

COMPETENCE AS "GOOD MANAGEMENT PRACTICE":
A STUDY OF CURRICULUM REFORM IN THE COMMUNITY COLLEGE

By

NANCY S. JACKSON

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Department of Education, Social and Educational Studies
The University of British Columbia
1956 Main Mall
Vancouver, Canada
V6T 1Y3
Date 1 September 1988

ABSTRACT

In the last decade, the concept of competence has become a powerful ideological force as a component of public policy in the post-compulsory sector of vocational/technical education in Canada. It has served as a device for articulating vocational policy and practice to the changing conditions for capital accumulation in the context of economic and social restructuring. This process of articulation is most readily visible at the level of broad public policy statements and political rhetoric calling for reform of the relation between education and work. Less clear is how competency measures give practical expression to these broad policy objectives at the level of routine curricular and institutional arrangements. These issues form the central empirical focus of the thesis, through an investigation of the work process of teachers and administrators involved in implementing competency measures in the college setting.

The central argument is that competency measures effect a fundamental transformation in the organization of curriculum decision making in the college setting. They accomplish the suppression of broad, long-term educational goals in favour of narrow, short-term ones, as a means to increase "flexibility" in labour supply. They limit the use of educational theory as the basis of curriculum decisions and replace it with a set of ideological procedures for constituting "needs" and

"requirements" related to job performance. These changes are brought about in part through the imposition of formal, documentary information systems to replace the discretionary judgment and interpretive practices of instructors, making the instructional process accountable within a centrally determined policy process. Through this re-organization of educational decision-making, learning is displaced by managing as the form of praxis which gives shape to curricular organization. The form of competence that is brought into being is not a feature of the performance ability of individuals but an aspect of "good management practice" in educational settings.

TABLE OF CONTENTS

Abstract	ii
Acknowledgements	vi
Introduction	1
Competence: Finding the Phenomenon	3
Summary of the Argument	5
Generality and Limitations of the Argument	8
An Approach to Critical Social Investigation	9
Overview of Chapters	13
1. Competency-based Education: A "Long and Unsuccessful History	18
Some Background to the Competency Movement	19
Panacea or Pandora's Box?	30
Toward A Political Economy	40
2. If Competency Is The Answer, What is the Question?	46
Public Policy and Ideological Discourse	48
The Vocationalist Discourse Reconsidered	52
A Framework for Action	63
Conclusion	73
3. The Social Organization of Knowledge: An Approach to Inquiry	80
The Social Organization of Knowledge	81
Textually-Mediated Action	83
Social Relations: The Problematic of the Everyday World	88
Toward A Critical Practice in Social Science	99
Investigation in Action	102
The Research Setting: West Coast College	104
The Research Process	106
4. Competence and "Educational Sense": The Standpoint of Instructors	109
The Collegial Environment	110
The Competency Environment	113
"Very Real Reservations"	115
Impact on the Instructional Process	120
Changing the Institutional Climate	122
Criticisms of Task Analysis	125
Conclusion	129

5.	Task Analysis: The Science of 'Needs'	132
	Empiricism and Vocational Learning	133
	DACUM: A Framework for Education of Disadvantaged Adults	137
	DACUM As a Tool of General Vocational Education	139
	Planning for Success	141
	Managing a Successful Outcome	145
	'Needs' and 'Industry': An Assumed Relation	149
	Conclusion	152
6.	Task Analysis: The Politics of 'Sufficiency'	157
	The Workshop in Action	159
	Conclusion	179
7.	"These Things Just Happen": The New Relations of Curriculum	183
	Instructors as Subjects	187
	Revision Meetings in Action	193
	Conclusion	209
8.	Competence as "Good Management Practice"	212
	The Problem of "Curriculum Creep"	213
	The Problem of "Institutional Pressure"	218
	Competence as Objective Organization	225
	Reform at an Arm's Length	232
	Conclusion	238
9.	Conclusion: Competence as A Social Relation	242
	Educational Crisis, Ideology and Reform	246
	Competence and Textual Mediation	247
	Political Economy and Micro-Analysis	250
	Implications: Questions Neither Asked Nor Answered	253
	Bibliography	260

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INTRODUCTION

This thesis examines the application of the concept of competence and its associated curriculum practices in the post-compulsory sector of vocational/technical education in Canada in the last decade. In this sector, the competency paradigm has achieved major significance as a device for articulating educational policy and practice to the relations of capital in the current climate of economic and social restructuring. This connection is most readily visible at the level of broad public policy statements and political rhetoric calling for major reforms in the relation between education and work. Less clear, however, is how competency measures give practical expression to such policy objectives at the level of routine curricular and institutional arrangements. These issues form the central focus of the thesis, through an investigation of the work process of teachers and administrators involved in implementing competency measures in the college setting.

The competency paradigm has a long history in the public school systems of the United States where it has been variously billed as a means for making educational goals more explicit, instructional methods more effective, and school systems more

accountable. In recent years the approach has been adapted for use at the post-compulsory level of education and training in Great Britain, Australia, the United States and Canada, as part of wide-spread policy initiatives aimed at making vocational education more "efficient", more "responsive" to the "needs" of industry, and better able to meet demands for increased "flexibility" in labour supply.

However, underneath these claims and promises rages a great deal of controversy about the character and impact of competency measures. Critics charge that the approach is "irrational", "dysfunctional", even "dangerous", and that it is "a mistake" which persists only as a "triumph of faith over experience" (Holt 1987; Short 1984; Guthrie 1976; Arnstine 1975; Smith 1975; Ruth 1972). Its more benign critics refer to the movement as "The Great American Educational Fad" (Spady 1977) or a "grand hoax":

In our most pessimistic mood, my colleagues and I fear the [competency] movement could degenerate into a grand hoax, a perpetuation of an illusion that students are more competent when all that has been done is to reshuffle the old deck, while mumbling some new jargon. The semblance of reform and its substance are very different things (Grant 1979:15).

The thesis will address these controversies and apparent contradictions surrounding the competency movement and attempt to situate them within the framework of a political economy of education.

COMPETENCE: FINDING THE PHENOMENON

The terms "competence" and "competency-based" have come to be used in a great many ways, and applied to a considerable range of educational practices. As a result, many observers have pointed out that the meaning of the terms themselves is no longer clear, that they are "rife with conceptual confusions" (Smith 1975:1). However, for the purposes of this thesis, such "confusion" provides fertile investigative ground, and I shall be relatively unconcerned with the problem of definition, per se. This is not simply because both proponents and critics of the competency method attest to the difficulty, if not futility, of efforts to find a stable meaning for the terms "competence" or "competency-based" [1]. It is also because a definitional approach to the phenomenon of competence runs counter to the fundamental logic of the inquiry undertaken here. That is, my intention is to seek an understanding of these concepts as the product of the inquiry, not as its starting place. Such an investigative stance has been described as getting "the feel" for the "presence of the subject matter".

At the outset of an investigation, it is not so much the intellectual faculty for making formulas and definitions that leads the way, but rather it is the eyes and hands attempting to get the feel of the actual presence of the subject matter (Volosinov 1973:45).

Following this approach, the analysis will focus not on what the terms "competence" and "competency-based" mean, but on how they have been used. [2] In particular, I will explore how these

terms have been utilized in a policy context - the demands, claims, and promises with which they have come to be associated.

Having said this, there are a number of ways that the concepts "competence" and "competency-based" have been used which I have not pursued with the "eyes and hands" of my research, and it may be useful to make this clear from the outset. In particular, many educators have come to understand the competency approach primarily as a form of innovation in methods of testing and evaluation, one which has attracted the support of progressive educators with the promise of making educational assessment more objective and more democratic. The minimum competency testing movement in the United States public schools is the most high-profile expression of this form of the competency approach (see Jaeger and Tittle 1980). My investigation does not pursue this path. Rather, primary attention is given here to an equally pervasive but less widely discussed aspect of the competency approach: its contribution to the setting of educational goals and objectives and the provision of institutional arrangements through which such objectives may be made operational in the instructional environment. The United States' Fund for the Improvement of Postsecondary Education (FIPSE) refers to this development in the following way:

Recently, the concept of competence or competency has entered the language of educational reform to describe efforts to reformulate the structures of postsecondary education on the basis of clearly defined objectives (FIPSE, quoted in Wise 1979:197).

Following this line of investigation, this thesis will explore how "competence" comes into being as a socially organized phenomenon, in and through a particular organization of relations among instructors, administrators and employers in the process of curriculum decision-making. These relations are outlined in brief below.

SUMMARY OF THE ARGUMENT

The central argument of the thesis is that competency-based curriculum organization constitutes a highly ideological form of state mediation of the process of vocational/technical education. Through it, the forms of social organization which derive from the relations of domination by capital over labour are embedded in the organization of the educational process itself. This form of organization is imported into local educational settings by means of a systematic approach to curriculum decision-making built into the routine management system of the college, articulating the local action of educators to the public policy arena.

In practice, this transformation takes place through the routine procedures for curricular design and decision-making specified by the competency approach, which are subjected to detailed examination in the empirical chapters of the thesis. I

will show that these procedures systematically block the use of conventional educational models for the formulation of learning objectives and insert in their place methods which appropriate the learning process to serve conditions for productivity in the workplace. Using these methods, the sympathy and commitment to broad-based learning expressed by educators is harnessed and subordinated to short-term skill requirements in the workplace. Traditional concepts of educational achievement are subordinated to short term objectives of job entry and work performance. Concern for the maximization of individual potential through education and training opportunities is displaced by the long-term interests of capital in retaining control over the work process. All of these transformative processes will be examined here, not in the abstract, but in their everyday practice in the college setting.

Competency measures also ensure that traditional educational methods and concerns which "disrupt" and "hamper" this designated curricular focus are excluded from the framework of institutional action. Instructors are removed as the primary authority for curriculum, and reassigned to act as the implementers of the educational decisions of others. Procedures for ensuring adherence to this form of the curricular process are embedded in the routine arrangements for individual, program and institutional accountability within the college system. Individual actions are thus rendered routinely administerable within the terms of public policy objectives.

This transformation in institutional arrangements is accomplished in part by the imposition of formal, documentary information systems to replace the discretionary judgment and interpretive practices of teachers in curriculum decision-making. In the documentary mode, the presence of students and instructors as active subjects of the instructional process is obscured. In their place appears an objectified accounting system designed to make the instructional process reportable/accountable within institutional goals and objectives. In this context, competency measures become an aspect of "good management practice" in educational settings.

Finally, the analysis undertakes to demonstrate that the use of competency measures to constitute educational objectives involves a transformation in the interests and methods of knowing that drive educational decision-making. In particular, the standpoint of the curriculum undergoes a radical shift from a focus on the learning process to the problem of satisfying the imperatives of a managerial process within the state. As such, the curriculum process itself grows increasingly unresponsive to "needs" as conceptualized from an educational perspective, or from the standpoint of the interests of individuals as learners. This arrangement of accountability for action makes the competency paradigm increasingly impervious to the kinds of criticisms to which it is subjected from educators, both theoreticians and practitioners alike, contributing to its

durability or its tendency to continually re-appear in "new trappings" (Goodlad 1975:10).

GENERALITY AND LIMITATIONS OF THE ARGUMENT

The analysis I have undertaken in this thesis is based on, and is meant to speak for developments in the vocational/technical sector (i.e. "applied programs") in the Canadian College system. Various Canadian studies cited here indicate that the competency measures I have examined are widely in use across the Canadian provinces. [3] Outside of Canada, existing studies suggest that similar approaches to instructional management are being adapted for use in non-vocational settings as well, such as four-year liberal arts programs in the United States (see Grant et al 1979). To the extent that this is true, it may be useful to treat some aspects of the experience of competency-based reforms in the applied programs sector as an indication of what could occur in other areas of post-compulsory education as well.

I also want to point out the similarities between the developments reported here in the college sector and many of the issues with which public school teachers have been struggling in recent years in Canada, Great Britain, and the United States. In particular, I am thinking of the growing concern about the impact of educational reforms in the eighties on the organization of the teaching profession, including loss of autonomy, exclusion from

the processes of curriculum design, increased accountability for and monitoring of instructional activity, new teacher assessment schemes, new management structures for schools, etc.; the list of reforms is long. According to Walker and Barton (1987:xi) the impact of such policies, "is a "fundamental shift in where and how the educational system is controlled and managed". [4]

The relevance of the present study of the college system to these developments in the public school sector is not idiosyncratic or accidental. They are related to one another as the result of an increasingly hegemonic management discourse [5] which is being applied across national boundaries and geographic localities and across fields of endeavor, as part of a process of contemporary social transformation in the context of capitalist crisis. In this context, the relevance of the developments studied here could be said to resonate not only beyond the vocational/technical sector, and indeed beyond the education sector in general, but to the question of how the relations of capitalist domination are organized in and through the routine work processes of contemporary institutional life. This study takes some tentative steps in the direction of such an understanding.

AN APPROACH TO CRITICAL SOCIAL INVESTIGATION

The investigation undertaken here is situated within the study of the social organization of knowledge, an area of

sociology concerned with the exploration of ideological modes of social action characteristic of contemporary corporate society. This framework introduces some theoretical, methodological, and political considerations that are part of an agenda for critical practice in the social sciences. Since the thesis addresses itself, both directly and indirectly, to some of these issues, I will comment briefly on how they relate to the empirical inquiry undertaken here.

In broadest theoretical terms, the notion of 'curriculum' is approached here from a non-positivist perspective. It is seen as an active social process, constituted in and through a specific organization of relations among parties with varying interests and responsibilities vis-a-vis the instructional process. In this view, curriculum represents not a fixed entity but an ongoing social relation, and a nerve center of the social/political/historical life of educational institutions.

I want to argue that this approach to curricular processes is central to the possibility of a political economy of education, although it is a type of analysis which is not frequently associated with a political economy perspective. A brief example here will be illuminating. I have found very informative, and have relied upon in my work, a recent analysis of the use of competency measures in private sector training initiatives which illustrates a level of analysis more readily identifiable with political economy. This analysis focusses broadly on processes

of labour market management which it identifies as the work of "coordinating the stock of labour ... within the comprehensively managed relations of hegemony of capital" (Smith and Smith 1987). While I see my own investigation as ultimately concerned with this same problem of "comprehensive management" and the "hegemony of capital" it is focussed at a very different level of generality. That is, my investigation begins within the college system, with a population of college instructors who do not see their daily work routines as having anything whatsoever to do with the "comprehensive management of the hegemony of capital." Were I to propose this framework to them, they would say, indeed did say to me in various ways, "Forget it, that's nonsense. It doesn't matter what the curriculum says. I've been teaching for fifteen years, and I just close my door and teach what I please." My own location in the overall enterprise of a political economy of education is oriented to responding to this instructor. I want to demonstrate how her own everyday experience, the mundane work in which she is engaged such as defining and teaching "telephone answering skills", is part of a transformation that may be understood as the comprehensive management of the hegemony of capital. I would argue that this level of micro-analysis is ultimately central to the realization of a fully developed and materialist political economy.

Next, I am concerned with the problem of theoretical adequacy of the critical stances which dominate educational thinking. In the case of competency-based education, critical research has

been undertaken for over a decade, documenting the failures, paradoxes and contradictions of competency measures in practice. As a product of this research, the dominant mode of understanding among educators who oppose these measures, both in the literature and in my own research findings, is that they are "irrational" and "dysfunctional". In the words of one college instructor interviewed for my research, the competency approach looks like "the brainchild of somebody with a small brain." On the other side of the controversy, among administrators who advocate competency approaches, the resistance of faculty is interpreted as "symptomatic of laziness, ignorance, self-interest or general incompetence" (Macdonald-Ross 1975:355). Again, this view of faculty resistance dominates both the literature and my own research findings. Neither stance is adequate for the purposes of a critical social science. By contrast, I want to propose a critical framework which accounts for the persistence of competency measures by displaying both how and for whom competency measures may be seen as both intelligent and rational, and which displays the grounds for opposition to competency as other than the "recalcitrance of local professionals" (Johnson 1984:41) or the "love of incompetence" (Macdonald-Ross 1975:380).

Most important in this line-up of background issues, it should be clear from the foregoing that I am concerned in various ways with mending the rift between so-called 'micro' and 'macro' levels of social analysis. The significance of this problem cuts across all other considerations of theory and method and brings

us face to face with the politics of social scientific knowledge. The methodological stance employed here is concerned to make possible the exploration of broad questions of social 'theory', (i.e. "How is domination organized in education?"), from a location within the messy world of ordinary experience and consciousness, the dilemmas of everyday life. Only in this mode does social science offer the promise of intersecting with political action by contributing to the development of the "theoretical basis for an oppositional knowledge" (Donald 1979:17). Only here lies the potential, as Marx enjoined, not only to know the world, but to change it.

Finally, one point of clarification. I want to be clear from the outset that the investigation undertaken here includes no examination of actual classroom instruction. This is not an oversight. Curriculum decision-making, not teaching practice, is the focus of inquiry. Explored here are the changing social relations within which instructional activities are conceived and governed under the competency paradigm. This is an active social process of which instructors are an integral part, which form the terms and conditions under which teaching takes place, whether the classroom doors are open or closed.

OVERVIEW OF CHAPTERS

Chapter One examines the competency paradigm [6], its promises and its contradictions. It surveys the popularity of

the approach in the American public schools, its recent adoption in the post-compulsory sector, and its legacy of controversy for bringing "profound and unanticipated consequences" to the educational settings where it has been implemented.

Chapter Two situates discussion of competency in a broad critical perspective on educational policy discourse in the context of the current economic crisis. It argues that the competency paradigm is part of an overall shift in the orientation of public education and training policy from the standpoint of individual needs to the standpoint of the employer. The power of competency-based curriculum rests in its capacity to translate this policy orientation into practice in the local college setting.

Chapter Three explores the detailed problems of method encountered in undertaking empirical inquiry in the social organization of knowledge. It discusses the theoretical and methodological premises for the use of both textual and verbal/interactive data as a resource for investigation. Finally, the chapter introduces the reader to the research setting and provides a brief description of the process of data collection.

Chapter Four begins the exploration of competency measures in practice through the eyes of instructors in the college setting. It searches out their understandings, intentions and expectations concerning the previously existing instructional process and

about competency based reforms, and their most recent experiences during the introduction of competency measures in their department. The analysis interrogates their sense of conflict and contradiction about the impact of these measures as a source of direction for further investigation.

Chapters Five and Six examine the central tool of competency reforms being undertaken in this college setting, the use of a task analysis workshop to establish current parameters and objectives for instruction in selected programs. The analysis focusses on the process of social construction through which the central concepts of 'needs' and 'sufficiency' are brought to bear on the determination of educational objectives. It stresses the ideological character of the basic tools of the competency approach.

Chapter Seven explicates the process of "realignment" within the curriculum decision-making process which is at the heart of the "effectiveness" of competency procedures. It highlights the impact which these new institutional arrangements have on instructors, shifting the instructional process farther from their control and imposing new parameters and criteria for the sense of professionalism to which instructors collectively lay claim. It displays the mediating effect of textual processes of institutional communication and action on the interaction among instructors and administrators.

Chapter Eight demonstrates how these reorganized relations within the daily work process are articulated to the administrative practices of the college and the state. It argues that the documents of the curriculum process make an "accounting" not of student learning but of administrative and institutional performance in the context of a dominant discourse in public policy.

ENDNOTES
(INTRODUCTION)

1. The following definitions are widely quoted. The first is from the U.S. Fund for the Improvement of Post Secondary Education (FIPSE): "Competence is the state or quality of being capable of adequate performance. Individuals are described as competent if they can meet or surpass the prevailing standard of adequacy for a particular activity (quoted in Wise, 1979:197). The second is from William Spady, a leading proponent of the competency approach: "[Competency Based Education is] a data-based, adaptive, performance-oriented set of integrated processes that facilitate, measure, record and certify within the context of flexible time parameters the demonstration of known, explicitly stated, and agreed upon learning outcomes that reflect successful functioning in life roles." (Spady 1977:10)
2. See Chapter Three for a more extensive discussion of the methodological implications of this stance.
3. See Muller (1987, forthcoming), Hart (1987), Fox and Boone (1979), Prokopec (1978) (Sinnett) 1975).
4. See also Apple (1986), Kliebard (1986) Apple and Weiss (1983), Wolpe and Donald (1983), Kogan (1986), Wise (1979).
5. For an analysis of contemporary management discourse, see Cassin (forthcoming).
6. The concept of "paradigm" is used here to represent an identifiable framework for thinking which holds sway for a period of time in a given field of endeavor. Of course, as Kuhn (1962) reminds us, such frameworks are never static, but occur in a dynamic historical process, in which their transformation is ongoing. A recognition of this dynamic quality is intended in my use of the term.

CHAPTER ONE

COMPETENCY-BASED EDUCATION: A "LONG AND UNSUCCESSFUL" HISTORY [¹]

The story of competency-based education poses a dilemma which is all too familiar to critics of educational policy. That is, there exists at least a decade of scholarship, theoretical critique and empirical research originating in philosophy, psychology, linguistic and learning theory, and sociology, [²] which argues in various ways that the competency paradigm has not and probably will not "improve learning" (Wise 1979; Hall and Jones 1976) in many of the educational contexts where it has been applied. To borrow words from Henry Giroux [³], the competency approach appears to "begin with the wrong problems, ... misrepresent the problems it endorses and ... advocate the wrong solutions" (1984:188). Yet the paradigm persists, indeed proliferates as "new generations" of the competency model are introduced, all claiming to benefit from the "mistakes of the past" (Collins 1987; Gamson 1979).

This chapter will review the controversial career of competency-based education, recounting both the promises made for it and the charges levelled against it. In the end, I will argue that these perspectives, taken singly or together, do not add up to an adequate account of the power and the persistence of the competency paradigm, although each makes an important

contribution in this direction. The remedy for these shortcomings will be explored in Chapter Two.

SOME BACKGROUND TO THE COMPETENCY MOVEMENT

The competency movement has recently been described as "the latest term for a long-standing belief in the possibility of fool-proof, all-powerful technique in education" (Johnson 1984:41; see also Wise 1979; McDermott 1976). The "long-standing belief" to which Johnson refers is traceable to the scientific management movement in education at the turn of the century in North America. Indeed, according to Herbert Kleibard, the competency movement represents the "triumph" of scientific management:

... [I]t should be clear to anyone familiar with the current state of the art in the curriculum world that the scientific curriculum movement, with few adaptations and modifications, has been triumphant (Kliebard 1975:34).

This view of the significant roots of competency methods departs, at least in emphasis, from the popular wisdom which locates the relevant antecedents of competency in behavioural psychology and in its attendant hopes for more effective as well as more democratic forms of instruction and assessment. While the importance of this heritage is not to be underestimated, particularly in securing support for competency measures from many progressive-minded educators, it is nevertheless not the focus of investigation in this thesis. The justification for

this choice of emphasis will, I hope, be self-evident as the thesis unfolds.

The educational reforms of the heyday of scientific management laid the groundwork for the competency movement of today not only by installing in the educational community a generalized acceptance of science as the model for progressive reform of education, but also by developing some of the specific techniques which remain to this day as prominent features of the competency approach. These include the detailed, empirically-oriented specification of learning objectives, instructional procedures and methods of evaluation (see Bobbitt 1918, 1913; Charters 1923) as well as the use of documentary accounting procedures to represent the instructional process in terms that make it amenable to decision-making based on administrative considerations (see Spaulding 1913; Ayres 1915, 1909; Strayer and Thorndike 1913; Cubberley 1919, 1916).

A reading of these historical documents makes the policy discussion of the 1980's feel like déjà vu. We find outlined in them the major elements of the 1980's approach to both basic skills and accountability, including those factors which are still at the center of controversy:

The central theory is simple. Human life, however varied, consists in the performance of specific activities. Education that prepares for life is one that prepares definitely and adequately for these specific activities. However numerous and diverse they may be for any social class, they can be discovered. This requires only that one go out into the world of affairs and discover the

particulars of which these affairs consist. These will show the abilities, attitudes, habits, appreciations, and forms of knowledge that men need. These will be the objectives of the curriculum. They will be numerous, definite and particularized. The curriculum will then be that series of experiences which children and youth must have by way of attaining those objectives (Bobbitt 1918:42).

The impact of such "scientific specification", according to Bobbitt, is far-reaching. It alters the student's approach to learning, the teacher's approach to teaching, and the capacity of the superintendent to oversee the educational process. Systematic reliance on objective standards and scales allows "the pupil [to] know definitely what is expected of him", each teacher to "know at all times whether she is accomplishing the things expected of her", the principal to "judge ... whether ... the course of training given by all his teachers [is] ... weak or strong", and "so on throughout the entire supervisory line". The superintendent, by glancing over his tables and graphs, "can locate instantly the strong, the mediocre, and the weak" among all his subordinates (Bobbitt 1918:16-39).

Furthermore, advocates of the scientific approach stress its importance not only as a means of maintaining internal control, but also of facilitating effective communication between educators and school boards and the communities on which they depend. With methods for scientific specification of standards and achievement, Bobbitt argues that the school superintendent "can talk a language that can be understood by the community", and thus can "bring the board to see the nature of the problem". "Facts" and "scientific evidence" provide

... unanswerable arguments on the basis of which to urge improvement in the quality of teachers, in the quality of books, in the quality of buildings, in the size of classes, in methods employed by the teachers, and every other thing that makes for increased efficiency (Bobbitt 1913:31-32).

These early documents amply display the historical ancestry of contemporary approaches to improvement in the specificity, efficiency and accountability of education. But the refinement of these methods did not stop with the first wave of scientific management. In the intervening years, the development of systems thought as the basis of management theory has brought new strength to the scientific approach to education, including a "broader intellectual undergirding and logical sophistication" than that of its ancestors at the turn of the century (James 1969:20; Wise 1979; Kleibard 1975). These developments led to a "new cult of efficiency" (James 1969; Callahan 1962) known as the "accountability movement" from which the contemporary version of competency measures emerged.

The first widespread application of so-called accountability measures came in the United States under the umbrella of the Elementary and Secondary Education Act of 1965, Title I. This was a compensatory program for disadvantaged children which mandated on an unprecedented scale a systematic approach to educational program design, evaluation and reporting. Proponents of the scheme argued that it would take the guesswork out of education by providing systematic information about what worked and what didn't and at what cost. The result would be to reform

the local practice and governance of education for poor children and to make federal decision-making more efficient (McLaughlin, 1975). The Title I framework led to the adoption of "accountability legislation" in over 30 states by the mid 1970's, marking the beginning of what came to be called the competency "bandwagon" (Spady 1977; Wise 1979).

Title I legislation in education was part of a broader reform movement within the United States federal government which focussed on the adoption of a new management system known as PPBS - Planning-Programming-Budgeting System - throughout the federal bureaucracy. The PPB System had its origins in the United States Department of Defense where it had been hailed as a means to develop "program goals that could be stated, measured and evaluated in cost benefit terms" and thus "to improve the efficiency with which public resources are used" (McLaughlin 1975:6; House 1978:389). In the summer of 1965, when Title I was announced, changes were already underway to implement PPBS in the Department of Health, Education and Welfare.

Under the terms of Title I legislation, reporting systems utilizing the PPBS approach to accountability spread like wildfire throughout the public school systems of the United States. While the design and application of the approach varied considerably from jurisdiction to jurisdiction, these systems had in common the adaptation of various techniques of management science to focus on the "output" of the educational system. In

an excellent study of these developments entitled Legislated Learning, Wise (1979) refers to the wide range of such measures in education as the "accountability lexicon", in which he includes "at least the following":

competency-based education, performance-based education, learner verification, behavioral objectives, master learning, criterion-referenced testing, performance contracting, planning/programming/budgeting systems (PPBS), management-by-objectives (MBO), systems analysis, program evaluation and review technique (PERT), management information systems (MIS), cost-benefit analysis, cost-effectiveness analysis, systems engineering, and zero-based budgeting" (Wise, 1979:12-13).

The movement which spawned these measures was marked by a strong rhetorical appeal to "common sense", well illustrated in the work of Alice Rivlin, who was one of the major proponents of PPBS in Washington, and one of those hired to install it in the Department of Health, Education and Welfare.

PPBS seems to me simply a commonsense approach to decision making. Anyone faced with the problem of running a government program, or indeed, any large organization, would want to take these steps to assure a good job.... Hardly anyone explicitly favors a return to muddling through (Rivlin 1971:1).

The common sense quality of PPBS-style measures depends upon a set of systematic procedures for decision making and action in institutional settings. This systematic character is evident in the main features of the competency approach, summarized in the statement "outcome goals are made explicit and agreed upon in advance" (Spady 1980:467). Each of these main features is explored briefly below.

The importance assigned to establishing goals is highlighted by Dale Parnell, a leading proponent of competency-based education who argued in the mid-1970's that "there is nothing basically wrong with the American education system except fuzzy goals...".

Every organization or system requires clear goals or targets. When the goals are fuzzy or out of focus, everything in the organization takes on the same complexion (Parnell 1978:19).

For Parnell, the solution was obvious: some "clear outcomes signals" to rescue the school system from being a "non-system".

...[T]he schooling experience is chaotic unless a policy demand is made upon the school system and clear outcomes signals are given. The system is not really a system; it is a non-system ... a cottage industry [where] ... each person does his or her own thing (Parnell 1978:19).

Previous strategies for goal setting in North American education, according to Wise (1979), have favoured the stating of goals either at a high level of abstraction or in "exhaustive lists" in order to minimize the possibility of objections and disagreement. The problem has been that both strategies are a poor guide to policy-in-practice. Competency-based approaches, by contrast, tend to emphasize goals which are "minimum, agreed-upon, measurable, [and] instrumental" as a means to greater clarity of purpose and certainty of results (Wise 1979:107).

Goal setting in the competency approach begins with the idea that schools exist to prepare students to enter society, to

satisfy elementary expectations in adult life roles. Thus "basic skills" and "basic education" are emphasized.

Basic education and basic skills, ... refer to minima, ... they are measurable, and they are instrumental. "Basic" can be construed as a synonym for minimum; basic is basic; basic is not advanced; basic is without frills, without extra's (Wise 1979:110).

The 'basic' approach is said to "generate consensus":

No one can be opposed to basic education; some may want more, but no one can object to providing at least the minimum. Basic does not generate dissent, at least not until the specification of its contents goes beyond the mere listing of literacy and computational skills ... (Wise 1979:110).

The next step is to ensure that basic educational goals are stated in terms of educational "outcomes". This is increasingly being seen as the single most important feature of the competency approach. Indeed, in recent years the term "outcomes-based education" (OBE) is coming into use as a generic term superceding "competency-based education" (CBE) (Spady 1982). In general terms it means to "treat the framing and attainment of outcomes as the primary base of school operations" (Spady 1980:463).

At its root, competency-based education is an emphasis on results. It calls for agreed-upon performance indicators that reflect successful functioning in life roles ... [and] focus[es] on results or outcomes rather than intentions or "inputs", that is, on what the student can be shown to have achieved rather than what instruction was given (Parnell 1978:18).

The process of establishing "explicit outcome goals" for the competency approach includes a "systematic procedure for agreement in advance about the goals of the instructional

process" (Parnell 1978:19). This is referred to as a system of "open communication" which is said to render the instructional process social, "... overcom[ing] the privacy of the individual classroom" (Gamson 1979:226).

... [E]ducators and the communities they serve will together re-examine what is to be taught ... [which] ... just may result in a greater degree of congruence between the expectations of the students, the public, and the educators. Everyone will have a clearer picture of what the schools are to accomplish (Parnell 1978:19).

Part of the attraction of such a process of "open communication" is the aura of neutrality that it carries. It is said to produce a form of education which is "devoid of ideological bias":

In logical terms, CBE is devoid of ideological bias; presumably it can accommodate any goals for education. Indeed, its acceptance in the first instance may result from this ideological neutrality. The adoption of CBE requires a commitment only to a process, although, as we shall see, that process shapes the goals of education (Wise 1979:107).

Thus, the overall appeal of the concept of competency is said to lie "in its seductive suggestion of simplicity" (van Manen 1984:141). It promotes the view that individuals, and not only young ones, are "insufficiently competent for the widely evident tasks of society ..." (Reisman 1979:18-19) and that this problem can be remedied through performance-based learning. Furthermore, "everyone" can have a clear picture of the goals, and the results can be clearly demonstrated. This common sense message is said to account for much of the appeal of competence as an educational slogan and to contribute to its "wildfire spread" (Fagan 1984:6) as an approach to administrative reform.

... the simplistic nature of competency, its binary modality, its bonds with accountability, its visible goals, its platitudes about the dollar "buying a dollar's worth of teaching" - these virtues comprising the nature of competency in a fiscally retreating economy - became a boon to legislators and to the media.... Competency, its supporters felt, would be as close to a panacea for educational ills as one might find for the decade of the eighties. Or at least that is the rhetoric supporting its adoption (Fagan 1984:8).

In the post-compulsory sector in particular, the promises associated with the competency approach have taken on a somewhat broader scope. Competency measures have come to be hailed as the means to reform educational institutions in the context of technological change and socio-economic crisis.

In their various manifestations, competence-based reformers have attempted to subordinate the traditional disciplines to some conception of competence, to be responsive to the concern for greater efficiency and cost effectiveness, to seek a closer fit between an ever more costly system of higher education and the needs of a technological society for highly skilled workers ... (Elbow 1979:10-11).

In this context, the United States Fund for the Improvement of Postsecondary Education (FIPSE) has called for the adoption of competency measures as a means to "re-examine" and "reformulate" the objectives of postsecondary education:

Given the changes in the technological and social context that have taken place over the past two decades, the evidence that many graduates are ill-prepared for their vocational and professions, and the changing labour market, a careful re-examination of institutional objectives seems not only appropriate but necessary (quoted in Wise 1979:197).

Similarly the Economic Council of Canada (1987b:30) has declared that the education system "faces a profound challenge" in

responding to the "accelerating pace of change" in a "high-technology world". It calls for policies that will "tighten" the links between business and education, introduce greater accountability for "efficiency" of educational institutions, and make educational and training programs more "responsive" to the "needs of industry" by producing "specifically trained, but nevertheless flexible, labour market participants" (Economic Council of Canada 1987b:35).

Competency-based education is said to "encapsulate[] the instrumental view of the process of education" called for by these agencies (Wise 1979). It promises that the "relevant elements of education" can be made to prevail in educational programming, and toward this end it "appears to provide a means to allocate instructional tasks, to specify expectations for performance, to circumscribe authority and responsibility and to specify the aims of official action" (Wise 1979:107). Thus, competency-based learning is said to be "ready-made" for the educational concerns of our time (Gamson 1979), and to offer "better dividends ... [to] ... the stockholders in education" (Harris and Grede 1977:253).

In the shadow of such sweeping promises, the competency paradigm has been adopted and adapted in the post compulsory sector across the English speaking industrialized world. In Great Britain, the competency approach is used in courses offered under both the Technician Education Council and the Business

Education Council (see Cantor and Roberts 1986) as well as in the massive training empire of the Manpower Services Commission. In Australia, competency measures are widely in use in vocational programs at the Further Education and Post-Secondary levels (Harris et al 1985; Harris 1982). In the United States, they are used in two-year and even four-year post-secondary institutions, including some liberal arts programs (see Grant 1979). In Canada, competency measures have been introduced by provincial ministries across the country at the technical and applied programs level in colleges and vocational/technical institutes (Muller 1987 and forthcoming; Hart 1987; Fox and Boone 1979; Prokopec 1978; Sinnett 1975).

PANACEA OR PANDORA'S BOX?

In spite of its common sense appeal and the promise of ideological neutrality, the upshot of over two decades of experience with various competency-based educational innovations is a fury of controversy and contradictions. Not only have these measures failed to achieve their intended results, but also they have come to be seen as the cause of "profound, unanticipated, and unexamined changes in the conception and operation of education" (Wise 1979:ix).

