DOCUMENT RESUME

ED 192 444 EA 012 922

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TITLE Notes on the Comparative Study of Educational Innovation.
INSTITUTION Stanford Univ., Calif. Inst. for Research on Educational Finance and Governance.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
REPORT NO IFG-PR-79-A12
PUB DATE Dec 79
GRANT OB-NIE-G-78-0212
NOTE 72p.: Paper presented at the International Workshop on the Comparative Study of Innovations in the Public Sector (West Berlin, German Federal Republic, December 14-18, 1979). Portions of Part 3 presented at the Annual Meeting of the American Educational Research Association (Boston, MA, April 7-11, 1980).

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Adoption (Ideas); Classification; *Comparative Analysis; *Comparative Education; Curriculum Development; *Educational Change; *Educational Innovation; Educational Policy; Elementary Secondary Education; *Government School Relationship; Organization; Research Methodology; Research Problems

ABSTRACT

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IFG

Institute for Research on Educational Finance and Governance

SCHOOL OF EDUCATION STANFORD UNIVERSITY

Project Report No. 79-A12

NOTES ON THE COMPARATIVE STUDY OF EDUCATIONAL INNOVATION

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December 1979

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The research for this report was supported by funds from the National Institute of Education (Grant No. OB NIE G 78 0212). The analyses and conclusions do not necessarily reflect the views or polities of this organization.

Paper prepared for the International Workshop on the Comparative Study of Innovations in the Public Sector, held at the International Institute for Comparative Social Research, Wissenschaftszentrum Berlin, West Berlin, December 14-18, 1979. To be revised for publication as a chapter in Richard L. Merritt (ed.), Handbook for the Comparative Study of Innovation.

INSTITUTE FOR RESEARCH ON
EDUCATIONAL FINANCE AND GOVERNANCE

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NOTES ON THE COMPARATIVE STUDY OF EDUCATIONAL INNOVATION

Abstract

The paper provides a critical review of the state of the comparative study of educational innovation and reform and proceeds to identify a number of theoretical issues and challenges on which further comparative work is likely to shed additional light. The review portion of the paper deals with the heuristic, political, and theoretical utility of existing comparative work on educational innovation, and singles out a number of typologies and generalizations from the literature as particularly significant findings. The second major part of the paper then develops a theoretical agenda which is organized around the issues of knowledge utilization (with special reference to experimental paradigms of reform), the legitimacy of innovation decisions, and the relationship between innovation and conflict.

C O N T E N T S

1. The comparative study of educational innovation: Some preliminary reflections

1.1 A few words on boundaries and emphases

At least for the field of education, the study of innovation seems to have reached a point of saturation. In the United States as elsewhere, the number of books, articles, bibliographies on one aspect or other of "innovation in education" is legion; a major North American publisher in the field of education has let it be known some time ago that book manuscripts with the word "innovation" in their title will no longer even be considered for publication. In education as in other areas, "innovation has emerged over the last decade as possibly the most fashionable of social science areas" (Downs and Mohr 1976, 700). The intellectual market, it seems, has had its share of the product, and has begun to recover from the onslaught in order to sort the fad from the fertile, the superficial from the profound.

This tidal wave of scholarly attention to the phenomenon of "educational innovation" reflects, of course, an equally consuming preoccupation with innovative policies or reforms on the part of decision-makers and policy-makers in education in most of the industrialized countries of Western Europe and North America over the last two decades or so. To some extent, this preoccupation stemmed from a genuine assessment of major weaknesses and deficiencies in existing educational systems; in no small measure, however, many of the educational "innovations" which have, for example, pervaded the educational system of the United States were probably as faddish and extraneously motivated as many a study of innovation. The attractive political

symbolism of "reform" and "innovation" (Naschold 1974, 21-22) has lead countries like the Federal Republic of Germany and the United States to making substantial amounts of resources available for innovative programs in education -- with the result that, not surprisingly, any number of necessary or unnecessary educational activities found themselves suddenly labelled as "innovations", regardless of whether or not they represented anything like a genuine departure from what was going on before. An instructive and impressive document on both the range and the size of this phenomenon is a recent "inventory" of educational innovations in the public schools of New York City alone (Rogers 1977), ranging all the way from entire alternative schools to a multi-sensory approach to bi-lingual pre-algebra for Spanish-speaking children and the "Archdiocese Drug Abuse Prevention Program".

Not surprisingly, a phenomenon of this nature, size and complexity presents a rather murky picture when it comes to defining what, precisely, it is all about. Deliberately or by default, "innovation" in education (as in other areas as well) tends to mean a good many different things to a good many different people and groups, and what is significantly innovative for some is a reinforcement of the status quo for others or a minor technical or procedural adjustment for yet another group. As a result, most of the "definitions" in the innovation literature are conspicuously vague, ranging from "the adoption of means or ends that are new to the adopting unit" (Downs and Mohr 1976, 701) to "any change which represents something new to the people being changed.....usually...a change which benefits the people who are changed" (Havelock 1973, 4).

I have no intention to engage in a continuation of this kind of

definitional exercises; given the complexity of the phenomena to be discussed, they are rather moot anyway. What I do need to state, however, is a rough boundary line between what I intend to discuss in this paper and what I do not intend to discuss. In drawing this line, I am guided by both an admittedly subjective notion of what is and what is not a significant instance of educational innovation and by a particular interest in innovations that are accompanied by a greater or lesser amount of political controversy. "Insignificant" innovations and those which are based on widespread consensus provide little leverage for a better understanding of the political dynamics of education in either a comparative or an intra-national sense, and since it is the understanding of these political dynamics which the paper is primarily interested in exploring, these kinds of innovations will not be given a great deal of attention in the following pages.

More concretely, and following to some extent the distinction (though not the terminology) used by the late Saul Robinsohn in his comparative project (1970, VIII), this discussion will be less concerned with single, highly specific and mostly localized measures and processes which are largely designed to make existing educational programs work better without affecting to any significant extent these programs' substantive and/or ideological orientations or their relationship to the realities of economic wealth, social structure, and political power. Instead, what this paper is interested in exploring lies more along the lines of what Robinsohn and others call "reform", i.e., a more encompassing set of policies which are (a) likely to affect an educational system as a whole or important parts of it in rather profound ways, and (b) designed to both reflect and advance

relatively clear and politically salient ideas about the future shape of a given society and of the role of education therein. It is this broader notion of the political economy of "reform" in education (rather than the more technical and procedural notion of educational "innovation") which has become the focus of a rather interesting theoretical debate, involving such varied positions as those of Dahrendorf (e.g., 1976), Becker (1971; 1976; etc.), von Hentig (1970), Galtung (1979), Husen (1974), Bourdieu and Passeron (1977), Offe (1975), House (1974), Lenhardt (1977), Katz (1975), Carnoy and Levin (1976), and many others.

Obviously, the line between "innovations" and "reform" in this sense is hard to draw with any precision, and there are likely to be borderline cases which may fall on one side or the other of the distinction. Specific measures to facilitate the education of handicapped children would probably be "innovations" in terms of our distinction, whereas massive and comprehensive legislative and budgetary measures such as the recent action of the US Congress in support of special education would have to be considered and analyzed as a major educational reform. Similarly, policies aiming at re-structuring post-elementary education ("comprehensivization") in countries such as West Germany, Great Britain, or Sweden, at providing bi-lingual/bi-cultural schooling in California, at changing the extractive and allocative-distributive patterns of educational financing in the US and several of its states, or at some rather basic changes in the curriculum of schools would be examples of the kinds of educational "reforms" with the analysis of which this paper will primarily deal. This limitation will, by and large, exclude a good deal of what has come to be known as

"organizational change" or "planned change" in educational institutions in the tradition of the Gross et al. (1971) study, even though this field has produced not only some interesting studies (on the results of some of which we will draw), but also a massive prescriptive literature of the "how to innovate" kind and of widely varying quality (Havelock 1973; Zaltman et al. 1977; Owens and Steinhoff 1976; to name but a few of the more recent ones).

Against this background of the distinction between "innovations" and "reform" in education, I will deal in this paper primarily with what I have described as educational reform, i.e., the initiation, modification, implementation and non-implementation of policies directed at major and lasting changes in the educational system and designed to change the "social product" of the educational process along the lines of ideological and political priorities of certain groups in a society. With this understanding in mind, I will henceforth use the terms - "innovation" and "reform" in this paper interchangeably.

1.2 The comparative study of educational innovations

The overwhelming majority of writings on educational innovation are products of or addressed to the realities of one particular educational and political system, even though they may -- rightly or wrongly -- claim a level of generality that would carry the significance of their findings beyond the particular context in which they were obtained. In contrast, the effort to move the study of the politics of educational innovation beyond a given national context to a more or less genuinely comparative or cross-national dimension is as yet rather scarce, probably reflecting quite accurately the general state of affairs in the

comparative analysis of social interventions in other areas such as health, urban renewal, etc. (for some notable exceptions in the comparative analysis of public policies, see Heidenheimer et al. 1975; Heclo 1974; Liske et al. 1975; Ashford 1978). To be sure, a number of international organizations have been quick in responding to the surge of attention to problems of educational innovation, and have launched or supported more or less ambitious research programs dealing with educational innovation in an international or rather multi-national context. The work of the International Bureau of Education (IBE) in Geneva, (e.g., Blanc and Egger 1978; Diez Hochleitner et al. 1978), of the Organization for Economic Cooperation and Development (OECD) in Paris (e.g., OECD 1971), or of the International Institute for Educational Planning (IIEP) in Paris (e.g., Adams 1978) are examples of both the intensity of the effort and of the limitations of essentially juxtaposing case studies on individual countries. Even the better ones among these studies contribute rather little to an attempt to treat certain differences from one national or sub-national context to another as a possible source of variation in the way in which innovations are initiated, implemented, modified or prevented in these different settings.

Does more or less centralization in the educational policy-making process make any difference when it comes to innovation? Are different attitudes towards conflict among administrators or among the public at large related to different "styles" of pursuing and implementing new ideas in education? Does the collective history of a country's social policy efforts lead to discernible patterns of how it goes about moving its educational system closer to some form of equal educational opportunity

How does the distribution of economic power and the pattern of alliances between economic power and political influence affect the life-chances of certain kinds of educational innovations? It is questions like these upon which, with all due caution, comparative analyses of educational innovations in different countries should at least begin to shed some light. At this point, very few studies do, although some have provided the data base of which comparative questions can be more systematically asked. Among the category of more strictly comparative analyses, what we have so far are largely studies limited to a few cases, such as Heidenheimer's (1974) effort to explain different levels of difficulties in bringing about a certain kind of educational reform (comprehensive schooling) in two social-democratic political systems (Sweden and West Germany). In another, similar study, Peterson (1973) tries to explain different patterns of educational reform in England and the United States as a function of, among other things, the greater significance of class differences in Britain and of the different systems of educational governance in the two countries.

One of the more ambitious attempts to study educational reform and innovation from a comparative point of view was the project initiated and conceived by the late Saul Robinsohn (1970; 1975). While the project generated a number of rather thorough country case studies of educational reform (Federal Republic of Germany, German Democratic Republic, Soviet Union, England and Wales, France, Austria, and Sweden) within a common framework, the original plan of an explicit comparative analysis of this rich material from the point of view of the social and political contingencies of educational reform was ultimately dropped -- for reasons which themselves shed a great deal of light on the

difficulties of a truly comparative analysis in this complex area (Glowka 1975, XXI-XXIX).

