The vocationalisation of the school curriculum: society, state and economy

Thesis

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The Vocationalisation of the School Curriculum:

Society, State and Economy.

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ABSTRACT:

This thesis is concerned with the vocationalisation of the school curriculum in Britain from the late nineteenth century to the present. It consists of three sections.

The first section constitutes the major theoretical component of the work, and develops a view of society as a dialectically inter-relating totality whose parts are invested with differential causal force. The social whole is seen as consisting of micro, meso and macro-levels, which correspond respectively to inter-individual, inter-organizational, and the social relationships which constitute the mode of production. This theory is then used to criticise certain existing approaches towards the sociology of education and develop an alternative which is utilised in the rest of my study.

The second section examines the social and economic forces existing on micro, meso and macro societal levels which were central to the formation and development of school-based vocational schemes. Here, I examine the relationships which have existed between individual career routes, the education system, state, economy, and class struggle. This facilitates an examination of the shifting determinations which constituted vocational education, as they have been located both diachronically and synchronically. The points of interconnection between the forces which impinged upon the progress of vocational education changed between the 'entrepreneurial' (late C19th to WW1), 'collective' (inter-War), and 'corporate' (post WW2) periods of
education-industry relations. During these stages, a combination of factors reduced gradually the autonomy of the school system, served to increase the influence of the state over the curriculum, and enabled the introduction of a number of vocational schemes in the 'corporate' period.

The final section moves between societal levels in a case-study analysis of the operation of two vocational schemes in a local education authority. This examines how the relationship between micro, meso and macro-levels can introduce disjunctions between the official aims and the actual consequences of vocational schemes. The case-study is also used to refine elements of the earlier theory and identify the areas of autonomy which remain within micro and meso societal levels. The introduction of the Technical and Vocational Education Initiative, and the Schools Vocational Programme is traced, and their operation is examined. Here, I focus on the subject options process, a school-based vocational course, and the attitudes and approaches of industrialists, teachers and students to work-experience.
Previously Published Work

Parts of this thesis have been published previously in accordance with university regulations. An earlier version of chapter seven was published as 'Work experience and schools: factors influencing the participation of industry', in Journal of Education Policy, 2, 2. Part of the data used in the first half of chapter five appeared in 'Implementing the Contract: the TVEI', in British Journal of Sociology of Education, 7, 4. Some of the data used in chapter eight appeared as 'Work-experience as a contradictory practice', in British Journal of Sociology of Education, 8, 4.

No part of this thesis has been submitted previously for a degree or other qualification, to this or any other university or institution.
CONTENTS

Illustrations.
Acknowledgements.
Preface.
4. The Formation and Development of SVP and TVEI.
5. The Subject Options Process.
6. 'Factories and Industry'.
8. Work-Experience, Students and Schools.
9. Conclusion.
 Appendix.
 Bibliography.
List of Figures/Tables

FIGURES:
1. Form of analysis allowing for the effects of societal levels.
2. Parental influence in the case-studies.
3. Form of analysis taking into account the significance of the mode of production in affecting parental influence in schools.
4. Location of Categories - 1.
5. Location of Categories - 2.
6. The Options Programme.
7. Attendance at Parents' Evening and Enthusiasm for daughters/sons to opt for TVEI.
8. The 'Factories and Industry' Course.
10. Demand and economic constraint undermining a firm's rationale.
11. Destructive dynamic leading to a reduced supply of placements.
12. Student experiences of social relations of production.
13. Student experiences of the labour process.

TABLES:
1. Form Teachers.
2. Form Teachers views of vocational education.
Acknowledgements

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Preface
This is a study of the historical development and contemporary operation of vocational schooling. It examines in detail two school-based schemes: the Schools Vocational Programme and the Technical and Vocational Education Initiative. In analysing their operation, I shall employ some of the methods utilised by case-studies inspired by 'sociological phenomenology', within a Marxist framework. Now, some writers have raised doubts as to the epistemological viability of combining the ethnographic techniques used in phenomenology and symbolic interactionism, with a Marxist study of of society (e.g. Hammersley and Woods, 1977. Hargreaves, 1982). However, following West (1984) I want to argue that it is possible to combine aspects of these perspectives and produce case-study material informed by some of the central theoretical tenets of Marxism.

The Schools Vocational Programme (SVP) was started in 1976 by two teachers working in an ESN(M) school who were determined to provide their final year students with a 'useful' and 'relevant' curriculum. Having gained the cooperation of a number of local firms, they established a project consisting of three 'industrial experience' courses, each of which culminated in a week's work-experience. By 1979, the Programme had spread into the 'low ability' streams of local schools and was supported financially by central government. At the end of 1987, SVP was operating in twelve schools and had become part of the Local Education Authority's permanent provision.

In contrast to SVP, the Technical and Vocational Education Initiative (TVEI) emerged from central government. In 1982 the Prime
Minister announced the Conservative Party's intention of launching an initiative to stimulate the provision of technical and vocational education for young people. By September 1983, students in fourteen local education authorities across England and Wales had embarked on the first year of TVEI programmes. These aimed to provide a vocational education broadly related to employment trends (MSC, 1984).

The growth of TVEI has been rapid. By September 1984 sixty-two authorities were operating projects which catered for 19,760 students (MSC, 1985). In 1986 the 'pilot' status which had been attached to TVEI was removed, and the White Paper 'Working Together - Education and Training' announced the Government's intention to extend the Initiative to all local education authorities ('Education', 19/9/86).

It is clear from this brief outline that SVP and TVEI have the potential to make an interesting comparative study. They originated from different sources, yet both focus on the 'world of employment' and have work-experience as a central part of their curricula. As such, they are two of the many schemes which have been seen as constituting the 'new vocationalism' (Bates et al, 1985).

The study can be divided into three parts. First, chapter one outlines a Marxist approach to the study of schools and society which guides this examination of vocational education. Secondly, chapters two and three outline some of the social factors central to the rise of technical and vocational education since the late nineteenth century, and examine how the relative importance of these has changed through time and across institutional sites. Thirdly, chapter four concentrates on the specific development of the two schemes in my study, SVP and TVEI. By examining their interrelationship with the organizational
sites of schools, I make problematic the translation of the aims of vocational schemes into their intended outcomes. The rest of the study examines the actual operation of various aspects of SVP and TVEI in two schools. Chapter five looks at how vocational education forms part of the options process at Borough school. Chapter six is a study of a school-based vocational course at Stonegate school, and chapters seven and eight examine the work-experience process as it exists in the local education authority, and the effects that spending a period of time in a firm had on the SVP and TVEI students at Stonegate and Borough. Chapter nine concludes by using some of the insights of this study to speculate on the future direction and possible consequences of vocational education.

Notes
1. 'Sociological phenomenological' is a term used to describe work utilising both symbolic interactionist and phenomenological theory (see Sharp and Green, 1975).
1 Schools and Society: A Marxist View

A major claim of Marxism is its ability to grasp society as a dialectically interrelating totality, whose various parts are invested with differential causal force (Luckacs, 1971. Bhaskar, 1979). In this context, while individual organizations such as schools may be viewed as 'social systems', their location within the wider society should not be neglected. Schools form an organizational terrain where such forces as gender, race and class interconnect and are mediated (see Meszaros, 1972). As a consequence, schools are not simply 'social systems'. Rather, they are 'open ended' organizations which affect, and are affected by, other institutions and social forces (e.g. see Giroux, 1983. Apple, 1986).

The view of society as a totality requires refinement before it can be used as an investigative tool in a study of vocational schemes. In order to achieve this, I shall outline three levels of analysis which represent essential elements of the social whole. These provide substance to a critical view which examines the relationship between parts of society, and the consciousness and actions of individuals. For example, social and economic crises become known through life-experiences which are expressed subsequently by both the language and actions of groups and classes (Marx, 1968a, Marx and Engels, 1977). In turn, people themselves create social and economic conditions. This is a dialectical process which requires an approach to the study of social life which can take into account both the constructed and constructing nature of society (West, 1984; 264). As a consequence, the methods of observation, interviews, and questionnaires, which are often utilised by
case-studies informed by 'sociological phenomenology', are important to an analysis which seeks to identify the existing views and actions of individuals. However, these methods need to be employed within a framework which recognises the 'open ended' contexts in which individuals interact.

It is important to note that this approach does not constitute a comprehensive theory. Rather, it is intended to establish the validity of the perspective employed in the larger, empirical study. My aim is to move towards uncoupling a Marxist analysis of schools from simplistic notions of economic determinism, while keeping it established within a materialist base. In order to establish guidelines for this study, I shall outline one way in which three levels of analysis have been used to characterise society. The work of Marx and Engels will then be used to re-present these levels, before employing them as a way of assessing the adequacy of traditional Marxist works on education, and several case-studies of schools.

Schools and levels of analysis
Following Offe (1985), the education system can be examined from three levels of analysis by using different perspectives. Offe's first, micro-level of analysis, focusses on individual actors involved in educational organizations. This involves teachers, students and those parents who have children at school. At the micro-level, the intentions, values and expectations of those in schools become objects for investigation. Important questions might be oriented towards ascertaining the potential these individuals had for influencing the policy and operation of schools. A micro-level perspective would be
sensitive to the formation and maintenance of the individual and collective sense of values and cultural identities that teachers and students develop in their roles.

The second, meso-level of analysis, is concerned with the 'opportunity structure' in which educational organizations operate. Areas of examination could include the funding of schools, the nature of their internal bureaucratization and differentiation, and their relationship with other institutions. For example, a meso-level investigation of the developing system of education after the 1944 Act could look at the funding and tripartite organization of the system, and its relationship with other welfare state organizations. This would reveal the links that schools had with other parts of the welfare state in constituting part of a social wage which was differentially allocated to individuals depending upon their gender, race and social class (e.g. see Finch, 1984).

Offe's third, macro-level of analysis, takes as its starting point the social system. Theorists within this category might examine the role assigned to education by the social system. The links forged between schools and other organizations would be important in such a task, as would be ascertaining the legal, economic, ideological and other parameters in which schools operated (e.g. Althusser, 1971. Bowles & Gintis, 1976).

