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ABSTRACT

The workings of schools have not received the attention due them in the study of educational administration. We need to generate new "images" or models of school organization that are more congruent with reality. These models need to be refined through expression and discussion and selected and changed through scientific methodology. Although this idea is nothing new, it has been given little attention. In the past, instead of generating theories by observing schools, we have borrowed inappropriate models from administrative science and organizational theory. Popular models of school organization like Weber's ideal bureaucracy are of questionable validity. We need to formulate new models by focusing on how schools are different from other organizations. They are human service organizations that do not have to attract clients, must deal with children, and have members that are unusually autonomous, among other differences. Several recent theories of school organization are worthy of consideration. The "garbage can" theory or organized anarchy theory holds that because schools have unclear goals, changing membership, and indeterminate technology, unpredictable activity and anarchy are the characteristic state of affairs. The theory of flexible systems holds that schools are made up of many elements that couple and uncouple. (Author/JM)

Schools: Bureaucracies, Flexible Systems, Anarchies or What? A consideration of alternate image production in Educational Administration

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Barr Greenfield's (1974) address to the Third Intervisitation Program in Bristol, the text of which was subsequently circulated to all CASEA members, has generated a not inconsiderable amount of debate, both on this continent and elsewhere (Crane and Walker, 1976, Griffiths, 1977). In essence, Greenfield advanced a preliminary argument for the adoption of an alternate paradigm in the study of educational administration. While I do not subscribe to the Doctrine of the Single Paradigm (Merton, 1975:43-5), seeing no reason why Social Systems theory and Symbolic Interactionism cannot co-exist within the same field of inquiry, I cannot but applaud Greenfield's (1974:2) initial rationale that it is time "... to examine the theory and assumptions which underlie the field of study." The objective of the present paper is to consider the theory and assumptions that have undergirded one part of the field of study and to outline in a small way some of the alternatives of approach in the future. The area of study is the school and the alternatives to be considered all cluster around ways of understanding the school as a whole, or, to use first paradigm language, as a system.

It is unnecessary to belabour the fact that schools are important in the study of educational administration. They generate the need for administrative structures and actions, both within themselves and at higher levels, and their outputs feed our third level educational establishments. That they have not received the attention that is their due is a more difficult proposition. Nevertheless, much of our attention has focussed on the workings of higher level systems such as those at the regional and provincial levels, with schools being considered somewhat *en passant* as either backdrops for administrator behavior or as black

boxes in the environment of higher level structures. Our school level knowledge tends to deal either with facets of the whole, such as the respectable body of knowledge dealing with school climate, or to be grounded in theory which may be inappropriate, such as the bureaucracy studies (Griffiths, 1977:3).

Before dealing directly with these concerns, however, it is useful to consider the nature of theory and knowledge. This is perenially a contentious topic, but nevertheless one from which there is no easy escape.

Knowledge in Educational Administration

I take it as axiomatic that our main goal is to produce and disseminate valid knowledge to make possible the better administration of educational establishments. What constitutes valid knowledge is, of course, the problem. For at least two decades we have followed the direction established by the founding fathers (Griffiths, 1959; Halpin, 1959) and have sought to produce "theory". In the process we have perhaps spent too much energy in trying to reach consensus as to what this may or may not be (Crane and Walker, 1976; Griffiths, 1977). Whatever paradigms may rule in the future, theory will still be important, but perhaps we will be prepared to take a less definitive approach to understanding the term. One such approach is presented by Kenneth Boulding (1966) and what follows relies heavily upon his ideas.

Boulding (1966:7-23) maintains that there is only one basic method of knowledge production, but three types of knowledge: folk, literary and scientific. Folk knowledge is that generated through everyday interaction with our environment. It is the type of knowledge we use to go to the post office or to participate in a cocktail party. Literary

knowledge is that recorded in writing and scientific knowledge is that acquired as a result of careful and refined observation and measurement. In each case the "knowledge" consists of images of reality that exist either in the mind of the knower, or as communicated in some form. Each kind of knowledge may be either valid or invalid. Valid knowledge or "truth" is represented by images that are sufficiently congruent with reality to ensure successful action now and to provide for reasonably accurate predictions of future states. Congruity is established by testing images against present reality or by establishing the accuracy of predicted future realities. If an image does not prove to be valid as a result of this testing, then the image is either replaced or mutated to weed out the error.