In the public schools sector, critics of competency have long ago come to the conclusion that the approach "fails to do

justice to the complexity of the educational enterprise (Smith 1975:1). On the contrary, the competency approach is variously said to be "dysfunctional" (Guthrie 1976) even "dangerous" (Holt 1987; Ruth 1972) and to "show no better promise for controlling the dark uncertainties that lie in our future than witchcraft, or even, perhaps, prayer" (James 1969:30).

The disappointing outcomes of competency initiatives are described by Goodlad (1979, 1975), who points out simply that "things are not getting better" under the new accountability model, and by McLaughlin (1975), who, on the basis of a painstakingly detailed analysis of the American Title I initiative, concludes that:

[T]he result, after 7 years, more than \$52 million, and a number of alternative evaluation paradigms, has been evaluation that has failed to meet the expectations of reformers, or even to serve the self interest of federal program managers (McLaughlin 1975:viii).

In the post-compulsory sector, competency-based approaches are similarly coming to be associated with disenchantment and disruption. The growing ranks of critics charge that the approach rests "on a foundation of high sounding rhetoric and pious promises" (Kliebard 1975:36) but, in practice, will "only achieve something that, at the end of the day, will not be worth having" (Grosch 1987:161). Initiating and maintaining a competency system is said to put a heavy burden on instructors, creating additional faculty duties which are largely unanalyzed and unrewarded by the administration (CIEA 1988; Gamson 1979). [4]

Many instructors are said to lack experience with the principles and mechanics of the competency format and with what some call its "unspeakable jargon", making curriculum preparation arduous and time consuming, and producing "ragged and exhausted" faculty (Gamson 1979; Grant et al 1979). The programs are said to require a high degree of cooperation and coordination among individuals and institutions that is not always forthcoming, making the systems sluggish and burdensome. An enormous volume of paperwork is generated, putting a strain on support services. In the United States, all these problems in implementation are blamed for mass resignations of faculty, a high attrition rate among students, and a high program mortality rate (see Grant et al 1979).

In the remainder of this chapter, I will explore more systematically the most common critical approaches to the difficulties associated with competency measures which have prevailed among educators over the last decade. For clarity and convenience, I have grouped them roughly under two headings, although these groupings are not mutually exclusive. First is the criticism that competency measures are irremediably reductionist in nature by virtue of their behaviourist foundations. In this view, the concept of competency is said "to explain complex phenomena by discrete, standardized concepts" (Collins 1983:174), resulting in a focus on narrow, even trivial educational goals. The second common line of criticism focusses on the problems of "scientism" and "hyper-rationalization".

These critics charge that the rational scientific model of education attempts to "rationalize beyond the bounds of knowledge", leading to the imposition of "means which do not result in attainment of ends" (Wise:1979:65).

The importance of these critical frameworks is their contribution to revealing the systematic impact of competency measures. They dispel the myth that simple educational solutions can be found through systematic science, and indicate that attempts to do so have been fraught with contradictions. However, I will argue that these critical frameworks do not take us far enough in displaying the transformative power of competency measures or their remarkable capacity to persist in the face of opposition.

In search of such a broader critical perspective, I will look briefly at previous efforts in the sociology of education to examine these same developments from a political economy perspective, primarily through the work of Michael Apple. This work will provide a point of departure for discussion of the approach to investigation I have used for the present study, which is discussed in Chapters Two and Three.

A. Behaviourism/Reductionism

Behavioural objectives are seen, by both proponents and critics, as the centerpiece of the competency approach. [5]

Although a comprehensive critique of the behavioural paradigm is outside the scope and focus of this thesis, I will review some of the main objections to the use of behavioural objectives expressed by educators as the basis for a widespread but somewhat vague prejudice against competency measures. [6]

The use of the behavioural approach in the selection of educational objectives is said by its critics to lend an apparently "technical" or "operational" face to decisions which involve important elements of value judgment and social choice. This is said to be true even in industrial settings where the problem of ambiguity of objectives remains "irremediable" (Macdonald Ross 1975). Subsequently, in the translation of objectives into instructional design, a behavioural focus is said to eliminate the flexibility associated with exploratory and innovative aspects of both teaching and learning, imposing an impoverished version of instructional interaction (Short 1984;Nunan 1983). In the context of vocational learning, critics charge that undue emphasis on behavioural objectives leads to a "prefabricated and encyclopaedic notion of knowledge", to "procedures which are shallow, quick and easy to put into effect", and to emphasis on the learning of "routine, unimportant, even trivial material" (Cantor and Roberts 1979:63-79). In a more philosophical vein, competency methods have been charged with "excessive reductionism" for their failure to account for either "intention and meaning" or the "motivational aspects of purposeful action" (Collins, 1983:177, 1987). In the

vocational context, they are said to inhibit the learning process by "block[ing] the development of elaborated knowledge or the formation of a coherent political consciousness" (Moore 1983:30).

A second kind of argument about the problem of reductionism builds upon these philosophical and pedagogical traits of the competency approach, but focusses on organizational process. In this view, reductionism occurs through a "goal displacement process" in which "[e]fforts to accomplish those goals that are measurable will shove aside those that do not lend themselves to quantification" (Guthrie 1976:272). The cycle of goal reduction begins with the call for increased efficiency and certainty of results. To succeed, the institution can afford to promise only what can be pursued without risk of failure, to set as goals only what can be agreed upon, to define as objectives only what can be specified in measurable terms.

The imperatives of centralized education policymaking lead to a substantially narrower view of the purposes of education. As policies are more and more centrally determined, abstract and salutary goals are reduced and trivialized, and only those goals which can be measured are implemented (Wise 1979:58).

And the following:

The more CBE programs seek high quality evidence as a basis for certification of competency, the more the goals will have to be narrowed and simplified ..." (Spady and Mitchell 1977:12).

These same critics also acknowledge that the narrow, reductive goals of education which appear as the product of this

kind of policy process may stand in sharp contrast to the personal views of the policymakers themselves regarding the purposes of education. Supporters of the competency approach commonly understand that they are subscribing not to a particular educational product, but to a process which will assist them in arriving at a satisfactory statement of educational goals. Missing from this view, however, is a sense of how the process itself has a determining effect on the product.

The exigencies of the policymaking process, together with the limited technology for making policies, causes policymakers to adopt a narrow view. Their personal goals ... [may include] ... to instill the desire to learn and to develop the potential of the child ... to develop their critical capacities and to cultivate various interests ... to preserve, create, and transmit our cultural and scientific heritage.... In the real world of policymaking, however, these larger goals are not integral to the process (Wise 1979:61).

Thus, even where educators are given to understand that broad goals, such as the pursuit of education "in its own right", are available as a "local option", they routinely find that such "options" do not receive the same priority as those goals which are specified in the policy process (Wise 1979:106). In this case, the actual educational outcomes may be a surprise and a disappointment.

B. Scientism and Hyper-rationalization

A second prominent perspective on the failure of the competency model, and of the whole rational/scientific model of

education on which it is based, is the view that scientific knowledge in the field of education suffers from "underdevelopment". This view holds that scientific knowledge about education is "inadequate", "premature", "unstable", "indeterminate" or "misapplied" (Wise 1979; Guthrie 1976; McDermott 1976; McLaughlin 1975), leaving a "vast scientific vacuum regarding educational processes" (Guthrie 1976:253). According to these critics, the "analytical state of the art" of educational science remains at "a very low state of technological development" (Guthrie 1976:259). The solution they await is for the social sciences "to mature" (Wise, in McDermott 1976:xv) in order to meet "the conditions of scientific rationality" (Wise 1979:75).

In the absence of a "mature" scientific rationality, the charge of "scientism" arises as

... financially pressured public officials, well intentioned laymen, and misguided professional educators continue to try to implement an accountability system premised on a non-existent educational science (Guthrie 1976:274).

Experience with Title I illustrates the problem. While the actual results of this attempt to employ scientific measurement and reporting raised "both methodological and functional questions about the wisdom of a continuing pursuit of scientific rationality" (McLaughlin 1975:119), nevertheless, as many observers have noted, "faith in the science of systems analysis remain[ed] undiminished at the higher echelons of the federal government (McLaughlin 1975:71). [7] According to McLaughlin,

these experiences with Title I are not peculiar, but rather reflect "a general pattern of information use" (1975:69) in the public policy system. That is, "... information gathering has become a necessary activity (qua activity) in the policy system" and such exercises have become a "permanent policy fixture" (1975:71). This practice is interpreted as an apparently unshakable faith in the scientific use of information.

There is an apparent growing belief by these central authorities that rules and regulations can make schools and colleges not only more equitable but also more efficient and effective. These central authorities require the measurement of learning, apparently believing that measurement will improve learning (Wise 1979:xvi).

The greatest irony of the Title I experience came with the recognition that it had failed as an attempt at "educational science", yet the fault was said to lie not in the scientific model itself, but with its levels of implementation. That is, the level of organization of the educational process was seen as perpetually inadequate to satisfy the conditions for scientific evaluation. So, as House points out:

Within a few years, an incredible turnabout had taken place. Whereas evaluation had originally begun in order to insure the success of the service programs, programs were now to be designed to insure the success of the evaluations (House 1978:392).

Although the post-compulsory sector of education in the United States has largely escaped the legislative approach to accountability, there is plenty of evidence that scientism, reductionism and hyper-rationalization are at work in these institutions as well. Wise (1979) cites evidence of protest

from presidents of American colleges and universities, both public and private, about the creeping influence of federal and state policymakers over the sphere of higher education. They refer to measures which "limit[] the discretion of university personnel" and "involve transfer of authority ... to public officials" which "diminish initiative and experimentation" and "impinge on the diversity of the system" (Wise 1979:188-89).

When the policy objective is to promote effectiveness, goals are prescribed by such techniques as competency-based education. When the policy objective is to promote efficiency, scientific management procedures such as PPBS are prescribed. Although the objectives are usually salutary, the policies frequently do not have their intended effects and sometimes have unintended effects. They often represent the misapplication of legal, scientific and managerial rationality to education. And they often introduce a pernicious concern for quasi-legal procedure, arbitrary rules, measurable outcomes, and pseudoscientific processes (Wise 1979:192).

Where such rationalized rules and regulations have been introduced, these same administrators report that "[n]o provable case can thus far be made that higher education is in any way better ..." (quoted in Wise 1979:191). On the contrary, ...

[t]he governance processes are worse. They are more costly, more cumbersome, more time-consuming, more frustrating, and place more power in the hands of those who are the furthest removed and who know the least (quoted in Wise 1979:191).

Both of the lines of criticism reviewed here make salient observations about the sources of frustration and disappointment which have come to be associated with the competency paradigm. And, both leave us with the same conclusion: such measures persist out of the mistaken, even "irrational" belief that they

can be made to improve education. However, this conclusion that the understanding and action of educational actors is "irrational" is a patently dissatisfying stance for a critical social science, and as such, it compels a search for a broader framework of analysis.

TOWARD A POLITICAL ECONOMY

The search for a broader perspective on these developments takes us in the direction of a political economy of education, and among North American sociologists of education, the work of Michael Apple and his followers is by far the most promising in this vein. Apple examines recent developments in behaviourism and systems management by analyzing them in light of economic, political, and "cultural/ideological" relations of power (1986, 1982). He situates such an exploration in the context of the contemporary crisis of capitalism, and the changing "functions" of "state intervention", in the service of "production ... accumulation ... and ... legitimation" (1982:52-58). Thus his approach falls well within the territory of a conventional political economy perspective.

At the same time, Apple addresses some important methodological issues related to the study of education from a political economy perspective. He is concerned to overcome the common problem of "abstractness" in analyses which have a broad,

political perspective, and therefore recommends combining what he calls "structuralist interests" with a "culturalist perspective that places human agency and concrete experience at the center" of analysis (1986:23). In this vein, Apple argues that research should attend to "the concreta of day to day life" as an important focus for analysis (1982:31), and that researchers must "get inside institutions and illuminate what actually happens, how people act (often in contradictory ways) within the conditions set by the institution and the larger society" (1986:23-4). These recommendations point in very promising research directions.

Apple's early work on behaviourism and systematic management in education made a seminal contribution to critical analysis of contemporary educational technologies (1972, 1979, 1980). In that work he points out that what education has borrowed in systems thought is "not from the scientific branch of systems logic" but rather "from the models of operation of the business community" where "systems management was created originally to enhance the ability of owners to control labour more effectively, thereby increasing profits and weakening the burgeoning union movements early in this century" (Apple 1979:114). He argues that through this heritage, "the logic of capital" embodied in "technical administrative knowledge" has come to penetrate the educational apparatus through a "logic of technical control" (Apple 1982, 1980). [8]

In setting out these research parameters some years ago, Apple identified much of the critical territory that is still on the agenda of the sociology of education today, particular for the critical study of curriculum (e.g. Apple and Weiss 1985). In fact, the research undertaken in this thesis also follows a number of the directions in which he pointed ten years ago, although it does so along a very different methodological path than that pursued by Apple himself in the intervening years. [9]

In Chapters Two and Three, I will begin to describe systematically the approach I have taken to the study of 'competence' as a tool of curriculum reform and systematic management in education. Many of the issues that have been raised in this chapter remain relevant to the analysis, but they are approached from somewhat different vantage point. The significance of these differences has to do with the ongoing search for a method of social analysis which adequately "illuminates the relationship" of everyday practice to the "surrounding socio-economic order" (Apple 1979).

ENDNOTES

(CHAPTER ONE)

1. Johnson, H.C. Jr. "Teacher Competence: An Historical Analysis" in E.C. Short (1984).
2. See for example Collins (1987), Short (1984), Grant et al (1979), Smith (1975), MacDonald-Ross (1975, 1972), Travers (1973), Ruth (1972).
3. This cryptic comment by Henry Giroux (1984) was originally aimed more broadly at what he calls the "new public philosophy" of education in the United States.
4. In British Columbia, the College and Institute Educators Association Newsletter, (Vol. 4, no. 3, March 1988) contained an article entitled "'Hidden Workload' Discovered". The article reports the finding of a task force at a B.C. college (not the one studied here), which concluded "There is a significant hidden workload for [faculty] members that is rarely seen or measured" and that is "not measured in regular data gathering methods and reports".
5. For advocacy of behavioural objectives, see Popham and Baker, (1970), Gagne (1967), Mager (1961), Tyler (1949).
6. For an extensive yet accessible critique of behavioural objectives, see Macdonald-Ross (1975).
7. Under these circumstances, critics point out that information is used "...selectively to lend a raiment of rationality to [an] essentially political mode of decisionmaking" (McLaughlin 1975:118). This problem is identified by McLaughlin as a routine one, involving a particular "appetite for information" on the part of the federal political process in the United States. His analysis of Title I illustrates the point. Public support for Title I was mustered on the basis of a public faith in the rational use of information in a democratic process. For example, American Senator Wayne Morse argued that the importance of Title I legislation was to "make available the facts" and then to "trust that this democracy of ours will put the democratic system to work on the basis of these facts". (Quoted in McLaughlin 1975:5). But in the last analysis, the data were used "politically" rather than "rationally". McLaughlin argues, "Congress doesn't really want to hear that Title I doesn't work" but they really want to know "where the money is going". More specifically, they want to know on a district by district basis, "how much money is going to the folks back home ... [etc.]" (1975:68). In other words, their interest in money is with

"distribution" and their concern is for the political impact of public spending.

8. In this regard, Apple's early work is much more promising than his later writing, although even the early line of analysis gets stalled on epistemological grounds which I will attempt to identify here, however tentatively. The problem, for my purposes, lies in the manner in which he treats questions of subjectivity and consciousness. That is, for Apple, the transformative power of scientific and systems methods is realized through the consciousness of individual actors. It is a subjectivist interpretation, one which treats social phenomena as originating within the mind. (For a fuller critique see Roslyn Bolough, 1979, especially Chapter One.) System procedures are seen to be effective because of the "ideological saturation of educator's consciousness" or the ways in which "ideological principles ... [have] found their way to the very roots of the brains of educators" (1979:106). Similarly, systems language is seen to depend upon certain "tacit meanings" and "latent uses" that support a "quasi-scientific belief system" among its target audiences (1979:114-5). This early stance by Apple reflects the influence of contemporary critiques of technocratic rationality found in the work of Marcuse (1964), Habermas (1971, 1975) Gouldner (1976). For specific discussion of education and curriculum changes in this light see Misgeld (1985). See also Bowers (1977) who dovetails this approach with Bernstein and a phenomenological approach to sociology, arguing that the language of technocratic ideology is a "restricted speech code" which depends upon certain "meanings, definitions, and typifications" to support "ritualistic communication" in a "shared symbolic universe" (Bowers 1979:33,39). All place the consciousness of individuals at the center of analysis. In my view, Apple's early reliance on such frameworks ultimately limited, rather than expanded, the capacity of his analysis to make connections to the arena of social action. That is, he missed the major point that systems procedures not only organize peoples' consciousness, but also directly organize the arena of practical, social action. The shift to a more empirical focus in his latter work largely obviates this criticism, but also takes him in directions which are much less fruitful for my purposes. See footnote nine.

9. Apple himself is so eclectic in his theoretical interests that his work is difficult to characterize. At the risk of over-generalizing, I will say that Apple has been consistently interested in the form and content of curriculum as part of the process of "cultural domination" (1979, 1980, 1982). In this light, his interest in technical/administrative knowledge has been primarily as a form of "cultural capital" which is produced and allocated through schooling (1982). He argues that individuals, both teachers and students in different ways, are articulated to such knowledge as "consumers" through a process of "commodification" (1982, 1986). For students, individualized consumption of differential knowledges becomes the basis for social differentiation through schooling. For teachers, these

relations are said to result in a process of "deskilling, reskilling, intensification, and ... external control" (1986:10) similar to the transformations occurring in other work processes under contemporary capitalism. In recent work, Apple has also related these processes of domination in work to the relations of gender and race as well as class (1986). In this formulation, the "state" appears in classic marxist garb: education is seen as a "critical arm of ... the state" (1982:53) through which it "intervenes" in the economy to "legitimate" and sustain the relations of accumulation. The work which I have undertaken departs from these formulations of Apple at almost every turn. Since there is no brief way to make these differences clear, and I will leave the problem of clarification of my own approach to Chapters Two and Three.

CHAPTER TWO

IF COMPETENCY IS THE ANSWER, WHAT IS THE QUESTION?

"Disorder is the order we are not looking for." Henri Bergson (1946) [1]

This chapter attempts to situate the critical dialogue surrounding competency-based curriculum in a broader social perspective. It shifts the focus of investigation away from concerns with how competency measures have failed as a "solution" to educational ills. Instead, it directs attention to critical examination of "the problem" which competency measures are meant to solve. In this context, it becomes possible to see both how and for whom competency measures might serve as a thoroughly 'rational' and 'functional' course of action. From this perspective, opponents of competency measures may come to see both the persistence of the approach and possible strategies of resistance in a clearer light.

This examination will reveal that behind its facade of simplicity and neutrality, the competency paradigm provides a sophisticated process of transformation in both the principles and the practice of public policy on issues of education and training. It promises not only more clearly defined goals and more reliable outcomes, as emphasized by its proponents cited in Chapter One. It introduces as well a new organization of "institutional arrangements" which is "attempting to restructure

the educational field - its discourse, practices ... and principles of power [and] control ..." (Moore 1987:228). [2]

In particular, this chapter will argue that the concepts of skill and competence provide the "ideological currency" (Smith 1984) for a policy regime which aims to ensure that the interests of capital are dominant in the education and training process, not only at the level of political rhetoric but also in daily practice. I will attempt to show that educational methods which serve these ends are gaining a "hegemonic position within the educational field", increasingly "control[ling] the agenda of ... educational debate" (Moore 1987:229) and dominating the working relations in educational institutions.

To begin, I will introduce some basic analytic tools from studies in the social organization of knowledge which will serve as the starting point and guideposts for this investigation. Secondly, I will take a critical look at the policy climate which has spawned the rise of competency-based education and training initiatives in the post-compulsory sector, critically examining some of its basic assertions and assumptions. Finally, I will begin to explore how competency measures are integral to translating this policy framework into practice in the college setting, pointing toward the more detailed empirical investigation undertaken in the chapters which follow.

PUBLIC POLICY AND IDEOLOGICAL DISCOURSE:

The notion of ideology is an important, if overworked and abused, tool of Marxist scholarship, so some groundrules for its use here may be helpful. Such guidelines are established here by beginning to situate my interest in the public policy process with the framework of analysis in the social organization of knowledge. The framework calls for some very particular understandings of ideology and ideological modes of action as a feature of the relations of dominance in bourgeois society.

The concept of ideology, as it will be used here, departs from its common usage in neo-marxist literature to refer to a system of ideas which "legitimate" or "reinforce" the practices of a dominant or ruling class. [3] Rather, the concept is used here to identify methods of talk and action which are an integral part of the conduct of such ruling practices (Smith 1987b; Rubenstein 1981). This apparently small theoretical distinction has far reaching implications for empirical investigation. That is, if 'ideology' is understood as a system of justification for the actions of rulers, then it will have its existence almost exclusively in the realm of ideas and understandings, and may bear an indeterminate relation to the practices which it is said to legitimate. If, on the other hand, the concept of 'ideology' is seen to incorporate practical activities which both organize and are organized by ideas and understandings, then its existence, and importantly its power as a social force, must also be sought in the form of organized practical activity itself.

Here, the term ideology will be used in the second of these two modes, to identify aspects of both discursive and practical organization which coordinate and articulate local understanding and action to a wider arena of social arrangements. This use of the term is central to studies in the social organization of knowledge. According to Smith, ideologies are

... master frames providing the conceptual order, sometimes vocabulary, coordinating ruling practices in the multiple sites of ruling, both within and without the state. The concepts of the master frame govern the devising of administrative and managerial practices; multiple specialized sites of ruling are coordinated with one another through the deployment of a common conceptual structure (Smith 1987b:25).

The research reported in this thesis, like other studies in the social organization of knowledge, [4] aims to show that these forms of ideological and discursive coordination are pervasive and central to the organization of ruling relations. They provide the "conceptual and interpretive practices" which organize the work of "administrators, consultants, professionals, and others active in processes of ruling". Such interpretive practices enable individual workers to have ordinary conversations with one another about their work, to read and use the literature and documents of their professional work processes, and most importantly, "to translate [such documents] into the appropriate next forms of action" at each level of institutional life (Smith 1987b:24).

The notion of discourse is also important here to signal this essentially coordinated and concerted character of contemporary social life. It points to a realm of social action which is largely mediated symbolically:

Discourse develops the ideological currency of society, providing schemata and methods that transpose local actualities into standardized conceptual and categorical forms. Ideological practices bind the local to the discursive ... (Smith 1984:64-65).

In the context of institutional work processes, such as the college system examined in this thesis, such ideological and discursive mechanisms serve to coordinate the work of educators in a wide range of local settings into a single institutional course of action, mediating "the relation of members' actual practices - their work - to the institutional function" (Smith 1986:8). They teach people how to "recycle the actualities of their experience into the forms in which they are recognizable within institutional discourse" (Smith 1986:8). Concepts and categories of the discourse become translated into the vocabulary and analytic procedures of an "institutional ideology" which provides individuals with "methods of analyzing experiences located in the work process of the institution" and for making them "observable-reportable within an institutional order" (Smith 1986:8). According to Smith, this kind of ideological procedure is common to academic, professional, and managerial work processes.

In this way, the work and practical reasoning of individuals and the locally accomplished order which is their product, becomes an expression of the non-local

relations of the professional and bureaucratic discourse of the ruling apparatus (Smith 1986:8).

In other words, it is through ideological practices of this kind that the work done by individuals comes to be part of a larger undertaking, one which may be largely out of view of the worker as she goes about her daily routines. Problems occur, or a sense of dilemma often arises, when these same individuals find that the larger enterprise in which their work is embedded does not reflect, or indeed may contradict, the sense or intentions with which they approach their own work. In this situation, it becomes evident that such ideological practices do their primary work not by influencing the consciousness of individuals (cf. Apple 1979; Bowers 1977) but by altering the organization of their action. In contemporary bureaucratic settings, such arrangements commonly rely on the use of documentary processes (e.g. forms, charts, reports) to articulate the work process of individuals to the institutional mode of action.

In this thesis, the modes of understanding and action represented by the term "competency-based curriculum" are shown have the ideological and discursive character outlined here. They provide a conceptual framework, a vocabulary and set of institutional practices, through which local educational activities are subordinated to a ruling discourse. Examined from this perspective, it will be evident that the remarkable endurance, the force, of the competency paradigm in the college system is attributable, not to its state of "maturity" as an

educational science, nor to the educational adequacy of the instructional goals it facilitates, but rather to its "cogency" (Smith 1987b) as an ideological force, that is, "its capacity to align infrastructure" in the education and training sector "with the changed conditions of capital accumulation" (Smith 1987b:24 emphasis in original).

The concept of alignment is central to the critical reformulation which is undertaken throughout the thesis. The process of alignment is itself a social activity, available to investigation through the talk and documents of the policy process and curriculum organization. This chapter will begin to examine the process of "alignment" at work, from the level of public policy discourse to the level of practical institutional action. In this context, some of the dimensions of competency-based curriculum systems described in the last chapter as "dysfunctional" or a "mistake" from an educator's point of view will be visible in a new light. In particular, aspects of the scientism and behaviourism of the competency approach will begin to emerge as integral to its contribution to a public policy process that can be seen as both coherent and responsive to the current economic and political climate.

THE VOCATIONALIST DISCOURSE RECONSIDERED

Recent analysis of "new vocationalist" policies in the post-compulsory sector has been the most vigorous among British

sociologists of education. There, critics charge that the dominant approach to training policy in western industrialized nations is an ideological smokescreen, offering short-term political solutions to long term economic problems. The critics say that current training strategies focus attention on the qualities and capabilities of the existing workforce and on the capacity of educational systems to adjust to the changing expectations of industry (Finn 1982; Donald 1979; Dale 1985). In so doing, these policies draw attention away from more fundamental problems related to technological innovation and industrial restructuring, including the failure of labour market mechanisms to resolve "imbalances" in supply and demand of labour, and the failure of national economies to generate employment growth (Holt 1987; Cohen 1984; Bates et al 1984; Donald 1979).

Thus, according to British critics, the vocational policy literature has laid blame for unemployment (of youth in particular) firstly at the feet of educational institutions, for their failure to transmit "basic skills" relevant to economic life, and finally at the feet of individuals themselves, who are said be unemployed because they "lack the skills" required in the workplace (see Bates et al 1984; Rees and Atkinson 1982). The popularity of this understanding in Great Britain was reflected (also promoted and exploited) in a much-cited 1979 Tory election poster which read "Educashun isn't Wurking" (Finn 1982). The significance of this formulation of the problem is particularly

clear in the British case where the policy response to unemployment focussed primarily on the creation of the Manpower Services Commission as a high-profile alternative to traditional educational institutions, which were said to be "less nimble" than required to meet the "speed and magnitude of required change" (Finn 1982:47).

In Canada and the United States, the same terms of debate have prevailed, also leading to succession of education and training initiatives as the major policy response to unemployment. While these initiatives have not included the creation of a wholesale alternative to existing institutions, as in Great Britain, they have nevertheless involved a fundamental shift or inversion of the framework for action in existing educational institutions. That is, the existing educational apparatus at the post-compulsory level was built up in the post-war years in a climate of liberal/humanist support for education as the means for individuals to satisfy their needs for employment, and as a means to maximize, even equalize, individual opportunity to realize their own employment potential, all in the context of building national prosperity. By contrast, the new vocationalist policy framework depends upon an inversion of this rationale. Instead of orienting to the realization of individual potential, education and training of individuals becomes directly subject to its perceived worth in maximizing the economic potential of the economy and the nation (Finn 1987; Gleeson 1986). Thus a framework is established for thinking about

education and employment primarily in the terms that they arise as a problem for capital, i.e. labour supply. Training institutions become a place for "remaking the young working class in the employers' image" or "manpower servicedom" (Finn 1987:3-4). Willis (in Finn 1987:iv) refers to this approach as "industrial remedialism" .

Among North American critics of education, this basic shift in the standpoint of public policy has met with surprisingly little reaction. Public silence is perhaps understandable in the context of widespread and well-founded fears of unemployment and under-employment, in light of which there is considerable popular readiness to see the "needs" of industry and those of individuals as the same thing (Grosch 1987). Individual interests appear to be served as a by-product of the process of meeting the needs of the employer. It is a kind of "trickle-down" approach to employment policy. But among educational theorists and critics, such a muted response to the hijacking of liberal educational ideals is somewhat more surprising. Humanistic ideals have been pressed into the service of crudely utilitarian forms of occupational preparation, and the time-honored educational distinction between what employers want and what is good for learners seems to have been "conjured away" through an elaborate "sleight of hand" (Cohen 1984).

Among British and European analysts of education, this "sleight of hand" has drawn considerable fire, beginning with a

broad critique of what has been called "a hidden agenda for redeploying the notion of skill itself" (Cohen 1984:184). They point out that the concept of skill has become the lynchpin of otherwise diverse strategies and objectives for change, orchestrating a broad public consensus about educational goals. Its usefulness in this regard depends upon the "loose and baggy" (Donald 1979:13) character of the concept itself. [5] 'Skill' has become a metaphor for the total output of all our institutions of learning, and a standard by which they should be judged. 'Skill' is used as the measurement of accomplishment or of readiness for entry to almost any endeavor, be it private or public, economic or social. The list is familiar: basic skills, job skills, life skills ... even "thinking skills" (Segal, Chipman and Glaser 1985; Beyer 1985). As a curricular category, the concept of skill is particularly useful because it appears to be "indifferent to contents ... an empty space into which a whole range of contents [can] be inserted" (Grahame 1983:5). Because the concept of skill carries with it overtones of status representing whatever is knowledgeable, even scientific, it lends an aura of authority to what ever falls in its shadow. It also serves to indicate that the need for innovation in education is driven by economic circumstances, implying a common stake in the outcome. For all these reasons, the concept has become in the last decade a dominant form of popular understanding about the purpose and objectives of education (CCCS 1981).

A number of critics have pointed out that the concept of skill has achieved a place at the pinnacle of educational

rhetoric by appearing to neutralize what is at its root a fundamental conflict between capitalist imperatives and popular needs. Lenhardt (1981) captures the sense of this critique in the following passage:

... [T]he concept of educational interests has been replaced by the concept of skill requirements, which is seen as being determined by economic growth or technological progress. Both economic growth as well as technological progress are conceived of as having political relevance but being themselves of a rather technical, "apolitical" nature. If the identification of educational interests and their transformation into educational policies is regarded as a technical problem rather than a matter of mediating conflicting social interests, then public democratic discourse with regard to educational matters is rendered meaningless (Lenhardt 1981:213).

Lenhardt argues that the concept of skill puts the discussion of educational objectives on apparently neutral territory. It invokes a realm of abstract necessity, where skill may stand in for imperatives which are qualitatively diverse and even contradictory.

Underneath this abstract consensus, however, lies a long history of struggle between employers and workers for control over the organization of work processes and over the supply and demand for qualified labour. On the employers' side, the need for skills has been subject to a particular time, place and stage of economic development, but never straightforwardly determined by a technical or technological considerations. Instead the demand for skills has always been mediated by social and political considerations relevant to the control of work (Noble 1984; Gordon, Edwards and Reich 1982; Edwards 1979), in which the

technical factors are themselves embedded (Gorz 1976; Althusser 1971; Gleeson and Mardle 1980). Central to these political considerations has been the interest of employers in minimizing their costs of labour, an interest which affects the determination of "need" in terms of the quantity and quality of education and training which are desirable from the employers point of view (Finn 1982; Blackburn and Mann 1979). Among workers and workers' organizations, the concept of skill has been an organizing device in the struggle for political, economic and social power, and control over educational measures has proved to be an important aspect of that struggle (see Gaskell 1983; Clement 1981; Barrett 1980; More 1980).

These longstanding political divisions over the management of skill are the context in which the whole enterprise of vocational/technical education is embedded, and to which the concept of competence has brought a new degree of sophistication. It has made possible a shift in attention on the part of educational planners and policymakers from the problem of "matching" demand and supply [6] to a concern for the way in which occupational skills are constituted, organized, and controlled in the context of learning. Historical forms of organization and control which invest skill within the purview of the worker, for which apprenticeships are the paradigm, have come to be seen as a limitation on the prerogative of employers to acquire, deploy and dispose of labour power according to their own interests. Previous broad concepts of craft mastery are

being replaced by a different logic of skill in which the worker is in an employer-dependent role in a labour hierarchy (Blackburn and Mann 1979). The concept of competence makes a crucial contribution to this new form of organization, creating a new discursive entity around which the employer may organize to retain more control over the specification and utilization of knowledge and skills and thus greater flexibility in the deployment of labour power. The concept of flexibility has become a central ideological device in the promotion of competency-based reforms of vocational education and training institutions. According to Cohen, such reforms facilitate

training for abstract labour, i.e. labour considered in its generic commodity form as an interchangeable unit/factor of production. The main function of this reclassification is in fact, to increase elasticities of substitution between different occupational categories, and thus, indirectly, to undermine the residual forms of control exercised by skilled manual workers over conditions of entry and training (Cohen 1984:113).

In this context, the whole concept of competence and the flexibility which it offers can be seen to be deeply embedded in the employers' interests in labour power. It shifts the practice in vocational/technical programs to more narrow, short-term, instrumental aims as an integral part of the promise to deliver programs that are flexible and responsive to the "needs" of industry. This flexibility is accomplished by the replacement of lengthy and comprehensive programs and certifications with limited forms of training to levels specified by the employer to meet short term goals. Knowledge and skills are treated as incremental, i.e. subdividable into component parts, and

cumulative, so that they can be acquired over a lifetime in a pattern of recurrent work and schooling. This organization of learning is said to satisfy the needs of the worker for early access to the workforce, and to facilitate easy passage back and forth from work to training on a recurring basis throughout adult working life. Thus the interests of all parties appear to be addressed.

Meanwhile, the process of converting a work process into a skill profile of competencies to be mastered subsumes, and depends for its sense upon, the particular social forms in which work is organized in the workplace. Although this work process lies at the foundation of work performance, it is specifically excluded as an object of instruction. This form of learning builds in subordination of the worker to the employer, not as a matter of proper attitudes or discipline, but as a feature of the division of working knowledge itself. Thus, within the very terms of working knowledge is inscribed the social form of the division of labour which ties together workers and employers in the service of capital.

Through competency-based education, this particular form of the organization of working knowledge is transplanted from the workplace into the educational institutions as that form in which "know-how" will be disseminated, made available for learning. It is a form of mastery in which emphasis on the knowing subject is replaced by an objectified form of knowing, i.e. performance,

subject to external controls and measurement. Such a focus of instruction largely obscures the developmental aspects of learning and knowledge related to work, how knowledge is modified and enhanced through practice, and how this gain may serve individual or collective welfare. It raises the prospect of a form of schooling which "contributes to depriving the individual of autonomous control over the work process and his [sic] living conditions" (Lenhardt 1981:200). Training in this mode has the effect of "minimiz[ing] the bargaining power of the 'collective worker'" (Cohen 1984:113) and increasing the potential to assert the interests of capital over those of workers.

The concept of competence thus serves to refine and extend the fundamental shift in the standpoint of education and training policy from the standpoint of the individual to the standpoint of the employer. Grosch (1987:157) calls 'competence' "the final and most important concept in the set of new mantras". It serves as a means to translate the requirements of a production process into a form in which they can be expressed as the characteristics of individuals. This translation is critically important in policy terms because it situates two potentially disparate constituencies for state action along a single continuum of "interests". That is, "competencies" stand for particular performance abilities which employers want to hire and individuals may come to possess. Individual educational and employment status comes to be measureable along this continuum. The notions of skill and competence provide a means to formulate

educational objectives not in terms of individual choices, interests or careers, but in terms of one's ability to service the interests of employers (Grahame 1983).