Some of the more interesting theoretical and methodological ideas in the comparative study of educational reform have come out of the ongoing project on Educational Policymaking in Industrialized Countries (EPIC) at the University of Illinois (e.g., Merritt and Coombs 1977; Merritt 1978; Coombs and Merritt 1977), which has made a serious effort to live up to its own exacting standards for rigorous scientific analysis in comparative work.

A particularly ambitious approach in this area is the comparative analysis of aggregate national data which seeks to establish patterns of relationships between a number of general economic and political characteristics of a country and certain features of its educational system. The work of Meyer and his associates (e.g., 1977) provides a particularly interesting example, and this is likely to be true for the work presently being undertaken by Inkeles (forthcoming). In a strict methodological sense, studies of this kind satisfy more appropriately the tenets of comparative analysis in that they allow for a more systematic examination of the covariance between a limited set of characteristics of national systems. On the negative side, data of this kind share the disadvantage of all aggregate data in that they tend to conceal rather than reveal both variation within the unit of analysis and patterns of change over time. These drawbacks notwithstanding, this line of inquiry bears a good deal of promise, at least as a generator of propositions which can be further explored in sets of more carefully designed case studies which can take both the historical and the interactive dimension of innovation processes at the national and subnational level more fully into account.

One international study which, even though it was not directly addressed to questions of educational reform and innovation, has had a remarkable impact on both the scholarly and political debate on innovation in education, has been the "International Evaluation of Educational Achievement" (IEA) which was based on achievement measures of national samples of students in different subject areas and in subsets of a total of 21 countries (for summary reports on the project see Passow et al. 1976; Peaker 1975; Walker 1976; cf. also Husen 1979; Inkeles 1977). Since the study collected not only achievement data, but also a wide range of information (less encompassing in some countries than in others) on characteristics of the educational system, its results have become a major data source for testing, at both the national and the international level, a whole series of hypotheses about the relationship between certain characteristics of the educational system and outcomes of the learning process. Since the data can also, with some caution, be set into the context of more general aggregate characteristics of the countries studied, they provide an opportunity for further and more genuinely comparative research on some of the societal correlates of achievement patterns.

A rather different and, for the field of education, as yet rather scarce kind of comparative study has to do with the legal and constitutional context of educational policy in different countries. While constitutional norms and practices have at best partial explanatory value when it comes to understanding cross-national variations in educational policy processes and innovation, the comparison of some key jurisdictional provisions across different countries can prove to be quite instructive, as a recent comparative study of "the authority of

the state in education" in Australia, France, Great Britain, Canada, Austria, Switzerland and the USA shows (Bothe et al. 1976).

Finally, and in addition to the kinds of studies which we have just briefly reviewed and which are "comparative" in a more formal sense, there is a considerable amount of work which, in one form or another, transcends the framework of one national system. Probably the most frequent type is that of the single-country and sometimes single-issue study undertaken from the perspective of another country and with that country's policy agenda and interests in mind. Looking at educational innovation and reform in the US from the vantage point of the West German educational scene, Herz (1973) and Richter (1975), among others, have provided interesting analyses with the added strengths of the outsider's viewpoint, while people like Merritt (1978) and this author (1973) have had occasion to look in the opposite direction.

This limited, but instructive body of research, whether formally comparative in a strict methodological sense or not, has yielded a substantial amount of insight into the problems, conditions, and outcomes of educational reform efforts in different countries. The extent to which it has, however, contributed to a theoretical progression towards a better understanding of the political conditions and contingencies of educational innovation is a matter which Merritt and Coombs judge with some justified skepticism (1977, 250-254; see also Robinsohn 1970, IX). After all, it has been the anticipated increase in explanatory power which has been one of the weightier arguments in favor of a cross-national, comparative approach to the study of educational innovation: If we treat educational innovation -- so the argument goes -- as the dependent variable or explicandum in a design in which

countries (or relatively autonomous units within a country) are the units of analysis, we should be able to posit and examine a number of hypothesized relationships between certain characteristics of the countries under study and the nature, effectiveness, duration, etc. of the innovation we are interested in explaining. If this exercise were systematically enough structured and the variables discreetly enough defined, the expectation is that such a design would yield important insights into the conditions of educational innovation. Measured against this exacting standard of a scientific design, it is not surprising that Merritt and Coombs in their recent review find most of available writings in the comparative politics of educational innovation wanting, even though some appear to have progressed a little further than others on the road towards the ideal design (1977, ibid.).

While Merritt and Coombs predicate their notion of what comparative studies ought to look like on the need for progressive generalization and theory formation, Naschold argues, in fact, for a similar type of study, but for the obverse reason, namely, in order to protect the advocate of educational reforms from overly hasty generalizations (1974, 109). But for him as well as for Merritt and Coombs, the key task is to identify "the empirical range of variation in educational systems as a function of specific conditioning factors" (1974, ibid.), and it is in this sense that, some few examples to the contrary notwithstanding (see above), the comparative study of educational innovation is still very much in its infancy.

To catalogue and deplore the deficiencies and shortcomings of existing comparative and international research in educational innovation is, however, not enough. If it is true that the present work in

the field is largely of the case study kind, that it is descriptive rather than analytical, and that it does not systematically formulate and test hypotheses about the conditions of the success and failure of educational reform (Merritt and Coombs 1977, 251), then we probably face less a problem of lacking methodological consciousness and sophistication and more a problem of lacking significant issues which it would be useful, promising and viable to subject to comparative analysis.

What is proposed here is to take a step back and take another look at the kinds of insights which various kinds of comparative study in the field of educational innovation and reform have generated. In taking such a look, we will be guided by two kinds of consideration: On the one hand, we will assume that it is in a pre-scientific way instructive for somebody trying to cope with a certain set of policy problems in a given country to know how other countries have tried to come to terms with similar problems. Problems such as special education, parental participation, the redistributive effects of educational financing, the relationship between education and employment, etc. are common to a number of countries, and have been addressed through a variety of policy strategies. To discuss these strategies is, at a first level of analysis, not likely to lead to broad and secure generalizations about the determinants of policy, but it is likely to lead to two things: (a) It will provide the policymaker with a potentially instructive experience of realizing both the basic similarities of the problems and the actual range and richness of possible solutions; and (b) it will provide an empirical context in which a number of as yet rather abstract theoretical notions about educational innovation can be

more fully and substantively formulated. If my impression of the state of the field is correct, and without contesting the ultimate appropriateness of the methodological tenets of scientific comparison, our most important next task lies in a more careful formulation of the theoretical questions which comparative analysis ought to seek to answer. Formulating these questions will require a theoretical frame of reference that is both informed and interpreted by as full an understanding of the educational and political realities with which we deal, and for which we already have descriptions and partial analyses in a variety of studies on educational reform.

While the second part of this paper proceeds to reviewing some of this material from several different points of view, the third outlines a theoretical agenda and argues the need, promise and possible shape of comparative research which answering some of the open questions on that agenda would seem to require.

I should add that there is an important comparative dimension sui generis in the task of developing such a theoretical agenda. The growing internationalization of the social sciences notwithstanding, there is a significant, and for our purposes, instructive variation in the emphasis that is given to different theoretical issues in different national research communities. The tremendous attention, for example, which German social scientists have in recent years given to such issues as political planning and legitimacy, and the relatively much more modest interest in these same issues by American social scientists is a case in point. It is therefore an important part of this exercise not only to review studies of innovation processes in different countries, but also to study and examine the processes and outcomes of theory formation under different national conditions.

2. The state of the art: Observations and queries

Leaving aside for a moment the question of which kind of comparative study is methodologically "purer", it would seem useful to ask what, after all is said and done, comparative studies of whatever kind have taught us. What has been the utility of looking beyond national boundaries into other countries' efforts to reform and change their educational systems? Has it been worth the trouble, and has the ratio of trouble to yield been such that it makes sense to carry on? Or are, after all, the dynamics of the relationship between education and politics in any given country so unique that the search for commonalities, patterns, generalizations is likely to be a waste of time?

In the first part of this section of the paper, I will argue and illustrate three kinds of utility of comparative studies of educational innovation. Following that discussion, I will review a few of the multitude of typologies and propositions which the study of educational innovation in different contexts has generated.

2.1 The utility of comparative studies of educational innovation

The skeptical comments on the state of the art in the first section of paper notwithstanding, comparative and/or cross-national work in the field of educational reform seems to have performed a number of moderately useful functions. Without any claim to comprehensiveness, and still in search of a better classification, I would elaborate on this argument by referring to what I call the heuristic, political, and theoretical utility in the comparative study of educational innovation and reform.

2.1.1 Heuristic utility

Reviewing the body of material that has been generated by one kind or another of comparative study, that material would seem to be useful (or at least potentially useful) in at least three different ways. First of all, it is likely to have contributed, albeit in terms difficult to measure, to a greater "transparency" in looking at national reform policies and at the experience of any one country in bringing about educational reform. Even short of any systematic generalization produced by testing specific hypotheses across national cases, the material that resulted from studies such as the Robinsohn, EPIC and IEA projects and the publicity it was given are bound to have produced, in policy-makers as well as policy analysts, a somewhat better feeling for what is unique in a given national policy context and what a number of countries may have in common. To be sure, the extent and intensity of this learning process varies a great deal across countries. However, both the policy maker (who tends to overestimate the uniqueness of whatever policy problem he faces) and the analyst of policy (who is more prone to look for generalizations) stand to gain and seem to have gained from the corrective effect of being exposed to concrete evidence on what is and what is not unique in the reform policies of different countries (see Naschold 1974, 109).

Secondly, and in a more specific and technical sense, the heuristic yield of the present work in comparative innovation analysis would seem to consist of a set of preliminary, plausible, and reasonably promising propositions for further and more systematic study. We find efforts at pulling some of these together into more coherent research agendas

(Merritt and Coombs 1977; Weiler 1973; Naschold 1974, 59) and we will have an opportunity to review some of them in a later part of this paper.

Lastly, it would be appropriate to consider as part of the heuristic utility of our present body of comparative material the fact that at least some of this material has alerted us to a number of important methodological issues, caveats and problems which, if carefully enough reviewed, should help in the design of a further generation of comparative studies. The methodological lessons learned from the IEA study (Inkeles 1977; Husen 1979) or from the difficulties which the Robinsohn project faced in trying to write a comparative piece on the basis of its case studies are cases in point.

2.1.2 Political utility

The political utilization of the findings or alleged findings of comparative studies of educational reform has been perhaps the most conspicuous aspect of the "yield" of this kind of work. The comparison with reform initiatives, difficulties and results in other countries -- ranging from rather impressionistic statements to the more or less careful perusal of comparative data -- has loomed large in the policy discussion on educational reform in at least a number of countries (Glowka 1975, XXI-XXII). In fact, the degree to which such comparisons have played a role in different countries would itself be a very interesting subject for comparative study. Some of the particularly conspicuous examples include:

- the utilization of the results of the IEA projects in a number of countries in advocating different (and sometimes contradictory)

educational reforms (cf. Husen 1979, 379-380);

- the political effects and utilization of the country reviews of educational systems conducted by OECD (e.g., for the Federal Republic of Germany, OECD, 1972a; 1972b) which are at least implicitly couched in comparative terms, and to which most of the international "examiners" of a national educational system bring a heavily comparative perspective; and
- the commissioning of a comparative study of educational decision-making in a number of different Western countries by the West German Federal Ministry of Education (Bothe et al. 1976) and the utilization of (some of) its results in the Federal Government's Strukturbericht in 1978 (Bundesministerium 1978, 65-66; 130-168).

