As Immegart (1969. P.165) states,

"Systems notions have proved of value as theoretical constructs, as vehicles for understanding organizational phenomena and as a classification or taxonomic framework". It should be clearly stated at this point that no all encompassing comprehensive and explicit model of systems theory exists. From Von Bertalanffy's conception of general systems theory, operations research, systems analysis movement, and the science of cybernetics, are drawn a number of closely related more or less vigorous, empirically verifiable theories, that in an eclectic sense can be used as bases for explanation.

It is important that a personal value stance should be exposed in order to legitimize what is actually an assumption central to the very core of this study. This is, that in seeing social systems established by man as being representative of one of the higher forms of human achievement, and given also that the social system is a necessary condition for the maintenance of civilization, then the tasks faced by organizations can be viewed sympathetically thus enabling a measure of identification with organizations to be exhibited.

It would also be advantageous to outline the manner in which social systems are perceived. Buckley (1967) distinguishes between the principal features characterizing mechanical, organic and socio-cultural systems and indicates quite clearly the inadequacies of mechanical and organic models to the analysis of socio-cultural systems. For example the movement towards an equilibrium state by mechanical models or towards homeostasis by organismic systems, is compared to the characteristic morphogenic properties of the

phylogenetic, higher psychological and socio-cultural systems by Buckley. At this latter level rather than minimize organizational movement to attain an equilibrium state or to preserve a given fixed structure, they,

....."typically create, elaborate or change structure as a pre-requisite to remaining viable as ongoing systems". (Buckley 1967, P.5).

Thus it is important to remember that a distinguishing feature of man as a social animal, is the sophistication and intricacy of the social systems that are developed in the collaborating, co-operating, compromising and colliding processes that eventuate, as survival and a continued improvement in the quality of life are pursued.

It should be fairly obvious from the value stances already taken, albeit implicitly, that society is seen as being a complex, adaptive system of social and psychological events, interrelated within a communications web, involving continuous decision making under conditions of uncertainty. It is a major assumption then, that complex adaptive systems have distinct characteristics in terms of morphogenic properties and can be examined through investigation of cybernetic principles of control, communications and information processing, positive and negative feedback, self awareness, goal seeking behaviour and so on. Given this, a distinction should be made between a system as a continuous interrelated assembly of parts undergoing boundary maintenance, and the structure or organization that its components may assume at any particular time. Whilst this study is directed in an organizational sense to the structure that characterizes a particular system of education, the central concern is with the fluid nature of the structure elaborating process which can be seen to operate within this complex, adaptive, system of social and psychological events.

Having thus made some introductory comments concerning what are to be seen to be the primary, distinguishing and important characteristics of social systems in relation to an organizational structure such as an education system, further exposition of assumptions and propositions concerning this study should be revealed.

First, is the proposition that in endeavouring to understand human behaviour, one must realize that everyone constructs one's own reality. Every interpretation that a person undertakes is idiosyncratic and thus reality is relative. One has one's own sense perceptions and from these, interprets according to one's prior socialization. Developing from this proposition is the position that one's perception of reality is personally important and that any interpretation attempted, will be influenced accordingly. An assumption basic to this stance then, is that whatever orientation one takes, one has to adopt a conceptual system. Additionally, the adoption of a conceptual system is a question of salience. Returning full circle to the original proposition, whatever one sees as the terms of reference for explanation, are the result of one's prior socialization, the kind of contacts that have been experienced in the past.

It is also appropriate to acknowledge another assumption central to this study. It is assumed that behavioural functions pertaining to particular organizational situations can be regarded as coherent, ordered and rational systems. These systems consist basically of a conceptual posture, the resultant concepts, with procedures for relating these concepts, and the generated propositions.

Thus as soon as one takes any kind of action one is committed to a value position. The most popular applications of systems analysis and research deal with finite models where all elements are specified. There are built in defects in social systems however as stated previously, and one has to offer the alternative with the least number of defects. In other words, while it is possible to subject a social system to analysis so that prediction about certain things such as planned change or innovation effects can be made, at each stage a number of alternatives are offered and the choice of the best possible alternative is the governing action principle. Furthermore, judgement is required to make such decisions. Criteria have to be stated against which judgements can be made. Evaluation under these terms then presupposes a position of values in respect of determination of organizational goals.

Given these propositions which reveals one's personal position, it must be clear that this study is more interested in processes rather

than end effect or consequences - i.e. more concerned with system effect. The education system in Papua New Guinea will be defined fundamentally in terms of system survival. Insofar as individuals within the system are concerned, interest at this level will be confined to a study of the principal change agents and the action of these individuals as seen to explain and define system effect.

The fact that the complete system has changed and not a small part of it upon which one could focus,leads to a complexity of possible strategies. If one has a huge array of alternatives to examine and analyse, then for sanity's sake, it is far better to don perceptual blinkers and probe one or two specific areas of interest. The complexity of educational innovation is apparent in the fact that it must be studied at various levels: at the community level, at the institutional level, at the level of the individuals being changed or changing others, and in the wider environment which permits acceptability of some innovations and resistance where conflict with existing values occurs. The problem of change has to be defined in simpler terms to provide parameters within a specific setting to enable significant or meaningful explanation. As well as redefining the change process in simpler terms it is also convenient to identify change strategies through a system of categorization, as this allows identification of the type of explanation that is being undertaken. For example one could identify change strategies in the manner of Adams (1972) using a pro-active - reactive compatibility typology. Alternatively one could use the Chin and Berne (1969) categorization of the empirical - rational, normative - re-educative and power - coercive approaches to change strategy

It is the intention of this study to initially review relevant research into change and innovation and to examine the characteristics and strategies employed by change agents. The methodological base upon which this study rests will then be developed and the parameters of the study outlined. Generated hypotheses will then be evaluated using collected data.