In the case of folk knowledge, the images are commonly adjusted as a result of everyday living. Thus, if we use an invalid image to find our way to the post office, then this is rapidly corrected, usually by asking our way of passers by. Literary knowledge is subject to less rapid corrective feedback, and may suffer from a defect in that the authority of the recorded word may often be great, allowing error to remain uncorrected. If we use a map or guide book to find our way to the post office and discover that the presented image is invalid, we may abandon the map and resort to available folk knowledge or folk validation techniques to find our way, but the map will remain to mislead others.

Scientific knowledge also relies on the creation and testing of images. The selection-mutation of images is achieved by a more sophistfcated process understood as the 'scientific method', that is, the testing of hypotheses be careful and refined observational measurement.

To ensure that hypotheses may be both generated and tested, the image cannot remain in an inchoate or non-communicable form, but must be expressed as an operational model from which statements and predictions may be derived by logical and mathematical inference. The testing of these statements demands refined observation and measurement of such a calibre that our normal perceptual mechanisms are frequently inappropriate, so that we need to develop specialized instrumentation. New images frequently demand new instrumentation, such as the telescope to test the Copernican image of the universe, and the OCDQ to test the Halpin and Croft (1963) image of school climate.

The important idea here is the image and whether or not this is congruent with reality. This image may be termed a model or a theory, it does not much matter, providing it is expressed in clear terms and allows for inference to, and prediction of, actual phenomena. Furthermore, a scientific image ideally represents an entire logical class of things such as atomic nuclei, free enterprise economies or schools. In addition, folk knowledge, by virtue of its genesis in individual experience, can only represent systems in the environment in which it was gained, while scientific knowledge has the capacity of being valid for all systems of the same type and for dealing with vastly more complex systems than can be known through individual experience. A valid image of the location of the post office in my town is useless elsewhere, but, a valid scientific image (theory if you prefer) of the location of post offices in Canadian settlements can be of use when I visit other locations.

This is the *raison d'etre* for the theory movement in educational administration. By generating and disseminating valid

scientific images of educational establishments and appropriate administrator behavior, we can prepare people to behave in systems and positions which go beyond their personal experience. The existence of more than one type of knowledge also provides the root of the theory/practice controversy. The practice argument tends to rest on the usefulness of folk knowledge, that is valid knowledge gained through personal experience; the theory argument on the usefulness of scientific knowledge, that is valid images generated under the impact of refined expression, observation and testing. Confusion arises from the fact that both types can be valid and useful.

What does all this mean for our concern with schools? There are several obvious points, the stating of which may seem over pedantic.

1. We need to generate images of schools which appear congruent with their reality.
2. These images then need to be refined and operationalized through expression and discussion.
3. The resulting scientific images then need to be tested, selected and probably mutated through an application of scientific methodology.

Despite the obviousness of these conclusions, there appears little evidence that we have given them our serious attention. Rather than generating images of schools, we have tended to plunder the literary knowledge of administrative science and organizational theory, acquiring pre-packaged images originally developed to represent non-school phenomena.