As it stands in this brief summary, there is nothing necessarily marxist in Offe's 'three levels of analysis'. However, what can be seen as marxist is the ability to take into account each level in an investigation of the education system in order to achieve an analysis of society as a dialectically interrelating totality. In this way, Offe's
work might be used to examine aspects of the education system as located within the social whole. This approach might identify phenomena which would otherwise remain invisible. For example, important events may occur on one or more of the micro, meso or macro societal levels. An examination of schools which remained on one level might fail to uncover these events (see Cawson, 1985; 221-222). However, Offe insists that the concrete structure and functioning of organizations is always a result of individual (micro), organizational (meso) and social system (macro) factors (Offe; 222). It is this insistence that makes his formulation of social levels problematic.\textsuperscript{223}

Firstly, the assertion that social phenomena should be examined from three perspectives is not justified as being theoretically adequate. For example, Offe provides no grounds on which to judge favourably his approach compared to one which advocated four, five or six levels of analysis. Secondly, there is an ahistorical dimension to the way in which the validity of micro, meso and macro perspectives is assumed. These are asserted as adequate and necessary levels irrespective of the context of the object under study. For example, there appears no allowance for the possibility that at certain historical moments a meso perspective may be of no relevance to the development of the education system. Thirdly, the categories of 'individual', 'organization', and 'social system', are simply asserted as an adequate representation of the real world. However, as Marx demonstrated, the meaning of categories should be specified in order that they are historically meaningful. Otherwise they appear 'as encased in eternal natural laws independent of history' (Marx, 1973; 105). As a consequence of Offe's presentation of his central categories, they tend to appear as 'empty
abstractions' (Marx, 1973; 105). 'Individuals' become autonomous beings detached from a specific socio-economic base. 'Organizations' are taken as historically given rather than socially constructed and historically contingent, and 'social system' becomes a static universal entity characterised by 'legal' and other constraints which appear as ever present features of society. Fourthly, the content and the relationship between the three levels of analysis appears arbitrary. For example, there seem no guidelines for including certain organizations on the 'organizational', rather than the 'social system' level. Furthermore, while Offe stresses the importance of exploring the 'connections' between the three levels, this usually refers to the relative weight and consequent importance of each level rather than the dialectical relationship between levels of the social system.

As it stands in the work of Claus Offe, then, the advocacy that social phenomena be analysed from three theoretical levels needs further refinement before it can be used satisfactorily. It is necessary to do more than simply present micro, meso and macro as a statement of intent. Their existence has to be established, not merely asserted.

Marxism and levels of analysis

In the work of Marx and Engels, the view of society as an interrelating totality is evident in their studies of the conditions surrounding productive individuals engaged in historical development (e.g. Marx & Engels, 1970). It is through such work that the employment of three levels of analysis can be justified in an examination of the education system. In what follows, macro and micro-levels of society are represented as the relationships which exist between individuals and the productive relations they enter into on the one hand, and extra-
productive relations on the other. In contrast, the meso-level is defined in terms of the social positions occupied by formal institutions, and the interaction which occurs within and between them.

a) The macro/mode of production level

Irrespective of the historical period in which individuals live, there exists the necessity of providing a means to ensure their subsistence. At a minimum, adequate shelter, clothing, food and water are required for the maintenance of life (Marx & Engels, 1977; 48). The importance of this interaction between individuals and nature is not confined to the period of ancient history, as the foundations on which economic activity exists are the same for all societies:

Just as [ancient man] must wrestle with Nature to satisfy his wants, to maintain and reproduce life, so must civilised man, and he must do so in all social formations and under all possible modes of production (Marx, 1959; 820).

Whatever the educational, cultural or other social activities individuals undertake, they must also produce their means of subsistence by entering into a productive relationship with other people and nature. The sum total of the relations formed through this process constitutes the mode of production (Marx, 1968; 181), and can be seen as the macro-level of society. In capitalism, the social relations of production give rise to two fundamental social classes; the bourgeoisie and the proletariat/working-class. This remains so irrespective of how 'complicated' the class structure of a society may appear as a result of
its relative success in world markets. The primary economic division remains that between those who own means of production, and those who must sell their labour to survive (e.g. see Miliband, 1985). However, the social relations of production do not only include class divisions, but embrace gender and racial divisions which are not reducible to notions of social class (e.g. Marable, 1983. Beechey, 1987).

The demands of survival in a mode of production may appear to fade into insignificance in periods of economic affluence. However, they are always there and may violently reassert themselves - and in so doing impinge upon every aspect of social and cultural life - given appropriate crisis conditions. Furthermore, the macro-level is not simply concerned with the relationship between survival and the mode of production. The very act of satisfying the conditions for existence leads to 'new needs' which go beyond the necessities of life (Marx & Engels, 1977;49). For example, cultural and educational activities may come to assume the status of a 'need', as may the development of increasingly elaborate means of satisfying the conditions of survival. In short, it is not just in situations where survival is at stake where the macro-level may impinge upon all aspects of social life. If the distribution of what is produced in an economic system generates substantial inequalities, this may again create concerns of 'survival'. Here, the concerns of a race or a social class may not be with having enough to exist, but over possessing sufficient resources to enjoy a life-style which represents 'survival' relative to the living standards of a particular society. Marx provides an example in the case of shelter:
A house may be large or small; as long as the surrounding houses are equally small it satisfies all the social demands for a dwelling. But let a palace arise beside the little house, and it shrinks from a little house to a hut...the occupant of the relatively small house will feel more and more uncomfortable, dissatisfied and cramped within its four walls (Marx, 1968:83).

The conditions and relationships which surround production are, then, fundamental components of social life and represent the macro-level of analysis.

b) The micro/individual level

The micro-level represents the extra-economic relationships entered into by individuals. Of interest here, are the actions and consciousness of individuals as formed through relations in a variety of social settings. As with the macro-level, individuals are not determined by these relations. In addition to being shaped by them, they also play a part in creating social relations. The 'common-sense or way of life' of individuals from a social category, means that people themselves affect the form and content of these relations (Johnson, 1979:234).

A central element of the micro-level concerns the social relations surrounding the reproduction of human life (Marx & Engels, 1977:49). Both historically and cross-culturally, the forms in which this has taken place have embodied a multiplicity of gender and racial divisions. Furthermore, the social relations surrounding human reproduction have a number of links with the productive sphere which make the micro-level merely distinct, rather than separate, from the macro-level of society.
(e.g. see Beechey, 1987). For example, in capitalism it is usually women who are placed in the position of aiding the productive process by reproducing labour power through domestic work in the family. As a result of their position within the family, married women often receive pay for waged work which is below the true costs involved in reproducing their labour power. Furthermore, women have been seen as constituting a reserve army of cheap and easily disposable labour (e.g. Bruegal, 1979), and have been discriminated against by male workers as a way of maintaining wage and 'skill' differentials (Cockburn, 1983. Feminist Review, 1986).

As defined in terms of the mode of production and the individual, then, macro and micro-levels of analysis can be seen as providing a key to important elements of the examination of social life. However, these elements of historical activity are not to be considered as separate 'stages', but rather as 'moments' which interact to form the base of social life (Marx and Engels, 1977). Their interrelationship is crucial, and requires an examination which goes beyond ascertaining the 'connections' between them (Offe, 1985; 222). Individuals and the conditions in which they produce and reproduce life exist in a dialectical relationship. For example, Marx examines how the macro and micro interact and change by illustrating the development of productive relations:

man produces himself through labour... There is... a dialectically conceived relation between his nature as determined by the conditions of his life, and the practical transformation of the conditions (1977; 21).
In capitalism, the division of labour develops in workers 'one-sided' and 'deficient abilities' which are suitable for only limited tasks (Marx, 1954:330). However, the very development of this division of labour reaches a point where the productive forces of society come into conflict with the existing social relations of production (Marx, 1968b:181-2). As a consequence, increasing numbers of workers are made unemployed, which has the effect of reasserting for individuals the necessity of providing a subsistence. If the instability caused by mass unemployment and the struggle to survive grows unchecked, there arises the possibility of large scale conflict and social change (Marx, 1968a:70).

In this example, the conditions in which individuals work creates the possibility for the transformation of both. The interaction of elements within the macro and micro societal levels are not static, but can produce change in both individuals and the economy.

This analysis of the relationship between individuals and the mode of production shows that an examination of social phenomena such as education should allow not only for the existence of micro and macro levels of society. It should also consider their interrelationship and interpenetration. While a particular study may aim only to examine individual actions and opinions, it should still allow for the influence of the mode of production on these individuals. In contrast, much work in the sociology of education often treats the micro and macro-levels of society as mutually exclusive. For example, ethnographic studies often take the speech and actions of individuals as unproblematic insofar as
they ignore the influence that social class as a relation of production has on them. Alternatively, studies which focus on the mode of production have tended to ignore the active role which social relations in the extra-economic sphere have in influencing the economy (examples of these will be examined later).

Studies which focus on race and gender in education have partially overcome this by combining an examination of the exploitation which exists in the mode of production and in other social relations (e.g. Valli, 1986). The more sophisticated analyses which have social class as a central focus have adopted a similar approach (e.g. Willis, 1977). However, to achieve an adequate understanding of social phenomena as located and determined within a social totality, it is necessary to understand how these forces mediate and are themselves mediated by the organizations of schools (see Ball, 1987). As Giroux argues, there is a need 'to provide a theoretical focus for linkages between how a society is controlled and organized and the principles that structure school experience' (1983;195. My emphasis).

Having explored a way of justifying the existence and use of micro and macro-levels of society, I shall now move to the meso-level.

c) The meso/institutional level of analysis

The meso or institutional level can be seen as referring to the social positioning of formal institutions or organizations, outside of the directly productive and familial reproductive spheres, and the relationships which exist between and within them.

In contrast to the mode of production, the purpose of relations entered into within the meso-level is not to immediately facilitate a
productive relationship with nature. The meso/institutional level of society is also distinguished from the individual/micro level, in that organizations are often characterised by a far greater stability or time-space 'solidity' (see Giddens, 1984). For example, schools consist of a number of buildings set aside for educative purposes, have distinct sets of people who are obliged to attend them regularly (students, teachers) and include a timetable which specifies the length and order of the school day.