This shift is part of institutionalizing, making into an objectified social practice, the separation of vocationally oriented learning from "immediate and available links with recognised areas of formal, elaborating knowledge" (Moore 1987:236). It divorces vocational learning from its ties to a traditional liberal concept of education and removes it from a "potentially critical knowledge perspective" (Moore 1987:236, emphasis in original). According to Moore (1987:240), the new paradigm is "intrinsically incapable of reflexive critical analysis of relationships of production or their ideological representations".

"By effectively denying its own grounds, 'the new vocationalism' achieves the precise opposite of its declared intentions - rather than enabling young people to acquire an elaborating perspective towards the social relations of work it perpetuates their mystification" (Moore 1987:240)

It is essential to the analysis being put forward here to stress that the uncritical or unreflective character of the new vocationalist paradigm is not simply a problem of "inattention" (Moore 1987) in competency methods. Rather it is a systematic property of its ideological character, essential to its power to effect a transformation in educational relations while maintaining a posture of objectivity and neutrality. This systematic, ideological character of competency methods is the

object of detailed examination throughout the empirical chapters of this thesis.

A FRAMEWORK FOR ACTION

The work of coordination and alignment of public policy which is accomplished by the skills/competency paradigm begins in the process, examined above, of defining or conceptualizing the educational enterprise from the standpoint of the employer. But the work of alignment doesn't end at this broad level of conceptual organization. It also involves providing an organization of practical action in the college setting which makes the instructional process accountable on the same terms. This practical level of organization articulates the daily work process of instructors in the local setting to the objectives set out in the policy discourse. Competency measures are central to this undertaking. They provide a documentary framework through which what goes on in college classrooms can be seen as part of satisfying the requirements of institutional accountability to public policy. Thus they are integral to the relations of college management. This point is critical to the transformative power of the competency regime, and central to our analysis of its "cogency as an ideological force".

A. The Social Construction of "Need"

The phrase "employer-driven" is used by policy makers to describe the salient feature of these practical institutional arrangements, the main objective of which is to make the college system "responsive" to the requirements of productivity in the workplace. In this approach, employers are deemed to be the "end-users" of the products of education and training, and as such become the primary source for determination of training "needs" and program "relevance". The competency approach prescribes a formal process for defining such "needs" through a workshop called a task analysis, in which employers are asked to specify their requirements for entry level workers. This process is used to establish basic educational objectives for a given program, to which instructors are required to conform in their course planning.

However, we will soon see that these processes of coordination and articulation are highly ideological, and it is this character which is the primary object of our interest. Recognition of their ideological character begins with the discovery that the concepts of "production" and "need" as they are used in this system are themselves "ideologically constructed categor[ies]" (Moore 1987:241). That is, as critics point out, the practice of asking representatives of 'business' to identify the 'competences' it wants or to define and verify their achievement

through training is "attempting the impossible" (Finn 1982). Employers' conceptions of their needs are often not explicit and not clearly formulated, and there are inconsistencies between what they say they want and the hiring processes they actually use (Finn 1982). This ambiguity renders the rhetoric of 'relevance' "almost meaningless":

The concept of "relevance" conveys no precise meaning or intention. Instead it is used as a vague term of approval, implying that direct and immediate economic applications justify some forms of knowledge and not others (Barker 1987:7)

Furthermore, this approach imposes a "simplistic gloss" over the real world of diversity and contrast in the requirements of differing and competing capitals, and even representatives of the state are said to be unlikely to successfully identify or construct such points of consensus (Goldstein 1984; Finn 1982).

These realizations highlight the essential fallacy of the rational scientific approach to educational goal setting in general, the notion that "need" is an intrinsic, objective, measureable property of individuals or organizations. Instead, it begins to become evident that "needs" acquire an "objective facticity" only through an elaborate process of objectification, and that the process itself is highly ideological. What is required for the purposes of this analysis, (and will be undertaken in the empirical chapters), is not a search for the 'real truth' about employers' needs, but an interrogation of the socially organized practice of defining "needs". Our objective

is to understand its "status as knowledge", its conditions of production, the standpoint it incorporates, and the interests it serves (Armstrong 1982).

The competency approach relies upon these socially organized definitions of "relevance" and "needs", however ideological, as the basis for a highly determining organization of curriculum decision-making. They become part of the institutional arrangements referred to as "instructional management systems", which may include the specification of some or all of the following: learning objectives, instructional procedures, desired outcomes, methods and/or substance of student evaluation, and evaluation of teaching (Spady 1982). Instructional management provides the context for re-examining the next major factor in the ideological character of the competency paradigm: behaviourism. The significance of the behavioural framework which becomes visible in this context largely escapes the attention of the critics cited in Chapter One.

B. Behaviourism Reconsidered

Behaviourism is recognized by its proponents and critics alike as a "cornerstone" of the scientific or systematic approach to education and of the competency approach in particular (Nunan 1983; Macdonald-Ross 1972). Like the competency paradigm itself, behaviourism has survived despite "... years of philosophical, psychological and political attacks" upon its assumptions, and is

still "... recommended and prescribed as 'knowledge that teachers should use'" (Nunan 1983:97). [7]

Numerous commentators have pointed out that behavioural objectives and accountability systems tend to be associated, or that "competency" is a "close relative" to accountability (Gander in Collins 1987:17), although they seem not to be linked either logically or necessarily. According to Ralph Smith,

[a]lthough performance-based and competency-based conceptions of teaching and learning ... are not logically entailed by a PPBS approach, they are compatible with it.... [I]t is not that a PPBS approach to education requires the use of behavioural objectives ... [i]t is simply, if I am right, that these things tend to get associated and lumped together (Smith 1975:3,5, emphasis in original).

Here I will argue that Smith is, indeed, not right. The association between these mechanisms is more than a "tendency to get associated and lumped together" and that even the term "logical" is inadequate to conceptualize the relation between them. Rather, the relation is a dynamic and compelling one, embedded in a particular arrangement of social relations on which both depend for their capacity to get things done. To demonstrate the ideological character of these arrangements, we need to take a few steps back and reconsider some familiar claims about what behaviourism is and does.

The importance conventionally attached to behavioural objectives by vocational educators is their promise to provide a clear statement of what is to be mastered. In this way they are

thought to provide a rational, instrumental link between the "needs" of the employer and the learning of individuals. The prescribed behaviours are treated as simple and taken-for-granted, given by the nature of tasks (Short 1984).

Behavioural objectives are presumed as being intrinsically unproblematical. They are taken and represented as given, as essentially natural.... [They] are treated as simply derived from, identical to, and immediately transportable back into everyday practices. They are essentially contextless - simple 'things' rather than the constructs of discourse (Moore 1987:239, emphasis in original).

However, in practice, behavioural objectives are anything but "natural" and straight-forward, and thus the promise of continuity on the basis of this assumption has not been realized. Critics are increasingly coming to recognize that the behavioural approach does not result in a "simple top-down imposition" of a new form of classroom learning, and we should not look for this kind of outcome as sole evidence of its impact (Moore 1987; Gleeson 1986; Finn 1982).

Rather, the power and significance of contemporary uses of behavioural objectives is found in the manner in which they impose a new set of "institutional arrangements" (Moore 1987) which is complex and ideological to the core. It is this ideological character which is key to the power of the competency approach to transform the social relations of educational practice. This is visible in several ways.

Firstly, the specificity and certainty which is promised by the behavioural approach can be shown to be an appearance, a

social construction, even when scrupulously implemented. Behavioural objectives have an ideal, even "fictional" quality, always just out of reach (Short 1984; Nunan 1983; MacDonald-Ross 1972). Thus they can never be implemented in practice with the precision they offer in theory. Participants at all levels know that what goes on in classrooms is not always done "by the book", and that this is more than a problem of stages of implementation (Hart 1987; Nunan 1983).

Secondly, the fact that behavioural prescriptions may not accurately describe the realities of teaching and learning turns out to be relatively "unimportant" Nunan (1983:57). What is more significant is that the approach provides the necessary "micro-structure" (Nunan 1983:57) for the rational/systematic approach to the delivery of education. That is, it produces a form of knowing and acting which is defined and controlled from outside the acting subject. This same micro-structure is visible in at least two dimensions. The first is in the objectification of vocational knowledge itself, organized by behaviourism as a form of action from which the acting subject has been removed. This objective form of action is represented by the notion of "performance" as the end product of instruction. When the behavioural principle is carried through into curriculum decision making as a whole, this same objectified relation is produced in a second dimension of the teaching learning process, that is the relation of instructors to the educational enterprise. Teachers become implementers of process which begins and ends outside

them, for which they are not the authors. The learning process is conceived and originated prior to the teachers' sphere of responsibility, and orients to, intends, has as its object a sphere of action in the workplace which is beyond their jurisdiction. The role of the teacher becomes a support function, subordinated to institutional goals and objectives which are determined for them and which order and organize their practice.

In these arrangements, the teacher becomes a "technician", rather than an "educator", skilled in the "techniques of meeting pre-established performative criteria" rather than being knowledgeable "about the theoretical traditions from which their prescribed practices are derived" (Moore 1987:236). He or she determines neither the ends nor the means of the educational process.

This situation correlates with changes in both the principle of the teachers' authority and the institutional mechanisms for defining, legitimating and evaluating 'educational' knowledge. No longer are these things constructed from within a relatively autonomous educational field, but are the province of corporate, non-educational interests (Moore 1987:236).

In other words, I am arguing that behaviourism is central to accountability measures such as competency because the two are isomorphic. They rely upon and bring into being the same objectified and objectifying organization of social relations, which is a necessary constituent of contemporary relations of ruling.[⁸] Through these accountability measures, successive

moments in the educational enterprise are transformed into a mode in which they are knowable from an external location, through the mediation of a documentary process. It is this moment of abstraction, of rupture or separation in the internal continuity of knowledge and action, which provides for the possibility of control. It inserts a point of authority outside the moments of teaching and learning from which these activities may be defined, measured, evaluated, as part of their articulation to, or alignment with, a process of ruling. Thus, behaviourism, even when only loosely or "weakly" practiced (MacDonald-Ross 1975) [9], unites the micro-structure and the macro-structure of the "new vocationalism". For this reason it is the constant companion and faithful tool of the new wave of college reformers.

The most politically perceptive analysis of this character of curricular processes is found in the work of Nunan (1983). [10] His brief but highly informative book, entitled Countering Educational Design, is oriented to helping progressive teachers understand and resist the detrimental effects of contemporary forms of curriculum organization. Nunan (1983:2) argues that when curriculum design is transferred from classroom practitioners to specialists "who aim to employ scientific solutions to learning situations", the interests which are at the center of the design enterprise also shift. He reminds us:

Educational design had its meaning within the teaching and learning situation of the classroom - the traditions of practice provided ways of 'making meaning' which served to inform decisions about design (Nunan 1983:2).

By contrast, in the systems approach, the educational process is divided into separate phases of design and execution. Scientific knowledge and rational problem solving techniques are applied to the design process with the claim of maximizing effectiveness and efficiency in teaching and learning. Such techniques are said to be superior to teachers' methods of decision-making, but they no longer "fit the educational facts with which teachers live and work" (Nunan 1983:5). Teachers "are assigned an implementation function", becoming consumers of educational packages which "reach the schools in brightly coloured boxes" leaving little or no room for "teacher tampering" (Nunan 1983:5). Importantly, Nunan identifies the significance of this shift not merely in terms of "control" (c.f. Apple and Teittlebaum 1986; Buswell 1980), but in terms of the standpoint that comes to be embedded in curriculum. He hits the nail on the head when he writes:

Present notions of educational design are structured from the position of those who would wish to manage rather than those involved in performing either teaching or learning (Nunan 1983:5).

Nunan's analysis is more than a romantic desire for teaching to remain "a creative, adaptive and vital undertaking" (1983:3), although he doesn't attempt to dampen his commitment to this principle. His work is also important theoretically and politically because it points toward a fundamental transformation of the social relations of curriculum which is at the root of the changing experience of teachers. These forms of organization

determine whose voices will be heard and whose interests will be served in the curriculum process.

CONCLUSION

My intention here has been to challenge the common sense assumption that the notion of 'competence,' as it has been used in the policy discourse, refers to ways to "improve learning" or to enhance individuals' capacity to act. Instead, I have argued that its importance as a policy tool inheres in a much more complex social relation. That is, 'competence' comes into being as a social force only in and through a particular organization of relations among social actors in the spheres of education and employment. This relation is one which articulates individual knowledge and performance to the process of capital accumulation in the workplace, and which coordinates and aligns the work of educational institutions so that the benefits or "property rights" which are the product of educational programs can be said to accrue directly to capital (Goldstein 1984; Moore 1987).

What we are witnessing in these developments is a process of transformation in the character of state regulatory practices which is not confined to the sphere of education alone. Rather it is part of a more generalized development in which an ever widening circle of activities, including many which have in past constituted a sphere of state action ostensibly concerned with

the public welfare (e.g. social services, health care, education), are coming to be managed according to their worth to capital (Clarke in Smith and Smith 1987). [11] The competency-based curriculum measures explored here achieve their broadest significance in this context.

These developments in the sphere of education also have far-reaching implications for our understanding of the state and state processes in contemporary capitalist social formations. They challenge our assumptions about the state, not only how 'it' may be expected to act and whose interests 'it' can be seen to serve [12], but also about what constitutes "the state" or state action. The curriculum practices examined here help remind us that the power we call 'the state' actually "... exists only as it is exercised ... in a network of relations, constantly in tension, in activity" (Donald: 1979:14). It is only by focussing on these forms of "state as practice" that we begin to understand its character, and particularly the continually contradictory character of state regulation and reform. While the problem of theorizing these observations of "state as practice" remains largely outside the scope of the present thesis, nevertheless I want to note the potential for a contribution to state theory which is implicit in this form of empirical investigation. [13]

Furthermore, the critical concern of Marxist critics of education is not simply with a form of "state as practice" which articulates education and industry, since this could be seen as

an essential requirement of economic viability in all forms of industrialized societies. Rather, we must be concerned with how this articulation is accomplished in the context of sustaining capitalist social relations (Donald 1979). In this light, my analysis of competency measures in practice begins to reveal that state mediation in the sphere of education and training serves the maintenance of capitalist social relations by effecting a redefinition of what vocational education is and is for, and by restructuring its institutions to serve these new objectives (Donald 1979).

Finally, this study of the curriculum relations under the competency framework reminds us that the social relations through which the interests of capital come to dominate the social process in our midst are never rigidly deterministic. Rather, they continue to involve a process of struggle among opposing forces. In this context, curriculum decision-making will continue to be an arena of conflict, inasmuch as it is made up of competing interests of instructors, representatives of differing capitals, and curriculum specialists representing the state, all driven by different relations to the question of "need". It cannot be taken for granted whose interests will prevail at any given stage in this ongoing historical struggle. In this context, the importance of competency measures is the sophistication which they bring to the practice of state regulation in this arena, and the way they are employed as part of a broad state strategy to give a larger voice to capital in the determination of the goals of public vocational education.

However, the curriculum process itself remains contradictory and ideological, even in the ways that it attempts to represent the interests of capital (Goldstein 1984). For instance, it is not at all clear the interests of capital are better served by competency arrangements which impose on employers a short-term conception of skill requirements on the job. [14] Indeed, this thesis argues that the most immediate and compelling force which sustains and perpetuates this particular form of curricular arrangements is the way it satisfies, not the skill requirements of capital, but the imperatives of managerial relations within the enterprise of bourgeois state rule. Thus, the competency paradigm is an important tool of state action not because it necessarily better serves the interests of capital, but because it becomes part of the capacity of public policy process to make education reportable/accountable as serving these interests. In this context, I will argue in later chapters that the competency paradigm becomes an aspect of "good management practice" in the college environment.

ENDNOTES

(CHAPTER TWO)

1. Bergson, H. The Creative Mind: An Introduction to Metaphysics. Quoted in David Schuman (1982).

2. I have found the work of Robert Moore extremely interesting and suggestive, and have made considerable use of it throughout the thesis. However, there are considerable differences between his analytic project and my own which require comment. Moore writes from a background of experience as a social education teacher in a comprehensive school and in non-advanced further education as an instructor and program evaluator. As a result, his work reflects a strong grasp of the relations of practice, which is its strength. As a sociologist, however, he gravitates toward rather abstract theoretical and conceptual tools, which ultimately limit the value of his work for my purposes. According to his own report (1987:228), Moore's "underlying theoretical approach" derives from Bernstein, from whom he adopts constructs such as "transmission codes" and "boundary relationships" to explore the relation between pedagogy and production (1987, 1983). In the process, his attention is diverted away from the ground of experience and practical social organization and into the world of abstract logic and conceptual organization. Thus, I have found it useful to follow Moore's suggestive formulations in the direction they point empirically rather than theoretically.

3. This use of the term ideology is too pervasive to attempt to catalogue. For ready examples in a relevant literature, see Apple (1982), Weiss (1985) and Livingstone (1985).

4. See G.W. Smith (1988, 1987), Ng (1988), Campbell (1988, 1984), Griffith (1984), Reimer (1987), Cassin (forthcoming).

5. For much of this discussion I am indebted to the Center for Contemporary Cultural Studies (CCCS, 1981), and to Peter Grahame (1983).

6. See G.W. Smith (1987, and forthcoming) for a detailed analysis of labour market management practices from a social organization of knowledge perspective.

7. See Nunan's (1983:53-57) excellent discussion of the "union of behaviourism and systems [thought]".

8. G.W. Smith (forthcoming) uses the concept of "recursivity" to explore this phenomenon.

9. Macdonald-Ross (1975) posits two approaches to the behavioural/systematic approach: hard and soft. The "soft-line"

approach identifies those who are satisfied with "weak rules" for deriving objectives ... "better than nothing but not leading to powerful prescriptions". Macdonald-Ross points out that the "weak rules" position is inconsistent with many of the "ambitious and demanding schemes" derived from behavioural premises in recent years, such as "payment by results or mastery learning" (1975:361) and furthermore objects that it is not clear that "weak" procedures can "deliver the goods: that is, whether the outcomes of education can be brought in line with the initial aims. And that surely was the purpose of the whole enterprise" (Macdonald-Ross 1975:361).

10. Nunan's analysis, despite its political clarity, does not entirely escape the problems of idealism discussed in the last chapter. The troublesome points in Nunan's work, from my perspective, are those aspects of his analytic framework which he specifically identifies as "sociological". For instance, he constructs a dichotomy among educators between the "controllers" and the "controlled", and treats these as manifestations of opposing "value positions" (p. 18) and "world views" (p. 36). He says "The approach is sociological, and based around the notion of key or core values held by groups. Teachers should ... be able to identify the ways in which they are being managed (through values) and who is attempting to manage them (by those who hold such values)." (p. 18). This passage is a classic illustration of the "ideological practice of sociology" (Smith 1974b).

11. See Campbell (1988, 1984) for studies of this relation in nursing and social work. See Ng (1988) on management of community organizations in this context. On community college management see Muller (forthcoming, 1987).

12. For an introduction to existing approaches to the state in relation to education, see Dale (1982, 1981).

13. Elsewhere (Jackson 1980) I have discussed problems of state theory particularly as they relate to class character of the state under capitalism. Although these issues remain peripheral to the central project of the thesis, I want to comment briefly on how the empirical research reported here may be seen as relevant to these issues. The problem is, as Philip Corrigan wrote, even as early as 1980, there is among Marxists a "surfeit of theory" (Corrigan 1980:xvi) about the nature of the state, (i.e. Jessop, Miliband, Offe, Poulantzas, Gramsci and their followers; for review, see Jessop, 1982), but there remains a relative dearth of theoretical or empirical work which aims to explicate the presence of state relations as a form of social organization which is a pervasive presence in everyday life. For examples of this genre, see Cockburn (1977), London-Edinburgh Group (1980), Corrigan (ed. 1980), Corrigan and Sayer (1985), Ng (1988), Dehli (1988), Resources for Feminist Research (1988, 1986). Such an approach to studying the state is informed by the epistemology of Marx, but not of most Marxists (see Corrigan, Ramsay and Sayer 1980). Since my interest in "the state" falls in this latter territory, I have chosen for the purposes of the

present study not to formulate my findings in relation to existing or proposed state theory, but rather to contribute to the growing body of empirical explorations on which an adequate, materialist, theoretical formulation might be built.

14. See, for example, Hirschorn (1986).

CHAPTER THREE

THE SOCIAL ORGANIZATION OF KNOWLEDGE:
AN APPROACH TO INQUIRY

The relation between individual and organizational or institutional action is at the heart of the investigation undertaken in this thesis. In the empirical chapters which follow, competency-based curriculum measures are explored through the talk and action of instructors and administrators in the college setting and the documentary processes which organize the relations among them. Our interest in these activities is the way in which they reveal the social organization in which they are embedded and on which they depend for their sense. Here I will explore some of the basic premises of analysis in the social organization of knowledge on which such an investigation depends.

This chapter identifies the basic methodological principles of the materialism of Marx as the starting place for social inquiry. From there, it provides a more detailed examination of the epistemological grounds for the use of language and documentary processes as the principle resources for investigation. These technical discussions deal directly with the practical underpinnings of the thesis in both a broad and a narrow sense. They provide the theoretical terms within which language and texts may be seen as constituents of social action; this relation underlies the entire conception of empirical

enterprise undertaken here. The same technical discussions also explicate the epistemological basis of the methods of data gathering and analysis employed throughout, including procedures for interviewing, observations, and attention to documentary processes.

THE SOCIAL ORGANIZATION OF KNOWLEDGE

The social organization of knowledge [¹] is an approach to social inquiry which takes as its broad objective the work of explicating the relations of dominance and subordination in twentieth century capitalism, through an investigation of the forms of knowledge, including documents and textual processes, which are characteristic of the "ruling relations" in capitalist society. The concept of "ruling" in this use extends not only to activities of government per se, but to the extended bureaucratic, political, juridical, economic etc. activities which characterize the organization of contemporary corporate capitalist societies (Smith 1984, 1974a). The approach begins where individuals are located in the everyday world of local experience and works to explicate the embeddedness of individual experience in these extended social relations of ruling. It seeks to demonstrate through this relation of embeddedness how it is that individuals participate on a routine basis in the production of social arrangements which seem to have power over their lives but which individuals experience as independent of, often contradictory to, their intentions to act.

The problem is a classic one in Marxist thought, posed by Marx and Engels in The German Ideology (1970). There, they wrote about the problem of "... the consolidation of what we ourselves produce into an objective power above us, growing out of our control, thwarting our expectations, bringing to naught our calculations ..." (1970:53-4). In The German Ideology, a critical method for investigation of this human dilemma was formulated in opposition to the traditions of German philosophical idealism. Over time, this analytic stance became the cornerstone of the materialist method which was the basis for Marx's developing critique of political economy.

Marx and Engels define their starting place from the observation that all of human history depends upon "the existence of living human beings" and that "the writing of history must always set out from these natural bases and their modification in the course of history through the action of men [sic]" (1970:42). Thus they insist on attention to "material life" as the ground of investigation:

The premises from which we begin are not arbitrary ones, not dogmas but real premises from which abstraction can only be made in the imagination. They are the real individuals, their activity and the material conditions under which they live, both those which they find already existing and those produced by their activity (Marx and Engels 1970:42).

Their exploration of material life focusses on the contradiction in interests between individuals which inheres in the historical division of labour, and to the "definite social

and political relations" in which these contradictions are both expressed and obscured.

The social power, i.e. the multiplied productive force, which arises through the co-operation of different individuals as it is determined by a division of labour, appears to these individuals, since their cooperation is not voluntary ... not as their own united power, but as an alien force existing outside them, the origin and goal of which they are ignorant, which they thus cannot control ... (1970:54).

Work in the social organization of knowledge extends and elaborates both the problematic and the methodological premises set out by Marx in ways that are attentive to the circumstances of late 20th century capitalism and to the enterprise of sociology. [2] In this context, it directs particular attention to the textually mediated character of contemporary social organization.

TEXTUALLY-MEDIATED ACTION

Studies in the social organization of knowledge are primarily concerned to explore ideological modes of social action. Smith characterizes the ideological mode as one which depends upon "a formalized, abstracted, impersonalized mode of knowing articulated to an apparatus of ruling" (Smith 1983:3). The dominant mode of action in this sphere does not depend upon the consciousness of individual actors, but upon documentary and textual forms of "communication, action and social relations"

(Smith 1984:59) in which individuals are the actors but are no longer the subjects of their own action.

Such documentary forms of organization are central to the institutional processes through which contemporary societies are governed. They involve the displacement of the interpretive activity of individual actors as the basis for decision making and action. In its place is inserted a system of documentary information gathering which provides the basis for decision-making that takes place outside the local setting, vesting authority for action in those who are not directly charged with its conduct. Analyses in the social organization of knowledge show that such practices "externalize" the consciousness of individual actors and reconstruct what they know as "objectified knowledge" or organizational consciousness, which then becomes a "property of formal organization", available to "appropriation by a textual discourse," and the basis for "rational action" (Smith 1984:60). Smith describes this as:

...expressing knowledge in a documentary mode and transposing what were formerly individual judgements, hunches, guesses and so on into formulae for analysing data or making assessments. Such practices render organizational judgement, feedback, information or coordination into objectified documentary rather than subjective processes (Smith 1984:62).

Key to the power of such documentary forms of communication is the way in which they "exclude the active and visible presence of the subject who is knower ..." thus "translating what is known ... into an objectified form" (Smith 1987b:5). [3] In this mode,

a world of social action is produced which may appear to "remain uniform across separate and diverse local settings" by "crystalliz[ing] and preserv[ing] a definite form of words detached from their local historicity" (Smith 1984:60). According to Smith, the importance of such objectified textual modes of communication is their capacity to contribute to the relations of ruling. They provide a means by which activities which take place in one time and place may be known in another, not necessarily in every detail, but in ways that tidy them up a bit, reducing their ambiguity for administrative purposes.

The curriculum processes examined here have precisely this character, in a form that applies to the problem of managing vocational learning. The documents of a competency-based curriculum process provide a form of knowledge about work which is abstracted and objectified, emptied of the particulars of time, place, and subject. The documents serve as an intermediary between the world of work and various stages of action in the world of learning. They do so by providing a definition of "competencies" which is treated as constant between settings, thus providing for continuity in understanding and action. [4]

This analysis of textual process has important implications for how documents are to be read, understood and used. Conventional approaches to texts teach us to treat them as a "surface from which we rake off meaning" or simply as "sources of information about something else, something in the field or some

background knowledge ..." (Smith 1987b:3). By contrast, the account of textual practices being developed in the social organization of knowledge requires that texts not be treated in isolation, but rather as moments in a discourse, as something "integral to the concerting and coordination of organization processes" of social and institutional life. (Smith 1987b:3)

In this vein, Smith (1984:72) reminds us that documents and documentary processes are "not idiosyncratic" and do not "appear from nowhere". Rather, they are embedded in and articulated with those of the "extended social relations of the ruling apparatus" (Smith 1984:67). As such they are part of an ideological and discursive apparatus:

Textually-mediated discourse is a distinctive feature of contemporary society existing as socially organized communicative and interpretive practices intersecting with and structuring people's everyday worlds and contributing thereby to the organization of the social relations of the economy and of the political process (1987b:5).

In times of change such as the present decade, these ideological and discursive forms of organization are central to the capacity of the ruling apparatus to generate coordinated change. Smith refers to this as a process of "ideological retooling" which serves as a kind of "currency" in relations among the "diffusely coordinated" sites of the relations of ruling:

Ideological 'retooling' plays a significant part in redrawing policy and in coordinating policy changes in multiple sites and at different levels of the relations of ruling, particularly ... state organization.... The

retooling of state policies is, of course, central for the state as the primary agent in coordinating a local economy within the global relations of capital and for providing the appropriate infrastructural conditions for the accumulation of capital ... (Smith 1987:23,25).

The process described here as 'retooling' provides a valuable conceptualization of the transformations in education and training policy explored in Chapter Two. The forms of thought and action provided by the competency paradigm provide, as we shall see, new methods of planning, decision-making, coordinating and taking action which make possible a form of state policy which is said to be "responsive" to changing requirements for the expansion of capital, referred to as "economic growth". They involve the use of objectified forms of knowledge about job skills, crystallized in documentary form for use in systems of rational decision making and coordinated institutional action. They facilitate the alignment of everyday practice in educational settings with state policy discourse in the arena of education and training for work. What remains is to make these processes of transformation and alignment visible as an empirical matter.

Smith (1984:60-61) points out that while "... [s]uch objectified and objectifying forms of relations are essentially textual" they are nevertheless themselves a social product, "accomplished by persons in everyday local settings, who thereby enter into and participate in objectified forms constituting organizational and discursive relations beyond themselves". Investigation of these social processes involves a method of attending to the "inter-textual" character of coordinated social

action in the research site (Smith 1987b:3). This requires some specific ways of organizing attention in the field work situation, which are explored below.

SOCIAL RELATIONS: THE PROBLEMATIC OF THE EVERYDAY WORLD

The concept of social relations, borrowed from Marx, identifies and expresses the most fundamental organizing principle of studies in the social organization of knowledge. That is the premise that individual experience is not isolated and idiosyncratic, but rather is embedded in a complex web of inter-related social action within which all experience arises and derives its sense. Such social relations are posited not as structural givens, abstract and remote from daily life, but as the ongoing production of the activities of individuals, present and past, in a time and place which may be laid open to inquiry. Thus, as social investigators, we are always dealing in a dynamic universe of phenomena that are constantly in the processes of production, reproduction, and transformation, always occurring in the midst of circumstances which we inherit from actions of those before us and thus, as Marx reminds us, are not of our own choosing.

Use of the concept of social relations serves "as a guide, from the moment of observation to a method of analysis which discloses how the phenomena arise as a social product ..." (Smith

1983:18). The importance of the term is as part of an effort to not "objectify the activity of individuals as something separate from themselves" but rather to see objectified social forms as arising, having their existence only in "the social articulation of individuals' actual practices". Using this investigative process resolves the problem of 'agency' because individual subjects are integral to the process of constituting the phenomenon under investigation (Smith 1981a).

Although these social relations which organize daily life in contemporary capitalism are in our midst, they are nevertheless commonly obscured from our view and understanding by a variety of ideological processes. Indeed, the social relations in which individual experience has its determinations routinely extend beyond the scope of experience of individuals in any given locality, contributing to the sense of social forces that are somehow "alien". But these same social forces have their particular manifestations in the midst of everyday life, in what is taken as common sense. They appear in the taken-for-granted ways in which people orient to and organize their daily life and work. As such, they are integral to the understanding which individuals have of their own experience and integral to the ways they organize their action. Studies in the social organization of knowledge focus on this relation between underlying social relations and everyday understanding and action and exploit it as the essential resource for investigating the social world.

Smith (1987a) identifies this investigative stance as the problematic of the everyday world. This orientation to the everyday world is intended "not to make it an object in and of itself, but a site from within which we explore the extended relations determining the local organization" (Smith 1987b:13). In this approach, individual research sites "cannot be treated as if they were self-contained and analyzable independently of the relations and organization with which they are coordinated" (Smith 1987b:13). Instead, the process is one of investigation and disclosure of relations which burst the boundaries of the immediate datum of individual experience.

This thesis examines the concept of competence as a social relation in the sense outlined here. It argues that, in practice, competence stands for a particular organization of relations among social actors in different spheres of state policy related to vocational education. Examination of these relations focusses on the work processes of instructors, administrators, employers and state bureaucrats, through whose actions the relations of competence come into being.

The method of explicating these extended social relations, is called by Smith (1986) "institutional ethnography". It is distinguished by its insistence on exploring two common forms of communication and action as essential constituents of social action and organization: talk and textual processes. Each forms an essential resource for social investigation in ways that are detailed below.

A. Talk and Social Relations:

What Smith calls the "point of entry" for an institutional ethnography are particular moments in the language or talk of the subjects of study. The primary focus of interest is not the facticity of what the speaker has to say (a positivist stance), nor the subjectivity of the individual (a phenomenological stance) nor even the intersubjective accomplishment of meaning (an ethnomethodological stance). Rather, the investigative focus is on aspects of the taken for granted understanding, situated knowledge and/or practical reasoning of actors which help to reveal features of the social organization within which individual action has its sense. These forms of practical reasoning are part of what the speaker relies upon in various ways for her understanding and action, but often does not mention directly in describing her experience. She does not fill in the details, though she clearly relies on them to make sense of her own utterance, as well as to guide her choice of action.

This feature of individual experience is critical from the point of view of the researcher, inasmuch as the same social relations which organize the talk and action of individuals also organize their accounts when they tell of their experience. Thus, if the researcher is to comprehend, as a listener, the sense which the speaker intends, she must enter into the same

organization of practical reasoning on which the speaker's account depends. That is, both the research subject and the researcher (and ultimately her findings) are dependent for their sensibility on some aspects of the social organization which is a feature of the setting itself (Jackson 1977; Smith 1981b).

This observation has important implications for our work as researchers. It means that in our attempts to "understand" or participate in the sense which a given experience has for the subjects of our research, we are bound by, or dependent upon, some aspects of the same social organization on which their experience arose in the first place. Thus we are obliged to either possess, or to acquire a knowledge of the social relations which are integral to its sense. Otherwise, we are at liberty to construct an interpretation or "explanation" of events or experiences which may bear an indeterminate relation to the forces on which they depend (Jackson 1984, 1977).

The use of language described here represents a considerable departure from the dominant mode of language use found in the educational discourse. This point can be amply illustrated from within the contemporary literature on competence. For example, in the work of Edmund Short (1984a, 1984b) and Michael Collins (1987, 1983) we can see a mode of language use which educational theorists inherit from a philosophical tradition. Short (1984b:202) is concerned to inquire into "the meaning and acquisition of competence" so that educational policies and

practices can be "reconceived" to serve an enriched educational practice. Similarly, Collins (1987, 1983) is concerned to reconstruct the notion of 'relevance', to rescue it from its reductionist tendencies in order to serve a broader vision of adult education. In these frameworks, language serves as an ideal, a guide, a normative conception of the educational enterprise. In a somewhat different but also prominent mode, Spady (1977, 1980) is concerned to use the term 'competence' to set boundaries around practice. He wants to tidy up the concept, banish the ambiguity and contradictions with which it has come to be associated, arriving at a constant definition which identifies a distinctive set of educational practices. It is a legislative, and taxonomic, approach to language use.

The methods of language use employed in this thesis are interested neither in restoration nor legislation of meaning. Rather, their objective is to investigate how language has meaning as a constituent of social action (Smith 1981b; Rubenstein 1981; Bolough 1979; Wittgenstein 1967). This approach to language is central to the work of both Marx and Wittgenstein. Both find fault with traditional philosophy for undertaking the search for meaning by separating ideas from their practical context. According to Wittgenstein, meaning constructed outside of the context of everyday use amounts to "language ... on holiday" or "philosophers's nonsense" (quoted in Rubenstein 1981:130). By contrast, Marx and Wittgenstein both argue that the meaning of a word can only be established by

investigation of its use, its embeddedness in social life, where language has meaning as part of purposive activity or as an element in a system of social practices (Rubenstein 1981). Wittgenstein refers to these social processes as the "language game[s]" in which meaning arises. This relation can be seen, according to Wittgenstein, in the way that children routinely learn the meaning of words, that is not by definition but by a kind of practical training in which understanding of the meaning of a word amounts to mastery of its role in social life (Wittgenstein 1967; Rubenstein 1981).