There would appear to be little wrong with this if the literature and the images on which we base our conceptions of schools and their administration clearly apply. We have made the major assumption that they do. This assumption rests on the somewhat commonplace statement that schools are organizations. Thus defined, schools are seen as members of a major category of social phenomena that subsumes factories, armies, hospitals, insurance agencies and government ministries, to name but a few. If the process of administration is essentially the same in all of these social systems, then it may follow that images of them and the knowledge derived from the testing of these images, apply to consideration of schools and their administration. Thus, the pursuit of a general theory of administration prospers and the use of Caplow's (1976) recent text "How to Run Any Organization" is sanctioned in the training of school principals. Why then bother to distinguish our discipline as *educational* administration? Why not throw in our lot with the business schools and other vendors of managerial know-how and let us all practice and preach the doctrine of general administration? The answer frequently given is that educational organizations are different from business organizations. This too is a commonplace, but have we seriously considered just how and in what ways educational establishments in general, and schools in particular, are different? Have we spent time generating and testing images of schools as schools. A few examples suggest that we have not.

Recent Images of Schools

Carver and Sergiovanni's (1969) reader, *Organizations and Human Behavior: Focus on Schools* is one of the few educational administration texts that purports to deal specifically with schools. It has four parts, one dealing, as we might anticipate, with the nature and use of theory, two dealing with human behavior and one with the nature of organizations. In this last section, only one of the nine articles deals specifically with educational establishments, and this outlines the impediments to innovation that may be expected in any Weberian bureaucracy. The balance of the articles deal with various images of organizations or organizational properties, all taken from the literature of organizational theory with only passing attention being given to schools.

This example provides a reasonable vignette of the way we have tended to generate an understanding of schools. Our images, be they complete or partial, have been borrowed wholesale from non-school settings. The bureaucracy saga is particularly illustrative in this respect for the general line of reasoning in educational administration is that schools are organizations, and, if a more precise operational image is required, then they are Weberian or neo-Weberian bureaucracies. Indeed, Hoyle (1976:5) has remarked that much of the organizational theory used in educational administration is "little more than a footnote to Weber."

Weber's (1947) image of an ideal-type bureaucracy is characterized by at least twenty-five different features from salaried employees through fixed spheres of competence to the genotypical faeture of administration based on files. Perhaps the single most characteristic

feature is the legal-rational authority base. However, most researchers who have tested the validity of this image for schools have used an abbreviated set of characteristics, commonly including hierarchy of authority, procedural specifications, behavioral rules and the existence of professional qualifications for employment. Thus most research into schools as Weberian bureaucracies is really an attempt to validate Hall's (1963) and MacKay's (1969) image of Weber's original conception. Furthermore, the bulk of this research has concentrated on the perceptions of teachers and principals, largely ignoring the lower order participants, who are certainly important members, and who, incidentally, can easily be accommodated in Weber's original statement (Albrow, 1970). The major outcome of this investigation into "schools" has been a two factor image of the administrative sub-system of high schools, although these factors have been labelled in various ways by various researchers. Thus Kolesar (1967), following MacKay (1964) and Robinson (1966) identified an Authority dimension composed of hierarchy of authority, rules for incumbents, procedural specifications and impersonality sub-scales of the *School Organization Inventory* and an Expertise dimension composed of the technical competence and specialization sub-scales. Similar dimensions were identified by Punch (1969:54) and Isherwood and Hoy (1972:49), although different names were coined. Nonetheless the validity of a two factor image of high school administrative structures can still be questioned as some of the data analyses mentioned hint that the "Authority" dimension may be composed of two discrete factors, thus suggesting a three factor solution. Furthermore, it has been suggested that the very concept of school structure may be invalid (Robbins and Miller, 1969). These

concerns, plus the nature of the model as a mutation from the original image, require further validation and even if then found to be reasonably accurate, this will still be a very partial image of schools.

If we follow Perrow (1972) then the "state of the art" image in organizational theory at present is the neo-Weberian bureaucracy. This is a much more complex proposition than Weber's original formulation. In capsule form, the neo-Weberian image accommodates informal and non-formal aspects of human association, recognizes the importance of environmental aspects, acknowledges that different tasks require different routines (or non-routines) and that therefore organizational structure will differ with the task technology used in each organization, and the environment in which it is embedded. Weber's ideal type is seen as ideal only when tasks are programmed and routine, recognition being given to man's tendency to satisfice in the face of environmental turbulence.