The explanatory power of this level is of a different quality than that of macro and micro-levels of analysis. Indeed, the ability of the institutional level of analysis to provide explanations of social phenomena is contingent on the relationship between the mode of production and the individual-level. As with the macro and micro, the meso-level of society is constituted by social relations entered into by individuals. However, the meso has its foundation in, and occupies a relational position to, the relations entered into around production and reproduction. These are the 'real foundation' on which rise components of the meso-level of society. For example, the structure of schooling in contemporary Britain is built upon both the resources made available from a capitalist mode of production, and patriarchal familial relations. These are translated into rules which place the teacher in 'loci parentis' and hold the mother primarily responsible for the behaviour and attendance of children (see David, 1978).

The relation of institutions to the mode of production is another example which illustrates this point. Before extra-economic relations can be entered into, people have also to enter into relations with their environment which allow them to achieve a means of subsistence. The
growth and continued existence of institutions is dependent upon a mode of production which allows people to participate in them and still achieve a 'satisfactory' material existence. This is not to say that institutional power is always dependent on a particular mode of production (though this is often the case with individual institutions e.g. the power of the Church in Russian schools disappeared after the Bolshevik revolution). Indeed, certain institutions may interfere with or regulate the timing and type of productive relations their members enter into. For example, prisons restrict the work inmates are allowed to carry out. The Church of England is against Sunday trading, and Parliament has placed restrictions on the length of hours that 'minors' are allowed to work. However, it is to argue that organizations within the meso-level of society will, in the long run, be powerless against the economic necessity people face to earn a living. Such a living may simply constitute what is necessary to achieve a bare subsistence. However, it may also constitute what is considered a 'satisfactory' standard of living within a particular mode of production at a specific stage of its development. This condition must be met as a prerequisite for institutions to remain viable within and across modes of production.

To the extent a mode of production restricts the type of social relations individuals may enter into to earn a living, institutions may be affected in two major ways. First, they may occupy what is seen as a legitimate place within society and have their members subsidised and effectively excused from engaging in directly economically productive relations for a time (e.g. student grants are an example of such a subsidy). In such a case the institution's fate becomes
dependent upon extra-economic factors such as governmental decision-making. For example, if an institution is seen to perform a 'useful' function in society, such as legitimizing the capitalist mode of production, it may receive state subsidies or even become part of the state apparatus (Althusser, 1971). Secondly, the practices of an institution may hinder its members from achieving a means of living they considered satisfactory. Here, the institution would have to adapt in order to enable such a living to be achieved, or face a decline in its viability as people rejected its legitimacy. Furthermore, such an institution may face challenges from other organizations occupying a more powerful position within the meso-level of society. For example, the state may choose to legislate against the practices of institutions considered to be harmful to the interests of the dominant mode of production.

The meso-level is, then, ultimately dependent upon the economic (and reproductive) relations entered into by people. However, this does not imply an economic determinism in which the exact shape of the educational system, alongside the state, and other formal institutions, is completely dependent upon the mode of production. While economic relations may reveal the 'hidden basis' of institutions:

This does not prevent the same economic basis...due to innumerable different empirical circumstances, natural environment, racial relations, external historical influences, etc., from showing infinite variations and gradations in appearance, which can be ascertained only by analysis of the empirically given circumstances (Marx, 1959, 791-792)
Indeed, not only can institutions such as schools within the meso-level exhibit 'infinite variations' within, say, capitalism. They can also exert a causal effect on the development of the individual and the mode of production levels. Schools, political organizations, the media, etc., all 'react upon one another and also upon the economic base' (Engels, 1968:694). Furthermore, elements of the meso-level can exert a determining influence at certain historical periods, as where politics in the ancient world, 'reigned supreme' (Marx, 1954:86).

The meso-level of analysis can, then, play an essential part in explanations of social phenomena such as the educational system. As with Offe, such an approach could investigate the internal bureaucratization and differentiation of education institutions, and how they may influence and be influenced by other aspects of the meso-level such as the state. However, for all its importance, this does not justify the assertion that the meso is a completely autonomous level of society which is always a vital element of explanation. The importance of the meso-level is itself contingent on the manner in which people provide for their production and reproduction. As Marx argued about the importance of politics in the ancient world, society was unable to live by politics alone. On the contrary, it was the mode in which individuals gained a livelihood that explains why politics played the chief part (Marx, 1954:86).

It is in this sense that the 'economic', or the social relations individuals enter into in productive activity, plays a determining role in the last instance. When a rapid change occurs in the economic foundations of society, it should not be surprising that institutions which were dependent on that foundation also undergo change
Having identified certain problems with Offe's schema for examining organizations I have attempted to develop and reformulate three levels of analysis, corresponding to three 'levels' of society, through the work of Marx and Engels. The micro and macro-levels have been viewed as universally valid approaches through their identification with individual relations which exist in the reproductive and extra-productive sphere, and the social relations which constitute the mode of production. The importance of the meso-level for explanatory purposes has been seen as contingent on the interaction between micro and macro-levels. It has been redefined to include the 'institutional' — a term which encompasses such aspects as political organizations as well as educational organizations. The meso is not separate, but a relatively autonomous level, and in periods of rapid change its importance as an explanatory factor in accounting for social change may become 'collapsed' beneath the interaction of individuals with the economy.

Furthermore, these levels of analysis represent factors which exist in a dynamic interrelationship with each other both within and between societal levels. They are not separate, but should be located relationally, within a specific historical context (Marx, 1973;100-101). The structure of a theoretical approach which allows for the dynamic interrelationship between individuals, organizations and the economy is illustrated in figure one.
By using these preliminary guidelines, I shall now examine the adequacy of two approaches to the study of schools. What follows is not meant to be a comprehensive or detailed examination of educational theory. Rather, it is a brief view of some work which has been inspired by 'sociological phenomenology' on the one hand, and Marxist theory on the other. The aim of this exercise is to ascertain the value of these approaches for an examination of the development and operation of school based vocational programmes, by ascertaining their ability to allow for movement between levels of analysis. For example, the inadequacy of micro approaches which do not allow for such movement becomes clear where what goes on inside the classroom is explained as being autonomously produced, sustained and changed by participating individuals. The limited nature of this explanation is evident as soon as it is realised that a number of teachers may seek jointly to establish alternative processes in the classroom, yet may, as in the
Figure One. Form of analysis allowing for the effect of societal levels
case of William Tyndale School, find themselves prevented from doing so by forces outside of the school such as the state (Dale, 1981).

Irrespective of the level at which analysis is begun, then, the possibility should exist for exploring the relationships between micro, meso and macro societal levels.

Sociology, the school and the classroom

Work that has drawn upon 'sociological phenomenological' methods in examining the education system from a micro-level analysis, has provided a wealth of insight into what goes on in schools and classrooms. In describing and explaining the behaviour of teachers and students, much of importance has been identified for anyone wishing to examine the consequences of individual action, and the internal organization and differentiation of schools.

The Manchester studies of Lacey (1966 & 1970), Hargreaves (1967), and Lambart (1976), provide the first examples of this work in Britain. Their case-studies adopt micro and meso-level perspectives and represent a significant break with the method of the previously dominant Fabian inspired analysis. These had charted the structured inequality built into the education system, yet enabled little to be said of intra-school processes (e.g. Floud, Halsey and Martin, 1956). The emergence of the Manchester studies, and others in the same tradition, rectified this omission. They provided detailed and highly revealing examples of the implications of processes formed by the decisions and actions of individuals within the school (e.g. Woods, 1979. Ball, 1981). I shall now examine their analysis of how educational practices serve to differentiate between parents in school decision-making processes. This
is a theme common to the work of the case-studies and illustrates how they approach macro, meso and micro-levels of society.

The studies of Lacey, Ball and Woods document the ability of parents to affect the destination of their children by intervening in the school streaming and subject options decision-processes. For example, Woods (1979;42) cites examples of middle-class parents using compulsion in telling their children which subjects they could and could not take. However, it is not only power over children that parents may exert. Ball (1981;122) provides examples of parents utilising the 'liberal' rhetoric of a school's policy as a method of engaging heads of department in debate to ensure their children are submitted to particular subject areas. This intervention often proved effective as department heads would usually 'follow the policy of the school' which stressed that any pupil 'should be able to take the subjects he wants at the level he wants.'

Lacey's study illustrates further examples of parental intervention in school decision-making. In 'Hightown Grammar' students were streamed, a process with significant consequences for their post-school prospects as it affected both the subjects they took and the level at which they studied. Lacey found a 'negotiated' decision-making process which enabled certain parents to intervene and alter the selections of teachers.
These studies share an approach which stresses the importance of the construction of meanings by individuals in pre-given organizational contexts. Teachers build up views of students on a number of 'rational and judgemental' criteria, which are used in assessing their 'suitability' for courses and streams (Cicourel and Kitsuse, 1963;74-75). Similarly, parents construct views regarding what constitutes an 'appropriate education' for their children. If teachers' decisions are at odds with their own views, parents may seek to alter them in a direction favourable to their child's education. For this to be successful, parents must be able to recognise and negotiate the meanings implicit within 'school knowledge':

Parents' ability to interfere with this process on their children's behalf is related to their ability to present the problem in terms of the school's ideology (Lacey, 1970;77).

Some parents, by contacting the school directly, were able to change decisions made by the staff...and thus sometimes to overcome the notions of 'appropriateness' attached to their child, deriving from a band-identity or a reputation (Ball, 1981; 154).

Coming to terms with 'school knowledge' involves the ability to construct with teachers an 'interchangeability of standpoints' and a 'congruency of systems of relevances' (Schutz, 1953). Parents who accomplish this have a possibility of exerting power in school decision-making processes which may affect the educational careers of their children. Crucially, this may affect the 'differentiation-polarisation'

It is not just examples of how individuals may positively influence school decision-making that the case-studies provide. Another benefit is the insights they make into how individual perceptions, values and actions create exclusion from school decision-making. For example, although some parents do intervene on their child's behalf, the majority clearly do not (Ball, 1981; 153-157). Indeed, the dominant organization of subject options and banding/streaming can be seen as a process of exclusion exercised by individual teachers over parents through their removal from the decision-making process:

Teachers do not appear to spend a great deal of time in explaining to parents the pedagogic rationale of their methods or their curriculum, or why pupils are 'grouped' in a particular way. Parents are not... in the mainstream of changes in educational culture... Without 'inside' knowledge, it is often difficult to apply support and guidance, and this is especially true in regard to the increasing range of curriculum choices in the large comprehensive and the proliferation of examinations of different types (Ball, 1981; 157).