For Marx, this feature of language reveals the essentially social and historical character of meaning, and ties the problem of analysis of ideas to a process of historical investigation. This relation lies at the center of his critique of the standard concepts of classical economic thought - value, commodities, money. His analysis reveals that these apparently ordinary social objects are an expression of an underlying organization of relations among individuals - the social forms of the production process. In this vein, Marx argues that the "commodity-ness" of an object does not inhere in the thing itself, contrary to its appearance as such, but in the social relation which the thing expresses and through which its character as a commodity is realized. So, an apple picked off a tree for a "snack" in the hands of the hungry picker, becomes a "commodity" in the hands of a picker who takes it to market and sells it for someone else's snack. Its character as a commodity is realized only in this social relation (Marx 1954).

Furthermore, the apple in this scenario serves not merely as an instrument, in a functional sense, of coordination vis-a-vis relations among individuals, but as an active constituent of social action. That is, it is only through the intermediacy of the apple itself that the apple grower/picker and the apple buyer/eater are entered into commodity relations. Thus the apple is an active constituent of the social relation being investigated (Rubin 1973; Marx 1954).

The analysis of the concept of competence undertaken here is characterized by a certain isomorphism with these analyses of Marx. That is, although 'competence' has been made to appear as a state or quality of individuals' capacity to act, one which can be produced and measured like goods for market, my enterprise is intended to show that "competence-ness" inheres in a much more complex social relation. It comes into being only in a particular organization of relations among social actors in the spheres of employment and education/training. In particular, the relation identified as "competence" is a particular form of such organization which expresses, puts in place, relations which articulate individual knowing and action to the process of capital accumulation.

B. Texts and Social Relations

The second major investigative resource for an institutional ethnography is textual or documentary processes. Here I want to specify the interests in textuality which are explored in this work, and those that are not. The 'notes' come first. First of all, my analytic interest in textual processes is not so much concerned with the text itself as with the social processes which are mediated by texts. In this case, my primary investigative focus is on the activity of individuals; no textual analysis will be undertaken. Secondly, with a couple of exceptions, the analysis is not generally oriented to displaying, or evaluating, the properties of texts or textual processes in terms of their adequacy as administrative tools. Our problematic is not how to do administration more effectively. Thirdly, I am not concerned primarily with exploring the realm of textual discourse, or with analyzing the detailed contribution of specific texts to discursive relations, although it will be clear that the recognition of textual discourse is integral to my analysis. In sum then, I do not claim for this work a fully developed character as an analysis of textual organization in the work processes of the college setting under investigation. Quite the contrary, it is a very preliminary step in this direction.

Having established these limitations, let me specify what I do intend. My enterprise is one of showing in a preliminary way the capacity of texts to participate in organizing everyday

practical action. I am less interested in exploring this capacity as a function of how words mean on the page, than in discovering how individual action is mediated by documentary forms of organization and communication in the settings under investigation.

Within the struggle and conflict of everyday experience of local actors, such as instructors and administrators in the college setting, there are many traces of the textually organized character of social action, though these textual presences commonly remain largely unproblematicized, unstated, even unseen by the actors themselves. Indeed, individuals often see the "paper work" in which they are required to engage as a nuisance, an imposition, an irrelevance, a distraction, even meaningless (Cassin, forthcoming) rather than seeing how it implicates them in the very relations which they wish to resist. That is, through the routine manner in which they conduct their work, these local actors accomplish or realize the coordinative function which the texts intend. As an example from the college setting, teachers and administrators commonly resist in principle anything they see as fragmentation or trivialisation of educational objectives. However, at the same time, they frequently embrace on pragmatic grounds the practical routines through which such fragmented forms of educational organization are imported into the center of their practice - e.g. skill profile charts, task analysis workshops. The capacity of the textual processes to speak for, or speak instead of, the

intentions of teachers or administrators themselves is largely invisible from where they stand, although it organizes the relations among them.

In these textually-mediated circumstances, we find in the interaction of local actors, evidence of how their action is part of a social relation that is not fully present in the room. The example used by Smith (1983) is the case of courtroom talk. In these settings, language is directed toward the production of a formally warranted record of the proceeding. So we find the request for each witness to state and restate information, much of which is already known to those present in the room, with the phrase "Would you tell the court ..." which has definite legal uses. In this situation, talk in the courtroom is part of the accomplishment of a definite, textually-mediated social relation. It is integral to the process of articulating the work of individuals to an extended division of labour which manages a changing historical reality and makes it available to a ruling discourse (Smith 1987b). Such talk and action in the present are oriented to the production not merely of communication in the moment but of a formally warranted record of communication undertaken as institutional action.

In the formal, institutional mode, words are removed from the social process in which their meaning arises, and entered into "an ideological mode, available to a textual discourse of ruling" (Smith 1983:7). It is in this mode that "motive" becomes

attributable to the defendant in a trial, or that competence becomes attributable to individuals as a property of their performance ability. Thus, competence is not and cannot be simply a characteristic of work-related knowledge. It is rather an account of work-oriented educational process which has been produced in an organizationally warranted manner (Smith 1983).

These understandings of language use and textual process will be reflected throughout the analysis of empirical data undertaken in the coming chapters. The talk of research subjects will be examined to find the institutional course of action in which it is embedded, and on which it depends for its sense. Local settings of decision-making among employers, instructors, and administrators will be explored for the mediating presence of textual processes that serve to articulate everyday practice in educational settings to a ruling discourse.

TOWARD A CRITICAL PRACTICE IN SOCIAL SCIENCE

This approach to investigation strives to make visible the ways in which local activities are articulated to the larger social and historical processes. It makes it possible to address questions about social processes which are larger than the experience of individuals, without abandoning their ground in practical action.

This feature of the social organization of knowledge approach addresses widely held concerns about the apparent dichotomy between macro- and micro- approaches to social analysis, that is, the analytic gap between the apparently stable, organizational features of contemporary society and the ordinary experience of daily life. This is a problem widely addressed in sociology over the last two decade, both directly and indirectly (Corrigan and Sayer 1985; Connell et al 1982; Knorr-Cetina and Cicourel 1981; Giddens 1979).

In Marxist scholarship, this problem has been evidenced, on the one hand, by an overemphasis on "structure" in the shadow of which "human agency" disappears and becomes the object of search. On the other hand, has been the tendency to retreat into analysis of localized activity and individual subjectivity in a way that severs analytic connections to larger social and economic processes.[⁵]

The social organization of knowledge approach largely avoids this dichotomy, indeed would argue that the dichotomy itself is an artifact of the ideological procedures used by social scientists themselves. This approach takes as its object of interest the very phenomenon which these other procedures are unable to account for, i.e. the relation itself between local and particular activities and the larger social organization of which they are a part. But it relies on the material world of activity, not the realm of theory per se, as the resource for its solution.

The social organization of knowledge approach also sheds light on another major theoretical and methodological problem for social science, and one addressed in the education literature with increasing frequency over the last decade. That is the question of the status of individual subjectivity. [6] Previous generations of social scientific orthodoxy have been concerned to banish subjectivity, or to establish the grounds to credit one reality claim over another by reference to procedures for objectivity, etc.. By contrast, the social organization of knowledge treats the presence of multiple subjectivities not as a problem to be overcome but as itself a resource for investigation. It treats individual knowledge not as a deficient version of objective knowledge, but as a form of local or situated expertise on which both the conduct of the social world and an understanding of its character depend fundamentally. It attempts to explicate the organization of social relations in which a multiplicity of subjective experiences occur and are organized vis-a-vis one another in relations of domination/subordination.

This work of showing the relation between everyday experience and the social and historical process of which individuals are a part is clearly a central piece of the agenda for a critical social science. It is part of our fundamental task as researchers to do more than simply reflect back - or deflect into the academic arena - the point of view of the subjects of

research, along with an elaboration of our procedures for doing so. It is part of attempting to do something other than to make "resistance" into a topic within the privileged discourse of sociology. Rather, this approach aims to contribute to the development of an oppositional knowledge, one which permits the social world to be known from the place of those who are ruled, rather than the place of those whose need to know is in order to rule. Such a knowledge is central to the possibility of political action, the possibility of those who appear as "objects" from the standpoint of ruling becoming the subjects and authors of effective political action on their own behalf. In this way, the approach is part of building toward a positive alternative to the much decried crushing pessimism of a deterministic Marxism.

INVESTIGATION IN ACTION

Following the investigative stance outlined here, individual knowledge of competency-based procedures will serve as the point of entry for examination of the routine activities through which competence is constituted as an organizational practice. In taking up the investigation in this way, we are committed to exploring a number of aspects of the curriculum decision-making process: what instructors in the college setting say and do, what employers and curriculum specialists say and do by way of contribution to the curriculum process, how administrators

function in relations both internal and external to the college setting. In all cases, we are interested in both what is said or done by these actors, as well as what is taken for granted in their actions and utterances, and the ways in which their actions are part of a larger institutional course of action.

So what does this mean concretely? It means, for example, that we want to be able to show the complex interactions between individual intentions and choices and the institutional relations which give shape to individual action. So, college instructors find that they must make choices, participate in decision-making on the basis of a finite range of options, based on a series of requirements imposed from without, and which change from time to time. These are the terms and conditions which instructors experience as the limits of their freedom to "close the door and teach what [they] please", or to adapt curriculum to meet the needs of their students. These terms and conditions are not of their own choosing, although instructors are thoroughly implicated in their production, as the following chapters will show.

All of the data chapters of the thesis rely to some extent on the use of talk and textual processes described here. Chapter Four searches the talk of instructors for evidence of the effect of the new organization of instructional relations, discovering how its powerful transformative character becomes visible as a pervasive disruption of their work and their intentions. Chapter

Five examines the texts of a professional discourse on competency-based curriculum-making, seeking to find the social relations which are embedded in them and which they also bring into being. Chapter Six scrutinizes the talk of employers to uncover its dependence on a variety of forms of social organization in the work place. In Chapter Seven, the talk of instructors in revision meetings is shown to be oriented to and organized by an organizational course of action which is embedded in a documentary process. Chapter Eight explores how the textually organized work process of administrators shapes their talk and action.

THE RESEARCH SETTING: WEST COAST COLLEGE

The research reported here was conducted in a two-year community college in British Columbia, in a department of Business Management and Office Administration. The department has a wide range of program offerings in both areas, (including university transfer courses in some business subjects) and a good reputation for educational standards and professional, up-to-date business practice. The present research focussed primarily on two office programs, Office Administration and Records Management, which, at the time of the research were both two semesters in length (eight months total) and oriented to career entry or re-entry. The two programs employed about a dozen instructors, about half of whom were full time faculty members

with the college, although several of these also maintained independent consulting businesses on the side. Instructors who were part time also had contracts for teaching and business consulting with other institutions and businesses in the vicinity. Both full and part time instructors tended to be active in professional associations and maintained varying levels of contact with local employers through professional, community, and college-related activities.

At the time of the study, this department was ideally suited to a study of competency-based curriculum reform. The Business Department was undergoing a process of program review, initiated by the Dean of Applied Programs, as part of the implementation of a five-year planning process throughout the college system in British Columbia. The stated objective of the program review was to determine the extent to which existing college programs were addressing identifiable labour market needs. The method of program review was chosen by the Dean, who had a long history of professional involvement in the development of competency-based education.

The review process chosen reflected standard procedures in the competency paradigm. The method begins with a task analysis workshop in which local employers are invited to participate in a one to three day session, under the direction of a professional curriculum consultant, to define the "range and depth" of skills required for entry level positions in a given occupation. The

workshop process is summarized in a document called a 'skills profile', which is then used as the standard for instructors to assess existing course and program content and to make revisions where necessary. All of these steps in the review process took place during the period of field work reported here.

THE RESEARCH PROCESS

The field work reported here was completed within a period of five months, although my period of contact with this department was spread over a period of approximately two years. This is because access for the thesis research was granted in the wake of a larger study of clerical education in which I was also involved as a researcher. Experience in the previous study provided me with extensive 'background knowledge' or access to the practical reasoning of members of the research setting, through observations in both classrooms and meetings and through interviews with students, instructors and administrators. It also gave me a preliminary working knowledge of the relations between the college and the Ministry of Education, Post Secondary Division. In addition, the previous study established my credibility and trustworthiness as a researcher, which was a valuable asset in the potentially sensitive climate of program review.

In this context, data gathering specific to the thesis was able to be highly focussed. I conducted interviews with a range

of individuals who had direct knowledge of both the department and the curriculum methods under study, including both instructors and administrators at West Coast College and representatives of faculty organizations both locally and provincially. I interviewed officials in the Ministry of Education, Post Secondary Division, who were familiar with curriculum practices in applied (Career-Technical) programs, as well as a curriculum consultant with many years of experience in the design and implementation of competency measures, including acting as facilitator for task analysis workshops. All interviews were open-ended and in-depth; all were tape recorded and selectively transcribed. In total, about 35 interviews were conducted.

In addition to interviews, I observed and sometimes recorded a number of meetings including both regular faculty meetings in the Business Department and meetings and workshops specific to the program review. I attended, as an observer, the task analysis workshop held for the Office Administration program, and subsequently observed the series of working meetings during which faculty assessed and revised their program and course structure in light of the workshop results. Throughout the period of field work I collected documents related to competency-based curriculum measures in particular, working documents of the program review process and the five year planning strategy of the provincial government, and routine documents of the course and programs approvals process within the college.

ENDNOTES

(CHAPTER THREE)

1. This area of sociological investigation has been pioneered by Dorothy Smith (see especially 1987a, 1986, 1984, 1983, 1974b). Because she has done virtually all of the formative or programmatic work in this area published to date, I have cited her work heavily in this chapter.

2. In so doing, it draws on several strands of non-positivism in sociology, in particular the work of Alfred Schutz (1970, 1962) and George Herbert Mead (1964, 1934) on subjectivity and intersubjectivity and work in ethnomethodology by Garfinkel (1967), Heritage (1984), Garfinkel, Lynch, and Livingston (1981), including some early studies concerned with organizational process and documentary communication such as Cicourel (1968), Zimmerman (1969), Zimmerman and Pollner (1971), and Elgin (1979). These approaches share with the materialism of Marx an interest in finding the constitution of social reality in organized human activity. Their application to analysis in the social organization of knowledge does not commit the enterprise to an analysis of subjectivity, but rather recommends and enables an exploration of the concerted or organized character of individual action. Indeed the analysis is specifically oriented to explicating the activities of concerting (or determining in the Marxist sense) themselves.

3. Such objectifying procedures are at the root of western, positivist science, and supply the epistemological grounding for all those areas of formal knowledge which in various ways claim science as their model, including sociology. Traditional sociology itself serves as an excellent example of such an objectifying practice (see Smith 1974b). Conventional procedures for objectivity require that the social scientist "systematically separates inquiry from the presence of the inquirer, and the account of social process from those who bring it into being as subjects" (Smith 1981a:11-2). These routine practices begin with "an actuality ... in which individuals as conscious beings are present from the outset ..." and reconstruct it in ways that "effect the disappearance of individuals in conceptual structure, reifying forms which individuals themselves have brought into being as a social process ... (Smith 1981a:21). Such objectified approaches to knowledge are the handmaiden of the forms of ruling characteristic of bourgeois societies.

4. This feature of competency systems is discussed in Chapter One.

5. For a discussion of both tendencies in an educational context see Connell (1983) Sharpe (1980), and Willis (1977).

6. For various recent approaches, see Corrigan (1987) Steedman, Urwin, and Walkerdine (1985), Henriques et al (1984).

CHAPTER FOUR

COMPETENCE AND "EDUCATIONAL SENSE": THE STANDPOINT OF INSTRUCTORS

The voices of instructors are a rich resource in the search to understand what competency systems are about and how they work. This is so not because instructors' are somehow more knowledgeable about the approach or because their opinions carry more weight than others. Rather the voices of instructors are important because of their location at the centre of the social relations which are reorganized by the competency approach. They are at the vortex of change. Thus, a great many aspects of their work are affected by the move to a competency system, and their talk makes this visible as an ordinary, everyday experience. In this chapter, what will become visible through the voices of instructors are the ruptures which are part of the process of curriculum reform. This presents itself not only as a break between past and present in how curriculum decision-making is organized, but more importantly, a growing disjuncture between the problematic of administrative control and the work of organizing a learning process for students in a classroom.

One kind of talk which will be used heavily in this chapter is "complaints" of various kinds. We will listen to instructors talk about how the introduction of competency methods makes a difference to their work. Some of it they like; a lot of it

they don't. They have a variety of understandings about what is happening to them and why. Our interest in what they have to say however, is neither to confirm nor dispute their opinions, likes, dislikes or explanations. Rather, we are interested in discovering the organizational processes that are occurring which give rise to their experience. How is the college organized under competency measures such that the experience reported by instructors would arise? Their reporting uncovers evidence of the social organization from their location in it. It tells us what is happening to them, offering a window into the social relations of everyday life. The fact that the time of which they speak is a moment of change increases the visibility of these relations, because individuals talk about the present in terms of how things have been in the past as well as what seems to be developing for the future.

THE COLLEGIAL ENVIRONMENT

One of the most striking things about the talk of instructors in the Business Department at West Coast college is their sense of pride in the programs in which they teach. That can be seen clearly in the following range of enthusiastic remarks.

What we have is a wonderfully ... the most efficient department in the institution. And it's because we have integrated our programs. We have multi-purpose courses (33:35). [1]

We have established a core group of courses that all must take, and then we allow them to specialize. There are ten

core courses, and they were set for the very purpose of trying to ensure that students did get that broader appreciation of what's going on out there in the world (33:36).

It's not a Bachelor's degree, by any means, but you do have a well-rounded, diverse grouping of courses (33:28).

We are talking about not only training, but also education...[so]...The fact that they are taking something slightly different or somewhat peripheral [to their specialty] ... doesn't matter. So long as they are learning how to think ... they are learning how to problem-solve ... they are learning how to apply ... they are getting a fuller appreciation of the way the economy works, the way society works. It doesn't really matter (33:35).

So the students are protected in that sense from making a mistake in choosing a career. If they change their minds, and say 'Wait a moment. I'm brighter than I thought.' Well, then they don't lose quite as much as if they had gone the other route (33:8-9).

These comments invite a number of avenues of investigation. The questions that will be of use to us are not about "why" instructors are so enthusiastic, but rather about "how" the arrangements they describe are actually put together. What does "multi-purpose" mean in their department, and how does it work? How have the educational "purposes" described here come about, and how are they held together as a form of organized, institutional action? What do all these claims actually look like in practice?

In the field work reported here, these interests were pursued by asking instructors to talk about and describe their work process. Gradually, the following general picture emerged of the organization of decision-making in the business department in recent years. For more than five years, faculty in this

department have worked in a collegial structure organized on the basis of disciplinary groupings, such as accounting, marketing, bookkeeping, or wordprocessing, which have served as the basic administrative unit within the department and as the first line of decision making about curriculum. Over time, these groups have worked together to develop courses for each program area that satisfy all aspects of the college mandate. This includes articulating course content to the requirements of the universities in order to serve those students who plan to transfer to the university. It also means shaping courses to satisfy the requirements of various professional licensing bodies in which students continue their studies toward accreditation, such as in accounting. And, finally, it means including content areas designed for those students who plan to enter the labour market directly upon graduation. In addition, faculty have juggled course content so that a single course, e.g. marketing could satisfy the varying needs of students in several program areas in the business department. This arrangement turns out to be the meaning-in-practice of the term "multi-purpose" courses.

One result of these years of planning and coordination is that instructors are quite happy with their department. They understand the objectives as well as the constraints that have shaped their programs. They are proud of the "efficiencies" that have been achieved through their planning, as well as the entrenchment in "program requirements" of medium and long term educational objectives, seen by instructors to be in the

interests of the students. This satisfaction is registered in the comments cited above.

Instructors also indicate that the demand for "flexibility" is well served by the existing course structure, because it gives the instructor room to make adjustments according the needs of a varied student clientele. Taking advantage of this is said to be a matter of "good sense" that most instructors take for granted as part of their work.

At the present time, a lot of course modification takes place ... on an ad hoc basis, by individual instructors who have a grouping of students that they know is mainly marketers or mainly this and mainly that..... Well, then, of course, as a matter of good sense ... the instructors will try to come out with examples that will relate to the students that they are teaching.... So of course that will happen naturally (33:37).

THE COMPETENCY ENVIRONMENT

The introduction of a competency approach in this department represents a considerable challenge to the logic and orderliness of these established procedures and priorities. Employers are given primary authority for curriculum decisions that were formerly lodged in the discipline-based organization among faculty, and occupationally specific performance objectives are given priority over broadly constituted educational objectives. Predictably, the introduction of these new procedures resulted in a sense of disruption among faculty. Most found themselves to be of two minds about the change.

On the one hand, instructors say that the review seems like "a very valid process" (20:6). It has a certain simple rationality to it which most instructors readily comprehend; they agree "it makes absolute, perfect sense..." (33:B6). For instance, it provides an overview of what they are doing, and helps them identify overlap in their courses.

The purpose of the whole review was to review our programs, to see what we were doing with our students, ... what we were doing in each course in terms of developing some degree of competency in certain areas ... so that we could relate one course to another to see whether we had a lot of duplication, or maybe we were missing certain aspects of skill training that we thought would be necessary (27:1).

What we are able to do [is] to see how much overlap we have in courses. We really do teach our courses in isolation. We don't really know what everybody else is doing ... we go in there and do our own little thing (31:14).

The process also appears to represent a logical extension of the liason with employers that faculty have maintained in the past to ensure the relevance of their courses. Employers have always been the main source of authority about what "objectives are", and instructors welcome the task analysis in this light, to keep them on track:

It [the task analysis] forces you to sort of get back into line, you know, with the content of your courses. To deliberately compare what the objectives are to what you're doing (29:10).

And you know, it's quite feasible to over a period of five to ten years to sort of just get off track a bit. Because you've done it so many years, you figure that what you're supposed to do anyway. So, you know, ... it's a positive thing really. It's important to do that (29:10).

Some instructors were optimistic that the task analysis would help reassure them that "what we are doing is what they really need" (24:3):

Because in the last five years, things have been really changing. We've tried to keep up with it, with input from employers. ... But you never feel really comfortable making those changes, without having some anxiety.... So we're hoping that a lot of it [the task analysis] will back up what we're doing. And we're also hoping that in areas where we do feel we need some changes, that maybe this will pick them up too (24:6-7).

Faculty also describe the task analysis as serving an important "public relation function" for the department. It brings "credibility", and that's good for the department and good for the college.

Working closely with employers like this adds a lot to the credibility of our program. I think it's a very important relationship (20:6).

... It brings a lot of good feedback to the department ... because we've got a lot of credibility, not only with industry, but that gets known in the community. It's good for the college as well" (20:9).

"VERY REAL RESERVATIONS"

On the other hand, and notwithstanding these basic sympathies with the rationality and "validity" of the program review process, many faculty members indicate serious reservations about the process on which they are embarking. They express concern about the assumptions on which it is based and the impact it will have on many aspects of the educational environment. At the

simplest level, this was expressed in objections to the task analysis as an affront to their professionalism:

Naturally at some of our department meetings when this was initially brought up, faculty did voice a concern as to why bring industry in? 'Are we not professionals? Do we not know what we're doing ...?' Definitely that was voiced (20:27).

Faculty are not lazy dogs. Faculty are sincere and committed ... to doing the very best job we can.... [But] basically the Dean decided - no, no, we were out of touch ... faculty don't know what they're doing - we need a task analysis (33:15-16).

Once we get past these defensive reactions, the more practical bases underlying faculty "reservations" begins to emerge. For instance, faculty resistance to the task analysis and review process grew as it became clear that it was requiring a lot of their time, and a lot of the work seemed redundant. "It makes work for us ... a lot of work", as one instructor put it succinctly, "repackaging ... existing curriculum ... [since]... basically the same material is there ... as in the existing course outlines" (33:32).

But, since they had no choice about the process, they would "do what has to be done, in the time available":

And, given that we've been in business for a while, we basically have on the shelf a whole set of courses. The selection that we'll make won't be different from the ones that they basically suggested.... It's like, give me a piece of cloth and ... I'll cut you a suit of clothes that will fit that piece of cloth. And that's all we'll do. We'll do the best we can, but we can't do much (33:34-36).

The sense of lack of choice and lack of control conveyed above is made more explicit in the following objection. It helps

to focus our attention on the central dynamics of the review process.

From on high ... there comes a new view of the way the world should be, and [I have] very real reservations.... I am not so sure that there has been a close enough examination of the objectives, and whether the Dean's objectives for the Business Management program jibe with the faculty and the department objectives ... (33:B6).

If we pursue these complaints about "objectives" on a practical level, we find that instructors are struggling with a number of kinds of disruption that result from the task analysis process. One instructor stated this broadly as:

The task analysis basically complicates, confuses the basic thinking, the basic discussion [of program content] that would take place ... (33:34-35).

The charge that the task analysis complicates or "confuses" the work of instructors is an important one for our investigation. It immediately situates us in the midst of a puzzle about the location of the knower: i.e. what is confused and for whom, in contrast to what opposing sense of order? Again, clues to this puzzle are scattered throughout the talk of teachers.

For example, some of the changes either recommended or implied by the task analysis process appeared to faculty to be oddly disfunctional. In particular, they complain that the task analysis undermines the structure of multi-purpose courses that they have worked so hard to achieve. Each task analysis workshop is geared to a single destination in the labour market, and

presumes a framework of courses specialized for this purpose. Instructors argue that this makes no economic sense and that, "... realistically, it cannot be done" (33:35).

So the task analysis ... can attempt to get us to develop specialized courses, but it's basically going to come up against the reality of the economics of it.... We can't as a matter of dollars and cents design a particular course for [one] program. You start up with 25 students. You end up with 13 in the third semester.... [So] as a responsible faculty, you realize you cannot do that. Therefore, we have to have multi-purpose courses (33:35-37).

In the old days we used to have some courses that could run with seven students because they needed it to complete their programs. Well, these days a program that has only a few students in it has to get the axe. You have to reshuffle, move the content somewhere else and try and fill those classes. That's the last word. It's not a matter of insensitivity to the issues; it's rather just a realistic business management approach to handling our situation in education (33:B10).

In addition to arguing that the task analysis approach to course design is unworkable in economic terms, instructors protested in various ways that the approach lacks "educational sense" and that "it comes up against the educational requirements of the programs" (33:36).

It's all nonsense ... it's not cost effective ... and also probably doesn't make educational sense.... It won't happen. You know, we're just paying lip service to the task analysis process to think that we are going to do it (33:35-37).

In this vein, some instructors argued that the competency approach carries the college in the direction of providing training instead of education. They argue against the fragmentation of knowledge and the reconceptualization of the instructional process that seem to underlie the competency

approach. The task analysis is seen as a first step in this direction:

Well, I'm very much against the mechanization of learning and of knowledge. Somebody, or a bunch of people, feel that they can cut learning into discrete bits and somehow attach these to each other, and a whole bunch of them [make] a program - you don't have to bother with the knowledge, which is stupid ... just stupid. Learning and knowledge is an organic process, and sometimes it comes in quantum leaps and sometimes it doesn't come at all. I don't personally believe that's the way learning ... knowledge ... education ought to be approached (35:5).

I would have very real concerns if the approach taken becomes very much the strict vocational/technical approach ... if in fact, we set out in a line nice specific modules of information which students churn their way through, and then we say 'Yes, you've completed the Business Management Program'. I think that we have to keep in mind the objectives we have for the programs and the type of students we would like to turn out: potential managers (33:B6).

It's like Dickens and his 'the hands' you know, what he called the 'factory hands'. All you want from them is their hands. What you are saying to these people [is] we are going to train them and we don't need them to be president; we just need these trainees.... So, let's remove all those elements of the learning process that aren't directly related to what they have to do (74:1).

Other instructors point to the major debates about skill levels going on in academic and policy circles, and to the call to "save general education" in order to produce "... a person that's flexible, a person that if that job doesn't pan out, there's something else" (33:28). They see the competency approach taking the colleges in the other direction:

We hear again and again from people like Rumberger and Levin that the specific skills should no longer be regarded as an educational concern, because they are volatile, and because more and more the private sectors are taking it as their own responsibility to impart those skills. So [they say] 'save general education.' ... I don't think the [competency-based curriculum] guys listen to those people (74:5).

And industry, I don't believe, should fully call the tune because their objectives ultimately will tend to be fairly narrow and specific to their own company or corporate or industry needs ... whereas we are talking about raising, helping to develop, a student who can fit into a number of different industries (33:B6).

The concept of flexibility is used repeatedly by these instructors to name both the work process of instructors and the capacities of students, according to their image of a worthwhile educational process. With competency measures, they foresee changes that are inconsistent with these objectives, and some are prepared to "dig in their heels".

That's when you'll likely find faculty digging in their heels ... when, as far as they're concerned, they find content being trivialized by ignoring some of what they would call the higher level learning objectives. Faculty do take that seriously (33:27).

IMPACT ON THE INSTRUCTIONAL PROCESS

Instructors point out that even the simplest objective of the task analysis to "eliminate overlap" runs counter to some basic pedagogical principles and to the conditions of educational life. That is, not all students take all courses exactly in the recommended sequence, for a variety of reasons, not all of which can be controlled. And even if the sequencing were perfect, instructors argue that a certain amount of overlap is important for "reinforcement", so students can utilize what they learn.

Some instructors argue that a syllabus which tightly specifies not only the objectives, but the methods of both instruction and evaluation effectively takes the "human element" out of the classroom experience for both teachers and students. One instructor argued that the students "are not getting their money's worth; they might as well take the course by correspondence" (29:5).

You have to make it interesting ... add some human elements ... give them something they can relate to as individuals, as students ... Remember, half these [accounting] students don't even have a banking account. So, you ask them to do a bank reconciliation, and they haven't got a clue. They've never done it before in their lives. They don't know what cancelled cheques look like. They don't know what a bank statement looks like (29:22-23).

For instructors, a common complaint about such an approach is that it wastes the talents and expertise of the instructors, both in the field of practice and as educators. They are left with little power to mediate the learning process to fit the circumstances of individual class dynamics, "to make the subject more alive" (29:21):

[T]he thrust toward ... a quite tight tying of content to strict behavioural objectives may inhibit the dynamic interaction between a faculty member and a group of students in pursuing current topics ... in pursuing specific or group concerns related to business and the business environment (33:B6).

What I teach varies from one term to another, and the way I approach it or explain it varies. Students' interaction with each other varies. So it is not the same learning experience every term (35:6).

I feel that students should be exposed to experiences of the instructors. And instructors should be free to some extent ... to talk about an area that they feel comfortable with from their experience. It's worth it for the students, not

just for the instructor to feel good that he's done something and you should know about it ... (29:21).

Instructors feel that these visions and expectations for the instructional process are part of what is thwarted by the competency approach, and with it, their sense of pride and satisfaction with the institution where they work.

CHANGING THE INSTITUTIONAL CLIMATE

Instructors expressed various concerns about the institutional climate that they saw emerging as a product of the competency measures being introduced. A few identified the problem as the adoption "an industrial model" of education in which the students get "lost in the shuffle":.

I tend to think what's happening in some cases with education right now is that some of the stresses of the free market are taking place ... in the colleges.... The students have become the product of an educational plant ... right? So in fact, the industrial model is being applied to the colleges and I don't think that is always very successful. ... I'm not quite sure whether the results are going to be for the best benefit of the students, who seem to be getting lost in the shuffle (12:7) .

We're not even teaching 'students' anymore....they've become 'through-puts'! (25:86).

Instructors at West Coast College were aware that in a fully developed 'industrial model' of instructional management, centralized specification of educational objectives is only the starting point. It is followed by specification of techniques of instruction, according to pre-set notions of efficiency and

effectiveness, [2] and then by centralized control over educational evaluation, in order to complete the "feedback loop" necessary for program evaluation. In the Business Department, not all of these steps were being implemented as part of the current review process. But some faculty members did not miss the point that the steps being taken did open the possibility for these next stages of change. They pointed out that once the basic logic of the competency approach is accepted, it is difficult to restrict its claim on almost all aspects of the educational process.

For this reason, the response of instructors to current developments was informed not only by their observations of immediate impact, but also by the prospect of subsequent changes. So while most instructors felt that the competency system is "perfectly effective at transmitting facts" (74:5), this didn't entirely allay their concerns.

There's nothing intrinsically intimidating or frightening about the DACUM approach,[3] it is just that once you start to use [it], it becomes very, very tempting to use it as a tool of strict control over what takes place in the classroom. ... As a planning tool, as an organizational tool to check out the matrix of activities, it is a wonderful, wonderful tool. But as soon as management sees it they suddenly see, "Wait a moment! Using this approach we can control in a fantastic way!" So, I guess ... it's like a hammer: in the hand of a good carpenter is a wonderful tool, but a hammer in the hand of a child in a china shop is a dangerous weapon (33:7).

One of the most controversial aspects of competency systems is their promise to provide administrators with tighter methods of performance evaluation, not only of students, but at all

levels of the educational system, including faculty members, programs, departments, and institutions. Individual and program evaluation is a complex topic, most of which falls outside the scope of the present investigation. However, some observations about the evaluation factor and its potential are necessary for even the most rudimentary understanding of both the support for and the opposition to competency-based systems. At a glance, the problem was summed up by one instructor as "He who controls evaluation calls the tune" (33:7).

It is only one short step from control of design to control of evaluation. So, my fear is that it's going to be used in this other fashion.... [From] the program set out in DACUM detailing individual courses in behavioural terms ... 'This is what we want to achieve ...' it is such a natural step. And that step, as far as our Dean is concerned, I imagine, [will be] as fast as he can do it. Fortunately, he is quite busy at present (laughter). But on the other hand he is willing (33:7-8).

Instructors argue that increased administrative control over evaluation of students profoundly ties the hands of the classroom instructor, and that this situation is good for neither students nor teachers. It results in such dynamics as 'teaching to the test' with its attendant problems of restricting the learning process itself. Additionally, the resistance of instructors to centralized evaluation increases exponentially when its systematic character is expanded to tie the evaluation of student performance to evaluation of instruction. This is accomplished by weighing objective measures of the terminal performance of students against objective statements of the instructional objectives. The result is treated as a measure of the quality of

instruction. Of this kind of 'systematic science', instructors are "a bit skeptical":

[The competency] system does lay the basis for evaluation of instruction which is better from the point of view of administrators ... although I'm a bit skeptical. I recognize that evaluation is important; there should be evaluation of instruction, and like any group of employees we probably have a number of people who ... are not performing well enough. But at the same time, I know that the apprehension [faculty] have about the system, about how it can be abused, is also legitimate (78:10). [³]

I think instructors are worried that they can be qualified, put the best effort they can or anybody could into a course, teach the course well, and the students will still not reach those objectives, you know.... I teach where students' backgrounds aren't that great. A lot of the students don't reach the objectives.... So, if the success of a course, and therefore the success of the instructor, is measured simply by the outcome - what happened - as opposed to the input that he or she put into the course, then instructors are worried (78:4).

CRITICISMS OF TASK ANALYSIS

Most of the "worry" and "skepticism" of instructors was focussed on the task analysis process which was already underway at the time of this research, bringing "worries" which were concrete and immediate. Some instructors argued that the workshops were "redundant" and "superfluous" because they duplicated the process of communication that was already taking place through the advisory committees. Others objected more strongly that the workshops were a poor substitute for the advisory committees and would produce less satisfactory results:

I think the calibre of analysis or thought you are likely to get from a group that's there on an ongoing basis is likely

to be higher than in a group that's basically the result of a struggle to find people with two whole days to commit. Are you getting the very best people ... with two full days to give up on this? (33:17).

This comment alludes as well to the difficulties experienced in organizing the task analysis workshop in accordance with the DACUM guidelines. For instance, the DACUM process calls for a workshop which lasts two to three days, but according to the instructors whose job it was to organize the event, "the business community would just not make that commitment". This was a problem for small employers in particular, who "just could not free up the time" for their staff to attend and as a result were said to be noticeably "underrepresented". This raised some question about the make-up of the groups of employers who did attend, such as:

Is it their commitment to education that brings them here, or the fact that they are not very busy and could well afford two full days to devote to a task analysis? (33:18).