This complexity results from an attempt to integrate many eclectic images of organization into a coherent whole. It is somewhat akin to Griffith's (1977:1-2) description of the accepted paradigm in our discipline, that is, "the Getzels-Guba social systems model, role theory, decision theory, bureaucrac and systems theory." The neo-Weberian image accommodates all of this and more. For anyone socialized into the core literature of organizational theory, then the neo-Weberiam image would be that most likely used to describe and analyse organization including schools. At present there would appear to be no comprehensive attempt to validate the accuracy of this image as it applies to schools. Nevertheless, several comments are possible:

1. This image was generated and refined mainly as a result of

considerations of non-school systems. Thus it may be expected to yield valid knowledge only about those systems from which it was developed, such as business, political and military establishments.

2. The neo-Weberian image lays not inconsiderable stress on how organizations do what they do, that is, their technology. Presently, we know very little about school technology, having tended to leave the problems of learning, teaching and socializing to the psychologists and sociologists. If the neo-Weberian image is to be tested for its congruency to schools, then we will need to rectify this, and in doing so we may find alternative images of schools more useful.

3. Finally, the neo-Weberian image contains much that is applicable to social systems in general. The dividing line between organizations and other types of social systems such as primary groups and communities is less than clear. Thus, in considering the nature of schools, we should not assume that the neo-Weberian image has any more potential validity than do other alternate images.

Where then, does this lead us? It would appear that the "obvious" objectives in the generation of valid knowledge about schools stated above still require much attention.

Strategies for the Future

Erikson's (1975) recent paper suggests that we will be paying increased attention to schools in the future, and that and appropriate line of attack will be to consider schools "in the light of reasonably sophisticated organizational theory." Given the comments in the first section of this paper, then I would suggest that we have two major alternatives. Either we may continue to rely heavily upon constructs,

models and theories, that is images, developed in the literature of organizational theory and run the risk of these being incongruent with the reality of schools, or we may focus our attention more clearly on schools themselves. The first of these alternatives would adhere to the "multidisciplinary" approach in educational administration which has been so characteristic in the past, and would be in the tradition of contributing to a general science of administration (Hoyle, 1969:37). The other alternative, which appears preferable, would constitute a major change in strategy and would be in conformance with the predicted paradigm shift in our discipline (Greenfield, 1974; Griffiths, 1977). The remainder of this paper sketches how such a change may develop.

A first step is to recognise the way in which schools are different from other organizations. There are perhaps two alternatives of emphasis here: either we identify schools as discrete objects particularly different from all other social systems, and determine to study schools as schools, or, we recognise that schools are members of a particular set of organizations which as a class are different from those types of organizations commonly studied in organizational theory. This second option could begin from the recent work of Hasenfeld and English (1974) who have recognized a set of establishments dubbed Human Service Organizations. Characteristics of these are that their goals are problematical and ambiguous, their technology indeterminany, they tend to rely on professional staff, they tend to lack useful measures of effectiveness and that they are people processing systems and thus staff client relations form their key activity (Hasenfeld and English, 1974:8-21). As members of this set, schools acquire some seemingly strange bed fellows

such as prisons and mental hospitals. Nevertheless, the characteristics as listed sketch an albeit fuzzy image which appears reasonably congruent with schools.

Some addition characteristics of schools that may be recognized as important and which tend to support the first option are as follows:

1. The domesticity of the school. This is a concept advanced by Carlson (1964) who pointed out that public schools do not, for the most part, have to attract clients. The students are compelled to attend, and, furthermore, once inside the schools, students have little control over their participation, activities being largely predetermined by others. While this characteristic is not unique, being shared by other human service organizations, it would appear to set schools apart from many other types of social system by mandating complete dependency upon demographic and geographic forces, as we have recently become acutely aware. Thus schools may not easily create new markets or locate where they will, rather they are prey to widespread and relatively unpredictable forces in the social environment.