The participation of parents in school decision-making is not only highly contingent. The case-studies show that the ability of those parents who are able to enter the decision-making processes in schools
is strongly related to social class membership. As Lacey (1970:151) puts it, the majority of working-class parents' 'socio-cultural resources' are 'inadequate' to enable them to enter fully school based decision-making. When it comes to the organization of subject choices and streaming/banding, this 'lack of knowledge and expertise' can amount to a 'serious handicap' for pupils (Ball, 1981:157):

the chances of working-class parents wanting to intervene...are very low; their ability to do so successfully is even lower (Lacey, 1970:77).

In summary, these case-studies provide many insights which can be utilised profitably in an examination of the education system. In the example I have looked at, taking into account the intersubjective construction of meanings between teachers and parents alerts one to how educational decision-making may include and exclude different groups of people. The ability to interact with teachers and construct an effective dialogue based on what schools regard as legitimate knowledge, is a crucial determinant in gaining access to decision-making concerned with subject options and banding/streaming. Indeed, in contrast to criticisms which have been levelled at idealist approaches (Sharp and Green, 1975), the case-studies identify a material base (social class) as the cause of inequality in school decision-making.

The case-studies consider micro and aspects of meso-levels of analysis. In studying individual interaction and the interpersonal construction of meanings, they deal with features of the internal bureaucratization and differentiation of schools as organizations. By
moving between micro and meso-levels, we are shown how the internal organization of schools provides the context for, and partly determines, the negotiation of students' personal identities and the influence available to parents of different social classes. With the introduction of social class as an explanatory variable, it would appear that the case-studies also allowed for movement to and from the macro-level. However, the view of social class implicit in these studies makes such an assumption problematic. Social class is essentially seen as the possession of cultural resources which provide individuals with differential potential to prevent their exclusion from school decision-making processes. Class appears not in terms of a position in relation to the means of production, which exists as a result of the prevailing mode of production, but as a resource which comes from belonging to an 'educated sub-culture'. Central to this notion of social class is individual possession of the 'self-confidence and understanding' necessary to acquire sufficient knowledge of the organization of the school (Lacey;149. Ball;156). As a consequence, while middle-class parents have the potential for successful intervention, working-class parents do not possess the resources necessary to prevent their exclusion from school decision-making processes and are rendered powerless. They experience school as an inaccessible institution where 'professionals practise their considerable expertise behind well-defined boundaries' (Woods,1976;142).

Social class is recognised as important, but it is a static concept which is important largely in explaining how pre-given individuals negotiate the existing structure of schools. The analysis of student
and parent cultures is an important part of examining school processes. However, *social class is not reducible to notions of culture*.

As a consequence of this limited notion of social class, the case-studies are unable to allow for full movement from the micro and meso-levels, to the macro-level of society. First, they tend to omit the connection which class in capitalist society has with the mode of production. Capitalist production is dependent upon the extraction of surplus value by those who own the means of production, *from* those who have only their labour power to sell in the market place. A recognition of class as a *fundamental feature* of the mode of production, points to an important source of exploitation which has implications for patterns of inequality which exist in organizations such as schools.

Secondly, the case-studies tend to neglect the capitalist conditions in which schools develop (although Lacey deals comprehensively with the *industrial* development of the local community, and the implications of this for the changing function of 'Hightown'). Educational institutions develop within a specific mode of production. This is not to argue that the economy determines the shape and form of educational institutions. However, it does pose limits to the extent to which the development and operation of schools is compatible with the smooth functioning of capitalism (Dale, 1982). For example, expenditure on education is at least a short-term drain on capital accumulation. Continual expansion of the education system could, therefore, pose an obstacle to capital accumulation which, in turn, might create a fiscal crisis for the state (O'Connor, 1973). The form and content of schools cannot exist outside of these constraints even though they may not be immediately obvious at any one point in time. For example, oppositional educational
practices have previously been 'absorbed' by the state in an attempt to prevent threats to the capitalist organization of production (see Johnson, 1979).

The 'case-studies' tend to neglect these aspects of the development of schools. Rather, it is processes within school which explain and define the significance of social class. It is the ability to acquire 'inside knowledge' of the school, to overcome the school's 'notions of "appropriateness"', and to recognize and manipulate the 'school's ideology' which determines whether parents may prevent their exclusion from, and possibly influence, certain educational decisions. This focus seems to place too much a priori significance on micro and meso-levels as enabling causal knowledge of the education system to be gained. As a consequence, there is a tendency among the 'case studies' to blame the school for creating differential access. This is a serious limitation as it makes highly problematic the acknowledgement that the mode of production provides the structure in which schools operate, creates social classes and is, therefore, at least an important determinant of inequality and access to educational decision-making in its own right.

The explanatory analysis contained within the 'case-studies' can be illustrated diagrammatically in figure two, alongside the form of an approach which would take into consideration the influence of the productive relations entered into by individuals in figure three.

Fig Two Here.
Figure Two. Parental influence in the case-studies

Parents with middle-class cultural resources

Parents with working-class cultural resources

School decision-making processes

Potential parental influence

[Figure two illustrates how the case-studies' perceive the operation of school decision-making processes as being primarily responsible for the lack of working-class parental influence].
The case-studies are concerned to focus on and explore micro and meso-level processes (fig two). However, their concentration on these societal levels creates a tendency to ignore the effect of the macro-level in structuring these processes and forming part of the context in which they operate. Figure three illustrates an approach which would take into account the mode of production in an examination of school decision-making processes.

Fig Three Here.
Figure Three. Form of analysis taking into account the significance of the mode of production in affecting parental influence in schools.

[Figure three illustrates a form of analysis in which the importance of the mode of production in structuring and setting limits to the development of social class and schools is taken into account].
The rise of Marxist theories of schooling which focussed on the macro-level of the social system, can be seen as stemming from the idealism inherent within the 'new' sociology of education (see Giroux, 1983. Young, 1971. Flude & Ahier, 1974). At a time of economic recession when the influence of the economy on the organization of education was becoming increasingly obvious, it was considered that a focus on the classroom as a context in which meanings were subjectively constructed, shared or imposed, led to an overemphasis on how 'reality was sustained at a micro-level' (Whitty, 1985; 22). For all the importance of interpersonal interaction and symbolic meaning at the level of the school, such an approach could not conceptualise adequately the economic system as an objective reality which impinged upon individuals irrespective of their own beliefs and interpretations of events (Sharp and Green, 1975; 34).

This recognition of the limitations of micro perspectives initially led Marxist educational theory to focus on 'macro sociology.' Here, political and economic forces replaced the classroom, and even the school itself, as the central focus of analysis (Banks, 1982; 21). Two seminal works which laid the base for the development of this approach were those of Althusser (1971) and Bowles and Gintis (1976). I have no intention of detailing and assessing the work of Althusser and Bowles and Gintis in detail as this has been carried out elsewhere (eg. Giroux, 1983). However, it is important to indicate the broad outlines of their work in order that the value of such a macro-level approach may be assessed.
For Althusser (1971), the ruling class controls the mode of production and are able to exercise an ideological power which dominates society. Those organizations which form part of the state, operate to reinforce the dominance of the bourgeoisie and are categorised in terms of ideological state apparatuses (ISAs, eg. church, schools), and repressive state apparatuses (RSA's, eg. police, military). In advanced Western capitalism, ideological state apparatuses have become the most important sites for reproducing capitalism, and schools have become the dominant ISA. They perform the vital function of promoting relevant skills and attitudes, and inculcating the discipline and respect required for the production of surplus value and the maintenance of capitalist relations of production. Schools are able to perform these functions because of the way in which ideology operates through organizations. Put briefly, it functions as a set of ideas and meanings that structure the unconsciousness of individuals such as students. This induces in them an artificial relationship to their real conditions of existence (i.e. living in a social system where they are dominated and exploited by the ruling class). Ideology, then, exists not only at the level of 'ideas' but is a 'lived' experience.

Althusser's notion of ideology occupies a central place in his examination of the social system. Ideology permeates organizations, manipulates individuals, and serves to make 'natural' and legitimate the capitalist mode of production. The importance of Althusser's work for an examination of education policy is that it alerts one to the internal operation of schools as being important sites for the transmission to individuals of skills and attitudes which support capitalism. For Althusser, any adequate examination of education policy would need to
take into account how school's are inextricably related to the dominance of the ruling class and the maintenance of the capitalist mode of production. For example, an Althusserian approach to schools would not view parental access to decision-making predominantly in terms of the unequal cultural resources social classes possess, or as the way in which the internal bureaucratization of the school allows teachers to exclude the majority of parents from school decisions. Rather, it would focus on such aspects as how school decision-making processes contributed toward legitimising the management and domination by the ruling class (and submission by the working-class) over other ISAs and the economy itself.

Such insights could provide a view of the limits in which educational policy operates and a context for moving from the macro to the meso and micro-levels of analysis. Decision-making processes within school might be analysed in an attempt to see the extent of legitimacy enjoyed by organizations permeated by the ideology of the ruling class. Those which attempted to strengthen or extend the efficiency with which schools accomplished this could be examined to see if individuals regarded them as legitimate and 'natural', or were dissatisfied with them and even involved in attempts to change them. Such an examination of micro and meso-levels might provide a base on which the domination of the ruling ideology could be judged. An examination of the extent to which schools actually produced attitudes and skills supportive of capitalist hierarchy and inequality would allow one, at least in part, to assess the efficiency of this ideological state apparatus. For example, evidence might be found which pointed to the break down of the 'legitimate authority' of teachers to make decisions regarding the
differential allocation of students to streams/bands. Here, it might be
possible to ask if schools were failing to do an efficient job of making
acceptable a set of 'lived practices' which supported wider instances of
the working-class' exclusion from management and power.