2.1.3 Theoretical utility

I am setting this section apart from what I have discussed earlier under "heuristic" utility, even though the two are obviously related rather closely. What I want to point out here is my impression that, again under conditions of more or less methodological stringency, comparative investigations into the politics of educational reform have at least helped to generate a number of important theoretical "themes" which should provide particularly significant points of crystallization both for the further development of theory and for empirical cross-national work. Most notable among these themes are the three which will be discussed further in a separate part of this paper:

- The relationship of innovation, knowledge and research;
- the issue of legitimacy in educational innovation; and

- different interpretations of the conflictual nature of educational reform.

While each of these themes would probably command a good deal of attention anyway, it is probably fair to say that cross-national variations in the way in which these issues manifest themselves in different societies have contributed to their salience and interest as areas of further theoretical reflection and empirical work.

Looking at the question of "theoretical yield" from a slightly different perspective, I note that work (and not only comparative work) on educational reform and related issues has served as an important field of application for a number of significant theoretical developments, including

- the development of "convergence theory" on the gradual progression of industrialized societies towards a common social structure and, thus, to common patterns of education and educational change (Inkeles, forthcoming), and
- the ever-widening discussion on the role of different theories of the state in the analysis of educational policies (Carnoy 1979; Offe 1975; Naschold 1974, 9-14; Lenhardt 1977; etc.) which probably represents one of the most seminal and important theoretical perspectives in the study of the politics of educational innovation.

While attention to convergence theory would seem to be a direct result of a number of comparative observations in different social realms, the "comparative" element in the parentage of current concerns with theories of the state and education probably lies less in a comparative empirical base and more in the increasingly internationalized theoretical discourse on the concept of the state in both marxist and non-marxist modes (e.g., Lindberg et al. 1975; Daedalus 1979).

2.2 Typologies and generalizations: A selected review

The rest of this paper could easily and amply be filled with a mere inventory of the multitude of typologies, propositions and hypotheses which the study of educational innovation -- comparative and otherwise -- has generated over the years. The value of such an exercise would be limited; a number of such inventories exist and can be consulted (e.g., Havelock 1973; Pincus 1974; Huberman 1973; Morrish 1976; Zaltman et al. 1977; etc.). What would seem appropriate here instead is an attempt to provide a broad categorization of various typologies and propositions, and to illustrate each category by a selected number of propositions which seemed to have a prima facie utility for further comparative studies. Most of the propositions, to the extent that they are empirically based at all, have resulted from studies in a national or sub-national context, although we have included those few propositions which are the result of cross-national studies.

All of the propositions discussed here pertain, of course, to the question of what determines the "success" or the "adoption" of an innovation: What are, in other words, the factors that can be shown to play a role in whether or not a given reform or innovation moves beyond the state of ideas and into some form of realization. In reviewing the wide range of more or less secure propositions on this matter, we can rather easily distinguish between three different kinds of propositions:

(a) those that have to do with the nature of the innovation itself;

(b) those that have to do with the nature, composition, characteristics of the organization or system that is to adopt the innovation;

(regarding the "symmetry" of (a) and (b), see Downs and Mohr 1976, 701); and

(c) those that deal with characteristics of the process by which innovations are considered, adopted, etc.

We will use this rough, but useful roster for our review of a number of propositions on the factors determining the success of innovations in education. Proceeding in this way will allow us to disaggregate this body of writing beyond the usual distinction between different "models" of innovation such as the R&D model, the social interaction model, the problem-solving model, etc. (Havelock 1973, 155-168).

It is, incidentally, particularly difficult at this juncture to maintain neatly the distinction between more limited, institutional innovations and the kind of more encompassing, systemic changes in education which was discussed in the first chapter to be the main focus of this paper. A number of propositions, even though they may first have been developed in the "micro study" of educational innovations, either have since been shown to explain some of the dynamics of reform processes at the national level as well or are of a kind that would seem to make their application to a more macro context sufficiently promising.

2.2.1 The nature of the innovation

Among characteristics of innovations in education which appear to have a good deal to do with their eventual chances of success, the following seem to be worth mentioning:

Cost. Obviously, on a small as well as a large, national scale, the cost of an innovation becomes a major determinant of its feasibility. Furthermore, the cost factor enters in a major way into the politics of reform in favoring the more "affluent" elements in the political system (note the "resourcefulness" of the federal governments in West Germany and the U.S. as agents of reform) (Downs and Mohr 1976, 702-704; Orlich 1979, 6-7; Peterson 1973, 176-177). "Cost" in this context refers not only to fiscal, monetary resources, but also -- and in many instances more importantly -- to non-monetary costs incurred through friction in the organization, alienation of clients and other consequences of reform, leading to what Heidenheimer, in discussing the cases of Sweden and West Germany, calls the "adjustment costs" of reform (1974, 405).

Complexity Just how simple or complex a given innovation is will have something to do not only with its ultimate changes of success, but also with the kinds of groups (and their degree of professional expertise) on whose cooperation it will depend for its success. In addition, as Down and Mohr argue (1976, 702-704), complexity of the innovation is directly related to its communicability; in situations where the political success of an innovation depends on how easily its purposes and features can be communicated to a wider public, this becomes a matter of considerable concern.

Conformity. We are referring here to what Pincus (1974, 118-121) calls "bureaucratic safety", i.e., the degree to which the nature and thrust of an innovation is compatible with and favorable to the current state of the bureaucracy which is to administer its adoption. Schools, according to this argument, are more likely to adopt innovations which

promote bureaucratic and social stability. While this is originally a "micro" argument, its basic logic clearly applies to the question of whether or not certain educational reforms are compatible with the existing set of economic and political interests in a given country. It is along the lines of this argument that Orlich, after reviewing a host of innovation studies, concludes that "curriculum and instructionally related innovations are easier to implement than those requiring changes in organization or administration" (1979, 6).

These three sets of characteristics of innovation provide some illustration of the many different facets of the argument that the nature of the educational innovation and reform itself has an important relationship to the chances for its success. From a slightly different perspective, we can classify educational innovations from the point of view of what they are meant to achieve and inquire, in the company of Merritt and Coombs (1977, 254-257), into the political connotation and context of each of a set of reform intentions:

- correcting abuses;
- enhancing efficiency;
- improving effectiveness;
- reforming the policy process;
- accommodating new groups; and
- reformulating goals.

Useful as this kind of typology of policy intentions might be, it has the distinct disadvantage of being rather formal and "content-free", and would benefit from an overriding substantive typology that would specify policy goals such as democratization, equity, legitimacy of certain ideological positions, etc.

2.2.2 Characteristics of the organization

It seems that by far the largest share of work on the determinants of innovation in general, and educational innovations in particular, has focused on characteristics of the organization or system into which a given innovation was to be introduced or which was to be changed by a given innovation. As a result, there is a vast literature on the role of organizational or systemic characteristics in explaining the fate of educational innovations. Much of this is, again, derived from work at the micro-level, and is only taken into account here where there seems to be some reason to assume its relevance to a broader national or sub-national policy context.

Resources. Clearly the mirror image of the "cost"characteristic of innovations, the amount and nature of resources available to the organization looms large in a good many studies of educational innovation (Pincus 1974, 119-120), even though the virtual monopoly of this factor in earlier studies has given way to a much more differentiated view of the organizational attributes that determine willingness to innovate. Just as the factor or resources has played an important role in research, so it has in the political debate on educational innovations, from providing handy arguments against innovations that were deemed too costly (but were in reality opposed on other grounds) to a whole range of ideas and initiatives on changing the resource structure of educational systems through finance reforms, voucher systems, etc. (Coons and Sugarman 1978; Levin 1979; Pincus 1974, 134-138).

Organizational norms and attitudes. Quite a variety of factors is covered by this category, all relating in one way or another to the value that the organization and/or its members attach to innovation in

general and/or to a given innovation. Obviously, the degree to which this factor becomes relevant depends on the kind of innovation one is talking about: as was pointed out earlier, the conformity of the main thrust and intent of an innovation with the prevailing norms and values of the organization turns out, not surprisingly, to be one of the strongest predictors of the innovative exercise (for a summary of the evidence on this point, see Pincus 1974, 120-121). It is obvious how the same argument could and should be made with regard to the problems which educational reforms face in the broader political realm: The value structure of both administrative and educational elites has certainly been one of the more serious obstacles in the attempt to reform the educational system of countries like France, the Federal Republic of Germany, etc. (cf. van de Graaff 1976; van de Graaff and Furth 1978; Heidenheimer 1974, 403-404; Merritt and Coombs 1977, 267-268).

Organizational structure: Centralization vs. decentralization. Do decentralized systems innovate more easily than centralized ones? Forgetting for a moment about the importance of the implicit ceteris paribus assumption, the question seems intriguing from the point of view of its explanatory potential. Heidenheimer, in comparing the educational reform efforts of Sweden and West Germany, attributes a good portion of the variance to the relatively more centralized decision-making power in the hands of the National Board of Education in Sweden (1974, 403; cf. Paulston 1968; Weiler 1973, 40-45); and Peterson compares the decentralized mode of educational financing in the US with the "centralized, focused character...of the partisan politics of educational reform in Britain" (1973, 179). A more systematic study of educational reform decisions and their implementation in a number of

countries which differ on this particular structural dimension is now in preparation at Stanford University and should shed further light not only on the relative significance of this variable by itself, but also, and more importantly, on the ways in which it interacts with other variables in determining the outcome of reform efforts (Weiler and Kirst 1979).

Client relationships. Educational systems are, in Pincus' words, "the captive servant of a captive clientele" (1974, 115); by and large, they cannot select their clients, and their clients have little choice but to accept their services, except in systems with sizeable and reasonably accessible private school systems. Since competition and leaving the system in protest are thus virtually excluded as elements in the relationship between the educational system and its clients, this relationship is mainly determined by different degrees of client involvement in the educational system's decision-making processes. From what little evidence we have, the degree of parents' and/or students' involvement in these processes can work both ways as far as the success of reforms is concerned. Even in one and the same system, parent initiative has been quite instrumental in both facilitating and hindering the development of Gesamtschulen (Weiler 1973). We now have a number of first attempts to come to terms with the issue of just how client participation works in the political context of educational reform on a comparative basis, (see especially Coombs and Merritt 1977; Wilhelmi 1974), and will discuss in another section of this paper some particular aspects of the problem in the context of curricular innovations. However, the present state of our understanding of this complex issue does not seem to justify any generalization besides the general

impression that in the degree and nature of client participation lies a theoretically and politically important element for the further comparative study of educational reform (for the most comprehensive and carefully annotated bibliography on citizen participation in the U.S., see Davies and Zerchykov 1978).