Many instructors objected that the task analysis workshop provides them with answers they already knew. For instance, the outcome of the office administration task analysis was said to be "... not news to faculty":

The changes that were recommended were ones that had long been considered in the department. We knew we would likely collapse some programs because their wasn't enough differentiation, etc. So really, that did not provide us with anything new (33:18).

The most biting criticisms of the task analysis were aimed at the curriculum consultant who facilitated the workshops, charging

that he failed to follow the principles and procedures of DACUM. According to some instructors, he was "lacking in the necessary leadership qualities" (21:1), "not directive enough" (31:26) and sometimes "supplied his own interpretations or perceptions" (31:28). Others objected that the facilitator "got a little carried away" and included in the draft of the skills profile objectives that "were never discussed" at the workshop and "weren't relevant" (21:1). Some of this improper material appeared to be "borrowed from other skills profiles" and some of it appeared to be "taken verbatim from text books" (21:2-3).

In addition to these problems with individual performance, a number of instructors complained about "technical flaws" with the task analysis design itself. Some of these concerns related to the interpretation of language. Instructors point out that in constructing a description of performance requirements on the job, "changing a word or two can change the whole meaning of a task" (33:31) and that such subtlety is not sustainable in the rather casual kinds of discussion that take place among participants in the task analysis workshop. Because of this, the process tends to be imprecise, leaving it open to the problem of "bias" from the facilitator, whose job is in part to resolve such ambiguities in preparing the final documents. The problem of interpretation focussed in particular on the use of "buzzwords" and "jargon". According to one instructor, these words are often used by people "attempting to appear in the know", but who may be unclear about their meaning. The difficulty is compounded when

... by the time those buzzwords are fleshed out as behavioural objectives by the facilitator, who the hell know what was fully intended, let alone whether the people using the buzzwords in the first place knew what they meant (33:30).

According to these instructors, problems with interpretation of "buzzwords" continue when the workshop materials are sent back to employers in the process called "validation". Instructors argue that many employers

... aren't sophisticated enough to know whether their meaning [in the skills profile] is different from what they were thinking. They just recognize the buzzwords, and think "Oh, yeah, I recognize that. Those are the words I said" (33:32).

More broadly yet, some instructors argue that the principle of validation itself is shakey. That is, once employers have "validated" the profile, confirming that they agree with it, the profile is thereafter treated by the administration as a "totally objective statement" of employers' needs. But some skeptical instructors argue that "if we sent them back ten other objectives, they would still agree" (99:2). In this view, the whole process is arbitrary, giving the appearance of something "objective and scientific" while creating a "boondoggle":

I would say that the effect of performance-based learning objectives is to create the impression of precision, where there really is none.... So, whereas in the past it has been difficult for both instructors and administrators to say that the course is working or not working, now there would be the appearance that it is working (78:5).

The institutions feel that if they can get down on paper a nice clear systematic statement ... that these were real objectives and they were achieved ... then it looks much more persuasive. But you know, it's a bit of a game,

because you can write up the learning objectives to look very impressive and they can take up a couple of pages, and then you can achieve them. You haven't achieved much - it just depends on how you set them up, and it's my impression that this can become a boondoggle - a tremendous amount of effort into stating the obvious. But I think the administrators feel that it does give them something objective and scientific (78:10.)

Most of all, instructors perceive that their reservations and criticism are in vain. "The Dean" will have his way, and competency measures will prevail, regardless of how "it works":

I think DACUM has become it's own industry ... it's self-perpetuating. I don't think it matters any more whether it works or not. It has a long enough history and is in enough places that its own competence no longer matters (74:5).

CONCLUSION

The experience of instructors examined in this chapter provides a point of entry to the dynamics of competency-based education and serves as a guide to investigation in the chapters which follow. Their experience of "disruption" in the shift from a collegial to a competency-based mode of curriculum decision-making invites further questioning. What about these notions of "educational and economic sense"? What changes in the work process lead to the fears, reservations and skepticism which instructors express? Does fragmentation of learning occur, and how? Are the long term interests of learner jeopardized by the new measures, and if so, how? What lies behind instructors' experience of erosion in "flexibility" and "efficiency" of instruction? Is the work process of instructors constrained in

new ways by the competency approach to decision-making? How does this occur? Does the "industrial model" of management make a difference to curriculum, and how does information that is part of a "feedback loop" serve the interests of "the Dean". How does all this "disruption" in the curriculum process connect to the arena of public policy? The following chapters will pursue these and other questions.

ENDNOTES

(CHAPTER FOUR)

1. Bracketed numbers identify file and page number of fieldnotes.

2. It takes the judgment of "effectiveness" out of the hands of teachers, where it can be weighed and considered in the context of local conditions. Instead, effectiveness comes to be redefined only as an objectively measureable matter, which, once established, is expected to rule the practice of all, without regard to local conditions.

3. Reference to the climate of political controversy over cutbacks in education in B.C. was not unusual among instructors. Many saw the introduction of competency measures as a means specifically to cut instructional costs and to reduce the power of instructors (see Muller forthcoming). One representative of a province wide instructors association put it his way: "In the political climate in B.C. in the last couple of years, which is perceived to be a very vengeful climate, teachers are really worried about evaluation.... There are legitimate apprehensions about the administration getting back at people who have been politically active outside the college, people who have been outspoken, etc.... The administration could get at people through a performance-based system. I know that sounds very ... unprofessional, but you know what I mean" (78:4).

CHAPTER FIVE

TASK ANALYSIS: THE SCIENCE OF 'NEEDS'

The first major step in implementation of the Program Review process in the Business Department at West Coast College was to hold a series of task analysis workshops with local employers. Task analysis workshops stand at the center of the practice of competency methods. They are the principle device through which "the requirements of industry" are translated into curricular form. The process starts with structured input from employers about requirements on the job, which is then worked up by curriculum specialists and, eventually, instructors, into a set of curricular materials which can be seen to reflect the "needs" of industry. Thus the task analysis serves as the first step in the process of practical articulation of vocational instruction in colleges to the public policy objectives of "relevance" and "responsiveness" to the economy. This chapter explores the principles of task analysis as outlined in the competency literature; Chapter Six examines these same measures in practice.

Examination of the task analysis process in these two chapters will show that the "needs" and "requirements" of industry are not a straightforward empirical matter, given by the character of work itself. Rather, they are produced as a social artifact, a line drawn by particular individuals with varied

'interests', in a highly structured process of decision-making. Thus, in a broad sense, they are a political relation/product, and their impact on the educational process can best be understood in this light. [1]

EMPIRICISM AND VOCATIONAL LEARNING

Educational critics of the use of behavioural objectives argue that the problem of origins of learning objectives has never been satisfactorily solved (MacDonald-Ross 1975, 1972; Spady, 1982; Nunan 1983). Some curriculum specialists have attempted to avoid this sticky issue altogether by restricting their efforts to the pursuit of "clarity and precision" in operationalization of objectives which are said to be determined elsewhere, such as through vaguely-defined "social goals" or "societal objectives". However, in the arena of vocationally oriented learning, the problem of objectives has conventionally been seen as much less troublesome than in general or "liberal" education. Indeed, liberal-minded educators commonly assume that the application of behaviourism to occupational learning is entirely appropriate and unproblematic (e.g. Hall and Jones 1976).

Since the earliest days of scientific curriculum making the problem of establishing sufficiency in vocational education commonly has been thought to be resolvable empirically. That is,

instructional objectives have been seen as derivable directly from observation of the desired occupational tasks themselves, as suggested by Bobbitt (1918, 1913) at the turn of the century. [2] This premise was given its first large scale trial during World War I, when the United States War Department hired leading vocational educators to design a system of rapid training to supply the tens of thousands of operators and technicians required for the war effort, both within the armed services and in civilian shipyards, munitions plants, and other war industries (see Allen 1919; Dooley 1919).

The resulting war-time training programs were widely acclaimed in a number of postwar publications which were highly influential in the wider educational community (see Chapman 1921; Toops 1921; Mann 1922). The American Council on Education published a series of monographs and reports outlining the "lessons of the wartime ... for civilian education" (Grace 1948:vii). Significantly, these documents carefully situate their observations and recommendations in the recognition that the objectives of wartime programs of education and training were very specific: "the effective conduct of modern technological warfare", "destruction of the enemy" in sum "Victory!" (Grace 1948:v,133). It is repeatedly acknowledged that the context of war created conditions, motivations, and practices that may not apply and indeed may not be acceptable or advisable or possible under peace-time conditions. Such caveats ranged from the general to the particular: that wartime learning was always

"knowledge stripped for action" i.e. the bare essentials, in the context of both military and civilian training; that all training was "for a specific operation" and offers "few lessons for the future in intellectual freedom or a liberal education"; that the end was always more important than the means; that the exercise of wartime military authority, as well as conditions of funding, were nearly unlimited; that the incentives for learners and instructors alike included the risk of death as well as the possibility of honor and promotion; that traditional methods were abandoned with ease if deemed ineffective (Grace, 1948:6,16,247). The council acknowledged as well the criticism and skepticism which the wartime initiatives engendered in some quarters, including the fear that it would ultimately contribute to the decline of liberal education (Grace 1948:233).

While, the restraining influence of such warnings and reservations is hard to judge, the influence of war-time experience on future approaches to training is well documented (Travers 1973; Glaser 1962; Tyler 1975; 1949). The entire tradition of occupational analysis is a part of this heritage, including the concept of "task analysis" itself (Miller 1962). The adaptation of this empiricist tradition to public vocational education has received little sustained critique. A notable exception is Macdonald-Ross (1975, 1972) who argues that behavioural objectives are characterized by a "basic (and inerradicable) ambiguity" and that the problems associated with their use in specifying training needs are intractable "even in

the industrial training context for which [such an approach] was created" (Macdonal-Ross 1972:40; 1975:359). This chapter and the next explore some of these intractable problems as they appear in the context of the use of task analysis to define entry-level "competencies" for office occupations served by community college programs.

I will argue that the ambiguities explored here cannot not be resolved through infinite specification; they endure because the specification of requirements for job performance is ultimately an interpretive rather than an empirical undertaking. It involves grappling with problems about the nature and organization of work itself, questions which are fundamentally socio-historical and political in character. And it is inseparable from the work of defining the relation of individual workers to the labour process of which they are part, again a relation which is not "given" by the character of work itself but determined in a highly interested social process. In this context, we will see that the process of superimposing a set of rational/scientific procedures on the problems of articulating learning to the labour process on the job constitutes a further social/political act. It provides a "raiment of rationality" (McLaughlin 1975:118) under which intensely political choices go unexamined and unchallenged.

DACUM: A FRAMEWORK FOR EDUCATION OF DISADVANTAGED ADULTS

The Nova Scotia NewStart Program is most commonly identified as the original site of the adaptation and use of the task analysis technique in the Canadian context (Prokopec 1978, Adams 1975, Sinnett 1975). The handbook for practitioners produced under this project, DACUM: Approach to Curriculum, Learning and Evaluation in Occupational Training by R.E. Adams (1975), has become the Canadian standard on DACUM [3] technique, and I will rely on it heavily. The other standard work on which I will draw is The Application of DACUM in Retraining and Post Secondary Curriculum Development by W.E. Sinnett (1975) who was instrumental in introducing the DACUM approach in Ontario.

The sensibility/rationality of DACUM methods are best understood in the context for which they were developed, that is programs of vocational education tailored specifically to meet the needs of educationally disadvantaged adults. This specialized approach to curriculum was based on a critique of standard practices in occupational analysis and vocational education that is very informative for our purposes and highly determining of the character of the DACUM approach. According to Adams (1975), previous techniques for developing "efficient" occupational training suffered from severe shortcomings in a number of areas. Firstly, they were "formidably" elaborate and cumbersome, to the point of discouraging their use altogether. Secondly, they tended to be characterized by an emphasis on

knowledge or information content as opposed to performance, at the level of both occupational analysis itself and in design of materials for instruction and evaluation. Adams points out that such knowledge-based approaches to learning systematically disadvantage learners who do not already have a high level of communication skills. That is, an individual might have a high functional capacity in the occupation itself, and a low functional capacity for the medium in which competence is taught and evaluated in the learning situation.

The DACUM approach addresses these major obstacles by offering a "quick and economical" (Sinnott 1975:Part I,8) two day process for occupational analysis and an approach to educational design oriented to minimizing barriers to learning that can be seen as extraneous to occupational performance. It emphasizes those behavioural skills which most readily facilitate achievement and places information or knowledge "about" occupational tasks in a "supportive role". According to Adams, basic knowledge components such as science, math, communications, or theory related to the work may be "somewhat related" but "not essential to development of the skills or behaviours required for performance in the occupation" (Adams 1975:11). By isolating such factors, the DACUM approach is said to minimize those dynamics which commonly contribute to lack of success in learning situations among disadvantaged adults.

In light of these considerations, the DACUM approach instructs the designers of curriculum to "ignore" and "suppress"

traditional methods of handling subject matter which are derived from an educational tradition. Instead, learning objectives are broken down into individual skills or behaviours which are specified as independent learning tasks, or independent terminal goals. Each learning task becomes a "problem-solving situation" and evaluation is geared to the achievement of behavioural solutions. This learning process is said to closely approximate that which occurs in the work environment, and on this account the DACUM is said to promote ease of transfer from one setting of performance to the other (Adams 1975:38-45).

DACUM AS A TOOL OF GENERAL VOCATIONAL EDUCATION

The DACUM method developed by Adams and his colleagues in Nova Scotia has had a major influence on the practice of vocational education across Canada. The method has been adapted and developed for a variety of settings of vocational learning, particularly in Prince Edward Island, Newfoundland, Saskatchewan and British Columbia, and somewhat later, Ontario (see Hart 1987; Sinnett 1975). As Sinnett points out, not all users implement the approach in the same way, but a common denominator seems to be the use of a systematic approach to analysis of objectives and the creation of a chart of skill definitions. Such a chart may then be used in any type of delivery system (individualized or group, lecture or lab etc.) and may or may not be embedded in an entire instructional management system.

According to Sinnett, the basic integrity of the approach depends upon the critical first step of producing a skill profile chart by means of a committee of employers in a task analysis process. The common variation of having instructors produce a similar profile chart of course content is criticised for being just another form of "scope and sequence chart" and an "afterthought" which "cannot become an instrument for relevant job or generic skill-oriented change in the learning environment" (Sinnett 1975:II-8). Such instructor-based analysis is said not to provide an "embedded" or "real-job" type of curriculum and thus it "defeats the whole purpose of behavioural task analysis as a learning technique leading to performance objectives" (Sinnett 1975:II-5). When the employer-based character of the task analysis is retained however, Sinnett argues that the analysis and profiling steps may be safely "extracted" from the application for which they were designed in Nova Scotia "without changing the integrity of the process" and may be applied "whenever a task or behavioural analysis technique would be useful in outlining the skeleton of a curriculum" (Sinnett 1975:II-3). Sinnett's discussion of 'integrity' does not include consideration of whether principles of learning derived from the needs of individuals who are educationally handicapped are equally suitable for all learners, or more specifically, the question of how systematic suppression of the knowledge component is justified in general vocational learning.

According to Sinnett, the strength of the DACUM approach is in the potential which it brings to satisfy what he calls the "emerging need" for greater curriculum flexibility. The concept of learning objectives serves to "break-up" large blocks of learning into "curriculum bits" or modules which can be stored by a computer in large "data bases", arranged in various matrices or profiles. These modules can later be retrieved in "new combinations" to build "unique courses" to meet individualized or specialized learning needs. Sinnett points out that these are the elements of a "highly flexible" instructional system, in which "local decision-making is possible." In his vision, "business, industry and the local community" can thus become "much more involved in shaping curriculum" (Sinnett 1975:V-3,4).

Both Adams and Sinnett include in their "how-to" manuals considerable discussion of the procedures that will lead to a "successful outcome" of the task analysis process. Both point to a wide range of potential pitfalls and deviations from the procedure that are said to "disrupt" the work of the committee and prevent it from "completing its task". These instructions are reviewed below, along with some critical commentary, under two headings: planning and process.

PLANNING FOR SUCCESS

The first consideration in planning a DACUM workshop is selection of committee members. Committee members are sought who

represent all aspects of the occupation so that the document which results from the workshop can be said to "serve as a universal description of the occupation" (Adams 1975:48). A number of explicit criteria of "coverage" are outlined. Regional or local differences in how an occupation is defined should be considered, as well as the relevance of specialties within the occupation related to particular industries. Also, variance in the occupation relative to the size of employing firms is said to be important because large firms will tend to define the occupation as having a narrower range of highly developed skills, and smaller firms will specify a wider range of skills at more general level. However, the instructions do not specify how such differences are to be handled once they are brought to light, and how they may be resolved into a single account in the workshop documents. The only suggestion of such procedure that I could find in the Adams manual is the brief observation that the broader definition of skills typical of smaller firms is likely to include "some that might not properly be part of the occupation even though job incumbents might be applying them" (Adams 1975:48). This statement suggests that the workshop procedure is predicated upon an a priori notion of "occupation" which is applied in order to construct some forms of occupational practice as "proper" and not others. But no such concept is provided in the DACUM materials, and the procedures for constituting "occupation" in the workshop remain unexamined. It is treated as a naturally occurring phenomenon which can be merely found and described. This is a highly empiricist practice

with heavily ideological implications, which will become more clear as this chapter unfolds.

The second consideration in selection of a DACUM committee are the "qualifications" of the individuals themselves. First, they must be competent in the occupation themselves, by virtue of being an incumbent in the type of position being described, a past incumbent, or a first line supervisor of the work itself. They must be involved in the work process full time, must be able to communicate the skills of the occupation verbally and have a demonstrated ability to work with confidence and flexibility in a group situation. In addition, because of the "lead time" necessary for the preparation of new graduates, the "ideal" and "effective" committee member is one who "keeps abreast of his field by reading journals and exploring the potential of new inventions" and who can then interpret, even "predict" the impact of such changes on skill requirements in the occupation (Adams 1975:49). Finally, individuals must be "free from bias[es]" related to training methods, training time, training costs, status of the occupation etc. in order to be "qualified" for the DACUM committee. Individuals who "fill an auxiliary role such as a union leader" are excluded on this basis, since they may be "influenced by his auxiliary role more than by the real requirements" (Adams 1975:50). [3] Again, we see the use of a distinction about what is "real" and "proper" which remains an unexplicated resource in the decision-making work of the committee.

The problem of "bias" also rules out the participation of instructors or trainers, who are said to "not perform well" as committee members because they visualize and anticipate the impact of committee decisions on the instructional process rather than focussing on a description of the work process itself. In particular, instructors are said to "hamper analysis" and "resist specification" of "theory-based analytical or problem-solving skills" and to "encourage specification of the theory or knowledge itself." This tendency is said to "disrupt[] the ... momentum" of committee work (Adams 1975:47-53).

The result of all this specification is that the field of individuals suitable to serve as workshop participants is relatively small. Nevertheless, workshop organizers are urged not to treat the stated requirements lightly. Considerable advice is given about the most successful methods of recruiting suitable participants, and organizers are urged to avoid "concession to political pressure" in accepting committee members who are personally or professionally unqualified or ill-prepared for the work of the committee. While it is recognized that the sources of such pressure are many and varied, "[i]t has been found in work to date that insistence on rejecting such persons is necessary" in order to secure a "successful outcome" of the workshop (Adams 1975:53). Finally, it is stressed that committee members must be available for the entire duration of the workshop in order for the group dynamics to be sustained and a successful outcome to be achieved.

Throughout this literature, normative concepts like "qualified", "necessary" and "successful" are used in a completely taken for granted way. They assume the standpoint of the competency paradigm and insert its assumptions as what the reader must share in order for the text to make sense. This problem of standpoint is key to the ideological character of the documents per se, as well as of the workshop procedures they describe, which will be examined in Chapter Six.

MANAGING A SUCCESSFUL OUTCOME

Once a suitable committee is assembled, the conduct of the workshop itself is also a highly specified undertaking. The manuals stress that because the task analysis procedure and its requirements will likely be unfamiliar to participants, a successful outcome depends heavily on the efforts of a skilled facilitator/coordinator. On the one hand, the coordinator must not influence the "technical judgments or contributions of the committee", and must be "very patient" in allowing the committee to "search for solutions" on its own. On the other hand, the coordinator is instructed to "insist that they work within the specified framework" and to be "unyielding in applying the basic principles of DACUM" (Adams 1975:58-60). This is said to be a "difficult role", and not one suited to individuals to whom "it is important to be liked". The coordinator must be able to

"handle argument, provide responses to questions and handle severe criticism in relation to his and the DACUM approach" (Adams 1975:59-60). Since these documents contain no discussion of the nature or the sources of such "pressure", these concerns with conformity serve as another aspect of their opaque and ideological character.

Using a system of cards displayed on the wall, the coordinator is instructed to maintaining the focus and momentum of the group "on its task". To do this, he [sic] must be able to make "rapid, in-process decisions" to "maintain control of the situation". He must notice when the committee or some members have begun to "drift away" from the framework, and take appropriate action to bring "the lost individual[s] back on track". He is charged with the responsibility of maintaining "a steady work pace" to "ensure that the work will be complete in the allotted time" (Adams 1975:59-65).

The documents specify that the coordinator may occasionally assist the committee in selection of a suitable "action verb" for expressing a given skill. Such assistance is said to be most commonly needed for skills "which have in the past been treated as knowledge that is merely applied" or in the case of skills that are "mental problem-solving in nature" and therefore "not physically observable" (Adams 1975:63). Hence, committee is said to have difficulty specifying them without assistance. No relation is suggested in the manuals between this "difficulty"

and the requirement to suppress emphasis on knowledge or background information. In fact one of the biggest obstacles that the facilitator is said to face is "persons concerned with knowledge for the sake of knowledge" who feel "that a wide background of information and theory is essential to enable the employee to speak intelligently about his field, as well as to perform capably" (Adams 1975:111). To counter this difficulty, Adams recommends to facilitators that it is "easy" to use examples of other occupations "in which increasing emphasis was placed on knowledge to the exclusion of useful occupational skills" (1975:111). [4] Again, we see evidence of the use of a prior standards for determining usefulness or relevance of knowledge which remain unexplicated in the workshop procedures.

Finally, it is said that the coordinator "must display common sense" (Adams 1975:68). While it is acknowledged that this is a "rather nebulous skill definition", it is nevertheless said to be "necessary" for the following reasons:

The entire procedure is a relatively simple commonsense approach to the problem of specifying training requirements. It is not commonsense to allow the simplicity of the approach to be complicated by the airing of committee members' views on learning, education systems, training programs, and a variety of similar concerns such as unionism, socialism, and motivation to work (Adams 1975:68).

In this use, the concept of "simple commonsense" is a completely taken-for-granted resource in the organization of the workshop process and in determining the character of its results. The opposition of "simple" and "complicated" appears entirely

arbitrary, as does the claim that "airing of views" is unwelcome on topics which are declared to be "peripheral" and "philosophic". In these areas, the coordinator is instructed to "avoid becoming personally involved" because it may "discredit him in the eyes of the committee and he may lose his leadership role" (Adams 1975:69). The ability to avoid such detours is seen as evidence of the professional skill of the facilitator. Inasmuch as these prescriptive formulations assume a standpoint which cannot be interrogated by the reader, they contribute further to the ideological character of the task analysis process.

These various specifications for a "successful outcome" of the DACUM workshop add up to a highly technical process, using a tightly controlled and determining set of procedures for organization and conduct of the workshop, including a closely specified set of procedures for the description of work tasks. In this framework, only certain kinds of talk and action may be entered as data or appear as results. All other contributions are counted as "disruption" or "trouble". They promote the 'wrong kind' of discussion or they "slow down" the committee's progress toward its target in the allotted time. Thus, in contrast to the naturalistic and folksy common-sense claims of many of its advocates, a "successful outcome" of the DACUM process emerges as an extremely fragile phenomenon. The highly ideological character of the DACUM procedures is embedded in that technical fragility, and remains the object of our continuing investigation.

'NEEDS' AND 'INDUSTRY': AN ASSUMED RELATION

The product of the workshop process is a statement of the "needs of industry" as they are knowable from within a given, highly structured framework. It is interesting to note, however, that the concept "theoretical" is not used in the competency literature to describe this character of the approach. Rather, the theoretical character of the framework is systematically denied and obscured, both in the skills profile documents themselves, which routinely make no reference whatsoever to their own highly technical character, and in the bulk of the "how-to" literature which introduces these methods to practitioners. Instead, the methods are introduced as logical, rational, reflecting common sense, and technically neutral or free from "bias".

The closest thing to a statement of framework in these works is in Adams who writes that the DACUM approach "relies heavily on the principle that the skills or types of competence required for performance in an occupation can be defined and that the definitions can be usefully applied as the goals of a learning program" (Adams 1975:60). Adams identifies this stance as part of a "skill-knowledge debate" in which the opposing side is committed to the expression of needs in terms of information or knowledge which may be specified in more general terms and is

said to be a hindrance to learning. However, no general theory is offered or referred to as an account of this difficulty. The Adams manual is completely without footnotes or bibliography. Sinnett has both, but with a limited content that might be called theoretical. This feature of competency documents makes it difficult to track back to locate the intellectual tradition of which they are a part (Moore 1987). This apparently a-theoretic character of the DACUM literature is an expression/reflection of the ideological character of the workshop practices themselves.

The next integral piece of the ideological character of the DACUM procedure is the way in which "employers" are defined. That is, "employers" in this case means not just any employer or group of employers, but rather a carefully constructed abstraction, a voice duly constituted to speak for employers at large, authorized to make what is called a "universal" statement of "need". The procedures for constituting such a voice are examined in this chapter. However, the statements of the abstract entity "employers" are inescapably grounded in the particular experience of those employers present at the task analysis workshop. Indeed, the insistence of the DACUM procedures on working concretely (discussed below) are intended to ensure that this is the case. The existence of significant differences between workplaces is rendered officially invisible and irrelevant to training following the publication of a skills profile which speaks for all.

Next, the ideological character of DACUM practices is visible inasmuch as not all statements on the part of employers are equally eligible to be counted as "needs". While the purpose of the task analysis process is to solicit information from employers to demonstrate skill requirements in their workplaces, only certain kinds of information are admitted; others are actively 'suppressed'. In order to be eligible, contributions of employers must contribute toward the construction of an answer to one basic question, variants of which recurred frequently throughout the workshop: "What will these people be required to do?" "Will they be required to do ...?" "Do you want them to be able to do ...?". The ideas or expectations of employers which cannot be expressed in this form are excluded from the product by means of active, systematic, "suppression" in the workshop proceedings. Employers ideas about skill requirements which fall outside this framework were described by one administrator at West Coast College as their "wish lists". The work of constituting the difference between a "wish list" and a "statement of needs" is the business of the task analysis.

Finally, not just any behaviourally-formulated statement of employers about work related-knowledge and action expressed as "competencies" can be the occasion for institutional action. Rather, the character of a given work activity as a 'competency' can only be assigned as the product of the official process of social construction which takes place in the workshop setting. It is through these processes that some actions and not others

achieve status as the warrantable object of instruction in a "competency-driven" educational system. The ideological character of the DACUM process is thus a product of these routine, systematic, objectified and objectifying practices.

These determining features of the DACUM process will become visible as a form of practical action only through an analysis of interaction of participants in the task analysis workshop itself, which is undertaken in the next chapter. There, descriptions of work which are a product of the workshop process will be seen to rely not on any naturalistic definition or dominant empirical practice which is discoverable as the entity called "sufficiency" on the job. Instead, we will see that the descriptions of work which result from the workshop are the product of a process of mediation among divergent accounts of work itself and conflicting and competing statements of adequacy in skills and knowledge.

CONCLUSION

The prescriptions examined in this chapter suggest that notions of "competence" itself, or the concept of "need" through which competencies are defined, are ultimately normative in character. That is, they prescribe specific behaviours to which individuals are expected to conform, but they represent only one possible 'value' among many. Their meaning is always derived

from the choices made in defining some other entity. But these latter definitions are open as well for negotiation, indeed only exist in a continuing process of social construction. The implications of this conundrum are identified by Edmund Short (1984) using teaching as an example. He argues that the competencies of teaching depend upon how one defines the role of a teacher, and that:

Criteria cannot be found ready-made by turning to authorities or empirical investigations; they represent value judgments (as does the use of them) and therefore they must be constructed, determined, by someone or some group in particular circumstances. Who, therefore, should participate in their creation is a crucial political question to be resolved. (Short 1984:205).

According to Short, the development of criteria of competence is always "both a political and moral activity". While traditional educational theorists, Short included, have tended to focus on the moral dimension of such dilemmas, very few observers of the competency approach have turned their attention to the political character of these dynamics. William Spady has done so, and remains a singular resource in this regard because of his unique position as a staunch proponent of the approach who is at the same time one of its most insightful critics (1982, 1980, 1977). Spady has identified the irretrievably political character of criteria for job requirements:

It is my personal conviction, after having examined this problem closely for several years, that ... decisive cut-off points for various programs or grade levels ... must essentially be political rather than educational or scientific, since most skills or information-oriented curricula have few easily defined or professionally advocated threshold points (Spady 1982:135).

Indeed, the absence of easy threshold points is a striking feature of the discussions reported in the next chapter. What is a maximum requirement from one perspective or in one situation is a bare foundation from the next. This dilemma highlights the fact that work tasks do not exist as such outside of a work process in which they arise and have their sense. The imposition of separateness on them, to satisfy a curriculum format that requires discrete independent tasks, has the effect of disrupting these material conditions of their performability and learnability. Severed from their sense as 'practical action', and formulated instead as discrete phenomenon, job tasks acquire a peculiar, sterile, unfinished quality. In fact, this quality is an elusive source of dissatisfaction to both employers and educators involved in curriculum review process, as I will show in subsequent chapters.

We will see that the "universal description" (Adams 1975:48) which the DACUM process promises to provide is neither a mirror reflection of how jobs are practiced, nor even how employers think about their "needs". The "cut-off" points which are established are the product of structured interaction between what workers do, what employers want or think is needed for the job and what the specified curriculum procedures are willing to count as a statement of "need". The definition of "need" which is achieved through these procedures is an abstraction, organized from a location which continues to be unexplicated in the

procedures themselves, as we have seen in this chapter. However, as our investigation continues, it will be increasingly clear that this location represents the standpoint of capital itself, that is, the position of dominance by capital over labour within the terms of work organization. Evidence of how this relation is embedded in the midst of educational practices continues to be explored in the next chapter.

ENDNOTES

(CHAPTER FIVE)

1. See G.W. Smith (forthcoming), The Social Organization of the Government Category of "Occupation". Also G.W. Smith (1987).
2. See this discussion in Chapter One.
3. The original term DACUM stands for "Designing a Curriculum", but it is often used in a generic sense to refer to a sequence chart of instructional objectives. See discussion on pages 139-141.
4. Note here that the exclusion of representatives of labour organizations distinguishes these methods from similar practices undertaken in a more social democratic context in European countries such as West Germany.
5. Interestingly, Adams points to teaching as a good example of an occupation which illustrates this problem. It would be interesting and revealing to pursue how such a claim would be argued from his point of view.

CHAPTER SIX

TASK ANALYSIS: THE POLITICS OF 'SUFFICIENCY'

"There is nothing inevitable about a more work-related curriculum being restricted to an employer-dominated version of work preparation" (Finn 1987:193).

The objective of this chapter is to explore the task analysis workshop process conducted to revise office programs at West Coast College. Here we will see how the DACUM procedures described in the last chapter effect the definition of "needs" which is achieved. I will demonstrate that the "universal description" of required competencies which is achieved in these proceedings represents a highly mediated point of intersection between what various employers want, what the DACUM methods permit, and what a given college program can practically get done within the time frame available. This product nevertheless achieves status in documentary form as a "totally objective statement of needs" for the purposes of instructional management. Here we will examine the ideological character of this process.

The excerpts of workshop interaction examined below illustrate that many aspects of the work process on the job which are systematically counted out when it comes to planning a curriculum are nevertheless central to the communication which takes place in the workshop process. They are critical to how the employers in attendance construct a sense-in-common of the work which is

the topic of discussion. In some cases such as the discussion of "bookkeeping" reported below, decisions about what to count in arise almost as a residue from the process of deciding what to count out. By emphasizing and highlighting the apparently irremediably embedded character of work tasks on the job, this discussion casts a shadow on the viability of the basic assumptions of the competency approach to vocational learning in general: that "competence" on the job is constituted in the mastery of tasks which stand as discrete "terminal goals", and that, indeed, "competence" can be adequately taught and learned through independent "learning objectives" that have been carved out to conform to such a model. However, my object here is not to attempt to resolve these broad questions about the educational viability of these concepts and practices, but rather to show their fundamentally interested character and their location in a process of mediation by the state.

One of the difficulties experienced by workshop participants in trying to produce such discrete curriculum bits is the problem of trying to separate the requirements for performance and the necessity for what they call "awareness". This problem resonates with the century-old critical debates surrounding behaviourism and empiricism in education in North America, focussing on the relations between doing and knowing, action and its object. Here, I have argued that the competency approach imposes a method of "knowing" work tasks for the purposes of teaching/learning which inserts a rupture into these relations.

That is, 'competence' of the worker becomes objectified, organized from a position outside of the learner/worker as the acting subject. Work tasks are constituted as knowable from the location of those whose interest (need-to-know) is not in order to perform but in order to manage, either in the workplace itself or in the learning environment.

The importance of this shift would be difficult to over-rate for the purposes of the present analysis. It is foundational to the task of re-organizing vocational learning so that it will be responsive to the policy process. Its immediate effect is part of separating teachers from control over the instructional process. In the long term it is part of the process of separating workers in general from the conditions for control over work, as argued in Chapter Two. Thus it is part of reconstructing working knowledge in an alienated form as a property of capital (Holly 1977). All of this takes place in a process of textual mediation that is initiated and defined by the state.

THE WORKSHOP IN ACTION

The most persistent issue that emerged throughout the workshop was the problem that came to be called "awareness". This concept appeared in discussion of virtually every kind of work covered in the program, and served as a major organizing

device to handle the problem of embeddedness of work tasks, that is, that work takes place in a continuous flow of interdependent action, each task dependent on the steps before and intending those that come after. Making sense of individual job tasks thus depended for employers upon defining this larger undertaking of which they were part, and competent levels of performance depended upon grasping the larger sense of ones' actions.

For instance, the task called "opening the mail" is arguably one of the most mundane forms of work that goes on in an office environment. But even such a simple task was revealed by the discussion to be embedded in a larger framework of understanding.

Employer: Sometimes they don't know what an invoice is, and they don't know what a purchase order is. That's a problem because ... if they are opening the mail, they don't know what things are or what to do with them. And that is an entry level duty (55:9).

In this case, what pieces of mail or other objects "are" depends upon their use in a work process. This is a specialized method of knowing in which recognizing the object is a matter of orienting to a particular course of action in the office, i.e. "what to do" with it.

A similar problem of comprehending objects as part of a course of action can be seen, at a slightly greater level of complexity, in the following discussion of basic secretarial duties such as preparing itineraries or cash advances.

Employer: Should we be including things like itineraries, and making travel arrangements ... there's an awful lot of things you could include....

Employer: Most junior secretaries would have to type up an itinerary, and if they give you an itinerary to type up and you didn't have a clue what it was, you've never done it, that's a problem. And you have to order a cash advance ... they all have to do it, it doesn't matter who it is....

Employer: I am not saying she is going to know them all ... but we're talking about her having some awareness ... that she is going to be adding these type of things....