However, this possibility is ultimately excluded by Althusser
through his development of a 'reductionist notion of power and a one-
dimensional view of human agency' (Giroux,1983;82). Power stems from
the dominance of the ruling class over the State and the capitalist
economy. Consequently, the diversity of the internal bureaucratization
and differentiation of those organizations which constitute the ISAs is
largely meaningless as it is a diversity which is always subordinated to
the ruling ideology. Indeed, by having ideology operate at the level
of unconsciousness, Althusser appears to make it immune to discovery or
reflexive criticism. The completeness of the domination assumed
would, as a consequence, also seem to make redundant any micro-level
examination of individual consciousness, values and action.
Oppositional practice toward the ruling ideology is not permitted by
Althusser's analysis. The only conflict allowed for in schools is that
derived from a class struggle which is destined to remain external to
them.

For the purposes of analysis, the meso-level is effectively
collapsed into the macro-level of the economy and its examination is
made largely redundant as it is bound to contain the ruling ideology.
All a meso-level perspective would be able to identify is how the
dominant ideology operated in schools. The micro-level of analysis is
also collapsed into the overriding importance of the power of the
ruling class within capitalism. Individuals are not just influenced, they are determined by the ideology of the ruling class.

This focus on the social system as being capable of seemingly infinite manipulation of organizations and individuals, through the all-encompassing 'universal reproductive functions of ideology' (Willis, 1977; 175), rules out the possibility of meaningful action within schools. Indeed the possibility of any change, in terms of a move from capitalist reproduction, taking place within the educational system seems implausible. Even a revolution which might bypass prolonged struggle would require a penetration of the very ideology that rules out this possibility through its ability to represent an 'imaginary relationship of individuals to their real conditions of existence' (Althusser, 1971; 154). In short, Althusser is unable to recognise the notion of active individuals. Despite the complexity of his work, he simply does not allow for the existence of creative individuals. As a consequence, there appears no room for moving from the macro, to the meso and micro-levels of analysis.

Bowles and Gintis share with Althusser an analysis which views schools as performing two essential functions in the capitalist mode of production. Schools reproduce labour power, which is structured along race, class and gender divisions, and they also recreate those values and dispositions necessary for maintaining capitalist relations of production. Central to Bowles and Gintis' analysis is the 'correspondence principle', which suggests that hierarchically differentiated values, norms, skills, and social relations which characterise the workplace are reproduced and reflected in the
classroom. In turn, the school 'produces' and 'labels' personal characteristics relevant to an 'efficient' staffing of the workforce (Bowles and Gintis, 1976; 130). Through 'competition, success and defeat in the classroom', school acts as a mechanism for allocating individuals to different levels in the economy and reconciling them to their social positions. As with Althusser, a focus on the economic functions of schooling brings attention to the role education plays in legitimising capitalism:

Schools foster...inequality through the ostensibly meritocratic manner by which they reward and promote students and allocate them to distinctive positions in the occupational hierarchy (Bowles and Gintis, 1976; 11)

The operation of schools ensures that students who 'master' what is necessary in terms of values and skills are able to progress within the educational system (eventually to fulfill elite positions in the economy), while others are ejected into 'appropriate' but lower corresponding levels in the workforce (p.152).

Bowles and Gintis identify some of the specific mechanisms (such as how the hidden curriculum is operated in and through the social relations of the classroom) which serve to manipulate students and make legitimate a system which produces social and economic inequality. However, their examination of the micro and meso-levels assumes an unproblematic and constant fit between policy and practice in schools, and the organization of the workplace. As the volume, categories and terms of employment are determined outside of schools (Hussain, 1976),
Bowles and Gintis' analysis assumes highly flexible educational decision-making processes which are able to respond adequately to every changing need of the economy. Furthermore, as schools are viewed as super efficient agencies of reproduction, it is difficult to see what causal significance may be accorded to individuals' consciousness, values and action. The assumption is that schools always serve the needs of capital.

The all-pervasive influence of the requirements of capital in the 'correspondence principle' is such that the notion that human action and structures presuppose each other is lost. As with Althusser, micro and meso-levels of analysis are collapsed into the macro-level, leaving them without causal significance. The recognition that attempts may be made to enter into the decision-making process by those dissatisfied with educational policy, as demonstrated in the 'case-studies', would appear problematic for an analysis which requires educational policy to function in response to the needs of the capitalist mode of production. Indeed, in Bowles and Gintis' study it is difficult to understand why parents and others should want to intervene in educational decisions which affect their children, as they should have been convinced of the legitimacy of the way in which schools operate. As Giroux notes, we are presented with an image of individuals' life which is 'fashioned solely by the logic of domination' (1983;85).

The insights which Althusser and Bowles and Gintis provide concerning the way in which economic and ruling-class power operates on and through the education system provides a very different focus than that to be found in the case-studies. However, in their examination of
the mode of production and the ruling class, the sophistication and complexity of what actually goes on in schools is lost. There is no analysis of what goes on in the classroom in terms of how policy and knowledge is transmitted, received and mediated by different groups. In fact, the very problem of how individuals construct, share and reorganize the meanings attached to school processes, appears to be dissolved into structural factors. As such, there is no room for the relationship between individuals, educational organizations and the social system to assume a dynamic interrelationship. The mode of production and the power invested in the ruling class determines the state, the organization of schools and the production of individuals, while they appear powerless to react back upon the social system. As a result, the economy is a closed level of society which is impervious to the influence of organizations or individuals. Its reproduction is unproblematic. There is no recognition of the vital role the state has in mediating economic effects, and the macro level of analysis is given an *a priori* determining role.

In comparison to an approach which would allow for all three levels of society to be taken into account (see figure one), the analysis of Bowles and Gintis allows only the mode of production to assume explanatory power in relation to the form and content of the educational system. The capitalist economy determines both individuals and the organizations in which they work. For Althusser, there is a similar reductionism in explanation. It is the ruling-class, created by the capitalist mode of production, which determines the operation and outcomes of schools.
The idea that schools are able to reproduce unproblematically key features of the capitalist system has been attacked by those critical of Marxist approaches towards the educational system. Criticism has focussed around the simplistic assumption that the internal features and workings of schools 'corresponded' to the 'needs' of the capitalist mode of production, and reproduced inequality and differentiation within the labour market (e.g. Browne, 1981. Hickox, 1982. Hargreaves, 1982). As Delamont (1981;80) argues, a focus on the macro-level is inadequate in the absence of detailed investigations concerning the operation of educational institutions. For the early educational work of the Marxists, the school was at once all important, in that it served to reinforce the dominance of capital, and of no importance, in that it inevitably assumed this function. In one sense, there was no need to examine the specific workings of schools. Since schooling was bound to serve the interests of the ruling class, questions concerning the specifics of such aspects as the curriculum were almost redundant as the answers were predetermined in favour of the existing mode of production. As Lawton (1980;6) argued, such an approach meant that investigation into the control of the curriculum comes down to examining the 'question of bourgeois hegemony'.

The Political Economy of Education

Though such criticisms may have been fair reflections on the work of early Marxist approaches to education, they were inaccurate and misrepresentative of later work (see Nash, 1984). By the late 1970s and early 1980s, Marxists had recognised the limitations of pure macro-level analysis which neglected the inner workings of schools, and the
problems involved in positing too close a link between education, inequality and the social system. Similar to the work of Gramsci, writers such as Johnson (1979), Apple (1982), Whitty (1978 and 1982) and Dale (1982), displayed a caution towards positing any straightforward correspondence between the capitalist mode of production, and the institutional and individual levels of society. They were concerned with providing elements of a framework in which it was possible to move between macro, meso and micro-levels of analysis. The object was to enable an examination of how these levels interacted, and allow for the possibility of each level having some causal significance on the operation of the educational system (e.g. Apple, 1982). Having identified the 'core problems' which face any capitalist state (Dale,1982), such writers were more concerned with investigating, rather than assuming, the degree of (dis)equilibrium between the mode of production, educational organizations and individual action (e.g. Whitty,1978. Dale,1981). The possibility existed for a loose 'fit', firstly because at certain historical periods much of what goes on in schools may not be that relevant to capitalist production or the state (Dale,1982). Secondly, correspondence cannot be assumed because while the institutions which constitute the state may seek to set broad limits to the development of the education system in responding to the economy (Apple,1982;4), they do not determine the exact form of sites such as schools and may be limited in the amount they can do to effect change:
identifying the core problems of the capitalist state does not entail identifying the particular means by which they will be tackled. Neither does such identification imply that the state apparatus as a whole is well attuned to overcoming the problems...the capitalist mode of production alone does not determine the forms that educational state apparatuses will take (Dale, 1982; 134 & 140 my emphasis).

There are cultural elements to which capitalism is relatively indifferent and many which it has great difficulty in changing and which remain massively and residually present (Johnson, 1979; 234).

This approach recognises the importance of concrete investigation into the educational system, and of being able to move between levels of analysis in examining the operation of schools, in a way which was not apparent in the work of Althusser and Bowles and Gintis. The capitalist mode of production is recognised as a vital aspect in an examination of schools. However, the ability of the economy or state to influence educational institutions is not, in itself, an adequate explanation for 'what goes on' in schools. No longer is a priori causal significance accorded to the mode of production, or the meso institutions which constitute the state. That education is not fully determined by the 'manipulative' power of the state, for example, implies the necessity of taking seriously the possibility of agents in other institutions mediating and opposing the effects of the capitalist economy. It is important to examine educational policy in its

As a result of this commitment, Marxist work has been concerned with the development of perspectives which could provide an analysis of educational processes as they are formed through factors from different societal levels (e.g. Sharp and Green, 1975). For example, Apple (1977) and Giroux (1983) have been concerned with the importance of accounting for individual interaction and the development of shared meanings within micro and meso-levels of society. In doing this, there is a recognition of the importance of many of the methods utilised within the 'case-studies':

One does not throw out social phenomenology... One combines it with a more critical social interpretation that looks at the negotiation of identities and meanings in specific institutions like schools as taking place within a context that often determines the parameters of what is negotiable or meaningful (Apple, 1977).

A recognition of the importance of micro, meso and macro-levels of analysis provides the starting point to this study of vocational schemes. Making use of the framework for analysis set out earlier in this chapter, I seek to employ the methods and insights of the case-studies within a recognition of the constraints set by the mode of production. My aim is to employ the methods of interview, observation, etc., in an analysis which moves between societal levels and the sites within them. I am not claiming there will be an absence of discontinuity in moving from examining individuals, to educational
organizations and the mode of production. However, what I hope this framework will accomplish, is to give a sense of the way in which different levels of the social system are not separate, but exist in a dynamic interrelationship.