Once again, this brief selection does in no way exhaust the full range of issues which research on the organizational characteristics as a factor in educational reform has generated. A number of important additional questions, notably about

- the conflict resolution capacity of organizations,
- the information-processing ability of organizations, and
- the legitimacy of organizations

will be treated in more detail in the third part of this paper.

2.2.3 Process characteristics

In addition to identifying attributes of the innovation itself or of the organization, a number of contributions to the study of educational innovation have emphasized the importance of certain characteristics of the process of initiating and implementing educational changes. This perspective is related to an increasing preoccupation not just with the adoption, but with the implementation of policy changes (Pressman and Wildavsky 1979, 163-194; Pincus 1974, 134); in addition, the considerable attention to the diffusion of innovations which was brought about by Rogers' pioneering work (1962) has further contributed a rich set of observations on how different kinds of processes affect both the initial adoption of the idea of an innovation and its subsequent implementation through the organization or system. Few if any of these

suggested relationships have been made the subject of comparative work, even though Merritt's and Coombs' discussion of "models for the analysis of educational reform", which remains curiously incomplete by omitting models in the marxist tradition, leans heavily towards processual aspects of reform (1977, 260-264).

Planning. Innovation processes can be distinguished from one another in terms of the degree to which, and the ways in which, they are planned; while planning in one definition or another is an ingredient in virtually all innovation and reform processes, approaches to planning vary widely and may well have differential impact upon the outcome of the reform process. In the field of education, the relationship between educational reform and educational planning has received a good deal of attention (Weiler 1978; 1979; Straumann 1974; Levin 1979), and while there is need for a fuller understanding of the way in which different planning strategies affect certain kinds of educational reforms, there are indications that at least the more conventional educational planning paradigms have tended to inhibit rather than facilitate major educational reforms (Weiler 1979). There are a number of important efforts to re-think the notion of educational planning in such a way as to overcome these limitations, as in Raschert's "pragmatist model of political planning", (1974, 28), in Offe's discussion of "political steering mechanisms" in his "general topography of reform initiatives" (1975, 82-100), in this author's discussion of "educational planning and social change" (1979) or in Naschold's critical review of the analytical capacity of educational planning by the state (1974, 95-111). Here again, a wide field awaits the comparative analyst who is interested in pursuing the relationship between planning and reform in education.

External intervention. The relationship between different "decision levels" within a system is another source of processual variation which tends to affect the course of innovative action in education in significant degrees. The rich literature on the politics of federal initiative in educational reform in the US (e.g., Berman and McLaughlin 1978; Richter 1975; Pincus 1974, 123-124; 126-128; House 1974, 204-248) and in other federal states (Bothe et al. 1976; Weiler 1973) provides ample evidence for the importance of the extent and the nature of intergovernmental relations in determining the outcome of educational innovations. Incentives of various kinds obviously play an important role in these relationships (Pincus 1974), as does the emergence and political salience of coalitions which are able to gain access to any of the particularly effective levels of decision-making (see Peterson 1973, 178-179, regarding the effects of the civil rights coalition on federal educational policy). An important and, in many countries, more recent form of "intergovernmental relations" in the context of educational reform is represented by the increasing role of the courts (Kirp and Yudof 1974; Merritt 1978; Duke University 1975; etc.) which have tended to play a rather active role in arbitrating the kinds of conflicts which a number of educational reforms have generated. Even without as yet much benefit of comparative data, it seems clear that, in understanding the dynamics of the success and failure of educational reform and innovation, the pattern and the nature of intergovernmental relations appears as a particularly important set of contextual variables.

In addition to these, I would like to add two other, closely related aspects of the innovation process in education which have come

to attract a good deal of attention in recent years: experimentation and evaluation. I will discuss these in the third part of this paper in more detail in connection with the relationship between research and innovation.

3. Issues and challenges in the comparative study of educational innovation

I have argued earlier in this paper that the most important challenge to comparative analysis of educational innovation and reform lies not in the further development and perfection of the methodology of comparative analysis, but rather in the identification of both politically and theoretically significant issues. This section of the paper pursues this contention and elaborates on what I consider to be the most important challenges to any further work in this field. This discussion aims at the further development and refinement of a theoretical agenda for comparative research on the politics of educational innovation; the choice of directions in which this task is to be pursued is informed by the excitement as well as the frustration which research on a number of aspects of educational reform has generated, as well as by that kind of reflection which translates normative assumptions about what is and what is not important into theoretical priorities about what is and what is not important to understand better. The following pages are meant to reflect both of these influences.

There is a certain artificiality about the way in which this section is organized. Clearly, the three "themes" of knowledge, legitimacy and conflict with respect to educational reform are closely and in important ways interrelated. Whatever else research does, it also serves important legitimizing functions in the realm of policy and politics; similarly, one of the most fundamental causes for the more serious instances of conflict over educational policy has to do with the real or perceived lack or evasiveness of legitimacy, etc. However, and this set of close interrelations notwithstanding, I feel that the

three issues of knowledge, legitimacy and conflict provide useful avenues of access to the question of where some of the more intriguing theoretical questions in the study of educational innovation seem to lie. Each avenue may lead us to some of the same questions; if they do, so much the better.

3.1 Innovation and knowledge

3.1.1 Educational research and educational reform: Interpreting a tenuous relationship

Talking about the relationship between research and innovation in education deals only with a variant of several broader aspects of the overall issue of the politics of knowledge or the relationship of knowledge and policy in contemporary societies. One such set of references is provided by the enormous literature on "knowledge utilization", much of which is identical or closely related to that part of the innovation literature which is predicated on some variant of the "diffusion" model of innovation. This field seems amply ploughed, but really remains in a state of serious underdevelopment as far as its conceptual and theoretical structure is concerned (as documented in the excellent effort by the Human Interaction Research Institute, 1976, to assess the state of the art of "Putting Knowledge to Use").

In a somewhat more specific sense, our problem is to determine whether or not research has anything to do at all with what is going on in educational systems. Obviously, the assumption that this question is to be answered in the affirmative has provided the basis for massive support for educational research and development efforts in the US and elsewhere, all of which is predicated on the notion that not only are

research results of a kind that lends itself to a "translation" into educational practice, but also that they are, infact, instrumental in bringing about educational change and, indeed, improvement. While a good many of both researchers and educators take this relationship for granted, the question of whether they are right in doing so has in recent years become the subject of rather considerable efforts. In one of the major efforts of this kind, the (US) National Institute of Education commissioned none less than the distinguished National Academy of Education to undertake a more thorough review of whether and how educational research influences educational practice (Suppes 1978). The result is a major and interesting volume of nine case studies, all of which, with somewhat varying degrees of conviction, come to the conclusion that, yes, educational research did indeed make a significant difference in one or the other aspect of educational practice: Skinner's work on behavior modification, Piaget's on early education, linguistics on second-language learning, the study of individual differences on the Swedish school reform, etc. In summarizing the evidence, Suppes admits that "all of us on occasion probably feel that there is little hope that research..... will seriously affect practice", but goes on to note with satisfaction that "such pessimism is not historically supported by the evidence" (1978, xiii). Similar conclusions, not all as carefully documented as this one, abound in the literature, and are at one level of analysis hard to refute. Very rarely, however, does this line of writing address a question which is at least as important as the one about the effect of research on practice, namely the question of whether the difference that educational research does make in educational practice is really significant by some

reasonable standard of significance. Could it be that, sometimes, the significance of the relationship (between research and practice) is mistaken for the significance of the effect?

Carrying this argument further will, however, carry us too far away from dealing with our more specific concern, i.e., the relationship between research and one particular aspect of educational "practice", i.e., educational innovation and reform. Here, the debate on just how much difference research has made and is capable of making in bringing about major changes in educational systems seems as heated as in the general realm of the research-practice debate, and even a good deal more controversial.

In an eloquent brief on the pivotal function of certain kinds of research for the initiation of reform processes, Hellmut Becker singles out the work of Edding in West Germany, Husen and Svennson in Sweden, and Basil Bernstein in England as prime examples of how research has paved the way for major educational reforms (1971, 11-14). Both he and others have attributed a good deal of the initial momentum for educational reform in West Germany in the early seventies to the impressive evidence on the determinants of learning outcomes gathered in Roth's book on Begabung und Lernen (1969; cf. Kuhlmann 1970, I/139), and Husen makes a similar case in his discussion of the Swedish school reform in the NAE volume (Suppes 1978, 523-579).

Levin, in reviewing research evidence in an attempt to understand and assess the contribution of education to improving the "life chances" of youths from low-income and minority backgrounds, sounds a much more skeptical note in asserting that "the social sciences cannot produce conclusive results that would support a particular educational strategy

for improving the life attainments of students from low-income and minority families" and that "the evidence that does enter the courts or the policy arena is considered and utilized on the basis of factors other than its scientific 'validity'." (1976, 89).

In a rather interesting debate at the 1979 meetings of the American Educational Research Association (AERA) in San Francisco, Richard Light and Gene Glass came to rather different conclusions in discussing the problem which conflicting research findings pose for the policy-maker. While Light argued for "Capitalizing on Variation", Glass cast his skepticism in the form of a number of questions such as the following, all of which he proceeded to answer in the affirmative and with a plea for what he calls a "policy for error variance": "Is that variance (in educational effectiveness) ... essentially irreducible by one who seeks understanding and top-down prescriptive policy about teaching and learning? Should our empirical policy studies be based on the assumption that the conditions that make schooling effective are either in practice unknown, unmeasurable, too numerous, or too labile to be controlled by persons at any significant distance from the essential nexus of learning, namely a pupil's brain and a tutor?" (Light and Glass 1979, 14). Observations like these and like those made by House (1974, 305 and passim) cast a good deal of doubt on some of the key assumptions underlying the cluster of typologies and propositions called the "Research and Development" or the "Research and Development and Diffusion" model of innovation in education (Havelock 1973, 161-164).

Even though Pincus recognizes some of the major challenges to the R&D model, he maintains that the innovation process in education "may

best be viewed both as a stimulus to social change and as a socially approved process of testing society's readiness for change" (1974, 129) and proceeds to suggest an incentive-oriented notion of educational R&D which would be capable of making the most of the fact that, in his view, the educational system is still, and Bowles, Gintis, Jencks & Co. notwithstanding, "the principal vehicle for policy reform" (op. cit., 128).

These and other attempts at rescuing the R&D model notwithstanding, the relationship between research and innovation and, hence, the theoretical basis for the R&D model remain tenuous. In addition to the inconclusiveness and instability of research findings in important areas (Downs and Mohr 1976; Levin 1976) and their persistent failure to move beyond accounting for a very modest portion of the variance on such key issues as educational effects (Light and Glass 1979), the researchers' strong indebtedness to and dependence on the established order of epistemological, institutional and social values (Levin 1976, 86-87) make them an unlikely source and agent of major educational change beyond the sometimes fancy yet ultimately rather insignificant modifications often referred to as "innovations" (see, for West Germany, the discussion in Kuhlmann 1970, I/126). Furthermore, as I pointed out earlier, it is quite possible that the very nature of certain changes in education is such that either they are likely to be decisively affected by forces much more powerful than even the most conclusive research results (e.g., the changes brought about in Chinese education by the cultural revolution or the transformation or non-transformation of socially stratified systems of post-elementary education in Great Britain and West Germany), or that the evidentiary

needs for advocacy and opposition are beyond the capabilities of "normal" scientific research (as in the case of comparatively evaluating educational systems with different sets of goals).