Employer: So are we talking about simply an awareness of these things? (55:31-32).

The concept of 'awareness' comes to stand not only for being able to recognize objects, but for various kinds of comprehension of the how and why of objects-in-use or function: where they come from and where they are are going. This is visible in the following discussion of basic bookkeeping skills:

Employer: Even a secretary at a desk has to have some sort of records, like to keep air travel, and cash advances, travelers cheques, everyone keeps their own for each principle ... it's a bookkeeping function.

Employer: I find with our small office, too, that most of the staff do make accounting entries, and I'm sure that some of them don't know why they are doing it.

Employer: These are people who are not necessarily going to go on to become accountants, but they do need some accounting skills. The important thing to teach is some theory, so they understand what they are doing and why.

Employer: Obviously they are not going to be full-fledged accountants, so you don't want to go into a kind of depth; but quite often they will take, maybe, first year accounting at night school, or something like that. The company pays for it, and it's very helpful.

Employer: I think it is too. Even if the word processing operator is typing up a document, a financial statement or a balance sheet, at least they have an awareness of what they are doing. Where it came from and maybe a little bit about why (55:19-21).

Thus the term "awareness" came to be applied over and over to areas of comprehension that were just beyond the limits of what an entry level person would be expected to perform independently, but were nevertheless important to a practical understanding of her own job functions. The term came to stand for aspects of background knowledge or understanding which are at the margins of what could be counted-in using a performance-based framework, but were seen by participants as part of both present and future capacities to act on the job.

Other aspects of performance on the job which were emphasized were described not so much as tasks at all, but as methods of proceeding. Early in the workshop, the facilitator supplied the term "problem solving" to bring a behavioural focus to aspects of job performance that some employers wanted to call "common sense":

Facilitator: Do we need to list problem solving as a skill? Is it a common problem? I heard 'analyze problems' and 'problem solve' a couple of times....

Employer: When you say problem solving, would this be at a basic clerical level? Like, when they come to you with a problem, and you try to find out what the heck the problem really is. Is that what we are talking about?

Employer: Yeah, you have to really interrogate them, and get them to define it, and go back and look again....

Employer: I think those are the people who stand out. The ones who use just a little bit of logic and problem solving and are not running to you with every little thing. Or they come to you with their answer and say 'Is this right?' not 'What should I do?'. I think people like that absolutely shine.

Employer: But aren't we talking about using common sense?

(Several Employers: 'Yes'... 'That's right'....) (55:7-8)

There were other ways of proceeding that employers tried to express variously as maturity, understanding, insight, and foresight, but they wanted them counted as part of what a "good secretary" took into account in typing a memo:

Employer: I can give you an example, and I think a good secretary would be able to catch it. Yesterday, a memo went out to 90 employees of our company, and it said, 'We are once again having our annual Fin and Feather Event. We would like volunteers for this worthwhile event...the time will be such and such.. and dinner will be served.' Well, I thought, what the heck is a Fin and Feather event, and what do these volunteers do? I don't know anything about last year's event (laughter). So, if a secretary had the foresight to go to the manager and say, well, tell me more about it, she could have reconstructed the letter....

Employer: So it isn't just the grammar, then, the grammar and the spelling and the punctuation ... it's what they are putting down....

Facilitator: So these people should be skilled in understanding the topic.....and always questioning themselves, not just read and type?

Employer: But that comes with maturity....

Employer: Well, this was a mature person ... and you would think they should have the insight to say, hey, this memo isn't going to tell a person....

Employer: Yes, but I am not sure that students going into their first job would feel that.... They should, but they don't all think that way. They take what is given to them....

Facilitator: They could be aware of it, though....(55:12).

This discussion highlights the absence of clear boundaries between various stages of knowing and doing on the job. Opening the mail also involves directing the mail; typing documents

requires comprehending their basic function; processing routine office communication involves the use of judgment logic and problem solving. As the boundaries of the tasks themselves get fuzzy, so do the notions of sufficiency in the skill required to perform them.

Much discussion in the workshop focussed on attempts to establish pragmatic ceilings of skill for various kinds of entry level work. Often these attempts were undermined by comments alluding to the difference between adequate performance conceived technically, such as typing speed, and the kind of performance which brings a notable sense of satisfaction and confidence to the employer. The latter was clearly of interest to employers, as evidenced in the following remarks:

Employer: I think knowledge of what they are doing will increase their speed, as opposed to having to type faster... Say, if you are using a spread sheet package, you are keying it in. How quickly you finish the spreadsheet doesn't depend upon how quickly you type. It depends on your approach and your knowledge of the package, and how you do it (55:17-18).

Employer: I think it is too. Even if the word processing operator is typing up a document, a financial statement or a balance sheet, at least they have an awareness of what they are doing. Where it came from and maybe a little bit about why (55:21).

Employer: [It is] very important to be really familiar with this little monster [personal computer] you are dealing with ... even though it is user-friendly, it doesn't tell you every step. So you have got to have the ability to go in and learn to fully utilize it. You have got to feel comfortable with the equipment ... If you get someone who is really comfortable with it, you really see the difference (55:11).

These comments point to the presence of what might be called "hidden skills", skills that are not visible as discrete performances and thus are easily taken for granted. But their presence or absence is said to make a difference to overall job performance that "you really see".

Perhaps the best overall illustration of the problems that emerged in attempting to chop work up into "discrete" bits and assign the skill levels required to perform the "bits" was a protracted discussion of bookkeeping. One basic point on which there was general agreement was that "there's no such thing as basic bookkeeping any more."

Employer: There is no such thing as basic bookkeeping any more. That's a hang over from an earlier era ... where you were sitting down there in the cellar ... using 'books' ... and the theory was completely left out. [Now] you can limit the accounting to one area, but it's not bookkeeping any longer...(55:22,24).

Agreement upon that point however, made even more difficult the problem of establishing what level of skill individuals needed to do their jobs, since the old habits of thinking didn't really apply. The answer to this question kept changing, depending upon the point of reference used in the discussion. The participants could all agree that even when the tasks were elementary, "you have to deal with concepts". But that left them with the problem of how far to go with "concepts". This seemed to be the most difficult decision of the entire workshop:

Employer: So, are we taking them to financial statments, or just to trial balance?

Employer: Well, I find it pointless to take a person just to trial balance, when the financial statement is really the object....

The question of what is "really the object" highlights the manner in which work tasks realize their sense by orienting to one another in practice. Without this context, their sense is disorganized for the purposes of performance as well as learning. The discussion continues from above:

Employer: Maybe get them to do the work up to the trial balance, but then have an awareness of the financial statement....

(Several employers): No, do the financial statements

Employer: Unless you do the financial statements, you don't really understand how the numbers are articulated.... What you do with a trial balance is technical; you run off a trial balance, then you pick and choose the numbers that are related to the different stages, and then you lay it out as a financial statement. And this is where the understanding really comes in.... See, a trial balance is just a working paper.

Employer: Delete trial balance and just leave financial statement.

Employer: How about 'procedures and processes leading to financial statements'?

Even the usual device of "awareness" did not solve the problems faced in this discussion of bookkeeping. A plausible argument could be made for setting the ceiling at either the trial balance or financial statement level. Eventually it became clear that this ambiguity had something to do with differences between workplaces. The discussion continues again from above:

Employer: If a person is coming out and going to work for a small office, they should be able to do this.

Employer: They would have to be pretty simplistic, though, wouldn't they?

Employer: Well, here we are talking about a small business, a person who is going to be able to function without supervision, in small offices, lawyers' offices, doctors' offices, etc. They may not have to do the financial statement, because in a small business chances are the accountant will come in. But they should have the knowledge, be conversant up to that point.

Facilitator: Would this not happen in a larger office?

Employer: We use technicians in a larger firm... We use a technician to take it up to a trial balance, and then an accountant to go to financial statements. Whether that is a good stopping point, I don't know....

Employer: Our people in accounting take care of debits and credits, and another girl will be in charge of the no ship lists, for so many days they don't get any more product if they haven't paid, etc. They each have a specific job. One does the data entry, to write in all the invoices. But none of them would be responsible for any kind of statement at all.

Employer: This is most probably true. And definitely in big businesses this will happen.

Facilitator: Well now, from what I am hearing, it sounds like in larger companies there is no need for this, but in smaller companies, there is...(55:25-28).

This discussion offers an important view into the relation between skill requirements and the organization of work itself. The discussion shows how jobs which appear to be the same are not because individual workplaces are organized differently, depending on many factors, including technology and size. Thus the concept of a "universal description" is called into question. For over an hour, the discussion of bookkeeping was stalled on these problems. Every avenue lead to the same ambivalent conclusion: "it depends".

College Personnel: What about cash control procedures, how much payroll, do you think we are into. And what about inventory? What kind of depth?

Employer: I realize you have to cover all of that, but in what depth? A very basic payroll? A more involved payroll. Do they need to know the ins and outs of all the various deductions, regulations, legislation....

Employer: They would have to do that if a person ended up in a one-girl office....(55:27)

Eventually, a break-through occurred which resulted a decision about bookkeeping made on pragmatic grounds relating to the organization of the college rather than the organization of the workplace. The turning point in the deliberations came in the following exchange:

Employer: Well, how much training time are we looking at here for that person? Two years?

College Personnel: Oh, no ... no. Eight months (55:27).

Within a few moments the decision to abandon the financial statement as the goal was implicit:

Employer: I am wondering if we are heading in the wrong direction, because, to be quite frank with you ... there's not going to be enough time ... we can't really take them up that far anyway....

Employer: You couldn't possibly do it in that time..."(55:27-28).

On the strength of this somewhat belated realization, the workshop group made a major decision affecting the Office Administration Program as a whole. They recommended the discontinuance of what had previously been a specialist certificate in Bookkeeping within the Office Administration

Program. Instead of graduating students with only eight months training who were called "specialists", they called for the inclusion of basic instruction in principles of bookkeeping/accounting for all students in Office Administration programs, and they set the trial balance as the ceiling. This was a compromise position: there wasn't "enough time" for the higher goal, but they settled for the lower goal on the optimistic note that "By the time they can do a trial balance, they have got enough concepts..." (55:29). The problem which remains unresolved, after all is said and done, is "enough" for whose purposes?

In the area of general secretarial skills, the conundrums were not so great, but there were nevertheless a number of lingering indeterminacies. As for bookkeeping, some of the problems related to the size of firms, but the more common differences related to workplace organization that depended upon the implementation of electronic technology. For instance, job requirements depend heavily on factors such as centralized or decentralized approaches to word processing:

Facilitator: Don't you have a kind of a 1-2-3-4 type standard letter that you send to your receivables ...?

Employer: No, the girl does it completely on her own. So do payables ... we're small.

Employer: Yes, well we do. In our [large] legal office, they are standard, and they are done by word processing ... (55:12-13).

Or the following:

Employer: Then you need to look at centralized and decentralized word processing.... When you have a

centralized center, they wouldn't so much be doing secretarial duties. But, if it's decentralized word processing, they would, wouldn't they. You know, you have got actually two different job descriptions. And depending on the actual business, whether they have decentralized or centralized set up, they could be one and the same person (55:38).

The omnipresence of new technology led to a strong call for "a general knowledge of all kinds of office automation equipment - what they can expect to find, what it is, what it does, what it is capable of doing" (55:18). New areas of technological innovation were seen to transform even basic, traditional office skills: typewriters, calculators, and telephones have "memory chips" and are "programmable"; word processing and data entry can mean operating anything from a dedicated work processor to a "dumb" terminal on a main frame to a personal computer; handling the mail can mean everything from posting letters to sending electronic messages. In the face of such changes, the relation between what employers "want [employees] to know" and what "they will have to do" grew increasingly cloudy. The case of programmable telephone systems provides an illustration.

Employer: There is something new that is just starting to be used, and that is the controlling software which can be controlled in-house. We have our own computer, we change our own locals, color paths, message senders ... that sort of thing. It is a new field....

Facilitator: Give me an example of how an entry level person would be affected by this.... Do you want this person to have the capability to do some minor level trouble shooting?

Employer: They would have to know enough to recognize that there is something wrong with the telephone, and to get to the person in charge and give them an intelligent problem to be solved.

Employer: Part of the difficulty is determining whether the problem is software or whether it is hardware; whether you try to do it yourself, or whether you phone for help. So there is a lot of problem solving in the job and you have to be aware of where the service comes from, whether it is in-house, or whether you don't waste two or three hours but go immediately outside....

Employer: Yes, we have just put in a new system, and it means a lot more skills required from the receptionist. Not only to trouble shoot, but also she does the programming, for messages and that kind of thing. She has to be aware that you get read-out, so she has to know how to operate the printer so she can get the read-out to see what calls were made.... And this is all getting to be standard equipment now, in a lot of places....

Employer: We see it now as something that you add to your job description, but in future it will be a whole career path of its own, and one that will be of some interest to students. I think that as time goes on it is going to be very important....

Employer: So maybe we should list "equipment awareness", because at this point in time the equipment is changing so rapidly and is so complex ... they need to be aware when they run into these things ..."(55:6-7).

Thus, while an entry level person would not be expected to program an in-house telephone system, a basic grasp of their programmable character was seen as central to mastering the basic receptionist function. The variety and rapidly changing character of other types of computer applications in the office also provided a large grey area in "sufficiency" of skills.

Facilitator: Ok, what about other technical skills. I guess we should talk about computers?.

Employer: It seems that secretaries now are expected to have a general working knowledge of a lot of different software applications....graphics, multi-plan, spreadsheets....

Facilitator: Lets take spreadsheets - is there something that is going to be common?

(Several employers)... Lotus 1-2-3 ...

Facilitator: Do you want them to be able to use this.....

(Several employers) ... Yes.... that's right.

Facilitator: Do you want them to have programming...

Employer: I don't think so. You just want them to be familiar with what it does

Employer: I think it is just an awareness again (55:18).

Grey areas in general secretarial skills were not confined to problems with grasping new technology. One of the most persistent themes throughout the workshop was the old-fashioned problem of writing skills. Concern with writing skills reappeared in the context of many different kinds of office tasks. But it always appeared obliquely, as a taken for granted means to the accomplishment of other tasks. Since in the existing curriculum, 'report writing' was taught to all students, one of the departmental observers eventually asked for clarification about the priority for writing instruction at this level. The process of clarification took place in stages, each one revising the decision made before. In the first stage, the group agreed that "a basic command" of English suitable for taking messages was all that was required.

College Personnel - I think it would be helpful for us developing curriculum if we had more direction under written skills. What kind of written skills,

Employer: Well, there are written skills all the way from the telephone which is simply taking messages to report writing. So what kind of skills are we asking for?

Facilitator: OK, What about written skills? ... This is an entry level person....

Employers (several voices): English ... Language skills ... grammar ... punctuation ... spelling.

Facilitator: What kind of composition would these people get, would you think? Would it be a very basic level? ... Obviously you don't have to put together a report....

College Personnel: Well, that's what I'd like to know.... What do they need...? (multiple voices..murmurs...).

Employer:just a basic command ... I mean some people just can't put their thoughts on paper, and if you read a message you still have to go back and clarify what was said....

College Personnel: So generally, report writing is not a requirement of these entry level people?

Employer: I would say no ... no ... no....

Employers (several voices, murmurs...): ... No ... no, I don't think so (55:9-11).

Only a few minutes later, they agreed that the ability to compose "a small note" to customers was a realistic requirement.

Facilitator: Do they have to be able to prepare certain kinds of business letters ... correspondence, memorandums [sic]?

Employer: Yes, what about a clerk, an accounts receivable clerk ... who has to send a small note off to a customer ... They should know how to do that....

Employer: Yes, that's important. Especially receivables

Employers (several voices): ... that's right ...(55:11-13).

Somewhat later in the workshop, the decision about sufficiency in writing skills was revised again to include "short report writing" for all students except those enrolled in the special legal secretarial program option.

Employer: You could offer a higher level of communications in the second level course ... much more written work....

Employer: Maybe doing some reports at this level....

Employer: ... actual composition, rather than just the routine memos....

Facilitator: OK, what would it mean though, about report writing? Do they actually write a report? Do research?

Employer: Justifications, maybe, for something....

Employer: I could give you an example. Right now, we have a secretary struggling with a report. She went out and did a special telephone assignment on how to bring in conference calls, from both outside and inside, and hook them all up. She researched it through the telephone company and put it all together. And it's a tough thing to put down on paper. That's the type of thing....

Employer: ... and writing out the procedures....

Facilitator: OK report writing, writing procedures manual, is that right? (55:33).

The upshot of this protracted discussion was to include report writing in the upper level course for students in all but one program, a reversal of the original decision. Indeed, the question of whether office workers "need" writing skills seemed quite elastic. The answer was influenced by how employers thought about the problem. It depended, for example, upon whether they focussed on everyday routines like answering the telephone, or on intermittent activities, like writing a procedures manual for new equipment. It depended upon the amount of scope that was built into the job, like writing "little notes" to customers. It depended as well on the amount of initiative that an individual took in the performance of her entry level job, such as attempting a report on a new telephone system.

It is evident from these discussions that both restrictive and expansive practices exist in entry level positions, depending upon the situations (small or large), the policies (centralized or decentralized) and the individuals involved. The concept of a "universal description" of an occupation with which the DACUM process operates completely obscures this complex reality and provides no explicit grounds for resolving the maze of contradictions which are uncovered. This situation led one employer in the Office Administration workshop to remark with a sigh, "There's so much interpretation left here!" (55:27)

The highly interpretive character of the decision-making process was an ongoing management problem for the facilitator, as anticipated in the how-to manuals. Discussion did not always proceed "according to the book". For instance, occasionally the problem of "wish lists" appeared as employers indulged in thinking about what "would be nice" for their new employees to "know". For example:

I'd love it if all my office staff had a better understanding of accounting. A lot of them have gone out and taken an accounting course after we have hired them (55:19).

Or the following:

I think it [knowledge of economic concepts] would all be valuable; they couldn't learn too much (55:22).

And

Probably marketing and sales are very important. You don't need them to get hired, certainly, but it wouldn't hurt (55:22).

When the discussion took these turns, the facilitator jumped in to re-direct the participants to focus specifically on performance expectations for an entry level employee.

Facilitator: I can think of a lot of things that it 'wouldn't hurt' these people to know, but we are trying to be as job specific as possible here...(55:22).

Or, in the same vein,

Facilitator: OK, that's where we have to ask the question, at what level do we want this to come to a halt? What are we talking about? I guess what we are asking is, what kind of general theory are we going to give these people ... [about] the marketing system ... the economic system ... without losing them in too much theory ...? (55:22).

However, the facilitator was not always successful with his redirection. As a result, there were moments in the discussion which contravened all the rules about focussing exclusively on entry-level performance. These violations are helpful because they display what is consistently counted out of the DACUM profile when the rules are being enforced. The statements in point focus on the relation between present and future performance at work. They suggest, among other things, that even if a pragmatic statement of universal entry level requirements for an occupation such as secretary could be achieved, a grey area would still remain with regard to what "entry-level" should be taken to cover. Does entry level mean only up to the day of hiring? What about performance six months later? Is future potential a legitimate part of entry-level hiring criteria, and if so, what implications would this have for training?

Employer: From my point of view, I could hire a new employee for the accounting department without any

accounting skills, just straight data-entry skills. In other words keyboarding, plus attitude, those kinds of things. I could be quite happy if she does the job as it is, straight data entry, without any concepts of accounting, she could do a very nice job. But let's say the individual wants to go further, and all she has is straight data entry, a little experience with debits and credits, without any understanding of the concepts involved. That person is limited (55:23).

Or, the following:

Employer: I think in today's world it would be advantageous for a student to have an overall grasp. In data entry - and when I say data entry I mean dollars and cents vs. communication - you have to know these software packages they keep coming out with. But, you've got a terminal, so you've also got word processing capability. I think it is advantageous for the student to give him the whole thing rather than trying to separate....you know. It's too low a level to split it into a career - to say, OK, I am going to spend the rest of my life just doing accounting data entry and no wordprocessing, etc.... So, I think it is to their advantage that things like communications skills be given to all of them.

Employer: I agree; they may not always be in that job. If they start with data entry, they may go on to do weird and wonderful things after that ... so they may as well have the basics (55:10).

Or, the following:

Employer: If they have those communication skills, they are going to be able to do what is necessary at an entry level. And if they don't, they are not going to be hired anyway, because if you get a young person coming in who can't talk during the interview ... then you know that this person may be good for six months in this position, but then that's it. They won't go any further...(55:16).

The interest in future skills which is specified in the DACUM procedures manuals is not in the future of individuals, qua individuals as expressed here, but rather in the future of the entry level positions itself, i.e. "what the [entry-level] employee will be required to do" in future. Thus the concerns addressed here are ones that do not find legitimate expression in

the workshop "task". The implications of this restriction are addressed explicitly in the following exchange:

Facilitator: Do these people ever have to address groups?

Employer: No, not really. [Silence...]

Employer: I wanted to comment on what I think is a common mistake. You said, speaking to a group? and I have found traditionally public speaking gets left off. You become an engineer, and suddenly you need to be talkin to groups so you go take a public speaking course.... So just because you don't get up often and speak to groups doesn't mean that you shouldn't have good hands-on training in public speaking. Because of the interviews, we are talking about, the ability to listen, give feed back. All of these are communication skills. A lot of them are part of this training in public speaking, which quite often they are not even getting at university level. To go into an interview, if a person has stood up and been taught some of the finer points of public speaking, it really helps (55:16).

The underlying difference of interests revealed in these remarks remains strictly off-stage as long as the workshop is focused on "its task." The only venue for such observations was in the manner of an "aside", as in an "off the record" remark made over lunch in a conversation about the importance of writing skills, when one participant said, with a knowing grin, "Maybe they need to ask for a raise, you know!" This sub-text of interest in the employee's capacity to look after her own interests came to the surface during the workshop proper only once, late in the proceedings, when the following exchange took place between one of the department observers and an employer:

College Personnel: It seems to me to be doing our students a disservice if we give them only entry level skills. Because then they would have to keep hopping back into the institution to get more and more and more, and once they have committed themselves to a job, that's very difficult to do. So I know that you are talking about entry level, but

mind it's not realistic to only give them that; we must give them more, so that they can....

Employer: I agree with that, but isn't this specific task-analysis job to define this entry level? (55:31).

Of course, the questions of "disservice", or whose needs are served, resides at the heart of the technical requirements for the task analysis in particular and the competency approach in general. According to the basic principles of competency-based curriculum initiatives, only the needs of "industry" are eligible to be named and served. Furthermore, in order to ensure that these needs are serviced in ways that meet the criteria of 'flexible', 'efficient' and 'accountable', only short term learning objectives may be pursued. These restrictions are precisely what the efficiency and effectiveness of DACUM is about. The voice which says, "This is a disservice to our students" is an instance of what is systematically counted out, a "disruption" and a "distraction" which deters the committee from "completing its task". The voice is an illustration of what it means to "not perform well" in the workshop process, and the reason that the attendance of college personnel is recommended only as observers.

CONCLUSION

The organization of educational relations put in place by these procedures for determining "required competencies" is one step in the realization of the policy objective of achieving

flexibility and responsiveness in programs of vocational education. The technique of task analysis, as seen in practice in this chapter, is central to the production of the "curriculum bits" (Adams 1975) that are required for the modularization of instruction. Only learning objectives which can stand as discrete units are workable in such a system, and only those which relate to performance in the short term are warrantable. Such an organization of instruction is said to provide effectiveness and efficiency in producing the conditions for productivity on the job and thus for growth and prosperity of "industry". It involves the active "suppression" of individual interests in the learning process and the subordination of practice at every level to the servicing of "needs" which are attributable to the employer. As we have seen in the task analysis examined above, it is difficult in this context to represent activities with a long-term educational pay-off, e.g. public speaking, as a legitimate learning task for entry level office workers, and those which serve the interests of individuals, e.g. the need for writing skills in order to ask for a raise, are no "need" at all.

For our purposes, what is essential to notice is that in practice, conformity to this model of "needs" or "sufficiency" of skills does not depend upon the desire or ability of individual employers to formulate and express their interests or desires in this form. Nor does it depend upon the agreement and intention of instructors to structure educational activities according to

this view. Rather, the relations are produced and held in place through the technical practices of the educational technology itself. Like other forms of modern technological innovation, whether embodied in machines or management systems, competency measures implicate their users in the practice of social relations which may not reflect their own intentions. The measures provide the vehicle to organize educational practice in a wide range of local settings, and to incorporate them into social relations which begin and end outside the immediate experience of local actors. This is the form of social organization which Smith (1974) calls the "extra-local" organization of ruling. Furthermore, this method of managing the social relations of education is selected and imposed not by capital itself, but by the state, in an attempt to meet the changing requirements for capital accumulation, as part of the conditions of bourgeois rule.

This discovery about the interested character of competency measures puts into perspective the claims to objectivity which surround competency-based curriculum and other systems-based approaches to management, in education as elsewhere. That is, we are compelled to recognize that the objectivity of these practices is constituted not in any claim to their "neutrality" vis-a-vis competing interests, but rather in their ability to systematize, stabilize and make objectively available a set of rational procedures for decision-making. Such procedures result in decisions which are routinely reliable, insofar as they are

not subject to influence by interests deemed "extraneous" to some specified "task". In this lies their popular claim to objectivity. The certainty which is promised by these measures is achieved not by resolving the ambiguity inherent in the social process, but by banishing such ambiguity to the margins of practical action and awareness. The stability and reliability of such an objective management process is achieved through its embeddedness in a documentary process, as we will see in the next chapter.

The next step in our investigation is to explore the practical impact of the task analysis process within the college environment on an ongoing basis. Chapter Seven begins that exploration with a focus on the changing situation of instructors within a new regime of curricular relations, and Chapter Eight explores how these changes are integral to the way that administrators do their jobs.

CHAPTER SEVEN

"THESE THINGS JUST HAPPEN": THE NEW RELATIONS OF CURRICULUM

This chapter will examine pervasive changes in the organization of curriculum decision-making which are part of the implementation of a competency-based curriculum process at West Coast College. Although the ostensible object of the decision-making processes in question is curriculum content, it will be apparent that the issues at stake are more complex than course 'content', narrowly conceived. Also hanging in the balance are some basic assumptions about the proper sphere of action, expertise and responsibility for key actors such as instructors, administrators, and employers, as well as the dominant concepts, vocabularies and methods of organization through which the enterprise of vocational education is made actionable. In other words, we are concerned not only with curriculum change, but with changes in the social relations of curriculum, and with the significance of these relations in a larger social process. In this context, I will argue that changes in curriculum relations explored here are part of the process of ideological "retooling" discussed in Chapter Two. They serve to articulate, to align, the everyday practice of college instructors in a host of local settings to the broader policy discourse. Most importantly, they make the work process in the college setting accountable to a policy discourse through a process of documentary mediation.

I will argue that in the implementation of competency methods, instructors' knowledge of the workplace, which has served as the basis for their professionalism as vocational educators, is displaced and embedded in a new form of documentary process which comes to dominate and circumscribe their work. Their active participation in, indeed essential contribution to, the production of these documentary forms is thus highly contradictory. This transformation in the work process of instructors is most visible in the series of program revision meetings, attended only by faculty, which are held following receipt of the skills profile chart from the task analysis workshop. These revision meetings are the focus of investigation in this chapter.

The revision meetings take place in a sequence of action that is dependent upon and subordinate to an extended division of educational and administrative labour. In the broadest sense, of course, this division of labour is as large in scope as the public discourse on needs in education and training, which we examined in Chapter Two. In a more immediate sense, however, it means that the activities of revision examined in this chapter are tied to and presuppose the prior occurrence of a task analysis process among employers (with the active "facilitation" and mediation of the curriculum specialist), and they orient to the subsequent stages of institutional action, e.g. reports to college committees or to the Ministry of Education, involved in implementing a curriculum revision.

In the context of such a division of labour, the talk and actions undertaken in the revision meetings cannot be interpreted in isolation, but rather must be seen as organized and coordinated by the larger process of social action of which they are a part. The talk and interaction within and around the meetings will be seen as moments in a social division of labour, organized by and articulated to actions and events which are either prior to or subsequent to the occasion of the meeting itself. This also means that the actions of individual participants are tied to activities and intentions which are not their own and which originate outside their sphere of immediate everyday experience. My objective in this chapter is to make visible this process of coordination or concerting of action and to establish how it gives shape to the practice of curricular decision-making.

For our purposes, one of the most significant and pervasive features of this process of coordination and articulation is that it takes place through the mediation of texts. In a competency-based system, textual or documentary processes mediate the curricular process in a host of complex ways. The mediating presence of texts can be traced in its most readily visible form by observing the movement of documents through the process of program design and approval, involving employers, instructors and administrators, eventually reaching all the way to the ministry that eventually gives program approval.

In outline, the documentary process thus conceived is accessible to investigation using relatively common sense procedures for factual observation and description. In this mode it can be seen to involve a number of interlocking steps. The organization of the task analysis workshop and its conduct rely in various ways on documents which provide instructions, explanation, invitation, etc. for participants. Subsequently, the documentary products of the task analysis workshop bring forward the outcome of that process of decision-making into other moments of institutional life, of which the revision meetings are only the first. In turn, the documentary products of the revision meetings, examined in this chapter, bring forward the cumulative results of the task analysis and revision processes into subsequent sites of administrative action within the college in the form of curriculum review committees. All of this activity intends the still subsequent actions through which the college officially (i.e. for organizational purposes) accomplishes the adoption of the newly revised curriculum. Part of this latter stage of action involves forwarding documents to the ministry, where they indicate the compliance of the college with its mandate to offer "competency-driven" programs of education and training.

Not all of these stages of documentary communication by the college lie within the scope of detailed empirical investigation undertaken here, but they are nevertheless relevant to my

argument. Their importance lies in the way that their presence as prior and/or next steps in an organizational course of action gives shape to the practical activities which take place at each step along the way. The practice of "giving shape" is also a textually-mediated process, but one which requires a rather different level of observation and analysis than the account of bureaucratic communication given above. It involves discovering the mediating presence of documents within settings, and attending to the capacity of documents to "stand in for" social reality in ways that obscure both the conditions for which they speak and conditions of their own production. In these capacities they serve as constituents of social action, as opposed to simple transmitters of information, and in this capacity lies their ideological character. This latter feature of documentary processes is essential to the processes of mediation to which Smith (1984) draws our attention in the term "textually-mediated social organization", and is central to the analysis undertaken in this thesis.

INSTRUCTORS AS SUBJECTS

The principles of competency-based education specify that the primary responsibility of instructors is to ensure that a sound educational process is used to pursue the learning objectives specified by employers in the skills profile charts. And indeed, there is plenty of evidence that this kind of educational

expertise is supplied by teachers in the implementation of the new design process at West Coast College. My field notes from the revision meetings are full of discussions among instructors over just such educational decisions:

Will they have enough time in the course to get through this much material? ... Is there a lot of terminology to worry about? ... Should billing and payroll be kept together in one course? ... What sequencing do they need to be taught in so they have the background when these things come up? ... Time sheets could be kept together with payroll because they go together. ... What are the prerequisites for each of these courses? ... Do they need to do anatomy and physiology before they do terminology, and do they need to do both before they can really do transcription? ... Is transcription a lab course, or a lecture lab? ... Will we be able to get it through the system calling it just a transcription course? (56:4-5).

What is not recognized in principle, although it is obvious in practice, is how instructors' knowledge of the workplace also serves as a cornerstone of the competency process. This reliance begins with the fact that in the college environment, instructors are the primary source of the kind of intimate knowledge on which the successful planning of a task analysis workshop depends. The Dean and the department head are heavily dependent upon this expertise, implicitly or explicitly, in the decision to hold local workshops.

At West Coast College, the planning of the task analysis workshop was left entirely to the faculty to do. Invitations to employers were sent out to individuals and firms known to and selected by instructors in the department. Instructors' choice of employers to participate depends upon many layers of knowledge

about their fields. It draws upon their general knowledge of developments in the field, as well as of variations and specialties by sector. It requires an understanding of the profile of various firms and individuals within firms, as visible in the following statement by a faculty member:

The people I have invited to the task analysis are in supervisory positions, office managers, comptrollers - they are the type of people who would be hiring the types of students we are putting out, such as accounts receivable or accounts payable clerks, inventory control clerks, bookkeepers. They are dealing sort of in a middle range, both upward and downward, having a meeting with the president of the company one minute and having a staff meeting the next. The people who do the hiring and firing, making employee evaluations and so on ... (36:13).

Instructors maintain a current knowledge of their fields through membership in professional associations - for example of accountants, office systems analysts, professional secretaries, etc. - through which they attend meetings which keep them up to date on developments in the field. They read professional journals and other literature from a variety of sources, and attend the occasional seminar. Some, particularly contract faculty, have small consulting businesses on the side.

As a part of their work at the college, instructors frequently will get phone calls from employers looking for a new employee. These conversations are also a source of "intelligence" about conditions for new employees in the workplace.

I still have a lot of contacts with employers, with them phoning in and asking for students for openings they may

have. And so they are actually telling me what skills they expect when I send a student out (24:16).

In that sense, I really do start to see a transition in requirements on the job. I feel that now a lot of the interpersonal skills are being emphasized more and more, rather than marks.... Before, what they wanted to know was 'How fast does this person type? How accurate is she?' - those kinds of things. Now, they're saying to me, 'Does she get along well with her classmates? Is she punctual? - those kinds of skills (20:10).

There are more informal ways that instructors have and continue to use to be informed about the fields in which they teach, what one instructor called a "little path of intelligence":

There are friends of mine who are accountants, office managers, and related fields. Our kids are the same age so we will meet at a band concert at school or something and I'll ask 'What do you think about this' and they'll say 'Oh, it's definitely this way' or 'definitely that way. Then there's another fellow, an accountant, who has taught quite a bit and has quite a large sphere of people he talks to. He is an ex-programmer as well as being an accountant, so he has been into computers for a long time. We used to chat and takes things apart. We both have friends in public accounting practice, doing consulting, and so on. So, you see, there's a little path of intelligence ...(36:7).

These contacts provide this bookkeeping instructor with a source of information about the field that is as dynamic as the field itself. He pumps them for information about changes in their working environments, always listening for evidence about whether his course addresses the situations he is hearing described.

These guys know what's going on. They may not necessarily have a degree, but they get involved with computers because their company is on a network system, on-line, or stand-alone. Or they are using wholly automated packages. So they will say, the PC is definitely the way to go, not to

mainframes, or if they can have network experience, so much the better, which is what we are putting in. They need to be able to load up a local office automated package and use it.... So when it comes to what I've done with my course, it is coming right out of their mouths (36:7).

Because of their extensive knowledge of the field, most instructors expect no surprises about skill requirements to emerge from the task analysis process. They anticipate that most of the changes called for will be ones that they have been considering or even recommending for some time. Instead, they indicate that the biggest change will be in the power of the new approach to get things done. For example, office administration faculty pointed out that for more than two years they had been dissatisfied with the marketing course provided for office administration students by the marketing discipline. However, faculty agitation for change had been seen as a matter of them trying to take the course back in order to protect employment within their discipline. Their complaints were seen to be tainted with self interest, resulting in a deadlock between opposing points of view or interests. Under the new system, however, once the course is shown to be inappropriate in relation to a skills profile chart, instructors expect that the changes will be addressed as matter of course. In cases like this, instructors anticipate that the new methods will bring action where their voices have been unsuccessful. Some of them talk about this optimistically as a matter of increased "leverage" for change.

Instructor: Basically I think some of the things that they came up with reinforced a lot of what we as teachers have

been pushing for a long time, for three or four years. And I think getting that feedback ... was good. I think it sort of gave us some impetus to get busy and say okay, you know, there are changes that are necessary. And it - because of the status of task analysis with the higher levels here, you can almost say that this is what task analysis wanted It is a little bit of leverage (20:17).