The next stage of this study, which constitutes chapters two and three, attempts to identify those forces of central importance in the formation and development of school-based vocational schemes from the late nineteenth century until the Great Debate of the mid-1970s and the arrival of the Thatcher government.
NOTES

1. Offe's article is concerned with the study of interest groups rather than the education system. However, since it is made clear by Offe that the method he employs can be utilised for all social phenomena, the object of study is of secondary importance.

2. That Offe recognises the historical variability of the importance of these three dimensions does not alter the theoretical consequences of this insistence.

3. The use of 'individuals' is used to denote social individuals who exist in a historically specific social formation.

4. Workplace institutions are seen as existing in the macro-level when concerned immediately with the production of profit (e.g. manufacturing industry), and in the meso-level when they are not (e.g. hospitals, schools, etc.). However, this definition is obviously a fluid one.

5. It could be argued that the mental/manual and occupational classifications utilised by the case-studies makes this criticism invalid. However, the emphasis on social class remains as an occupational feature rather than an occupational feature that is tied to a conception of class as related to a particular mode of production.

6. At certain times schools may appear autonomous, as having the freedom to teach what they like and even organise as they decide. However, th
appearance does not negate the fact that their very autonomy is dependent upon the state of the mode of production.

7. The only way in which class can be seen to be dealt with adequately in the case-studies is if one holds a conception of structural features of class as translated in their totality into individual educational cultural resources.

In a fuller illustration, the family and other aspects of society would be included in these figures. However, as the example I have been examining concerns the mode of production, it is this which receives emphasis.
In line with the theoretical approach outlined in chapter one, I shall now examine those forces on micro, meso and macro-levels of society which have been central to the formation and development of school-based technical and vocational schemes. The employment of societal levels helps account for notions of relative autonomy, determination, and the displacement of contradictions in capitalism (Geras, 1987: 48-50). For example, the virtual abolition of the Industrial Training Board network by the government in the early 1980s, led to a restructuring of the institutions required to provide training (Finn, 1987). As the economy deteriorated, the State turned to schools to help prepare youth for work. This interaction between the State and economy, led to a reduction in the autonomy which had previously characterised the meso-level space occupied by schools.

It is important to note that this study is concerned with technical and vocational schooling in Britain. Consequently, the way in which the micro, meso and macro-levels of society interconnect here, may be unique to the British context. In examining the determinations which constitute vocational education, it is essential to consider the dynamic interrelationship which exists between levels of society and their relative importance. This involves examining the connections between individual actions and their wider contexts or, as Bernstein puts it, the 'situational activities of negotiated meaning' and the 'structural' relationships which they presuppose (Bernstein, 1974: 155). However, it is not sufficient to confine analysis to micro, meso and macro factors across a single historical period. The promotion and operation of
vocational education needs to be located not only synchronically, but diachronically if the educational system is not to appear an unchanging element of social reality.

In their examination of the origins of contemporary welfare states, both Heidenheimer (1981) and Therborn (1984) illustrate the factors which should be included in such an analysis. First, there is a concern with history in terms of the development of the institutional level of society, and the time during which links were forged between individuals and the political system. This took place in the context of a rapidly developing capitalist mode of production:

If we ask how previous educational opportunities were adapted in the era of the welfare state, we need to turn our attention...to the 1880s. It was in that decade that Britain, Germany and the US all came to combine mass enfranchisement with the bureaucratic potential for policy steering and implementation in rapidly industrialising systems (Heidenheimer, 1981:274).

Heidenheimer shows how each country adopted proposals for welfare expansion which were dependent on their historically specific institutional, cultural and economic development. This illustrates the point that educational systems are 'organic' to particular national institutional arrangements, and that innovations such as vocational schemes are 'at least rooted in the framework of existing provision' (Dale, 1986a:53). An understanding of the forces behind the form and content of present provision can, then, be aided by an examination of the institutional history of vocational provision.
Heidenheimer concentrates on the role of the institutional and political systems in the rise of welfare states. However, forces outside of these contexts are given less attention and, as Therborn argues, it is not just the history of institutional factors which are significant. Extra-institutional forces from other societal levels are of great importance in achieving full understanding of institutional formations:

The timing of new applications and elaborations of institutional traditions...should be seen as being determined, for the most part, by the balance of socio-political forces and by the conjunction of capital accumulation (Therborn, 1984;17).

To understand the promotion and operation of vocational schemes, then, requires an historical appreciation of the relationship between the institutional level, and the micro and macro factors of social forces and the specific stage reached by the mode of production. This approach can produce an analysis which is dynamic both in terms of the contemporary sites in which systems develop, and the forces which historically shape them. As Therborn concludes, it is on 'the basis of existing institutions, [that] the outcomes of industrial patterns of class conflict have shaped the welfare states of today' (1984;19).

An illustration of the importance of micro, meso and macro factors across contemporary space and through historical time may provide a guide to the analysis of technical and vocational schemes. However, empirical work is required before it can be ascertained which specific
social forces, for example, were of importance in their development. Such an analysis would identify the interrelationship between levels of society through a focus on such variables as the perspective of social movements promoting technical education, and the power and resources available to them (see Cooper, 1983).

The next two chapters are designed to identify and examine some of the historical conjunctions in which forces from micro, meso and macro-levels of society interconnected to produce outcomes of importance to the contemporary development of technical and vocational schemes. I want to make it clear that this will not involve a detailed description of the development of technical education as a thing-in-itself. This is because there are already plenty of accounts which detail the rise of technical education (e.g. see Roderick & Stephenson, 1978. Guillou, 1981), and as a result of the tendency to neglect those wider forces which affected the role of technical and vocational education. For example, explanations of Technical Instruction Committees often omit how it was a conjuncture of state and class forces which determined their functioning as bodies retarding the development of technical education (see later discussion). It is these 'wider forces' that I am primarily interested in. I hope to demonstrate that it is the interaction of such factors as the economy and class struggle that were and remain of real significance for technical and vocational education.

Those writers concerned with education-industry relations have identified characteristics of what can be seen as three periods in the development of technical and vocational schemes (e.g. Beck, 1981. Reeder, 1981. Esland & Cathcart, 1981). Esland describes these as
dating from the late 19th to the First World War, the time between the two Wars, and from the late 1940s to the present (Esland, 1986; 11). The different types of interaction between schools and industry in these periods have been characterised in terms of their extensiveness and stability, as the 'entrepreneurial', the 'collective' and the 'corporate' stages (Esland & Cathcart, 1981). However, despite the distinctiveness of these stages, they are marked by a common concern with the function of education in capitalism:

The recurring theme of industry-education debate is that of economic nationalism, founded on a negative view of Britain's economic performance over the last century and the idea of educated labour as a national need (Esland, 1986; 11).

Central to the theme of 'economic nationalism' has been a concern with the place that technical and scientific education should occupy in the education system. It is with the development of technical and vocational education, rather than the different path taken by pure science (see Layton, 1973, 1980. McCulloch, 1986), that the following analysis will be concerned. The above three stages of education-industry relations will be utilised in examining the development of technical and vocational education. Across these stages, five major factors from macro, meso and micro-levels of society will be outlined. Firstly, the specific stage reached by the developing capitalist mode of production in Britain is located in the macro-level of society, and will be examined as it constitutes part of the setting in which calls for an
extension of technical education were made by various individuals and groups.

The second factor is the organization of the education system, which exists on the institutional/meso-level of society. A descriptive account at the beginning of the period under examination illustrates the institutional position occupied by technical and vocational education, and its overall relation to the schooling system.

Thirdly, class conflict is located on the mode of production/macro-level. Its relevance to educational provision constitutes an integral part of the development of technical education. In the 'entrepreneurial' and 'collective' periods of education-industry relations, class struggle was significant primarily in that technical and vocational education was not central to the agendas of either the working- or the ruling-class. However, the concerns of class struggle during these periods will not be neglected. Instead, the agendas of the working- and ruling-class will be examined in order to foreshadow developments in the 'corporate' stage of industry-education relations. During this time, vocational education and class struggle intersected.

Fourthly, the state exists on the institutional/meso level of society. Its developing relationship with the economy, class conflict and educational base will be illustrated, with particular attention paid to the implications of this for technical education.

Finally, the importance of an individual's career is located on the individual/micro-level of society. The concept of 'career' is introduced to represent those educational routes which have historically tended to lead to various positions in the occupational hierarchy. It will be seen that technical and classical curricula had a different
relationship to the labour market which affected their position within the institutional level of society.

The above five factors have been identified separately and located on different levels of society. However, my aim is to make clear that they do not operate in isolation. Rather, they exist as 'partial totalities' which shape and form the structure of each other across contemporary space and through historical time. For example, an individual's 'career' is inevitably shaped by the prevailing stage of the capitalist mode of production and the sites in which work takes place. As such, the influence of mode of production, educational base, class struggle, state, and career, are not confined to any one societal level. As illustrated in figure four, these factors interconnect through micro, meso and macro-levels.

In what follows, the influence of these forces will be analysed in the 'entrepreneurial', 'collective' and 'corporate' stages of education-industry relations. However, a full detailing of their significance is a project which would take several volumes to complete. Consequently, in each stage I shall limit my analysis of their relationship to a few instances of importance in the development of vocational education. After outlining the broad context within which vocational education developed, I shall examine the specific combination of forces which impinged on its evolution.
Figure Four. Location of categories - 1

<table>
<thead>
<tr>
<th>Macro-Level</th>
<th>Meso-Level</th>
<th>Micro-Level</th>
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<tr>
<td>Mode of production</td>
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<tr>
<td>Class Struggle</td>
<td>Education system</td>
<td>State</td>
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<td></td>
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<td>Career</td>
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The Entrepreneurial Period.

a) The economic context

The period from the late 19th to the First World War was a time during which contacts between schools and industry were relatively few. Those that did exist were established on a laissez-faire basis, with individual or small groups of firms making contact with schools and colleges. During this time marked changes took place in the British economy.