Against the background of this dilemma, there are a number of ideas on how one might reconceptualize the relationship between science and research and the policy or reform process. Alice Rivlin, in reviewing Jencks' book, makes an interesting case for a "forensic social science" (1973) which adopts an adversarial mode for weighing the pros and cons of a given policy issue. Levin, having discussed the inadequacies in conventional attempts to use the social sciences as a useful instrument in laying the grounds for policy decision, is prepared to accord them what he calls a "heuristic" rather than a "deterministic" role, i.e., to use them "to frame the issues and their consequences rather than to obtain conclusive evidence on what is right and what is to be done" (1976, 92-93). Kuhlmann, in his review of educational reform in West Germany, concludes that the main role of research has probably been to "shake up" some of the prevailing typologies of talent which leaned heavily towards models of "natural" ability (1970, I/139). Haller and Lenzen (1977, 9-10) see a threefold role for educational research with regard to educational policy: Legitimation -- in order to justify decisions taken for "extra-scientific" reasons; optimization -- to provide know-how for increasing the effectiveness of educational reform programs; and evaluation for the assessment of innovative educational experiments. Before we proceed, however, to reconsidering the role of research in educational innovation and to identifying a comparative research strategy on this issue on the basis of these and other observations, we need to look a

little more closely into what has become of one of the most conspicuous and cherished modes for the interaction of research and reform and, at the same time, one of the favorite targets of criticisms of this interaction. I am referring to educational experimentation as a strategy of both research and reform.

3.1.2 The experimental paradigm of reform

It had seemed almost too good to be true: "Reforms as Experiments" -- the classical paradigm of scientific methodology transplanted into the realities of public policy, with the prospect of being able to say, with the conviction of the true scientist, that one social program was "better" than another, that advocates of a given innovation were "right" and its opponents "wrong" (or the other way around, as the case or the data may be). The notion was attractive enough, and the message derived from some early social experiments like the Manhattan Bail Bond experiment (Riecken and Boruch 1974, 1-2) and from Campbell's pioneering work on the utilization of experimental designs in social policy situations (e.g., 1969) was not lost on either policy makers or policy analysts in any number of countries.

In an attempt to substantiate the notion that "systematic experimental trials of proposed social programs have certain important advantages over other ways of learning what programs (or program elements) are effective under what circumstances and at what cost" (Riecken and Boruch 1974, 3), the (US) social Science Research Council's Committee on Social Experimentation devoted a major effort in the early seventies to elaborate "A Method for Planning and Evaluating Social Intervention" (Riecken and Boruch 1974; cf. Boruch and Riecken 1975). For a wide

range of policy areas, from delinquency and criminal reform to rehabilitative programs in mental health and to special educational programs, the possibilities and experiences of testing "the effectiveness of a proposed social program before adopting it on a nation-wide scale" (Boruch and Riecken 1975, 2) under conditions of "controlled comparison" were reviewed and taken into account in differentiating and adjusting the basic experimental paradigm to the various contingencies and "threats to internal and external validity" which reality, as distinct from the laboratory, tends to put in the way of scientific pursuits (for an inventory of these "threats", see Campbell 1969, 410-412). Experimental programs in education loomed large in this early phase of developing and improving the concept and practice of experimentation and included educational television in the US and abroad, vocational education and counseling programs, curriculum development, early childhood education, etc. (Riecken and Boruch 1974, 308). Major federal programs in the field of education (Head Start, Follow Through, Titles I, III, VII, and VIII of the Elementary and Secondary Education Act (ESEA) and others) went through rather large-scale experimental phases before being fully adopted or abandoned (Pincus 1974, 129-131).

But neither the notion of launching and evaluating innovative educational programs on an experimental basis nor the theoretical and methodological discussion of "reforms as experiments" was limited to the United States. In the introduction of a comprehensive system of secondary schooling in Sweden in the fifties and early sixties, experimental studies of a number of proposed elements of the new system played a rather significant role in reinforcing the arguments of the advocates of reform (Heidenheimer 1978, 22-25), even though some of

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r educational innovations as well. A survey conducted
77 by the Bund-Länder-Kommission (1978) lists a total
al experiments as either completed or ongoing in pre-
:ion alone, ranging all the way from experimental
special programs for handicapped children and new
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In his view, the experiment provides the vehicle for the progressive, step-by-step development and mutual correction of political goals and scientifically prepared means (ibid.). This represents an interesting and important variation on the original scientific paradigm in the Campbell tradition: Here, neither goal nor means are definitely fixed at the outset, but are subject to revision and correction as the ongoing experiment yields insights into both real needs of the population to be served and into the feasibility of certain kinds of policy responses and innovations that would effectively meet those needs. In reality, however, most educational experiments remain rather closely tied to the basic logic of the original experimental paradigm which specifies in advance both the objective ("criterion") to be accomplished (e.g., increase achievement) and the alternative means or "treatments" through which it is to be accomplished.

The hope associated with the heavy emphasis on educational experimentation as a strategy for reform was to bring together not only research and practice, but also researchers and practitioners in a mutually useful way. In both respects, however, the experimental strategy has, in different settings, encountered major limitations and difficulties. These difficulties do not invalidate the basic notion of bringing research and reform together through the device of the more or less controlled experiment, but suggest that the effectiveness of this device (a) is contingent upon a number of conditions external to the experimental situation and program, and (b) may consist of results which have very little to do with the comparative assessment and evaluation of different treatments, but a great deal with the issues of legitimacy and conflict in educational reform. In respect to

both of these possibilities, a more systematic cross-national perspective beyond the brief references to national experiences made here would seem to be immensely useful.

Before pursuing these issues further, however, let us look for a moment at some of the shortcomings of the experimental approach to educational reform. When I reviewed for the National Academy of Education in 1973 the developments surrounding the Gesamtschule in West Germany, I came to the conclusion that "from the point of view of generating 'objective' evidence on the relative performance of two different systems of education, the experimental (Gesamtschule) program was a failure virtually from its beginning" (1973, 51); I, as well as others, had reached that conclusion not so much because of the tremendous methodological problems inherent in such a massive comparison, but most importantly because of the profoundly different normative and political connotations of each of the two different types of schooling. These different connotations caused a basic lack of agreement "on the very criterion variables on which the performance of each system is to be tested" (op. cit., 47). With regard to the same program, Raschert comes to similar conclusions in recognizing both the "political" and the "scientific" limitations of the program (1974, 204-207) which tend to draw rather narrow boundaries around the possibility for "rationalizing decisions by experimenting with institutional alternatives" (op. cit., 205).

We find related criticisms of experimental approaches to major educational innovations in the US where Pincus concludes that they either are so small that they tend to "disappear from view" or that, if they are larger, they "have in general not been designed or evaluated

in ways that would allow anyone to assess the reasons for their success and failure in the real-life setting of the schools." (1974, 129-130). He adds a point which is often overlooked in the more enthusiastic advocacy of experimentation, namely, that "any substantial intervention in an existing social system is very likely to have important unintended effects (ibid.). Since almost every major experiment in educational reform bears out this observation, it would seem to have some important implications for any further research in this area, expecially in terms of extending the scope of outcome phenomena which we would study in connection with any major experimental reform. On similar grounds, and on the basis of studying the different assumptions about the ways in which education affects life chances, Levin concludes that for issues of this magnitude and complexity, an experimental approach is "politically and practically infeasible" (1976, 74-76). Briese et al., after reviewing the extensive experimental program of educational reform in the West German state of Baden-Württemberg, disqualify the entire program as a "democratic playground in social capitalism" (1973, 174 and passim) and suspect, probably not entirely without good reason, that the program reflects an ideological utilization of science and research as an instrument of manipulation in the hands of a status-quo oriented educational bureaucracy.

Whether or not each of these various observations on the weaknesses of experimental programs as strategies for effective and significant educational reform are correct, they do raise a number of important questions on which both further theoretical reflection and comparative policy analysis should be able to shed a good deal of further light. The assumptions which would particularly benefit from such an effort would include:

(a) that the relative political salience and controversiality of a given set of educational reforms is an important negative predictor of the effectiveness of an experimental design for the initiation and the evaluation of the reform;

(b) that the notion of reform through experimentation has a certain ideological quality which is deliberately used by dominant economic and political groups in the society to facilitate "pseudo-reforms" and to oppose those reforms which might effectively affect the status quo;

(c) that experimentation in the context of educational reform does not serve the provision of scientific information on the advantages and disadvantages of alternative educational arrangements, but rather the legitimation of existing processes of educational decision-making and/or the management of social conflict in the design and implementation of reforms (cf. Kuhlman 1970, 105; Haller and Lenzen 1977, 1-102).

It is this last point which provides the linkage to the following two parts of this section where we will deal with the issues of legitimacy and conflict.

3.2 Innovation and legitimacy

3.2.1 Legitimating educational reform: Meanings and problems

Any comparativist with a sense for the fact that theoretical agendas are, at least in part, a function of the historical conditions in which the theorizers find themselves in a given country at a given time must have been struck by the considerable variance in the degree to which social scientists in different countries have concerned themselves with the issue of legitimacy over the last decade. To be sure, the question

of legitimacy, of the bases on which states exercise power and have that exercise accepted by their subjects, has always been on the agenda of political thought. However, the degree to which the matter has been taken for granted has varied significantly over time and from one country to another; a comparison between the social science scene in the US and West Germany is a striking case in point. A number of American scholars have addressed the legitimacy issue in a variety of ways over the last decade (e.g., Rogowski 1974; Lindberg et al. 1975), and some of them (Schaar 1969; Herz 1978) take up and provide their own contribution to the theme of the "legitimation crisis" which is evoked so much more persistently and pervasively in other parts of the world, notably West Germany. Interestingly enough, the latest compendium on the politics of education to appear in the US (the 1977 Yearbook of the National Society for the Study of Education) does not even have an entry for "legitimacy" in its extensive index (Scribner 1977). I will leave it to appropriately learned colleagues to furnish the fully reconstructed reason why this should be so, but as a matter of fact it is indisputable that West German social science has seen an exceptionally intensive and extensive preoccupation with the problem of the legitimacy of the modern state, paralleled to some extent by discussions in France and other parts of continental Europe. The German Association of Political Science chose "Legitimation Problems of Political Systems" as the theme of its 1975 Congress (Kielmannsegg 1976; Ebbighausen 1976), and both before and after there is a wealth of published efforts to come to terms with one of the more intractable conceptual and theoretical issues in the social sciences (cf. Ebbighausen 1976; Offe 1972; Dahrendorf 1979; etc.). Much of this, but by no means all, has been

mobilized by Habermas' (1973; engl. 1975) provocative piece on the "legitimation crisis".

The nature of the problem -- the "crisis" -- is couched in different terms by different people. Dahrendorf puts it most generally in speaking of "an effective doubt about the appropriateness of existing institutions and about the assumptions on which they are predicated" (1979, 151), while Schaar quotes a 17th-century gentleman from The Whitehall Debates defining the problem such that "authority hath been broken into pieces" (1969, 276 -- a notion aptly illustrated by the cover design for the English edition of Habermas' Legitimation Crisis (1975). Offe sees the problem of legitimacy in the threat to the state's "monopoly of politics" and in the direction of an increasing "loss of state" (Entstaatlichung) in politics (1976, 98-99). Another aspect is brought into the discussion by recognizing, as Lindberg does, "the apparent disjunction between the increased load of tasks undertaken by modern capitalist governments and their diminishing capabilities to assure legitimation of such powers and tasks" (1975, x), which is closely related to Mayntz' concern with the relationship between legitimacy and the "directive capacity" of the political system (1975).