2. The particular nature of the client. Schools are required to deal with children, that is, unenfranchised special status but assumedly 'normal' people and are thus constrained in what they may do and how they may do it. The only other widespread social system in which children may form the centre of attention is the family, thus perhaps profitable insights may be gained from considering social systems that are not generally subsumed under the classification of organizations. Furthermore, there are far more students than other role occupiers in

schools, which is an obvious but perhaps very important characteristic.

3. The importnace of autonomy rather than authority. Sometime past, Katz (1964) advanced a powerful argument to the effect that schools are characterized more by teacher and student autonomy than by administrator or teacher authority. That is to say that much of the activity of schools is not directed and controlled by internal or external authority structures, but is rather characterized by independence from such structures, as is represented by the great deal of freedom accorded classroom teachers, and, in some schools, students themselves.

4. The "deconcentrated" pattern of organizations. This term was coined by Dror (1973) in her description of education systems, and stresses the importance of school classes as the vitally important productive sub-systems of schools. In all schools the productive activity takes place within simple and small social systems that have a limited life span and limited and unique membership. These systems may be more akin to primary groups than organizations, and are essentially temporary systems (Miles, 1964).

5. The general lack of performance related feedback. Also remarked upon by Dror (1973:15) this is a characteristic that stems from the intangibility of school goals, and the long time serial production process which in most schools ensures that final outputs are not realized for a considerable number of years. The effects of any changes in the processing of students will likely take a considerable time to become manifest.

6. The intensely political nature of schooling. How students are taught and what they learn is of interest and importance to many people

and systems. Parents want their children treated in a particular fashion, interest groups want particular knowledge disseminated or expunged, and the political and economic systems of the future require the inculcation of certain behaviors and knowledge. Thus as Waller (1932) observed, schools are in a constant state of perilous equilibrium, being constantly threatened and manipulated by interested external parties.

These six characteristics are likely only a sample of the particularly distinctive characteristics of schools. Each by itself may not signify difference, but taken together, they may well define a unique type of social system and they certainly indicate aspects of reality to be accommodated by any reasonably congruent image of schools that we may develop in the future. However, the main point here is that in studying schools we must take pains to be aware of how they differ from and correspond to other social objects available for study, such as organizations and non-organizations, bureaucracies and non-bureaucracies, human service and non-human service organizations. In doing this we may have to reject Halpin's (1958) arguments against the development of taxonomies in educational administration. For, before we can ever begin to develop adequate images of objects of importance it would seem vitally necessary to identify and separate each type of object from other similar but different objects. Thus we should not assume that school boards, ministries of education and schools are all members of the same logical class of objects and thus amenable to comprehension, analysis and explanation via the same image. Similarly, we should not assume that high schools, elementary schools and administrative sub-systems occupy the same cell in any typology we may develop.

Having defined the targets of our attention, which is the first step, then the next stage would appear to be the development of abstract conceptualizations, that is, images of these objects. In doing this the object should surely be to generate as many seemingly suitable images as possible. The question is how. Several approaches seem possible.

1. We may tap extant literary knowledge. There is much more to the literature of organization theory than Weberian and neo-Weberian bureaucracy. Some seeming useful images are Goffman's (1961) concept of the total institution, Selznick's (Perrow, 1972:177-202) more flexible "institutional" notions and the Tavistock socio-technical model (Burns and Stalker, 1961). These images, either by themselves or melded together with other views, could well prove fruitful. Furthermore, there are the writings of other social commentators, some current and some historical, that may be of value, such as Michells (1959) and Spencer (1897). There is no reason why we should restrict ourselves to sociological or organizational literature in doing this. Images in dramatic or narrative writings may furnish kernels for future development. Dickens, for example, has much to say about schools and schooling.

2. We may tap existing folk knowledge. This would appear to be part of the phenomenological alternative and would revolve around the explication of images already developed in the minds of those that spend time in, or dealing with, schools. Individual principals, teachers, students and parents have developed conceptions of their schools and we could well invest time and energy in extracting, refining and reporting these images, seeking both commonalities between them and congruence with other images developed in other ways.