In the late 1800s, Britain's position as the 'workshop of the world' came under threat from increased foreign competition. British industry did not stagnate, as output doubled between 1870 and 1913, but in the world economy there was a fourfold increase in production (see Ashworth, 1960. Roderick & Stephens, 1978). As Britain was the first national economy to industrialise, it was hardly surprising that its 'semi monopolistic' trading position should be challenged once other countries also industrialised (Aldcroft, 1981; 21). However, it is the extent of Britain's manufacturing decline which has been viewed as surprising by many commentators of the period (e.g. Roderick & Stevens, 1978 and 1981. Aldcroft, 1981). Though basic industries such as steel, coal and shipping increased their output, Britain's relative position in production and world trade declined. For example, in 1883 Britain's share of world trade in manufactures was 37% and yet by 1913 this figure had fallen to 25.4% (Roderick & Stephens, 1981; 4).

Changes just as important for Britain's long term economic future, were the rise of new chemical and electrical industries in the last quarter of the century. Advance in these and other emerging industries has been seen as relying to an unprecedented degree on 'systematic
technology and scientific research' (Roderick & Stephens, 1978:2).

Certain politicians and industrialists of the time who held this view, looked to the educational systems of Britain's competitors for possible solutions to the 'problem' of how education could better serve a technologically sophisticated capitalist mode of production.

David Reeder identifies two main forces which were involved in attempts to promote technical education in this period; industrialists and technical educators. They wanted a mix of what Jamieson (1985) has referred to as industrially and commercially relevant 'knowledge, skills and attitudes'. There was a focus on basic literacy and numeracy, as evident in the considerable support given to the government's extension of elementary education in the 1870 Act. This was accompanied by a desire that education should equip young people with the skills necessary for industrial success in an economy where new industries were increasingly reliant on technological development. Comparisons with foreign competitors such as Germany led to a growing concern that Britain's education system was inadequate in terms of providing a satisfactory supply of suitably skilled labour (see Searle, 1971:55. Roderick & Stephens, 1978:4,131,158).

The Great Depression of the 1870s to 1890s, and the pace of technical change in industry, also led to the view that schooling should help maintain a stable context for capital accumulation. This context was seen both in terms of a willing and compliant labour force, and a stable environment in which business could operate. Industrial training in schools was seen as a way of shaping the 'social character' of the workforce. Schools should instill 'habits of regularity', 'self-discipline', 'obedience' and trained effort among potential employees.
The developing capitalist mode of production had created heavily populated cities, and this raised fears among owners of the means of production about the stability of social and economic life. In this context, education was seen as an 'antidote to the worst features of urban life' (Reeder, 1977; 75. See also Smith, 1980), and a tool which might somehow 'restore the relationships of community' (Reeder, 1977; 76).

Given the relative decline in Britain's manufacturing and trading performance, it might appear as if the mode of production had reached a stage conducive to the reforms in the meso-level of society advocated by industrialists and technical educators in favour of vocational education. However, there are two factors which call this into question. First, although a number of moves to support technical and vocational education were made by industrialists and technical educators, they remained relatively small and loosely knit groups. Indeed, the response of capital as a whole in this period was of marginal importance to the schooling system. It is true that a number of links were established with colleges and the foundations of cooperation with civic universities was begun. Furthermore, a number of organizations such as the National Association for the Promotion of Technical Education were established with the aim of bringing schools and the economy into a closer relationship. However, despite their efforts, those who acted to secure influence within schools were 'exceptional in being unusually conscious of the significance of specialised knowledge to industry' (Reeder, 1981; 181).
Secondly, other aspects of Britain's economic situation mitigated the potential influence of these industrial and technical reformers. In the late 19th century Britain was still a strong imperial power. As a consequence, the relative decline in its manufacturing performance was cushioned by the privileged trading position Britain enjoyed and the opening up of new markets in the empire. This enabled both trade surpluses and domestic industrial profits to be maintained. These two factors detracted attention from deficiencies which may have existed in the educational system in terms of scientific and technical education and, in the short term, made unnecessary the need to modify what was industrially an 'increasingly obsolete technological base' (Simon, 1965; 167). Britain's imperial status and development into a world financial centre (see Ingham, 1984) had further educational implications which mitigated the efficacy of calls for a greater component of technology in the education system. The demand for general clerical workers grew massively in the last two decades of the 19th century, and those employed by central government more than doubled during this time (Bernbaum, 1967). As a consequence, it was calls for general literacy and numeracy which received most emphasis:

The greatest shortage now remarked was not so much of technologists as of clerks, particularly in the capital but also in the great commercial centres of the Midlands and the North. So much was this the case that German clerks were widely recruited in the 1890s owing to the lack of supply in Britain itself. Towards the end of the century it was the need for schools that would provide a good educational grounding for clerical workers of all kinds that
received most stress (Simon, 1965; 167-168. See also Cotgrave, 1958; 51-2).

Britain's industrial output and trading position were declining in relation to its competitors. However, its imperial position in the late C19th provided alternative economic opportunities. While the relative decline of Britain's economy was storing future problems for the nation, politicians and industrialists could, in the main, look to the empire for an expansion of investment and trading.

In contrast to first impressions, then, the economic base did not appear an entirely conducive context for the success of those reforms advocated by industrialists and technical educators. Furthermore, the peculiar nature of the British ruling class did not help the reformers. As members of the aristocracy continued to dominate key posts in government (Ingham, 1984), the view that the function of education should be to 'teach people their place', rather than equip them with skills necessary for an industrialised nation, remained important.

The influence of a mode of production does not, however, operate in an unmediated manner and before anything less speculative can be said about the development of technical and vocational education, other factors need considering. In particular, the interaction of class conflict with sites in the meso-level of society had an important bearing on education.
b) The organization of education in the late C19th

In the previous section, I examined aspects of the relationship between the capitalist mode of production in Britain and the actions of industrial and technical reformers. However, 'education system' has been treated as a given rather than something which needs exploring. This is inadequate as the specific organization of the system which developed in C19th Britain is of vital importance in explaining the impact of economic factors. Furthermore, as Therborn makes clear, while class struggle affects education-industry relations, the outcomes of these processes occur in specific sites (Therborn, 1984).

Prior to the mid nineteenth century, education was provided largely by the 'voluntarists'. Church schools, dame schools, charity schools and Sunday schools made up the major provision of schooling, and funding was provided largely by parental fees (Roderick, G. & Stephens, M. 1978; 12). This educational 'system' was far from extensive and as a consequence there were large discrepancies in the amount of education received by different social classes (see Roderick & Stephens; 16-17).

The class based educational system which developed during the first half of the C19th was consolidated in the second half. The Education Act of 1870 laid the foundations of a 'highly organised and strictly segregated system of [elementary] schooling designed specifically for the working-class' (Simon, 1965; 112). Despite the extension of schooling this represented, pupils at elementary schools received only 'strictly circumscribed teaching up to the school leaving age which...could be as early as ten' (Simon, 1965; 112).

The main concern of national education policy at this time was to create a literate society; an aim connected with the desire for a
workforce which could service Britain's imperial role. Measures
designed to produce this included the introduction of a payment-by-
results scheme which ensured that drill teaching methods and the 'three
There was also to be an increase in the number of schools. This was
achieved by the creation of School Boards whose members were elected by
ratepayers and given the right to raise a penny rate for the purposes of
filling 'gaps' in educational provision. The results were that by 1880
about 3,500 new board schools and 6,000 new voluntary schools had been
built. In this same year the government passed an additional Act which
made full-time attendance at school compulsory for all children between
five and ten years (Roderick and Stephens; 18). However, it was not
until 1891 that an Act made elementary education free and even this did
not guarantee access to all of those eligible (Simon, 1965; 112). The
predominance of child labour and poverty among the working-class meant
that many children were unable to attend school. Even at the beginning
of the C19th, one third of the population were insufficiently fed and
clothed (Bernbaum, 1967; 8). As Marx said about other aspects of the
institutional level, people could not live by education alone. Rather,
it was their position in the mode of production which determined the
extent to which they could utilise schooling (see Marx, 1954; 86).

Outside of the elementary sector, schooling consisted largely of
privately funded grammar and public schools whose curricula followed a
classical aristocratic liberal tradition which mirrored that found in
the universities of Oxford and Cambridge. The working-class were
largely excluded from post-elementary education and it was not until the
1944 Act that fees were finally abolished for secondary schooling. The
educational system of this time, then, was far from comprehensive in its coverage and embodied large discrepancies in the schooling received by the ruling- and working-class. This was not just in terms of the quantity of education received, but in its quality. For example, technical education was excluded from the private education sector. However, during the first quarter of the nineteenth century, the increasing pace of industrialisation produced a widespread 'conviction' in society that industrial workers required a basic knowledge of science as related to their specific occupations. To achieve this, a variety of endowments helped technical education grow in the middle of the century through the establishment of evening schools. Technical and science classes, alongside others, were held for workers in public libraries, Mechanic's Institutes and night schools under government inspection (Roderick & Stephens, 1978; 2-3, 19. Johnson, 1976. Shapin and Barnes, 1976). Later in the century the payment-by-results schemes was relaxed, and technical education entered the elementary sector. Furthermore, in the early twentieth century, a special form of junior technical school was created which took young people from the age of thirteen for a two year course in technical and vocational training. By this time, industrial and commercial education was also available in a number of selective central schools. Nonetheless, technical education remained a subject confined mostly to evening and night school provision (Roderick & Stephens, 1978), and it was not until the inter-war period that state initiatives were to extend the development of technical education to schools. Even then, this was a problematic process. The organizational curricula division which had developed between the classics and technical instruction, led to a widespread perception that
the latter was suited only for those who were to enter manual working-class occupations.

In short, those industrialists and technical educators who campaigned for educational reform and accomplished local successes through their own financial support, operated in an institutional context where technical and vocational education was of low-status and a relatively rare phenomenon in the country's schools. Despite their action, the pre-existing arrangement of education across the institutional level of society was decisive for the fate of technical education during this time. This was reinforced by the relationship which existed between organized education and the labour market. Classical education dominated the elite universities, served the ruling-class and provided a career route into the elite professions. In contrast, technical education did not lead to well paid jobs with status, and was not a necessary element in career progress. Where training was needed, it was often provided on the job.

c) Class struggle.