This is not a paper about legitimacy, however, but about educational reform and innovation. What do the two have to do with each other? I hold -- and plan to show in this section -- that the most critical issues in the politics of educational reform stem from the question of legitimacy and that, furthermore, cross-national variations in the interpretation and solution of the general issue of the legitimacy of the modern state should be a particularly interesting variable in studying and understanding the politics of education in general, and of educational reform and innovation, in particular.

At the most general level, we can argue that, inasmuch as the state is the source and the agent of all decisions affecting education, and especially public education, any loss of confidence in the validity of the state's claim to exercise its directive role with authority is bound to affect the credibility and acceptability of the state in educational matters, especially where, as in the case of innovation and reform, a more demanding degree of compliance is required than would be the case in the routine continuation of the status quo. More specifically, one can argue that the state's educational decisions, dealing as they do with such critical issues as socialization and the allocation, through educational credentials, of statuses and life chances, are likely to be particularly susceptible to erosions of statal authority, and would thus tend to be subject to particularly volatile problems of legitimacy. It is signifcant that the issue of legitimacy has found its most intense manifestation, even if compared with other policy areas such as health, housing, etc., where one or both of two educational issues were concerned: Measures to provide for (even rather modest) greater equality in and through education (as in the case of comprehensive schools and such), and changes in curricular objectives and guidelines. Major reform initiatives in these two areas, especially where, as in West Germany, their results are found wanting by sizeable parts of the population, seem to place state authority in particular jeopardy and give rise to particularly searching questions about the bases and sources of the state's legitimacy in matters educational.

The contemporary legitimacy discussion deals with this question in several different ways, reflecting some of the major cleavages and

directions which have emerged in that discussion at a more general level. Without engaging in a lengthy discourse on each of these, I shall illustrate my point by elaborating briefly on the way in which different notions of legitimation bear upon and relate to different political strategies for educational reform and innovation.

Legitimation by procedure

Reflecting Weberian traditions and the considerable influence which the work of Niklas Luhmann (1969; 1975) has had on the contemporary legitimacy discussion in West Germany, one major set of propositions on the legitimacy of the modern state and its policy actions centers around the notion of "legitimation by procedure" ("Legitimation durch Verfahren") and includes a variety of not necessarily mutually compatible perspectives. The basic argument here is that the state acquires legitimacy for its actions by virtue of following a particular set of presumably "rational" or at least transparent and generally accepted procedures; in this sense, the procedural quality becomes the basis for the legitimacy of a decision. It is obvious that planning processes serve as a particularly appropriate "test" for the procedural legitimacy of policy decisions: A policy would be legitimate by virtue of it being the result of a careful, rational planning process (Luhmann 1975; Schatz 1976; Scharpf 1973).

While this notion of legitimation by procedure has been heavily criticized on the grounds of its lack of "material content" (Offe 1976, 87; 1975, 249), it has also played an important role in discussions on the nature and politics of educational reform. This is particularly true for the discussion of the legitimacy of curricular decisions

(e.g., Baumert and Raschert 1978, 20-22; see also below) and for the rather intensive recent debate on the legal quality of educational reform decisions (Oppermann 1976; Richter 1976; Gruschke and Rüdell 1979). In addition, it is clear that much of the rationale for the importance of educational planning is derived from a procedural paradigm of policy legitimation (Weiler 1979).

Legitimation by expertise

Closely related to our preceding discussion and to the notion of legitimation by procedure is the idea that policy decisions gain in legitimacy to the extent that they are the result of, or have been informed by, a scientific research process. I am here coming back to what I pointed out in a previous section on "knowledge and innovation", namely that, beyond and aside from any substantive contribution which research might make towards the solution of a policy problem, the very association of a research element with the policy process serves to enhance the latter's legitimacy. It is in this sense that, in the US as well as other countries, experimental programs of educational and other innovations serve an important legitimating function -- almost regardless of what the results of their evaluative efforts might be -- by virtue of their conferring the dignity and prestige of the scientific enterprise upon that particular innovation or reform initiative. It is in this sense that Haller and his colleagues raise the question of the "current legitimatizing quality of educational research" (1977, 12; cf. Raschert 1974); with the possible exception of the area of curriculum development and reform, answers to the question do not seem to be readily forthcoming, and it is here that a comparative inquiry will

help understand better the possibilities and limitations of this particular notion of legitimating educational innovation.

Legitimation by symbols

Another important contribution to the discussion of the legitimacy of political authority stems from the work of Murray Edelman on the importance of symbolism in politics (1964; 1975). The basic contention is that certain symbols emitted by the state evoke beliefs which are supportive of the state and its actions. Such beliefs "are not necessarily false, but it is social cues rather than their factual accuracy or demonstrability that brings them into being" (Edelman 1975, 310). Edelman discusses the designation of "enemies" and "threats", the "reassuring" role of certain laws beyond their actual legal effect, or the use of official language as typical cases for the use of symbolism in politics. Another one of his examples, i.e., the use by educational systems of tests or other devices of classifications for the "symbolic evocation of merit" (1975, 315-316) suggests why his work has the potential of adding another important dimension to the discussion of the legitimation of educational reform: The politics of educational reform in many countries have been particularly heavily affected by the use of symbols -- from the symbolic value of the favorable connotation of the term "innovation" itself all the way to the symbolic baggage which concepts such as equality, experimentation, participation, etc. have been made to carry (cf. Naschold 1974, 21-22) -- and it would seem promising to follow Edelman's own suggestion of a 'comparison of political symbolism and its consequences in different countries and cultures" (1975, 319) for what might well be a particularly rich set of

cross-national commonalities and variations in the politics of educational reform.

Legitimation by participation

The issue of "participation" has been talked and written about in recent years for a wide variety of reasons and in many different contexts, and nowhere perhaps as ubiquitously as in education. For the US alone, a careful recent bibliography on citizen participation in education (Davies and Zerchykov 1978) lists over 800 titles. Coombs and Merritt provide a useful comparative typology of various forms of "the public's role in educational policy-making" (1977), and under Dietrich Goldschmidt's leadership, a joint German-Swedish commission has prepared what is certainly the most thorough and comprehensive comparative study in this field to date, dealing with democratization and participation in schools and universities in the two countries (see summary volume by Wilhelmi, 1974).

What is interesting for us in this phenomenon is its relationship to the question of the legitimacy of educational reforms. For alongside and in contrast to the different notions of legitimacy already discussed, the proposition that participation should be seen as a critical source of legitimacy for policy decisions has gained much ground, especially where educational policy is concerned, but not only there (see Alemann 1975; Rodenstein 1978; Matthöfer 1977). The basic argument is that the involvement in the policy-making process of those who are likely to be affected by its results enhances the legitimacy of the process and its results, but both the justification and the interpretation of this notion vary widely from one ideological frame of

reference to another; Offe, in his discussion of citizen's initiatives, provides an instructive example of the skepticism with which marxist scholars regard some manifestations of the participation phenomenon (1972, 153-168; cf. 127-134). Much of this skepticism is directed at the basic ambivalence of participation which consists in that it can always serve as an instrument for the ruler as well as the ruled (ibid.; cf. Baumert and Raschert 1978, 32). Among those who accept participation as an important source of legitimation in educational policy and reform, there is a tendency to see participation not only as a relatively abstract principle of individual emancipation and self-determination, but also as an increasingly necessary complement and corrective vis-a-vis the inadequacies of decision processes in parliamentary systems of government (Baumert and Raschert 1978, 29-30) or, indeed, as a deliberate strategy to preempt and replace those processes (Büchner 1972).

The study of educational reform from the point of view of the processes and norms which legitimate reforms holds, as the preceding brief discussion may have shown, a rich and promising challenge. While the issue of legitimacy is inherent in the politics of educational innovation in any country, both its salience at a given point in time and the theoretical frame of reference within which it is approached may vary significantly and instructively from one country to the next. In pursuing this question a little further, we will concentrate on one area of educational reform where concern with legitimacy has been particularly conspicuous.

3.2.2 Curriculum reform and legitimacy

It seems that, of all the areas of education where innovations have been debated, tried, implemented, or rejected, none has been quite as susceptible to major controversies on legitimacy as the field of curriculum development and reform, even though we note here as well considerable and interesting cross-national variation. An earlier analysis of curriculum policy-making in the US concludes that "the determination of the public school curriculum is not just influenced by political events; it is a political process in important ways" (Kirst and Walker 1971, 480) and proceeds to discuss various political factors bearing on the curriculum development process without, however, explicitly raising the question of legitimacy. By contrast, most European and especially German writing on curriculum reform in recent years seems absolutely consumed with the question of how curriculum decisions, especially decisions on the objectives of the learning process, acquire legitimacy in a situation which is characterized by

- the development of increasingly divergent theoretical and methodological paradigms in the disciplines to which curricular subjects relate;
- increasing doubts about conventional notions of the learning abilities and learning needs of children at different age levels;
- the competitive claim on children's attention by educational factors outside of family and school, notably in the media. (Baumert and Raschert 1978, 18-19).

These and possibly other factors have contributed to making the process of curriculum development increasingly contingent upon new answers to the question of the legitimacy of this or that orientation of an entire

curriculum or important parts of it. This tendency, which in principle should be found in at least all advanced industrialized societies, is accentuated where, as in the case of the Rahmenrichtlinien in the state of Hesse in West Germany, there is an outbreak of major political conflict over changes in curriculum, even though Raschert (1977, 24) points out that a review of the history of curriculum decisions in earlier times already provides rich evidence for the intensely politicized dispute over the legitimacy of particular changes and reforms.

Faced with this problem of the legitimacy of curricular decisions, the field of curriculum development seems to have responded very much along the lines of the more general categories of legitimation discussed earlier, even though some of these responses seem to raise more problems than others. Some of the issues which emerge in this process as worthy of further consideration include (see also Frey et al. 1975):

- the legal quality of curricular objectives and the possibility and limitation of their legitimation through parliamentary or other decision processes (Baumert and Raschert 1978, 22-23; on the limits of the legal dimension of curricular legitimacy, see Künzli 1976, 201-202);
- the importance and the limitation of educational research as a basis for legitimating curriculum decisions (Hameyer et al. 1976, 291-339; Baumert and Raschert, 1978, 25-28);
- the conditions for, and the effect of the participation of teachers, students and parents in the process of curriculum reform (Frey and Santini 1976; Hesse 1975; Baumert and Raschert 1978).

While there is thus a rich supply of material from which a further, comparative exploration of the legitimacy of curricular

decisions could take its point of departure, the design of such an exploration would do well also to take into account some of the rather critical observations on recent developments in the curriculum field (e.g., Becker and Jungblut 1972, 127-203), especially with regard to the alleged neglect of the important conditioning factors which bear on the teachers' and children's position in the instructional process itself, largely independent of all curricular specifications (op. cit., 203).