3. We may study schools directly and scrutinize descriptive school data available in order to develop images which accommodate the reality we perceive. Reanalysis of extant data and findings from the bureaucracy studies is one option here with the possibility of forcing informative mutations of existing images. The gathering and analysis of general data is another option as is the serious consideration of some recently generated images that have been offered by Cohen, March and Olsen (1972) and Weick (1976). Both of these images have been reviewed by Griffiths (1977), but both their form and the method of their development are illustrative and worthy of consideration here.

Organized Anarchy

The Cohen, March and Olsen (1972) image is variously known as the Garbage Can Theory or the Organized Anarchy Model. It was generated in order to accommodate general observational data dealing with the operation of, and decision-making in, eleven universities. It suggests that because of the generally unclear goals, changing membership and indeterminate technology of these establishments (that is, their human service characteristics), they are forced to function through essentially non-rational coping strategies. Thus non-rational, unpredictable activity tends to be characteristic and anarchy rather than stable authority is the 'natural' state of affairs. Some implications of such as image for school administrators have been recently expounded by Miklos (1978). We may be content here to note the remarkable congruency of this image with that of Waller's (1932) "perilous equilibrium" conception and the manner in which the image easily accommodates several of the characteristics of schools outlined previously.

Flexible Systems

Weick's (1976) notion of educational organizations as loosely coupled systems is a fine example of original image production to accommodate perceived reality. The original article (1976:1) begins with an extended metaphor likening a school to an unconventional soccer game with many players all with differing conceptions of the rules, but who, nonetheless, manage some cooperative action and maintain some form of shared identity. After remarking on how the traditional bureaucratic image of schools fails to accommodate the differing realities suggested, Weick proposes the image of schools as systems with many elements that couple, decouple and exist together and apart over different time spans, for differing purposes, and in response to various forces. Altogether, he offers at least fifteen connotations of "loose coupling", many of which make a great deal of intuitive sense and offer new and exciting images of schools and school processes. The paper is essentially concerned with image development (Weick uses the term 'image' frequently) and draws from each of the three alternative and complimentary approaches suggested here. For example, Weick draws from extant literary images including the writings of Steinbeck (1941), from records of essentially folk images (Mitroff and Kilmann, 1974) and from descriptive observation of schools themselves. The resulting impression stresses the flexibility and adaptability that we may assume is necessary to accommodate the forces generated by the characteristics listed above.

The image of schools as loosely coupled flexible systems will likely find much use in the future for its strength lies not merely in its rich and evocative portrayal of schools, but also in its genesis

for it is one of the very few images of schools generated from a consideration of schools. Despite this aptness we should not be content to rest our future efforts on one single image, regardless of its seductiveness. We should bend some portion of our energies to developing more alternate conceptions. There are certainly many more images awaiting discovery and articulation. For example, the agricultural metaphor shows great potential for the long and careful process of nurturing crops seems to have much in common with nurturing the minds and bodies of the young. Furthermore, a recognition that schools and families may have much in common, Dreeben (1968:3) notwithstanding, may open the gates for serious consideration of biological analogs from the emergent field of socio-biology (Box, 1973).

Perhaps the alternate case will prevail, however, and as soon as we begin building new and potentially more congruent images of schools by studying schools, then we will find the field so rich that we will concentrate on image building rather than image testing. It must be stressed, therefore, that the development of new and rich images of schools, while essential, is only a precursor to the production of valid scientific knowledge about schools. The images must be operationalized through, if you prefer, the development of 'theory', then tested against the reality they purport to represent through careful formulation of hypotheses and subsequent testing of these. In the paradigms of the future, the methodological alternatives will likely be many and will include both the new and the old, for new scientific images frequently require new instrumentation and new methodologies for their testing, the development and application of which are sure to yield their crop of

surprises, for, to quote Boulding (1966:21) for the last time, "... it is only by unexpectedness that knowledge increases," and future knowledge, is, by definition, unpredictable.

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