Instructor: It is a bit of a political issue, actually. Some of our courses as you know in Office Administration are service courses, taught from outside the department. So there is one course, taught by the business department, that in essence was supposed to have been a level of oral communications for us. And we have taken issue with how it's taught. Students have taken issue with it and so have faculty. We did have a meeting with the business department and expressed our concerns with regards to the fact that the course is maybe not answering the need. And the business department defended their stand and we defended our stand.... But now, I think that upper management will give us the support now to say, "Look, you people in that discipline obviously have not been serving them well. Their focus is different. Their objectives are defined differently." And we'll have this package saying it, rather than our word against theirs.... We have this external input (20:13).

Instructors' talk of 'leverage' is a useful focus for our investigation. As we pursue their sense that the task analysis will 'get things done', we will see that this feature of the approach is the same dynamic that makes the process contradictory in relation to their interests as instructors. The power of the new curriculum methods arises out of a new organization of decision-making relations. In the new mode, the knowledge that instructors have of the workplace comes to be externalized, vested in a documentary process which is then used to subordinate their work to the decisions of employers and administrators. The activity of instructors becomes one step in an organizational course of action which originates and derives its sense elsewhere.

REVISION MEETINGS IN ACTION

There are many moments in the interaction of instructors in these two days of revision meetings that begin to make visible the contradictory process in which they are ineluctably embedded. The first and probably most pervasive feature of the course revision meetings that is important to examine in this light is the way in which the voice of employers organizes the scene from off-stage. The duly constituted voice of the abstraction "employers in general" enters the revision meetings as a ubiquitous "they" which serves as a central organizing device in the discussions which take place among instructors. This dynamic secures the orientation of talk and action in these meetings to the employer as the source of legitimate authority on the work process and to the dominant discourse on "needs" which is the driving force behind the program review.

The articulating presence of the abstract "they" may be seen, for instance, in the following verbal summary of a portion of the skills profile for the Medical Office Assistant Program. This summary was part of an introduction of the results of the task analysis process, done for the instructors who were assembled for the revisions meetings. The person speaking had been one of the departmental observers at the task analysis workshop itself, and was also chairing the revision meetings.

Maybe I will just review the type of content included there to give you some kind of feeling. In this one, they wanted to talk about medical institutions in the Lower Mainland, they wanted to know about their location, their principal focus for work. They wanted to have students aware of their hierarchical structure and the communication structure within these institutions.... They also wanted them to be aware of the different types of orientation packages they face when they enter those institutions ... who they report to etc. They wanted team dynamics addressed ... They want you to address in this course the "typical office assistant" i.e. the kinds of jobs, the kinds of skills, the kinds of personality, the kinds of knowledge that that individual will need to get a job at the end. They wanted them to be aware of the professional associations that they can use as a support group.... Then they talked about the students setting down career goals for themselves.... They wanted time and stress management skills looked at a little bit. And they wanted us to discuss things like responsibilities to the employer ... (56:4).

This excerpt of talk illustrates the structure of 'us and them' that dominated the meeting. The word 'they' appears fifteen times in a roughly two minute segment of talk. This is, of course, partly a feature of the character of this talk as a condensation, a summary, but in this form, the essential relations are also made very stark. The word "they" appears in the paragraph above as the subject of almost every sentence. This is more than a grammatical observation; "they" are indeed the acting subjects and authors of the decision-making process which is being recounted in summary. It is that same decision-making process which is being re-organized and reconstituted through the review process in ways that situate the "us" and "you" of the speaker, referring to instructors collectively as audience, "other" to the decision-making subjects who are employers. The results of employers' actions come to instructors

as news, information conveyed to them from outside their sphere of immediate experience and action.

Results of the task analysis process are officially vested in and conveyed through the formal documents of the task analysis workshop, the skills profile and learning objectives charts. These documents are integral to the accomplishment of the revision process for administrative purposes, but their power in this regard depends upon their capacity to stand in for the detailed process of review and revision of course materials by instructors, which the documents also organize, as we will see in this chapter.

During the review and revision process, the information contained in the task analysis documents is summarized, interpreted, reinforced, mediated in various ways through personal communication by those faculty members who attended the task analysis workshop as observers. In the case of office administration programs, there were two observers, who also held appointed positions within the department as coordinators or "convenors" of different aspects of the program. In this context, their actions are extremely important in putting into practice the new organization of relations which is begun in the task analysis process. Their verbal summaries and interpretations of the task analysis documents carries the special force of speakers who were present at the events of which they speak. Their voices also carry the weight of their

delegated administrative responsibility for overseeing the "implementation" of the review process, of setting the meeting on track by reminding others of "what we should be doing". In these senses, their voices 'real-ize' in the new setting the decisions of others on which they are reporting. At the same time, their talk and actions in these meetings are part of putting into practice a transformation in the relations of curriculum in which they are full participants. In this light, the talk of the person chairing the revision meetings is more than a matter of reporting; it is an active part of constituting the new relations. At the same time that she constructs an account of the decisions that have been made elsewhere by others, and of the procedures which are to be followed, her account of these changes is part of their reflexive accomplishment as a new form of curriculum relations.

For instance, the first discussion of the day was about requirements in the area of communication skills. After several minutes of discussion, the chair produced the following interpretation of what had gone on in the task analysis workshop:

What the task analysis really stressed was communications - being able to communicate with other office workers adequately, in oral and written form.... What they say here [reading from the profile chart] is "demonstrate the ability to communicate effectively...." And they really did stress this, to the point where, I would say, the first hour of the Office Administration task analysis was basically spent discussing just communications from all angles - telephone, interpersonal relationships, working with a team - all of those things (55:3).

This kind of mediation and interpretation is part of making real in the setting occupied by instructors the new organization of decision-making. What is important is determined elsewhere, as is the sense of relative weight or urgency among items. This information is conveyed to instructors as a form of instructions to act, not an invitation to debate and decide, as in the past. Faced with this recognition as the discussion progressed, one teacher soon voiced the following protest:

I am a little confused here; it is as though we have already changed communications into two courses, and yet we have never decided whether we need that course more than we need Typing I. I am a little miffed about that. It seems that these things just happen. The way you are talking, we are just going to get the two communications courses, and Typing I has just been swept under the rug (56:3, emphasis mine).

Under the new system, instructors are put into a situation where curriculum decisions "just happen". By the time they are involved, the moment of decision is past, a fait accompli. Consider the response of the meeting chair to the protest quoted above:

I think it is given that we need two levels of communications courses ... if you read through both documents, it's there, without a doubt.... There are five pages in there that call for communication skills ... and that's just the oral part. Then you have to address the written skills.... So we have to think of this as not straight English (56:3, emphasis mine).

In past, there was no mechanism for curriculum decisions to "just happen" to teachers in this way. Teachers were the active agents of curriculum design work which was undertaken in a collegial process. Within that organization of action,

instructors might influence, even constrain one another's decisions. Employers, on the other hand, remained essentially a resource, able to influence the curriculum only in so far as teachers, individually or collectively adopted their advice, or took their experience as the basis for planning. By statutory requirement, each program maintained an Advisory Committee of local employers that met on an irregular basis to advise departments on matters of program content. Faculty traditionally organized and met with these committees, with the endorsement and assistance of the Dean and the President's office in recognition of the formal character of the advisory role. But the knowledge which came from employers via these contacts was appropriated by instructors as their own, for use as part of their professional stock of knowledge and as the basis to act. The new system precludes this particular form of appropriation, imposing a new organization in which knowledge of work is mediated through an administrative process to which instructors are subordinate. This new organization of decision-making was summed-up later by one teacher who said: "Who are we to question what they think is worth while? They are the experts" (29:21). This process of subordination is mediated by the task analysis documents. As put by the meeting chair above, still in response to the voice of protest above: "If you don't want to take my word for it, you can look at the documents ..." (56:3).

The kinds of decision-making assigned to instructors is profoundly altered by these new arrangements. This is clearly

visible in the proceedings of the revision meetings. According to the meeting chair, the first job of instructors is to rearrange existing instructional blocks to see where they fit into the new profile and to make whatever additions or deletions the new profile requires. Then, they prepare the documentation that must go forward from the department to the established system of curriculum committees within the college where formal, institutional approval of course and program changes takes place. Sending the changes to these committees involves the use of standard "Course Information" sheets which provide an overview of each course in a standardized format.

For the revision meetings examined here, the coordinator and convenor have done some preliminary work of matching existing course content to the new profile charts in order to "expedite the process" among the larger grouping of faculty attending the revision meetings. This has involved "identifying" blocks of curriculum in the existing programs and in the new profile, seeing what's "missing", what's "covered", and what "coincides". The process is like completing a puzzle: "checking" one document against the other, seeing that items are "listed", "covered" or "don't fit". The chairperson asks the assembled instructors to check this preliminary work, to verify that what they have produced "actually conforms to what is in the profiles" or whether something has been added or deleted in error (56:1-2).

After introductory discussions, the chairperson gives instructions for the faculty to break into groups for the

afternoon and work on different segments of the program. Their major task is to prepare a new set of documents called Course Information Sheets which must be submitted to a series of curriculum committees within the college for formal approval of the revision. Her instructions to the group are as follows:

Your job this afternoon and tomorrow, will be first of all to name the course, to identify a calendar description, to verify the content ... I think the content is almost basically done for you, you just have to type it in. The objective statements are basically given in the [task analysis] package. All you have to do is make sure that they match. Then you are going to have to determine the mode of instruction, e.g. lecture, or lecture/lab, and last thing the evaluation process. Oh, then texts. I have an office full of texts for you to look at ... (56:6).

In this account, instructors' role is carefully delimited. It consists of matching, determining i.e. choosing between options, and a small amount of composition i.e. the course name and one paragraph description. Working in sub-groups on the details of the revision, instructors reminded one another:

This is what the committee said we should be doing ... We should be working from the recommendations of the committee.... I think we can take from the old course outlines, as long as we don't go against that (56:6).

As the meetings proceeded, it became clear that this was not an occasion for debate or discussion of decisions contained in the profile charts. At the time of the meetings, the draft document had been sent back to employers who attended the workshop for "validation", a process which provides a check on the work of the curriculum specialist and a chance for employers to think twice about their own decisions. Although the

validation process might lead to requests for amendments from employers, the department was initiating the revision work on the basis of the draft documents, due to time pressures. The validation process includes virtually no formal mechanism for instructors themselves to challenge the decisions contained in the documents. Due to the fact that the documents were not entirely finalized, the department head anticipated some argument over details, but he has made it clear that instructors' opinions will not carry much weight:

Any changes that we suggest will have to be substantiated in some way; it can't be just a gut feeling, or something like that. [The head of the department] is going to expect some sort of substantiation to support our adding, or taking out, curriculum that was not in the task analysis. So it can't be just sort of an idea that comes up ... he wants some sort of back up ... and he has really indicated that to me ... (56:1).

The curriculum committees for which the Course Information Sheets are being prepared have already adopted the use of some standard competency techniques, such as the use of behavioural language, and some instructors already have experience with the need to conform in order to get their courses approved. As the revision meeting broke up in to smaller working groups, the chair offers the reminder, "Make sure you don't miss anything; they are getting really sticky about everything matching - boy oh boy!" (56:9).

Anticipation of a "sticky" committee process can be seen as a major factor in determining how time is spent in the small group meetings. For instance, a lot of time and effort is spent

struggling to produce the required form of verbs for the Course Information Sheets, as the following passage demonstrates:

Instructor A: OK, well, this is a main objective.... The student will demonstrate the ability to communicate using written business messages. Now, do we have to say 'by choosing' or do we start out 'choose and produce'...?

Instructor B: It has to all just add on to this part....

A: But what I am saying here is can you use "choosing, using..."?

B: Oh, yeh, that's no problem. It's got to be a verb that continues with this....

A: Yeh, that's a gerund, though ... can you use a gerund instead of an active verb?

B: It seems to me that on the DACUM chart you're supposed to have 'choose, use, handle, discuss ...'?

A: Yeah, but can you use 'choosing, handling, correcting ...'?

B: Oh, I see what you're saying ... that's no problem.

A: Or do you put 'the student will be able to ...' several times down the page ...?

B: No, you would have 'The student will be able to...' and ... then a colon ... and under that have A,B,C,D....

A: Oh, I see, well that would be a lot easier ... so after the colon would be 'A. Demonstrate the ability to ta-da-ta-da....' Yes, I'm following you now. It's easier to work with this way ... (56:7-8).

Attention to a particular use of verb forms is small detail from which we can learn a lot. On the surface, the problem appears as largely a matter of clarity and economy of words. Getting the specified arrangement of gerunds and infinitives etc. gives a degree of clarity, simplicity and uniformity to course outlines. Achieving this format is reported by those instructors who have been trained to use the system as relatively

unproblematic, even helpful. For those who have not had such training, the required use of language poses a considerable stumbling block - an example of "impenetrable jargon" (Cantor and Roberts 1979:63) or educational "mumbo-jumbo" (51:8,10). In the Office Administration Program at West Coast College, the majority of faculty members have not had such training, and the result is that a large proportion of the time and attention of faculty members in revision meetings is devoted to mastering the format, as in the example above and the one following. "They" refers again to the "sticky" approvals committees in the college hierarchy who police the use of the competency format:

Instructor A: OK, so what we are saying is, "The student will be able to ... demonstrate the ability...."

Instructor B: You can't demonstrate an ability....

A: Yes you can; they accept that....

B: Oh, will they except that?

A: Sure, they can demonstrate by writing an exam, etc ... (56:7-8).

The essential importance of language to the competency system is, however, much more deeply rooted than the concern for economy of words. It is embedded in the basic principles of behaviourism required to achieve a thoroughly systematic form of curricular organization. In this mode, only those outcomes that can be externalized or objectified for the purposes of observation and measurement are technically eligible to be used as learning objectives. This requirement is particularly essential if the systems approach is to be extended beyond the planning and design

phase of instruction into the evaluation phase as well. In the Business Department at West Coast College, such strict applications of the rational/scientific approach to evaluation were not being introduced at this time. But instructors were aware that the administration favoured such an approach and that they were already in use in some other departments.

The competency steps which were being implemented and are visible in activities examined here constitute critical ground on which any further aspects of a curriculum management system might be laid. They achieve the essential step of making instructional goals determinable by individuals other than instructors, thus laying the cornerstone for programs that can be seen to be "responsive" to policy, and establishing a framework of institutional relations in which the problem of accountability for delivery can be addressed rationally and systematically.

The vital importance of this shift in the relations of curriculum decision making is further illustrated by taking note of an aborted earlier attempt at a review process for business programs. The decision to undertake a review was made more than a year before the task analysis workshops eventually took place, and in the interim, the department head had instructed faculty to begin work on the definition of competencies in their program areas by breaking their course content down into what they called "dacum charts", using the word DACUM generically to mean a chart of performance objectives. Some faculty had previous training in

this method of instructional design, and began work on the requested charts fairly promptly. I interviewed a number of instructors as this work was underway, and discovered considerable variation among them in procedures used and results obtained. The charts which I was shown conform to what Adams (1975) described (and objected to) as 'content matrices' which broke the courses up into fourteen week segments, and were predominantly information-oriented. This was best illustrated by the Math instructor who began each objective with "The student will understand ..." in direct contravention of DACUM principles. Many instructors delayed starting on the charts, for a variety of reasons: lack of familiarity with the process, disagreement with the approach, pressure of other work, etc., and eventually, rumours that the request was going to be withdrawn (89:10). Indeed, within a couple of months, official directions came down from the Dean's office, via the department head that faculty were no longer required to work on the charts, since the Dean intended to host DACUM workshops, using employers to define the skills profiles. This decision produced considerable irritation among the faculty, usually expressed as resentment by those who had already spent time working on their own charts, and/or impatience that the decision meant further delays in the program review process which was already behind schedule. The most tactful version of these complaints which I heard was that the change of plans caused "a loss of momentum and enthusiasm for the program review process, which was unfortunate" (33:17-18). Others objected to the change of plans because they vaguely distrusted

the prospect of losing control over their courses, although these same people were of the opinion that

you know, one can see the administration's perspective. ... [They are] understandably concerned that you shouldn't have a self review ... otherwise you can simply perpetuate the mistakes or problems that are inherent in the programs (33:17-18).

Here we see again the triumph of commonsense scientism: a rationalized, systematic, external review is seen as being 'objective' and therefore just and reasonable.

However, the evidence to be gleaned from the aborted effort to write competency charts is critical to this chapter. That is, the original procedure of having instructors make content matrices was cancelled by the dean in favour of the plan to hold local task analysis workshops. The cancellation occurred even though the process of chart production by instructors was well underway, and similar skill profile charts for a number of the occupations were already available from other sources. In an interview with the dean, I asked about the importance of doing local task analyses in occupational areas for which profile charts were already available. His answer was that it was important to do the workshops locally as well, because it "validated" the chart for each local situation (54:16). What I hope will become apparent here is that the critical difference, which is being subsumed into the notion of "validation", is the process of reorganization in local relations of decision-making about course and program content. Without putting these new

relations into practice on a local basis, the introduction of a new skills profile chart from employers would have little transformative power. Instructors would still see themselves as the authors of curriculum, free to pick and choose from the new profile chart as they have always done from an array of text books, and their choices would still be grounded in classroom practice.

At West Coast College as elsewhere (see Grant, 1979), this shift in expectations for professional practice met with some resistance, as in the case of the instructor quoted above who was "miffed" that her concerns had apparently been "swept under the rug". The experience of difficulty with instructors in implementing competency-based systems is routinely taken as evidence of the need for training in the specialized techniques required to support the competency approach. Lack of such training is the most commonly cited explanation for programs which have been unsuccessful: instructors are said to be "not adequately prepared" or "not properly trained" (69:15). Indeed much pre-service and in-service training for college instructors in the last decade in B.C. has been focussed on mastery of the competency-based approach to instructional design (see B.C. Ministry of Education 1981). The requirement for special training to assist instructors in the use of the competency approach contributes to the aura of science that surrounds it.

The equation of rational/scientific instructional design procedures with professionalism serves as an effective mechanism

for social control. Teacher resistance may be construed as an outgrowth of backwardness, lack of appropriate skills, and need for professional upgrading. The potential for legitimate controversy among informed professionals is effectively suppressed. The provision of in-service training is part of transforming how instructors understand and perform their jobs. It also contributes to the technical/scientific mystique surrounding these methods. Its value as "window dressing" for the new professionalism is evidenced in the occasional passing remark by instructors or administrators about "those thousand dollar seminars" from "one of those educational entrepreneur types" (78:10).

The reorientation of the attention, sphere of action and expertise for instructors examined here does not occur in the form of an explicit challenge to their professional role, but rather as a change in how their professionalism is defined. The new system puts aside instructors' former claim to professionalism as 'deciders' in relation to course and program content. Under the new order, professionalism for instructors consists of willingness and preparedness to participate in a new rationalized organization of decision-making about curriculum, and in demonstrating the range of skills involved in producing curriculum in a competency-based format.

CONCLUSION

The activities examined in this chapter are part of the practice of the relations of coordination, articulation, and alignment discussed in Chapter Two. The experience of decisions that "just happen" is the everyday form of those relations and of their capacity to shape local action. The revision process warrants only those actions in which the practice of instructors is subordinated to the decision-making of others. Instructors "match" and "verify" and supply verbs for decisions which have already been made, and translate them into an objectified form (Course Information Sheets) where they become a property of the organization. The remaining characteristics of teachers' knowledge, action and decision-making disappear, are not accountable for organizational purposes. They are done as a staff function for the Department head, making visible for organizational purposes a curricular system which is said to be "employer-driven". The "employer" is an abstraction who stands as a discursive object, organizing from offstage the practical action of instructors, mediated by the ideological procedures of a curriculum method designed and imposed by the state.

The skills profile chart provides an archemedian point of reference for decisions regarding course content. The judgements of "needs" which appear there are stripped of their particularity, their visible location in a social constellation of interests. They are seen to be objective, to have no

interested subject. They can be expressed in the passive voice, as actions with no actor: requirements "were identified" and changes "were indicated". Only in this ideological form, are they legitimate agents in a rational/scientific universe of action. They are the property of the Dean's office, and have their sense in the practice not of instruction but of administration.

The processes of change or shift in dynamics that are visible in the revision meetings are central to the transformations in social relations with which I am concerned. They are the mechanisms through which management or administration come to substitute for education at the heart of the curriculum process. They signal the emergence of a relation which might be dubbed, for convenience, the 'employer/administrator couplet' which is a critical step in the transformation of the relations of curriculum and in their ideological character.

The most important thing about this transformative process is that the entire sequence of action examined in these chapters, from the start of a task analysis to the production of Course Information Sheets, is effectively blurred in practice, and the products of all the accumulated work processes contained in the sequence come to be enshrined in the documents and attributed to employers as their "totally objective statement of needs". With the implementation of new curricular relations which represent the "needs of industry" in decision-making processes at the

college, the pieces required for publicly accountable institutional action are in place. Thus the promise of greater certainty in administration of the instructional process is accomplished for organizational purposes. Key features of this administrative process are examined in more detail in Chapter Eight.

CHAPTER EIGHT

COMPETENCE AS "GOOD MANAGEMENT PRACTICE"

This chapter will take up the exploration of competency measures from the location which is occupied by administrators. As with the instructors examined in Chapter Four, our investigation will begin with the comments and complaints of administrators which arise from their location in the extended relations of curriculum decision-making. Then, it will go on to explore their descriptions of the administrative work process in which their own particular needs, interests, and choices vis-a-vis curriculum organization are embedded. Again, we will find in such 'talk' about the work process of administrators evidence of the extended division of labour in which it is embedded and traces of the process of documentary organization and textual mediation which are essential to its character as part of an extra-local mode of ruling. [1]

In our search for the "sense" of competency measures, the experience of instructors has repeatedly directed attention to places "on high" in the ranks of the college administration, the most visible location of which is the Dean's office. From the standpoint of instructors, the "buck stops" there for the curriculum reforms with which they are struggling. However, it would be a mistake to conclude that, when the documents of a "totally objective statement of needs" finally arrive in the

Dean's office, and the Course Information Sheets have been duly submitted to the "sticky" college approvals committees, that the transformative power of competency measures has been exhausted, or that the full extent of their "sense" and "rationality" has been accounted for. This chapter will locate these moments within the broader scope of the policy process of which they are a part.

THE PROBLEM OF "CURRICULUM CREEP"

The "presenting problem" or complaint of administrators is about the trouble they have with faculty. The problem, as they see it, is that instructors have their own "pet interests" and "hobby horses" that influence what they teach. "Faculty like doing their own thing, in their own way" and they like "shutting the door on the classroom." According to administrators, faculty "hide behind the [idea] of academic freedom ... not always knowing what it means". But they don't like anyone "meddling in how and what they teach" and they "turn off anything they think intrudes". This behaviour of faculty is characterized by administrators as "very, very conservative" (51:19-20; 58:C4).

In the view of administrators, the result of such faculty autonomy is that a lot of "baggage" finds its way into the program, material that "is not required by anyone" but is there because "instructors have a passion for it" (58:B16,C4). They

refer to this condition as "curriculum creep" or "program creep". They complain that it clogs up the system by making it difficult "not to create something new, but to get rid of the obsolete junk" (58:B3). The department comes to be run by "vested interests" where "employment security dictates curriculum" or where "we are employing instructors for the sake of employing instructors". In the words of the department head "it doesn't serve any bloody purpose" (58:B2,B15-16).

These few phrases from the working language of administrators plunge us deeply into a standpoint for viewing the curriculum process which is radically altered from where we have been located heretofore in the analysis. Suddenly, the tables are turned, and what makes "good educational sense" for instructors has become "baggage" from the standpoint of administrators; what instructors see as being a "responsible faculty" represents "vested interests" to the administration. These oppositions raise a host of questions about the social process that lies behind these concepts. For example, how is the difference constituted between a "requirement" and a "passion", and what "purposes" count as legitimate for the purposes of instruction? In relation to what alternative is faculty behaviour construed as "conservative"? As in previous chapters, these questions which guide our investigation are about the location of the knower and the sense which their "knowing" derives from the work process in which it is embedded.

From the activities examined in previous chapters, we can readily see how the competency approach serves as a remedy for the situations formulated by these administrators as their 'problems with faculty'. The task analysis begins to address these problems because it lays the content of every course open to examination. This is accomplished not directly by evaluating what is already taught, which would be seen as a direct assault on faculty, but rather by establishing a new definition of "need" against which every aspect of instruction will have to be justified anew. Administrators at both the college and the ministry compared this approach to a zero-based budgeting exercise, in which nothing continues from year to year without justification. In this context, some administrators described the task analysis as a basic administrative tool for "program evaluation".

For our purposes, it is important to notice that the process of making the curriculum accessible to evaluation in the offices of the administration is a pivotal step in the reorganization of curriculum relations. It shifts the grounds on which evaluation of curriculum is conducted and the adequacy of course and program content is established. That is, the task analysis process, properly undertaken in its competency-based framework, establishes the terms for review of instruction by focussing on on-the-job requirements as these are identified by employers, for example the ability to write a business memo or report. Adequacy of instruction can be justified only in relation to

these end goals, and not in terms of the mastery of familiar educational building blocks such as grammar, punctuation, and composition. Thus it forces a shift in the reference point for the work of instructors from their "discipline" as educators (e.g. math, english, accounting) to the workplace, as the place where adequacy is determined.

Furthermore, the introduction of the task analysis shifts the locus of legitimate decisions about when or how "adequacy" in instruction has been achieved from instructors themselves to the college administration. It dislodges the previous authority and responsibility of instructors to mediate between the workplace and the classroom, affecting instructors both individually and collectively. Individually, the knowledge of workplace requirements which instructors acquire through professional activities or in intermittent dealings with employers regarding either their courses or their graduates, is no longer accorded legitimacy for organizational purposes. Judgments which they make about classroom instruction on the basis of such knowledge is now subjected to a new level of review and assessment in the task analysis process and its aftermath of revisions. Collectively, the new procedures disrupt the formal Advisory Committee mechanism through which instructors have in the past gathered information about changing needs in the workplace.

The task analysis process replaces these previous systems of direct consultation between faculty and employers with a process

which largely circumvents the faculty. This it does by bringing in an external curriculum consultant, who reports directly to the Dean's office, to facilitate the task analysis workshop and write all reports of the workshop proceedings. This process essentially takes authority for curriculum out of the hands of instructors. It establishes instead a system in which the judgment for curriculum decisions resides not only outside of the professional expertise of individual faculty members, but ultimately outside the collectivity of faculty as a whole. The department head stresses the importance of this step, calling it the "separation of outcomes from input" which he clarifies as meaning that "objectives ... are going to be set by people out there as opposed to people in here ..." (58:B15).

The process we are implementing is a method whereby the faculty assumes the responsibility for assuring that the institution meets those [externally defined] objectives. You know, it's simple - almost trivial - yet it's a major, major shift in direction for the institution ... because in the past, the faculty have been responsible for the definition of program content and outcome. You cannot have that - you cannot put the wolves in charge of the chicken coop, let's face it (58:B5).

It has not always been the case that faculty in charge of curriculum would be seen as "wolves in charge of the chicken coop". Indeed, during the years of headlong growth in the college system, curriculum development was done almost exclusively by faculty members, and depended on their expertise both as practitioners in a given subject area and as educators. In the view of administrators, this process led to a sense of "ownership" of the curriculum among faculty. In the 1980's, in a

climate concerned with system-wide rationalization and accountability, this sense of ownership has become a barrier to the implementation of goals and objectives set for the college system as a whole. Under these new conditions, what administrators say they need is "a vehicle - anything - to force people to abandon the concept of ownership" and to address instead a set of institutionally defined objectives (58:B1).

THE PROBLEM OF "INSTITUTIONAL PRESSURE"

Administrators are not unanimously or straightforwardly opposed to the curriculum decisions that faculty have made in the past. On the contrary, individual administrators voice a wide range of opinions about the direction of educational change, and some of their comments reflect a vision of the educational process that appears quite similar to the goals expressed by instructors, and highly contradictory vis-a-vis competency measures. For instance, the Business Department head spoke on a number of occasions about his responsibilities as an educator to resist the move from "education to training":

Employers, by definition, want training to occur. And as an educator, we have to make sure that when we translate their objectives we are translating back into educational terms, not training terms.... The educators' job is to take a step back and say, alright, if we are talking about sales work here, we had better provide you with some material about what constitutes marketing, or financial analysis, or maybe you should know what a debit and a credit is.... So the educator will fill in those blanks, [although] the final check, the final audit, will be the employers' again (58:A9).

It is not socially responsible for public educational institutions to adopt a narrow approach to training. Because, in the final analysis ... we are in the education business. We have to ensure that the graduates have a broad set of skills and knowledge (58:A2-3).

What we, by definition must do, is educate individuals ... give them ... the basic knowledge to permit them to [have] ... career paths ... if you will (58:B7).

While espousing these ideals, the same department head reported that competency measures seemed to him to be "the most effective way to accomplish what we are trying to do ... considering our financial problems and everything else" (58:A13). For instance, in the office administration area, he reported that the competency-based review was integral to his plans to shift the program "to a two month modularized structure ... expand it to ten months duration, and gain a lot of flexibility". These changes are specifically designed to satisfy the requirements for seat purchase by the Canada Employment and Immigration Commission (CEIC), a move which had long been unpopular in the department but was eventually dictated by "our financial picture". Once these changes were implemented, the department head expressed confidence that "substantial efficiencies will come from the process" (58:19-20).

Another high ranking executive at West Coast College gave me a brief account of the dangers of the competency approach, at the same time as he was overseeing its implementation in the departments under his control. He said that by itself "it does not tell you what an adequate education would be" because it is

"reductive, like all of western science". He warned that "if you don't start with a broader perspective, you won't have anything of quality" and it can lead to "absolutely absurd situations". At the same time, he hastened to point out that it "is a very useful tool of analysis". It "helps you sharpen your objectives, [and] ... lets you crank out a lot of answers in a short time" (50:1).

The crucial factor for these and other administrators in their accounts of the "usefulness" of the competency approach seemed to be the contemporary "climate" or "environment" of decision-making. They talked about the last decade as a "rather hectic" one in educational institutions, from which they were struggling to recover. A lot of new programs had been "brought on-line" in a relatively short space of time. Major shifts in the economy and "changes in political direction" had brought revisions in "overall educational strategy", particularly in employment oriented programs (78:8; 60:3). Significant reductions had occurred in educational spending levels, particularly the B.C. government campaign of "restraint".^[2] In this context, there had come to be a "much greater emphasis on accountability and reporting" and a growing interest in "central control" (78:8; 60:3; 51:8; 58:A4).

Many administrators summed up this state of affairs as an "environment" of "institutional pressure". When pressed to clarify what this meant, they gave the following kinds of replies:

In a contracting environment, everyone is in the trenches defending their turf.... If you create the greatest program in the world, it will always be scrutinized, always be challenged, questioned, and so forth (58:A12).

During difficult economic times, what we have laid on the institutions ... is if you want to do something new, you are going to have to do it at the expense of something you are already doing (60:3).

You don't need individual pressures.... When we are looking at reallocation of resources internally because we don't have enough money to make ends meet, things are going to come under scrutiny (58:A13).

Since the early 1980's, administrators report that there has been a lot of "pressure" for the colleges to "tighten up" and to "consolidate around a kind of philosophical objective" (58:A4). A lot of time and effort have gone into reporting "all sorts of statistical information" (51:8; 78:8) to the government, and that this work has become the justification for the expansion of administration. Increased centralization of information is seen as part of the drive to consolidate and rationalize services where possible, and to "increase efficiencies through control" (51:10; 78:14). In vocational programs, this has resulted in a move to "standardize programs, including curriculum, evaluation, etc." (58:A10).

It all started about five or six years ago when they started developing these five year plans.... A lot of work was spent on these goals, and now it has become part of the budgeting process, where a college decides what it plans to do and how much money it needs, and the government makes its decision whether to give us the money. I think that laid the foundation for competency-based instruction. It's a natural outcome, it naturally flows from it ... (51:1-2).

The view of competency measures as a "natural" outcome or component of the systematic approach to college management echoes the dominant understandings of educational "common sense" explored in Chapter One. Its adoption by administrators as a "useful tool", despite its tendency to be "narrow" and "reductive", reflects the power of the rational/scientific paradigm as a framework for administrative thinking and action. As one college administrator observed, focussing on outcomes seems so 'obvious and natural' that "you might ask why [the idea] has been so slow in getting going" (51:18).

I think the attraction of administrators for this is in the outcomes; just to be able to demonstrate that at the end, this is what we will have (78:10).

The competency format allows you to be specific about what it is you're getting out of it. You state what your outcomes are, what your competencies are. Then the curriculum is designed to meet those outcomes (76:12-13).

Both curriculum specialists and administrators agree that the competency approach takes the element of "chance" out of the curriculum. That is, with an instructor-based system

... all of the curriculum is vested with the faculty person you hire to teach that course ... and there's a tendency for them to teach to their own area of specialty, which may or may not be in tune with the world of practice.... Then, if that faculty person walks out, you don't know what's going on (76:12-13).

Differential emphasis within disciplines really skews what the student learns.... So whether you are well prepared or not depends upon what college you went to or what instructor you had.... That is leaving it to chance (76:13).

"Leaving it to chance" is more of a problem in some areas of instruction than others. In some fields, instruction in the

college system is tied to regulatory processes of the state, such as the licensing of practitioners in social and health care fields where, as one ministry official put it, "there is a real or an apparent health or human safety problem" (60:28). According to ministry officials, such cases call for "competency-based training in its purest form":

In this particular case we are saying that the kind of training that relies on the individual input of the instructor is inappropriate.... We want to make sure that everybody has a standard set of skills. Then we can feel fairly comfortable when they ask about your license (64:28).

You don't have each little training program doing their own thing. We are saying there is a standard of practice that is required if somebody is going to work in this field ... and it becomes the standard for the system (64:27-8).

What the license is saying is 'We certify that this person is in fact capable of doing A, B, and C. We trained them, we assessed them, and we are saying that this person is capable of doing one group of things and not others ... in a safe and effective fashion' (64:23).

Competency-based curriculum makes a contribution to this kind of training not only in its routine form, but also when trouble arises. As a ministry official explained, the competency approach is an essential safety net should "the people in our training institutions get hauled into court" in a malpractice suit of the kind that are now happening in California. [3] In such a situation, competency measures have you "covered":

Suppose you have a daycare situation where a worker has been striking a kid. So they come to you and they say 'What procedures have been taught to this worker for handling such a situation.' So you check, and you say, 'OK, on September tenth we taught the competencies for handling an aggressive child ... no striking the kids, time out up to three minutes is OK ... ' etc. So then the students went on practicum, and you check the records and find, yes the student in

question handled a time out situation on November eighth, yes, it was the correct time, and the correct procedures, and yes the practicum supervisor checked him out on that.... So you've got it covered (64:31).

This hypothetical scenario demonstrates an important feature of competence as an organizational practice. That is, the significant forms of competence for the educational system are those constituted as an organizational course of action rather than as an attribute of individuals. The legal responsibility of the college or the ministry stops at establishing that the procedures for safe and legal practice were accountably taught, and that the performance of the individual was demonstrated to be adequate in that context. So that demonstrating "competence" is a matter of making teaching and testing accountable to a standard through a warrantable set of procedures. Technically it is not the competence of the individual but the competence of the instruction which is at issue.