3.3 Innovation and conflict

Innovation and conflict, in education as elsewhere, seem to be close neighbors. Major educational reforms tend to be accompanied by considerable degrees of conflict; if reforms occur without conflict, one tends to get suspicious and begins to wonder whether what happened was indeed a real reform. But as long as we talk about real reforms -- in the sense we discussed at the beginning of this paper -- some form of social and political conflict is usually not far away. The question is, however, how they are related, and I suggest that the understanding of that relationship between educational innovation and social conflict presents yet another important challenge to the future study of the politics of educational reform and that, like the other challenges, it stands to benefit from looking at it from the vantage point of comparative analysis across different political systems.

The challenge lies in finding out more about both the nature and the direction of the relationship between innovation and conflict. Does conflict lead to reform, or does reform lead to conflict? Do reforms typically come about as a result of conflict (e.g., educational

reforms as a result of student protest), or is it more likely (or as likely) that reforms -- always imperfect as they are bound to be in an imperfect world -- create more dissatisfaction, frustration and, ultimately, conflict? Obviously, theoretical and, eventually, empirical answers to these questions will form an important part of any theory about the relationship between state and education; the progressive comparative investigation of a number of conflict situations which appear to have arisen in conjunction with major educational reform projects should have a major contribution to make to clearing up this issue.

At this point, the theoretical discussion on this issue tends to be bimodal. In the tradition of liberal conflict theorists like Coser (1956), Dahrendorf (1958) and others, conflict tends to precede reform and to serve as a necessary condition for it; in fact, one of the arguments for the necessity and functionality of conflict in societies is that, without conflict, societies will stagnate and fail to adjust, through social reform, to changing conditions and demands. A number of studies, notably Baldridge (1971), have applied this framework or variants of it to the study of change in educational organizations, and have found that the assumption of continuing and ubiquitous conflict in organizations serves well to explain certain patterns of change and innovation (cf. Dill and Friedman 1979, 417-418).

Arguing from a very different theoretical position, Naschold posits certain kinds of conflict conditions within the educational system as contributing to the potential for change, and distinguishes between

- the mobilisation of internal conflict within schools through

politicized groups of students and teachers in the direction of a limited "syndicalist counter-force";

- the "horizontalization" of educational conflict through the intertwining of educational problems with those of other areas of reproduction (vocational training, urban development, etc.) in the direction of a wider "frontier of conflict"; and
- the "verticalization" of educational problems in connecting them with the world of work and trade unions (1974, 28-29).

While it seems plausible that tensions, cleavages, and conflicts existing in societies are capable of generating momentum which may lead to reform and change (or, as in the case of the measures taken by the French Government after the events of May, 1968, to pseudo-reforms), there seems also to be a good deal of evidence which suggests that reforms result in conflict, sometimes even in more intense conflict than that which preceded them. Raschert points out how a number of characteristics of the Gesamtschule in West Germany which were indispensable ingredients of the reform experiment were bound to lead to all kinds of conflict with the inherent logic of planning processes, with perceived needs for the stability of the entire educational system, etc. (1974, 204-205; for some analogous observations from the US, see House 1974, 301-306). Drawing on examples from the policy areas of housing, traffic, education, and environmental protection, Offe maintains that the modal pattern for the capitalist state is one where conflict does not cause reform, but is caused by it, particularly because reform policies with their associated rhetoric tend to generate expectations and needs which, given the highly limited capacity of the capitalist state for change, they prove unable to meet, often leading

to a situation that is worse than that prior to the reform. (1972, 124-126).

In a particularly interesting and penetrating analysis of comprehensive secondary school reforms in Western Europe, Levin (1978) pursues a similar argument. He describes the dilemma which comprehensive schools face in living up to their putative egalitarian intentions while at the same time having to contribute to the reproduction of wage labor for the capitalist systems in which they operate. Since these reproduction needs require highly unequal educational outcomes, they are very basically at variance with the egalitarian aspirations and expectations that went with the introduction of comprehensive schools. Levin argues that, since comprehensive secondary schools cannot perform the task of stratification as well as their vertically structured predecessors, the role of stratification is now increasingly being taken over by institutions of postsecondary education through such devices as numerus clausus, permitting overcrowding and higher dropout, etc. In addition, whatever rest of the stratification task cannot be accomplished by higher education is likely to be taken up by the labor market through rising rates of unemployment and underemployment of university graduates. If his analysis is correct -- and the history of educational reform in Western Europe and elsewhere will bear some further examination to see whether it is -- then the conflict potential which these kinds of reform may have generated is fairly obvious: "...these frustrations and feelings of dissatisfaction with both the educational system and the labor market will lead to increasing manifestations of class conflict and struggle.... These conflicts will place pressure on the state, capitalist enterprises, and the

universities to seek a solution to the plight of an overeducated and underemployed proletariat.... The ultimate result of the reforms is the rapid formation of a new and highly conscious class with great potential for forcing social change" (1978, 450).

All of this suggests that educational reforms and their consequences are likely to confront the capitalist state with even greater problems in satisfying its needs for minimal consensus and legitimacy. In this confrontation, the state will take recourse to whatever legitimation strategies it can mobilize. For the field of educational reform, these strategies will certainly include the symbolic use of the notion of "reform" itself; given that the attractiveness of the symbolism is in part at least a function of the expectation that "new" also means "more", i.e., that reforms also mean additional resources, the power of this particular legitimation device may be on the decline as Western societies approach "steady state" conditions. At the same time, the role of research and knowledge as a legitimation strategy may have its limitations as well, even though the device of experimentation has served quite well for the temporary containment and management of reform-generated conflict (see Weiler 1973, 51; Kuhlmann 1970, I/105). Similarly, we will need to question other legitimation strategies regarding their possible role in what begins to appear as the most serious theoretical issue in the comparative study of educational innovation: the relationship between educational reform and social conflict.

REFERENCES

R. S. Adams, Educational Planning: Towards a Qualitative Perspective. Paris: Unesco 1978

Ulrich von Alemann (ed.), Partizipation - Demokratisierung - Mitbestimmung. Opladen: Westdeutscher Verlag 1975

Douglas E. Ashford, Comparing Public Policies: New Concepts and Methods. Beverly Hills: Sage 1978

J. Victor Baldridge, Power and Conflict in the University. New York: Wiley 1971

Jürgen Baumert, Jürgen Raschert et al., Vom Experiment zur Regelschule. Stuttgart: Klett-Cotta 1978

Egon Becker and Gerd Jungblut, Strategien der Bildungsproduktion. Frankfurt: Suhrkamp 1972

Hellmut Becker, Bildungsforschung und Bildungsplanung. Frankfurt: Suhrkamp 1971

- et al., Die Bildungsreform: Eine Bilanz. Stuttgart: Klett 1976

P. Berman and M.W. McLaughlin, Rethinking the Federal Role in Education (Rand Paper Series). Santa Monica: Rand 1978

Emile Blanc and Eugene Egger, Educational Innovations in Switzerland: Traits and Trends. Paris: Unesco 1978

Robert F. Boruch and Henry W. Riecken (eds.), Experimental Testing of Public Policy. Boulder, Colo.: Westview Press 1975

Michael Bothe et al., Die Befugnisse des Gesamtstaates im Bildungswesen: Rechtsvergleichender Bericht. Bonn: Bundesminister für Bildung und Wissenschaft 1976

Pierre Bourdieu and Jean-Claude Passeron, Reproduction in Education, Society and Culture. London: Sage 1977

Volker Briese et al., Grenzen kapitalistischer Bildungspolitik. Frankfurt: Athenäum 1973

Peter Büchner, Schulreform durch Bürgerinitiative. München: List 1972

Bundesminister für Bildung und Wissenschaft, Bericht der Bundesregierung über die strukturellen Probleme des föderativen Bildungssystems. Bonn: BMBW 1978

Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung, Informationsschrift 1978 über Modellversuche im Bildungswesen. Bonn: BLK 1978

Donald T. Campbell, Reforms as Experiments. American Psychologist 24, 4 (April 1969), 409-429

Martin Carnoy, Theories of the State and Education (unpublished paper). Stanford: Institute for Research in Educational Finance and Governance 1979

Martin Carnoy and Henry M. Levin, The Limits of Educational Reform. New York: McKay 1976

Fred S. Coombs and Richard L. Merritt, The Public's Role in Educational Policy-Making. Education and Urban Society 9, 2 (February 1977), 167-196

John E. Coons and Stephen D. Sugarman, Education by Choice: The Case for Family Control. Berkeley: University of California Press 1978

Lewis Coser, The Functions of Social Conflict. Glencoe, Ill.: Free Press 1956

DAEDALUS, The State. Fall 1979

Ralf Dahrendorf, Toward a Theory of Social Conflict. Journal of Conflict Resolution 2, 2 (June 1958), 170-183

- Bildung bleibt Bürgerrecht. In Hellmut Becker 1976, 63-71

- Lebenschancen: Anläufe zur sozialen und politischen Theorie. Frankfurt: Suhrkamp 1979

Deutscher Bildungsrat, Einrichtung von Schulversuchen mit Gesamtschulen. Stuttgart: Klett 1969

Don Davies and Ross Zerchykov, Citizen Participation in Education: Annotated Bibliography. Second Edition. Boston: Institute for Responsive Education 1978

Ricardo Diez Hochleitner et al., The Spanish Educational Reform and Lifelong Education. Paris: Unesco 1978

David H. Dill and Charles P. Friedman, An Analysis of Frameworks for Research on Innovation and Change in Higher Education. Review of Educational Research 49, 3 (Summer 1979), 411-435

G. W. Downs and L. B. Mohr, Conceptual Issues in the Study of Innovation. Administrative Science Quarterly 1976, 21, 700-714

Duke University School of Law, The Courts, Social Science and School Desegregation. Law and Contemporary Problems 39, 1 (Winter 1975)

Rolf Ebbighausen (ed.), Bürgerlicher Staat und politische Legitimation. Frankfurt: Suhrkamp 1976

Murray Edelman, The Symbolic Uses of Politics. Urbana, Ill.: University of Illinois Press 1964

- Symbolism in Politics. In Lindberg 1975, 309-320

Karl Frey et al. (eds.), Curriculum Handbuch (3 vols.). München: Piper 1975

- and Bruno Santini, Legitimation von Innovationszielen im Innovationsprojekt Weiterbildungsschule Zug. In Hameyer 1976, 222-234

Johan Galtung, Schooling and Future Society. In Weiler 1979

Peter Glowka, Einführung. In Robinsohn 1975, V-XXIX

Neal Gross et al., Implementing Organizational Innovations: A Sociological Analysis of Planned Educational Change. New York: Basic Books 1971

Andreas Gruschka and Günter Rüdell, Bekommen Reformen nur Recht, wenn sie Recht haben? Neue Sammlung 19, 2 (March/April 1979), 155-171

Jürgen Habermas, Legitimationsprobleme im Spätkapitalismus. Frankfurt: Suhrkamp 1973 (English edition: Legitimation Crisis. Boston: Beacon 1975

H.D. Haller and D. Lenzen (eds.), Wissenschaft im Reformprozess: Aufklärung oder Alibi? (Jahrbuch für Erziehungswissenschaft 1977/78). Stuttgart: Klett-Cotta 1977

Uwe Hameyer et al.(eds.), Bedingungen und Modelle der Curriculuminnovation. Weinheim: Beltz 1976

Ronald G. Havelock, The Change Agent's Guide to Innovation in Education. Englewood Cliffs, N.J.: Educational Technology Publications 1973

Hugh Heclo, Modern Social Politics in Britain and Sweden: From Relief to Income Maintenance. New Haven: Yale University Press 1974

Arnold Heidenheimer, The Politics of Educational Reform: Explaining Different Outcomes of School Comprehensivization in Sweden and West Germany. Comparative Education Review 18, 3 (October 1974) 388-410

- et al., Comparative Public Policy: The Politics of Social Choice in Europe and America.New York: St. Martin's Press 1975

- Major Reforms of the Swedish Education System: 1950-1975. Washington: The World Bank 1978

John Herz, Legitimacy: Can we retrieve it? Comparative Politics 10, 3 (April 1978), 317-343

Otto Herz, Ansätze und Beispiele für Innovationsstrategien in den USA. Zeitschrift für Pädagogik 19, 4 (1973), 583-601

Hans A. Hesse, Basisorientierte Modelle der Curriculumreform. In Frey 1975 (Vol. I), 270-278)

Ernest R. House, The Politics of Educational Innovation. Berkeley: McCutchan 1974

A. M. Huberman, Understanding Change in Education: An Introduction. Paris: Unesco 1973

Human Interaction Research Institute, Putting Knowledge to Use. Los Angeles: Human Interaction Research Institute 1976

Torsten Husen, The Learning Society. London: Methuen 1974

- An International Research Venture in Retrospect: The IEA Surveys. Comparative Education Review 23, 3 (October 1979), 371-385

Alex Inkeles, The International Evaluation of Educational Achievement. Proceedings of the National Academy of Education 4 (1977),139-200

- Convergence and Divergence in Industrial Societies. In Erik Allardt et al. (eds.), Directions of Change: Essays on Modernization Theory and Research (forthcoming)

Michael B. Katz, Class, Bureaucracy, and Schools: The Illusion of Educational Change in America. Expanded Edition. New York: Praeger 1975

Peter Graf Kielmannsegg (ed.), Legitimationsprobleme politischer Systeme. (Sonderheft 7/1976 der Politischen Vierteljahresschrift). Opladen: Westdeutscher Verlag 1976

David Kirp and Mark Yudoff, Educational Policy and the Law. Berkeley: McCutchan 1974

Michael W. Kirst and Decker F. Walker, An Analysis of Curriculum Policy-Making. Review of Educational Research 41, 5 (1971), 479-509

Rudolf Künzli, Legitimation von Innovationszielen, Teil 1: Legitimation zwischen Argumentation und Durchsetzungsstrategie. In Hameyer 1976 197-213

Caspar Kuhlmann, Schulreform und Gesellschaft in der Bundesrepublik Deutschland 1946-1966. In Robinsohn 1970, 1/1 - 1/206

Gero Lenhardt, Bildungspolitik und privatwirtschaftliche Rationalität: Marxistische Perspektiven zur Bildungsreform. In Josef Derbolav (ed.), Grundlagen und Probleme der Bildungspolitik. München: Piper 1977, 179-199

Henry M. Levin, Education, Life Chances, and the Courts: The Role of Social Science Evidence. In Nelson F. Ashline et al., Education, Inequality, and National Policy. Lexington, Mass.: Heath 1976, 73-100

- The Dilemma of Comprehensive Secondary School Reforms in Western Europe. Comparative Education Review 22, 3 (October 1978), 434-451

- The Limits of Educational Planning. In Weiler 1979

- Educational Vouchers and Social Policy (IFG Program Report 79/B 12). Stanford: Institute for Research in Educational Finance and Governance 1979a

Richard J. Light and Gene V. Glass, Capitalizing on Variation: How Conflicting Research Findings Can be Helpful for Policy; Policy for the Unpredictable (Uncertainty Research and Policy). Educational Researcher October 1979, 7-14

Leon N. Lindberg et al. (eds.), Stress and Contradiction in Modern Capitalism. Lexington, Mass.: Heath 1975

Craig Liske et al. (eds.), Comparative Public Policy: Issues, Theories, and Methods. New York: Wiley 1975

Niklas Luhmann, Legitimation durch Verfahren. Neuwied: Luchterhand 1969

- Politische Planung (Second Edition). Opladen: Westdeutscher Verlag 1975

Hans Matthöfer (ed.), Bürgerbeteiligung und Bürgerinitiativen: Legitimation und Partizipation in der Demokratie angesichts gesellschaftlicher Konfliktsituationen. Villingen: Neckar Verlag 1977

Renate Mayntz, Legitimacy and the Directive Capacity of the Political System. In Lindberg 1975, 261-274

Richard L. Merritt, Opening up the Universities: Role of the Courts in West Germany (Paper prepared for publication in Minerva). 1978

- and Fred S. Coombs, Politics and Educational Reform. Comparative Education Review 21, 2/3 (June/October 1977), 247-273

John W. Meyer et al., The World Educational Revolution, 1950-1970. Sociology of Education 50 (October 1977), 242-258

Ivor Morrish, Aspects of Educational Change. New York: Wiley 1976

Frieder Naschold, Schulreform als Gesellschaftskonflikt. Frankfurt: Athenäum 1974

OECD, The Management of Innovation in Education. Paris: OECD 1971

OECD, Reviews of National Policies for Education: Germany. Paris: OECD 1972 (b)

OECD, Educational Policy and Planning: Germany. Paris: OECD 1972 (a)

Claus Offe, Strukturprobleme des kapitalistischen Staates. Frankfurt: Suhrkamp 1972

- Berufsbildungsreform: Eine Fallstudie über Reformpolitik. Frankfurt: Suhrkamp 1975

- Überlegungen und Hypothesen zum Problem politischer Legitimation. In Ebbighausen 1976, 80-105

Thomas Oppermann, Nach welchen rechtlichen Grundsätzen sind das öffentliche Schulwesen und die Stellung der an ihm Beteiligten zu ordnen? Verhandlungen des einundfünfzigsten Deutschen Juristentages, Band I, Teil C. München: C.H. Beck 1976, C5-C108

Donald C. Orlich, Federal Educational Policy: The Paradox of Innovation and Centralization. Educational Researcher July/August 1979, 4-9

Robert G. Owens and Carl R. Steinhoff, Administering Change in Schools. Englewood Cliffs, N.J.: Prentice-Hall 1976

A. Harry Passow et al., The National Case Study: An Empirical Comparative Study of Twenty-One Educational Systems. Stockholm: Almquist and Wiksell 1976

Rolland G. Paulston, Educational Change in Sweden: Planning and Accepting the Comprehensive School Reforms. New York: Teachers College Press 1968

Gilbert F. Peaker, An Empirical Study of Education in Twenty-One Countries: A Technical Report. Stockholm: Almquist and Wiksell 1975

Paul E. Peterson, The Politics of Educational Reform in England and the United States. Comparative Education Review 17, 2 (June 1973), 160-179

John Pincus, Incentives for Innovation in the Public Schools. Review of Educational Research 44, 1 (Winter 1974), 113-143

Jeffrey L. Pressman and Aaron Wildavsky, Implementation. Second Edition. Berkeley: University of California Press 1979

Jürgen Raschert, Gesamtschule: Ein gesellschaftliches Experiment. Stuttgart: Klett 1974

- Probleme der Legitimation von Lehrplänen und Richtlinien. In Haller and Lenzen 1977, 21-37

Ingo Richter, Die unorganisierbare Bildungsreform: Innovations-, Legitimations- und Relevanzprobleme im amerikanischen Bildungswesen. München: Piper 1975

- Nach welchen rechtloichen Grundsätzen sind das öffentliche Schulwesen und die Stellung der an ihm Bete-ligten zu ordnen? (Referat auf dem 51. Deutschen Juristentag 1976). Berlin: Max-Planck-Institut für Bildungsforschung (mimeo.)

Henry W. Riecken and Robert F. Boruch, Social Experimentation: A Method for Planning and Evaluating Social Intervention. New York: Acade-ic Press 1974

Alice M. Rivlin, Forensic Social Science. Harvard Educational Review 43, 1 (February 1973), 61-75

Saul B. Robinsohn, Schulreform im gesellschaftlichen Prozess. Vol.I. Stuttgart: Klett 1970

- Schulreform im gesellschaftlichen Vergleich. Vol. II. Stuttgart: Klett 1975

Marianne Rodenstein, Bürgerinitiativen und politisches System: Eine Auseinandersetzung mit soziologischen Legitimationstheorien. Giessen: Focus 1978

David Rogers, An Inventory of Educational Improvement Efforts in the New York City Public Schools. New York: Teachers College Press 1977

Everett M. Rogers, Diffusion of Innovations. New York: Free Press 1962

Ronald Rogowski, Rational Legitimacy: A Theory of Political Support. Princeton: Princeton University Press 1974

Heinrich Roth (ed.), Begabung und Lernen. Stuttgart: Klett 1969

John H. Schaar, Legitimacy in the Modern State. In Philip Green and Sanford Levinson (ed.), Power and Community: Dissenting Essays in Political Science. New York: Pantheon 1969, 276-327

Fritz W. Scharpf, Planung als politischer Prozess: Aufsätze zur Theorie der planenden Demokratie. Frankfurt: Suhrkamp 1973

Heribert Schatz, The Development of Political Planning in the Federal Republic of Germany. In Klaus von Beyme et al. (eds.), German Political Systems: Theory and Practice in the Two Germanies. Beverly Hills: Sage 1976, 41-68

Jay D. Scribner (ed.), The Politics of Education. 76th Yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press 1977

Peter R. Straumann, Neue Konzepte der Bildungsplanung. Hamburg: Rowohlt 1974

Patrick Suppes (ed.), Impact of Research on Education: Some Case Studies. Washington: National Academy of Education 1978

John H. van de Graaff, The Politics of Innovation in French Higher Education: The University Institu tes of Technology. Higher Education 5 (May 1976), 189-210

John H. van de Graaff and Dorotea Furth, France. in John H. van de Graaff et al., Academic Power: Patterns of Authority in Seven National Systems of Higher Education. New York: Praeger 1978, 49-66

Hartmut von Hentig, Systemzwang und Selbstbestimmung: Über die Bedingungen der Gesamtschule in der Industriegesellschaft. Stuttgart: Klett 1970

David A. Walker, The IEA Six-Subject Survey: An Empirical Study of Education in Twenty-One Countries. Stockholm: Almquist and Wiksell 1976

Hans N. Weiler, The Politics of Educational Innovation: Recent Developments in West German School Reform (A Report to the National Academy of Education). Stanford 1973 (mimeo.)

- Towards a Political Economy of Educational Planning. Prospects 8, 3 (1978), 247-267

- Educational Planning and Social Change. Paris: Unesco 1979

- and Michael W. Kirst, Project Proposals: Politics Program. Stanford: Institute for Research in Educational Finance and Governance 1979 (mimeo.)

Jutta Wilhelmi, Demokratisierung und Mitwirkung in Schule und Hochschule (Kurzfassung des Kommissionsberichtes). Braunschweig: Westermann 1974

Gerald Zaltman et al., Dynamic Educational Change: Models, Strategies, Tactics, and Management. New York: Free Press 1977