The important thing about competency measures in this context is, as put by administrators, "... [w]hen you have outcomes, you can tell" about the instructional process. The new systematic methods require educators to establish in advance "what outcomes they seek" and then to "operationally define them" (76:5). They also require "standards that are validated", since "most standards are sort of guesses out of the air; they don't have any validity, in a professional sense, attached to them. They are kind of best guesses" (54:9). Previous methods of establishing standards through advisory committees are criticized

with hindsight as "having no checks and balances" (58:A2). The ministry argues that such committees were used by business people as a forum for "lobbying" for their own particular interests and by college officials to "co-opt" local business groups to support the college. By contrast, competency methods are said to engage local employers "legitimately" as a "sounding board" to examine the nature of the program (64:3). Finally, since the "objective function" of the program is "marketability of graduates", they require an "operational definition of that outcome", a measure that is currently under review by the ministry (58:A2).

COMPETENCE AS OBJECTIVE ORGANIZATION

The notion of "objective function" is itself a manifestation of another central aspect of the systematic relations of management in the college system. It points to the existence of a hierarchy of reporting relations traceable all the way to the College and Institutes Act, which specifies what may constitute college 'business'. A number of administrators referred to the importance of the Act as the point of departure for understanding the college system.

[T]he driver for me has always been the Colleges and Institutes Act, and it is very clear in terms of the institutions' mandates. The act specifies that colleges are in the business of providing university transfer for up to two years, career/technical, and continuing education..... It's a very, very simple model. Those are the three things I must do; they govern all our activity. The mandate determines what is relevant; anything else is irrelevant. (58:B2)

These remarks serve as reminders that the responsibility for curriculum organization does not stop with administrators, and does not depend, as faculty may fear, merely on their "passions", their past experience, or the characteristics of their "brains". Instead, the sensibility of administrators' actions, like those of faculty, arises in the particular work organization in which those actions are embedded. Their priorities, and their accountability, are determined in the extended bureaucratic, legislative, and political framework in which the college system is situated. These extended relations routinely depend upon documentary forms of communication which make the administrative process accountable/reportable in a policy process.

In such a documentary mode of organization, the credibility of the college as a whole, its programs, and its administration, depends upon, as the department head put it, the ability of individuals viewing the college from the outside to "recognize that we are performing as stated in our mandate" (58:B2). In recent years, this requirement has been made increasingly central in their reporting relation with the ministry. In order to demonstrate that college programs match the "requirements of the field", administrators are now expected not only to show feedback from employers that says "Yup, these people are in fact able to do the work" but also to demonstrate that the learning objectives of the program have been established and "validated by the

field", that the "pedagogy ... matches the learning objectives" and "all that kind of stuff" (58:A12; 64:12). Only under such conditions can the department head or the faculty adequately defend what they are doing. Competency-based curriculum procedures emerge as the primary means for demonstrating that administrators are "doing our job".

It can make a difference in face validity ... with the ministry, I think. Because as part of our reporting of what we are doing and what we have done, the fact that we have done a task analysis will indicate that, yes, we are doing our job. We are involved in the community (33:16-17).

What competency-based measures would do provide is a justification.... So if the administration came to us and said, 'Why should we put your program on the profile this year?' what I would do is to haul out my stuff and say ... 'I've got it all laid out; here it is.'... So if you want to cut the program, you will cut it for some other reason that we aren't doing our job.... (64:12).

"Doing our job" in the sense used here is not just a matter of running up-to-date programs and turning out students who get jobs. It is a matter of attending to these goals in a manner that is visible and accountable for organizational purposes. In this context, there is growing emphasis on the administrative role per se and on the professionalism of administrative practices. This translates in turn into pressure on local administrators to show an interest in the latest trends in program evaluation and accountability measures, which are seen as "just good management practice" (64:15) and part of doing "a creditable job" (60:16).

Administrators are professionals in their own right, and that brings an interest in program evaluation and accountability that doesn't necessarily come from government. It comes from a number of directions....

I would think that some of the interest would come from administrators themselves, just wanting to do a more creditable job (60:15-16).

Competency measures serve exactly this purpose: they have, as one instructor put it, all the "administrative jelly beans you could desire" (74:5) to demonstrate that administrators are "doing our job". For example, competency methods can facilitate the routine demands of "housekeeping" by providing information about programs at a very detailed level. Then, if a program is not doing very well, there is recourse to systematic information to help identify the problem.

So instead of just saying, "We've got a problem here ... we had better cut the program," or "... we had better change it" we need to ask, "Change it to what?" "Let's try something different..." you say, but what? Maybe if they try three or four different things, it will work. But if it works, they would never know why. With [the competency approach], you are at least able to identify a problem and back it up (64:13-14).

Competency methods permit administrators to respond to routine pressures of planning and budgeting in the current management climate. Also, when non-routine changes are required, due to budget cuts or changes in spending priorities, competency methods provide the administrator with a means to make and defend difficult decisions. For example:

Well, if I was running a program out in the field, ... and I knew that every year I had to justify to my Board my little program with twenty-four students in it, because every year they are going to have to request the money and the Ministry is going to look at it and say, 'Gee, why are they doing that?', and they are going to ask that question every year.... Well, then what competency-based measures would do for me would be a justification (64:12).

If an institution has cancelled the really obviously poor, un-needed programs, and you still have some 'plums' you want to run, and you're only given the option of maybe a little bit of provincial money, you're going to have to find the resources internally. You have to come up with a pretty good method of judging and evaluating the programs you have. So you have to bring up the rigour and quality of your own curriculum assessment, curriculum development. Otherwise, you're just shooting in the dark (60:4-5).

"Shooting in the dark" may have been passable administrative practice in the past, but today administrators see it as risky business, "given the nature of grievances and things like that". They point to the possibility of "being on pretty rocky ground pretty quickly" if they try to cancel one program and bring on another based on "superficial allegations" about the merits of one program versus another (60:5). In this situation, competency processes are a means of making decisions which will be seen to be "objective" and organizationally warranted.

For the purposes of our analysis, the important thing to establish is that the all-important objectivity of competency measures is accomplished in and through the use of decision-making processes that can be seen as external to the interests of the particular individuals or groups, particularly the interests of instructors. Through competency measures, judgments about "relevance" and "needs" are externalized, made into a property of the duly authorized administrative process of the college itself. This is largely accomplished through the documents of the competency-based curriculum process, which come to stand in for lived experience in settings of work and learning, and become active constituents of an institutional course of action.

In such a textually-mediated universe of action, what counts as "the actuality" for organizational purposes comes to be one step removed from the ground of experience and action of individuals. What counts is not what individuals do per se, but what individuals can be shown to have done - action as reportable/accountable. This epistemological disjuncture in the constitution of the "actual" is an essential ingredient in what Macdonald-Ross (1975) lamented as the "weak" form of systematic procedures, and what is popularly called by bureaucrats an "arms' length relation". What counts as "actual" is a socially constructed abstraction, omitting many aspects of the social process which it claims to represent. This form of organization allows for a certain amount of "slush", or absence of precision in its renderings of the social reality. Some questions are neither asked nor answered.

We have a provincial curriculum, but all the institutions don't teach to it.... I suppose you could say they are not required to teach to it.... You might call it an arm's length relationship ... (60:16).

I suppose if we wanted to go out and assess all of the [] programs, we would find that there's a great array of content.... Do all [] programs use our competency book and start on page one? No, they don't. But we don't necessarily want to know the answer to that question, so we don't go out and try to find it (60:16).

Suppose we challenge you to prove that you are covering each one of these competencies in the right degree of emphasis. ... That's where the program would have a hell of a time. We know bloody well that the reality of the situation is different (69:38).

On the other hand, the "value" of competency measures is said by these same administrators to be the manner in which they "can

tell" those things they need to know, to the degree they need to know them. It makes selected aspects of the curriculum process reportable/accountable, creating a form of documentary vision, through which they "can see" and "know". This form of seeing and knowing comes to constitute the "actual" for administrative purposes.

The value of the competency approach, in my perspective at the moment ... is that it lets us know what we can expect to see covered in the program: A,B,C, and D. 'B' is not missing, regardless of which way it is delivered, it is actually there. We know that the field has been consulted by the task analysis process. We know that the competencies have been validated by the field. So what you are giving me is a statement not from instructors, not from administrators of the college. You are giving me a statement from the people who are doing this stuff for real - the employers. So the statement about what needs to be trained is employment based, practitioner based. We can see that... (60:19-20, emphasis mine).

The abstract character of these arrangements is as old as scientific management itself. It is perhaps this feature of management "science" that Spaulding (1913:260) was referring to at the turn of the century in the claim that "scientific management is a method characterized by its spirit quite as much as by its accuracy". It is echoed again by officials in the British Columbia Ministry of Education who assured me that a certain "looseness" in detail was not inconsistent with the "spirit" of the competency regime.

Well, I think that from a program management point of view, what you have to have is a method, on the part of the department or the institutions doing the training, of showing that what they are doing on a day to day basis really meets the spirit of the [competency] approach (64:32).

REFORM AT AN ARM'S LENGTH

The fact that such "indirect", "loose" or "weak" management methods tended to be cumbersome and even to generate a certain amount of confusion and contradiction was a matter of little surprise or concern to the administrators with whom I spoke. As one government official put it, "Big ships take a long time to turn around" (69:7). This attitude was most strongly expressed in the reaction of the college administrators to the complaints of instructors about the inadequacies of the task analysis process, as cited in Chapter Four.

I am not really concerned. It doesn't make a damned bit of difference what the hell [the task analysis report] comes up with ... that is not important. The process is important (58:B5).

The actual quality of of the work that is being done from our perspective is not acceptable; it is very very mediocre.... But that's irrelevant. What's important is that a new process, an objective process, will be introduced into the system (58:B4).

What the process basically says is that - in the long run - there will be periodic external definition of requirements ... of these programs. A totally independent, objective statement of what program requirements are (58:B5).

In the long run you've implemented something very positive ... (58:A13).

Reform of curriculum in "the long run" and from an "arm's length" depends upon establishing a work process which reorganizes and re-orientes the work routines of individuals toward different ends. Such a process of re-alignment is most successful when least visible, taken for granted as a part of

"environment" in which individuals do their work. The routine and invisible character of such a process commonly depends heavily on documents to order and organize the work processes. The methods used to introduce competency measures into the college system of British Columbia illustrate these points.

The key documentary device that serves to coordinate activities among various sites in the college system is the Integrated Five Year Planning document entitled "System Mission And Goals and System Objectives", ("MGO"). This documents calls for a number of measures to ensure that programs are "competency-driven". These include "securing feedback from employers ... on all competenceis demanded in the work place" and "ensuring that program length and method in career/technical and vocational programs relate directly to the time and approach required to become competent" (B.C. Ministry of Education 1983:8). The performance of individual institutions is assessed against the goals and objectives outlined in this document. Yet, when asked about the upsurge of interest in competency measures in the province, a number of administrators expressed the view that the impetus was coming from educators "in the field" and that "... there's nothing really in it for the administration" (51:9). [4] The business department head at West Coast College expressed the opinion that the ministry of education had "very little interest" in the use of task analysis in his department. He said he "hasn't discussed the matter with Victoria" and that the ministry is mostly "an interested observer" of such undertakings by the

local college administrations.

[The ministry] is very interested in seeing the results of what we are doing.... They may recommend what we have done to other institutions, or show them the final product and say, why don't you have a look and see if it is of use to you. But beyond that, I don't see the ministry becoming active (58:B16).

Indeed, this particular college has tended to pride itself on standing up to the ministry on a number of curriculum issues, and several administrators expressed satisfaction on this account.

On the bright side of things, the ministry has failed in terms of total control. And I am very pleased with this institution. We have largely taken the position that the institution has complete control and responsibility for what it teaches. It is quite true that the ministry approves programs through the Program Profiles, and all that jazz, but we will not accept the ministry dictating what can and what cannot be taught (58:B12).

Of course, with the competency approach, the ministry does not "dictate what can and cannot be taught", nor do local administrators need to discuss their plans with "Victoria". The whole system of accountability works on a longer leash. It organizes the conformity of individual institutions to decisions made at the center by ensuring their participation in a revised professional discourse, by providing them with an "ideological currency" which provides for both understanding and action. In this manner, the direction of the institution can be influenced in a host of "indirect ways" including financial and administrative mechanisms which form an "architecture of control" (51:3) embedded in the midst of local decision-making.

The nerve center in the system of control is at Treasury Board, where budgets are approved on an annual basis. Satisfying the information requirements of Treasury Board is the ultimate hurdle in the hierarchy of decision-making. At this level, the systematic character of decision-making is very tight:

The colleges and institutes send us programs they want to run. We crank it through our formula and come up with a program approval which just happens to be a budget at the same time. So it is a constant, annual program review that by definition translates into money.... So, you don't need PPBS any more. It is all on line every year (64:11).

Thus what a college administrator sees as the ministry being "not very active" is rather the local appearance of a relation which has a significantly determining character, but which has already been provided for at a level of organization that is taken for granted in peoples' daily work routines. So, for instance, in the office administration area, the decision of the provincial government to privatize instruction for office administration was implemented in part through a series of low profile administrative moves, moving office administration programs in community colleges from the budget category of provincial programs to the budget category of local priority programs. The difference was explained to me as follows:

Provincial programs means that ... we cannot change it, we cannot cancel it. We can only dump the damn thing with the ministry's permission.... Local priority means that we can do whatever we feel like.... We can dump it if we want to and move the money elsewhere.... [For instance,] ... Office Administration was a provincial priority, and it has been changed to local priority this year (58:B12).

The interesting point here, of course is that what administrators may "feel like" or "want to" is highly organized by for them by the changing circumstances of funding and political priorities. So, if the institution is getting less money than it needs to continue its present programs, then putting a program on local priority makes it a potential victim to the wants and wishes which administrators may have in other program areas etc. It is in this kind of managerial climate that local administrators need, and will seek, a competency system to assist them in making program changes "rationally" and warrantable. Indeed, a situation like this arose at the end of my period of field work, affecting the office administration programs. As the department head explained to me:

CEIC is cutting back.... The college takes the position that there is no way that we will sell 34 seats [in office administration] to CEIC, and therefore we are not waiting for the axe to fall next year. So senior management has made the decision that they are on the chopping block (58:14).

These forms of administrative organization insert into the routine work organization of educational (or other) institutions an infrastructure through which regulation can take place. Local action is rendered responsive to priorities at the center, but this is accomplished by means of an organization of decision-making that will be seen as local or decentralized. The principle is elegant in its simplicity. It leads to situations that administrators call "the crunch":

The crunch is very simple. It is the government not giving enough money and then local administrators trying to figure out ways of dealing with that (74:12).

The ministry has a number of means at its disposal to encourage, again indirectly, the adoption of systematic measures such as competency-based curriculum, which are essential to the smooth functioning of these "arms' length" relations. For instance, pressure may be brought to bear at several sites in the governing structure of the college system, such as the Boards of Governors of the individual colleges. College Boards in British Columbia were, at the time of this research, responsible for ensuring that college policies and practices were in line with the Mission Goals and Objectives statement ("MGO"), as cited above. So, according to ministry officials, if a particular institution appeared a little slow to adopt the competency approach, the Chair of the Board might be gently prodded:

What could happen is that we put a buzz in the ear of the Chairman of the Board of Governors, which is responsible for practices in the college. 'Mr. Chairman, how come you aren't doing these things?' and he would say 'Oh, aren't we? Oh, well...' And so that way, you know, the institution retains its autonomy (64:15).

These remarks about "autonomy" warrant close attention if we are to understand the character and significance of competency-based curriculum measures. That is, competency measures have their impact on the conduct of college affairs while leaving in place many of the features of the division of labour which existed previously in the college system, taking into account the "almost trivial" but crucial modifications explored above. At the same time, what competency measures alter, is the the manner in which existing responsibilities are discharged and reported,

and the interests which are inscribed in the procedures. Their success in this regard does not depend upon imposing from the top a particular set of ideas about the content of employment oriented courses, nor by imposing a particular set of instructional activities. What is imposed is strictly a method of making curriculum decisions and making them accountable/reportable. Adherence to these required methods and procedures organizes the relevances of action and decision-making of individuals at every level of the educational apparatus. These decisions are articulated through bureaucratic, legislative and political framework to the interests of those who are neither teachers nor learners, but rather sit in the offices of industry and government, where their concern is with securing "a better return on educational investment" (Gamson 1979).

CONCLUSION

This chapter has argued that in the community college setting the use of competency-based curriculum procedures realizes its full "sense" and "rationality" as part of an initiative by the state to reform the relations of decision making in public vocational education and training. Competency measures dislodge instructors from the central place of authority over vocational curriculum and replace them with new methods of decision-making which are objectified and externalized, and embedded in a documentary form of governance. In the documentary mode,

students and instructors cease to appear as subjects of the educational enterprise and come to be viewed instead the objects of a centrally-determined policy process. Skills and competencies, as the outcome of the instructional process, come into being not as a property of the performance capacity of individuals, but as a social construction, the product of a particular method of educational "accounting" (Smith, G. 1987) through a process of textual mediation.

Through the documentary processes examined here, the accountable form of competence is a particular organization of administering and managing the delivery of educational programs. The documents of the curriculum process account for those activities of administrators which count as "doing their job" and the performance of college programs which count as satisfying the dictates of their external mandate. In this organization of administrative action, the concept of competence comes to express the relation of individual actors to a managerial organization of interests in the educational enterprise. It is part of a mechanism through which interests which are exogenous to the work of teaching and learning gain the capacity to "rule the schools" (Wise 1979:xvi). This character of the competency approach is pivotal to its popularity as a management tool in the current economic and political climate.

Finally, I want to caution against one particularly seductive conclusion which might be drawn from the views expressed by

administrators in this chapter. That is the conclusion that competency measures have no impact beyond the question of how administration gets done in the college setting, and that the process of competency-based reform will not make a real difference to the practice of vocational education in the long run. Such a judgment would be contrary to the evidence of the research reported here. My intention is to argue, by contrast, that educational 'process' cannot be separated from its 'product' in this way: that management and administration cannot be isolated from how the educational process is conceived and organized and enacted on a daily basis; that such an organization of practical daily action is part of constituting a social consciousness of education for work; and that constituting such a social form of consciousness is not separate from the process of bourgeois rule. It is to these issues I will turn in the conclusion.

ENDNOTES

(CHAPTER EIGHT)

1. See Chapter Two for this discussion.
2. On the impact of "restraint" on education in British Columbia see Muller (1987 and forthcoming), Hartland-Rowe and Stewart-McDougall (1987) Fleming (1985), the College-Institute Educators' Association Newsletter (1986, 1985), Finnbogason (1985), Magnusson et al (1984), and Witter (1983).
3. According to the ministry, there is already some discussion in British Columbia about buying group malpractice insurance as protection against such a development (64:32-3).
4. This view, expressed by some administrators both in the college and at the ministry, provides a typical example of the contradictory opinions and understandings of local actors. In one breath, they assured me that competency-based curriculum has "virtually no implications at all" for the way a college is administered. In the next, they described in considerable detail the ways that it was useful to them in their work as administrators. This feature of the relation between understanding and action has important implications for how individual understandings are used as a resource for investigation. See this discussion in Chapter Three.

CONCLUSION

COMPETENCE AS A SOCIAL RELATION

The research reported here suggests that the competency approach to curriculum "makes a difference" in a variety of ways that have an impact on the character of vocational education and training in the public sector in Canada. It effects a fundamental transformation in the social relations of the vocational enterprise, with implications for all those involved: students, instructors, administrators, employers and the state.

For the student, the implications of competency measures rest with the character of the educational experiences that are offered as a product of the decision-making and goal setting activities examined here. [1] That is, competency measures involve the explicit suppression of broad, long-term educational goals in favour of narrow, short-term ones, in an attempt to maximize "flexibility" in labour supply. [2] This practice is part of an explicit policy of servicing not individual learning needs, but the imperatives of economic growth through increased productivity for capital, as discussed in Chapter Two.

However, the analysis presented here stresses that competency-based curriculum is not primarily a classroom-based

reform, and that in order to comprehend its power, we must examine the transformation in institutional arrangements which occurs long before the student reaches the classroom. In particular, competency measures penetrate and re-organize how both instructors and employers make decisions about objectives for vocational learning.

For instructors, the competency approach limits the use of educational theory as the basis of curriculum decisions and replaces it with a form of systematic empiricism, lodged in a set of ideological procedures for constituting "needs" and "requirements" related to job performance. It also reorganizes and limits the use of instructors' knowledge of workplace requirements as the basis for their instructional practice. A new process of organizational decision-making is created which displaces authority over such curriculum decisions from instructors to the institution itself, thus constituting the "objectivity" of curriculum for organizational purposes.

In this situation, instructors find themselves "losing control" of the curriculum and becoming implementers of the educational designs of others, as Apple (1986, 1982) and others have argued. Furthermore, those educators who raise questions about this process or about the character of learning opportunities that result from competency methods are charged with ignorance and self-interest. Thus, not only the content of instruction but also the basis of professionalism in educational

action is transformed. Instructors become the agents of a course of action which does not reflect their own understanding of the educational process, and which remains highly resistant to their criticism. They are

...caught inside a discourse which is not [theirs] and which expresses and describes a landscape in which [they] are alien and which preserves that alienation as integral to its practice. (Smith 1975:366).

For administrators and managers within the educational apparatus, competency measures vastly increase the tools available to them to orchestrate and monitor the process of decision-making about instruction. Decisions are embedded in a formal and documentary process, making the curriculum itself accountable to centrally determined policy through a process of textual mediation built into the management process of the college. Thus, the competency approach makes a difference not only to what may be taught in the present, but to the ongoing organization of decision-making about what is legitimate for instructional purposes.

For employers, competency measures reorganize how the "needs" of their workplaces may be represented in the curriculum. They suppress employers' interests in employees' "knowledge about" work in favour of a focus on demonstrable "performance", and deflect employers' concerns with employees' future performance potential in favour of attention to immediate performance at entry-level. This formula for constituting the "needs" and "requirements" of industry is imposed on employers by the

technical requirements of the curricular methods themselves, and serves as the criteria of legitimacy for employers' demands on vocational education in the public domain. Expectations of employers which fall outside this formula are dismissed as their "wish lists".

I have argued in Chapter Two that these local experiences of instructors, administrators and employers, engaged in the process of constituting skill for the purposes of instruction, arise and derive their sense as a manifestation of the realignment of educational policies to fit the changing requirements for productivity and accumulation. As such, they are part of the enterprise of "comprehensive management of the hegemony of capital" (Smith and Smith 1987), articulating educational activity at the local level to the social relations of capital. Viewed in this context, the continuing evolution of competency-based education ceases to appear as a confused and dysfunctional attempt to "improve learning", as argued by the educators cited in Chapter One, and comes into focus instead as an orderly, rational, and increasingly sophisticated approach to the problem of "good management practice" in the context of public policy. It has served as a powerful ideological force and a central tool of educational reform in the post-compulsory sector of education and training in the last decade.

EDUCATIONAL CRISIS, IDEOLOGY AND REFORM

The concepts of skill and competence are central pieces of the "ideological currency" of the process of policy realignment in education. They translate the requirements of a production process into a form in which they can be expressed as the characteristics of individuals. They have been used to shift the dominant understanding of the goals and objectives of vocational learning from the standpoint of the individual to the standpoint of the employer, thus appropriating the enterprise of vocational instruction to serve the social relations of capital.

In this capacity, competency-based curriculum practices illustrate the understanding of "ideology" which Marx and Engels point toward in The German Ideology, i.e. a form of practical reasoning about society that is social and historical and integral to the way individuals live and work. In this view, ideology does not occur as ideas which shape consciousness; ideology is part of an organization of consciousness which is inseparable from its material and social dimensions. It is a form of social practice through which things get done (Smith 1987b). In the current climate of vocational reform, the notion of competence is well on its way to becoming the dominant form of such a social consciousness of education for work. It increasingly provides the images and methods of knowing through which the process of vocational education is available to be thought and expressed (Smith 1975), and it gives specificity to

such a social imagination at the level of routine institutional arrangements.

Competency measures align the work of local educators in the college setting to a public policy process through the mediation of a documentary organization of curriculum decision-making. They provide an objectified and externalized mode of institutional action through which individuals appear not as the subjects of vocational learning but as the object of vocational policy and the product of warranted curriculum procedures. Curriculum decisions are removed from their grounding in the relation between teachers and learners and lodged in an organizational process oriented to the imperatives of institutional management and public policy. In this transformation, curriculum decisions enter an ideological mode, mediated by a documentary process, and available to a textual discourse within the state. "Needs" and "competencies" come to be attributed to employers and students respectively as characteristics of their relation to a work process on the job, but their status as such depends upon a highly ideological process of social construction.

COMPETENCE AND TEXTUAL MEDIATION

In the documentary mode, the instructional process is represented as objectified and externalized, concealing the presence of its various subjects and authors - employers,

instructors and learners alike - as interested individuals in particular social locations. In their place are inserted the abstract entities of an administrative relation. Decisions come forward in the passive voice, appearing to "just happen" in a remote but duly authorized process, and learners become "throughputs" in an accounting system where they remain invisible as active subjects of their own learning. This abstract relation is the central achievement of the systematic approach to curriculum.

These abstract relations are inscribed in the documents of the curriculum process, which become the ideological constituents of a bureaucratic course of action. Their power to serve in this capacity depends not upon their technical adequacy or accuracy in reflecting a social reality, but upon the conditions of their production as an organizationally warranted account and the basis for institutional action. The documents themselves come to constitute the "actual" for the purposes of the organizational action which they organize and intend.

For example, if administrators want to establish that competency-based instruction is in place in their institution, they do not take a stroll through college classrooms to see whether instruction is taking place in the required form. Rather, their method of "knowing" about the achievement of competency-based instruction is through a process of textual mediation. Relying on the documents of the curriculum process,

Treasury Board "can tell" or "can see" that employers are being asked to establish program objectives, that courses have been reviewed and revised accordingly, and that this process of review and revision is being conducted on a recurring basis. In other words, they "can see" that the curriculum process is "competency-driven". These documentary forms of action make the practice of vocational education reportable in the terms of the legislative and policy mandates of the college system, and make the practice of management and administration accountable on these terms.

Through this organization of educational action, the form of 'competence' which is the product of public policy is not a measure of individual student achievement nor an indication of the capacity of individuals to perform on the job. Rather, it is a particular method of administering and managing the delivery of instruction, in which "relevance" to the "needs of industry" is made accountable in organizational terms. The needs inscribed in the documents of the curriculum process are not those of learners, but of the managers of both learning and work processes, including the process of bourgeois rule. Thus, in the competency mode, learning is displaced by managing as the form of praxis which gives shape to curricular organization.

This organization of vocational provision in the public sector constitutes a little examined aspect of the transformation of the practice of state relations in the sphere of education. The relations of competency accomplish an extension of the

relations of bourgeois rule into new educational territory by appropriating to the state the work of regulating the form and content of vocational learning, in the service of capitalist expansion. This process of articulation was previously accomplished within the terms of a professional relationship between vocational educators and employers. Under the competency system, it is mediated by the routine management processes of public educational institutions. College instructors experience this change as a reorganization of control over their work. In the analysis undertaken here, this experience can be seen more broadly as a manifestation of the changing organization of the state and of the practice of 'local state' relations (Cockburn 1977) in the education sector. [3]

POLITICAL ECONOMY AND "MICRO-ANALYSIS"

This analysis has attempted to approach political economy through the advice of Marx and Wittgentstein about the embeddedness of language in social life. [4] I have traced the concept of competence to its "home" in a public discourse about educational management and economic performance, and in a particular organization of institutional arrangements in the college setting. Using these investigative procedures, I have found that the primary acting subjects of the relations of "competence" in vocational education are instructors, employers and administrators, whose actions are organized by the documents of the competency-based curriculum process.

This approach to analysis provides a dynamic and materialist view of the relation between the "concreta of pedagogic life" and the arena of social and economic action. It begins to reveal how everyday activity in the sphere of education is part of the extended organization of the social relations of capitalist production, in other words, how it is part of a political economy of education. However, instead of making its subjects disappear behind the broad brush of "structure" and "forces" of history, this approach to political economy leaves individuals in their place as the acting subjects of the social ordering which they bring into being.

This emphasis notwithstanding, this analysis shares with others in political economy a concern with historical struggle and its relation to the organization of domination under capitalism. Indeed, the current study explores the continuing contest for control over workers' knowledge and readiness to labour, and the impact on that struggle of contemporary forms of state provision and regulation of vocational instruction. Such a study shows a great deal about how domination is organized in the current historical period through the use of rational/scientific, objective models of systematic management. The adoption of such an approach to vocational learning has not, as Bobbitt argued [5] and contemporary educators may have hoped, mitigated the relation of antagonism between the employer and the worker. Rather, this historical antagonism has been institutionalized by systematic

curriculum methods. It has come to be embedded in the procedures for rational objectivity in institutional processes, and thus become part of the fabric of vocationalism as a state enterprise. The historical concern of workers to make the learning process serve their interests is systematically suppressed by competency measures and excluded from the institutional arrangements of public education. Competency-based curriculum measures have a significant impact on this historical struggle. They enhance the capacity of managerial interests, both in industry and the state, to define how knowledge and skill are defined and organized and how they are attributed to individuals in the working population.

Institutionalization of this historical antagonism has an impact on the terrain of struggle over vocational learning and has implications for how resistance to these hegemonic forms might be organized. That is, analysis of forces of change and planning for resistance must take into account not only the location and allegiance of individuals in relation to a conventional marxist set of class categories, but also the way in which the social relations of capitalist domination are embedded in increasingly complex forms of social organization and institutional process, such as those examined here. Thus, opposition must involve a strategy for the transformation of dominant forms of institutional relations, through actions that are specific to the contemporary organization of capital. This undertaking may include renovating some of our notions of "collective action" to fit our changing circumstance.

A critical step toward the possibility of all such forms of resistance is for educators to become more critically aware of how their own everyday practice is implicated in the larger social arrangements of domination and subordination, and to consider how their own daily practice may thus become the ground for more effective political struggle (see Weiss 1985, Everhart 1983, Nunan 1983). I will return to this problem below.

IMPLICATIONS: QUESTIONS NEITHER ASKED NOR ANSWERED

According to administrators cited in Chapter Eight, there remain some questions that the competency system "doesn't ask" because it "doesn't want to know". The interesting point to ponder, of course, is what doesn't it want to know? According to one instructor at West Coast College, "most of the most important things we would want to know" about education fall in this category. Obviously the notion of "important things" is not an absolute or universal category, but this voice does encourage an exploration of what may be lurking in these blind spots. This involves examining vocational education from outside the standpoint of its governance, and listening to voices that are routinely silenced.

If we pay attention to stories being told at the margins of the competency edifice, various forms of "trouble" come into

focus. They arise from the problem of "disjuncture" in the "constitution of the actual", which lies at the foundation of the competency system as a tool of public policy. [6] They begin to reveal the experience of those who are the objects of a policy process which does not reflect their reality and does not respond to their interests and concerns.

For example, there is some evidence of "trouble" in the de facto performance abilities of graduates, although this complaint is hard to assess since little or no systematic data is collected. A number of anecdotal reports to this effect came to me during the course of my field work, including one account of a local automobile mechanics course organized on a competency basis. The instructor from this course reported his own growing discomfort about graduating students who could perform discrete mechanical repair tasks but had no "feel for the engine" (74:23) His assessment of this situation is expressed by his cryptic assertion, "I certainly wouldn't hire them in my garage!" (74:24). Such reports are suggestive of the legacy of a curriculum system oriented to administrative rather than educational effectiveness.

Trouble is also beginning to appear in the form of growing uneasiness or dissatisfaction among employers, like those cited in Chapter Six, faced with a system which routinely limits aspects of training related to growth-potential beyond entry-level performance. Such a system jeopardizes the long term

viability of workers' knowledge, which has negative implications for employers as well as employees that are overlooked in the rush to solve short-term political problems with educational solutions.

These and other forms of trouble come from aspects of the educational process in which the competency approach "doesn't ask" questions, and indeed, has no answers. That is, ironically, the competency approach to curriculum reform fails to address questions and concerns about the viability, for individuals or for the society, of the mode of vocational learning which it champions. This is because, as an information system, competency methods are designed to do something else, i.e. to produce a "managed form of educational practice" (Nunan 1983:1). Other goals and objectives are systematically excluded by the competency approach, and as such, become unavailable as the basis of institutional action.

Experience with such information systems as the basis of management practice is not limited to education, and the evidence about their ideological character is mounting, for example, in social and community services, health care, and personnel administration. [7] Such systems operate from the standpoint of those who govern and make the social processes knowable and actionable only from this location. This is central to their hegemonic character. However, they routinely do not accomplish the kind of transformation in the everyday lives of ordinary

individuals which are the basis of their public promises, such as the popular claim that the "competency" approach to education will make individuals more "competent" in adult life. [8]

In the present study, I have not pursued and explored the moments of contradiction which have become visible within the practice of competency-based curriculum measures, but their presence does suggest fruitful areas for further research. One line of investigation would be about how such moments can inform strategies of resistance among practicing educators, who live and work in these contradictory relations on a daily basis. For instance, are there ways to magnify and accentuate the marginal "trouble" reported here, to maximize its potential to undermine the competency edifice from within? How might such a form of resistance be organized? This study has not included an exploration of such activities of resistance primarily because at West Coast college, the competency regime was too new for such strategies to have taken hold. Future research, however, might usefully include an examination of whether and how such measures arise and might be encouraged among dissenting teachers in a competency-based environment.

A second pressing line of questioning for progressive educators concerns the search for a positive policy alternative, that is, an approach to vocational/technical learning that satisfies real social needs. Such an objective would require a policy undertaking of an entirely different kind than the

competency regime explored here. Although most of what might be involved in designing "institutional arrangements" to serve a broader vision of vocational learning is beyond the scope of even the most speculative moments of this thesis, some implications for this question can be gleaned from the present study. Foremost among them is the evidence that the enhancement of vocational learning will require a method of "knowing" the educational enterprise that is more grounded in and responsive to classroom practice. Nunan (1983:5-6) refers to this as a "classroom floor view" of the educational process. Such an approach to organizing the educational process means inevitably siding with the practitioner and with practical contextual knowledge (Nunan 1983:115; Duckworth 1984). It means accepting the idea that effectiveness in teaching depends upon interpretation and judgment that cannot be externalized as rules and formulas. It means giving up the notions that teaching and learning can be adequately represented by abstractions in the name of efficiency and accountability (Nunan 1983:5-6,115).

In other words, as a handful of critics are beginning to argue, we must "cease searching for simple solutions" (Apple, 1979:108) and "easy answers" (Holt 1987), stop "tinkering in superficial ways" (Wise 1979:68) with "outcomes" and "throughputs" of the educational process. We must pry the policy apparatus away from its reliance on vocational education as a political 'quick fix' to economic ills. The real questions and answers are not easy ones. They lie at the heart of the

educational enterprise: What is worth teaching and learning? How can we make teaching and learning a vital and rewarding process for both teachers and learners? How are we to build a form of education which contributes to a more democratic society? These unasked questions point to the real dilemmas of public policy in the vocational arena.

ENDNOTES
(CONCLUSION)

1. Of course, there are many other aspects of reform associated with the competency approach, such as self-pacing and individualization of instruction, which have not been examined here and do have a major impact on student learning experience.
2. The mechanisms of explicit suppression referred to here are examined primarily in Chapters Five and Six.
3. See the previous discussion of the state at the end of Chapter Two, pages 73-75.
4. See Chapter Three for this discussion.
5. Bobbitt (1913) argued that the historical antagonism between capital and labour could be resolved through a process of rational analysis to determine the one best way for production functions to be performed.
6. See this discussion in Chapter Eight.
7. See Campbell (1988, 1984), Ng (1988), Reimer (1987), Cassin 1988.
8. According to Harold Silver, this character of public policy is unremarkable in historical terms. He argues that educational policies have long been recommended on the basis of vague and ambiguous promises and results they routinely did not deliver and that attempts at clarification of meaning have always been be "left mainly to philosophers" (Silver 1983:153).

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