It will become clear in what follows that class struggle did not encompass technical and vocational education as an important concern during this period. However, the agendas of the two major classes should not be neglected, as the development of class conflict through the late nineteenth to mid-twentieth century partly explains why technical education was to appear on the political agenda during the 'corporate' stage of industry-education relations. To neglect the concerns of conflict which led up to this would be to make invisible the
Influence and importance of class struggle in the development of vocational education.

As the central agendas of labour and capital were similar during the 'entrepreneurial' and 'collective' periods, I shall deal with them both mainly in this section.

The length of schooling that children received was a fiercely contested issue and occupied a central position in conflict of the period. In the context of great social class disparities in educational provision, the labour movement's main focus was on issues of access. This was important in itself for the development of technical education, as labour was not campaigning for its promotion in schools. Indeed, the labour movement was concerned primarily with ensuring that education was something more than industrially relevant.

In contrast to the current concern that schooling should be relevant to the demands of work (see Bates et al, 1984. Gleeson, 1987), the labour movements campaigns for free universal schooling in the late nineteenth and early twentieth century were inextricably tied to demanding an education which went beyond the stultifying conditions of work in a capitalist economy. This was expressed in protests against child labour:

The 'only possible excuse' for child labour was that it was educative, but since technological development had broken down the apprenticeship system this was not so; rather it was injurious to the physical, intellectual and moral welfare of the children (ILP Conference Report of 1896, in Simon, 1965; 140).
The labour movement campaigned vigorously for free education through the ILP, individual unions and the TUC (Simon, 1965:130-131). In addition to campaigning outside of the education system, the elected School Boards were a site within the meso-level where the possibility of popular control was seen to exist. Though there were criticisms of elementary schools, they were largely funded from local rates and taxes, and viewed as having 'the makings of a genuine system of people's schools' (Simon, 1965:123). Socialists, and others opposed to the existing education system, contested elections for places on School Boards and were able to exert influence in parts of the country. From these positions, a number of reforms were sought to improve the quantity and quality of the education received by working-class children and remove some of the divisions within existing provision. The most important issue concerned free education, but pressures for reform included free school meals, leisure facilities and a reduction in class sizes. Progressives on School Boards also sought to end the payment-by-results system and corporal punishment, and wanted a stop put to the Church's extensive involvement in the education system. Individuals were also involved in efforts to achieve medical care within schools (Simon, 1965).

These educational issues were inextricably related to the position of the working-class in the mode of production. The labour movement sought social change through educational advance, and it was not surprising that their representatives met with opposition. For example, the fight against child labour had to continue beyond the First World War, as employers sought to maintain a cheap supply of workers (see Simon, 1965:355). In addition to the position of young people in the
labour market, there were other forces which impinged upon the
development of education. One of the more influential came from the
meso-level, in the form of those in charge of grammar and public
schools.

From the 1850s a number of grammar schools, which had originated as
common schools serving children in their geographical locality, took
steps to transform themselves into residential schools which served a
single class and gained public school status (see Simon, 1965:98-100).
This process was aided by a bourgeoisie that was rapidly becoming
assimilated into the institutional educational life of the previously
ascendent aristocracy. It had become the 'done thing' for capitalists
to send their sons to public school in order to receive an 'adequate'
social, as much as academic, education (Weiner, 1985). The formation of
The Headmasters' Conference in 1869, gave a coherence to these and
others which constituted the growing 'number of exclusive and expensive
boarding schools...(which formed) a system of schooling framed and
organised to the needs of the upper class' (Simon, 1965:103).

The strength of this public school movement was illustrated by the
successful campaign they fought against the initial formulation of the
Endowed Schools Bill (modified act passed in 1869). This Bill
threatened to exert a considerable measure of public control over the
schools in order to improve educational standards (see Simon, 1965:104-
105). That public schools were able to maintain their independent
status illustrates how schools can sometimes 'react back' upon the
development of other parts of the meso-level of society. Here, public
schools were able to prevent the extension of state power and maintain a
curriculum which excluded industrially relevant education.
The promotion of technical and vocational schooling was not, then, a major concern for large sections of the bourgeoisie or working-class. Struggle was dominated by issues of educational access. The private sector fought to maintain control over its classics dominated curricula, and representatives of the working-class were concerned with campaigning for a universal system of free education. Vocational schooling was also of little concern to individuals as it did not lead to a career path involving status or economic reward. As a consequence, it was left to the state to advance the cause of technical education.

d) The State

The government abandoned its attempt to achieve control and monitor standards over public schools through the Endowed Schools Bill. However, this does not mean that the state could be regarded as an instrument of the ruling-class which was protecting its schools, or a passive reflection of the balance of class forces at that time (see Jessop, 1982). The actions of the state went beyond the concern of those defending grammar and public schools, and illustrate how diversity and internal divisions characterised the very growth of the state in the nineteenth century (Corrigan, 1980). Different factions fought for power within the state, and the state itself faced a number of problems concerning the rapid development of industrial capitalism (Richards, 1980). As a result, it was quite feasible for the state not to carry through attempts to achieve greater control over public schools, while at the same time take steps to promote technical education through a series of commissions, reports and legislation.
In 1852, a 'comprehensive' programme for technical and science education was launched. A Division of Science was added to the Department of Practical Art to form the new Department of Science and Art. The main aim of the division was to encourage the teaching of applied science and various steps were taken to achieve this goal (Roderick & Stephens, 1978; 61). From 1860 onwards, Royal Commissions were sponsored to report on the education system and through 'numerous recommendations' they made clear that science and technical study was neglected by the country's schools (Perry, 1976; 29). Henceforth, the state played an important role in determining the fate of technical education.

The state cleared the path for technical instruction to form part of the elementary school curriculum when it relaxed the payment-by-results scheme in the last part of the nineteenth century. As a consequence, science and technical education became an important part of the curriculum in a number of elementary schools (see Roderick & Stephens, 1978). From 1872, in an attempt to stimulate technical education in the secondary sector, the Department of Science and Art gave grants to schools qualifying as 'organized science schools' (i.e. those which could satisfy the Department as having a substantial element of science and technical studies in their curriculum). These grants were also extended to some elementary schools which achieved 'higher grade' status after their School Boards established classes offering 'advanced' education.

Despite this action, subsequent Commissions and reports repeated earlier warnings concerning the lack of technical and scientific input to the British education system. For example, the Royal Commission on
Technical Instruction (the Samuelson Commission, published 1882-4) supported those who argued there was a 'mismatch' between schooling and the economy, and concluded that technical instruction should be greatly increased in endowed secondary schools and teacher training colleges.

In the late 1880s, the state took further measures to increase technical education. For example, the Technical Instruction Act of 1889 enabled local authorities to raise a penny rate for the support of technical education. This was followed by the Local Taxation Act of 1890 which allocated money from customs and excise duty (the 'spirit' or 'whisky' tax) to local authorities for the possible use of financing technical education. The amount of money spent on technical education grew, as did its provision. However, there was a reluctance among local authorities to raise money through the rates. Indeed, an analysis of the returns gathered by the Department of Science and Art in 1894 reveals that out of a total of 108 county councils and boroughs, 'less than a dozen were raising money under the terms of the Technical Instruction Act for spending on technical and manual instruction; the total income raised from this source was a mere £20,000' (Roderick & Stephens, 1978; 74).

The state was not, then, inactive in stimulating technical education during the late nineteenth century. However, the measures taken by government were of limited effectiveness, and by the First World War the provision of technical education was wholly inadequate in relation to the perceived 'needs' of the economy (e.g. Roderick & Stephens, 1972, 1978 & 1981. Perry, 1976. Guillou, 1981). Given that the government was unable to exert control over the curricula of the private educational
sector, this should not be a complete surprise. To omit the most prestigious schools in the country from plans to increase the provision of a curriculum is always going to cause problems. However, the classics dominated public and grammar schools were not the only cause of this situation at the end of the 'entrepreneurial' period.

Throughout the nineteenth and early twentieth centuries, the state was dominated by a liberal view of government. With few exceptions, state power should be confined to providing a framework which guaranteed the freedom of capital to trade, produce and buy labour (see Adam Smith, 1980). In practice this was not always an accurate guide to how the state operated, as the attempt to gain an element of control over public schools illustrates. However, the significance of a laissez-faire approach was evident in the type of (in)action taken by the state to develop technical and vocational schooling.

The government's general philosophy towards vocational schooling was revealed in 1859 through its attitude to scientific studies (see Cardwell, 1957; Roderick & Stephens, 1972; 14). Rather than an emphasis on state provision, it was hoped that science would spread from 'below upwards':

'It is to be hoped that a system of science instruction will grow up among the industrial classes which shall entail the least possible cost and interference on the part of the state'...[This] entailed minimal cost for the central government which wanted to be involved as little as possible, the emphasis being on local initiative (Roderick & Stephens, 1978; 62)
The minimalist interpretation of the state's role held by those in power may not always have been adhered to. However, it goes some way towards explaining the reluctance of governments to make the widespread and systematic changes required in the institutional level of society to ensure the substantial development of technical education. For example, despite the recommendations of the Samuelson Commission, they have been seen as 'conservative' in relation to the judgements made by the Commission concerning the reforms required to effect such changes (Roderick & Stephens, 1978;73). Although the Commission realised that in foreign countries the state subsidised heavily the cost of technical education, it appeared hampered by the view that the British state should play as minor a role as possible in the development of society:

It will be necessary to look...to local resources for any large addition to the funds required for the further development of technical instruction in this country (Samuelson Commission, Vol.1;515)

The state was far from inactive in its attempts to stimulate the provision of technical education during this period. However, although it provided what can be seen as 'enabling' legislation, actual developments in technical and vocational schooling were left to individual educationalists and industrialists. At this time, the state's approach to the curriculum allowed the meso-level space occupied by schools a substantial degree of autonomy.
Through an outline of a number of pertinent factors, a brief illustration of the context in which technical education developed has been provided. However, up to now emphasis has been on the economic climate in which demands for technical education were made, the organizational base of education, the importance of class struggle, and the general approach of the state, as separate forces. At the start of this chapter I emphasised that they did not exist independently, but shaped and formed each other in a dynamic interrelationship. I shall now attempt to isolate the specific combination of these factors from micro, meso and macro societal levels which accounted for the slow development of technical education.

Three major related factors provide an explanation for the slow development of technical and vocational schooling. First, the state pursued apparently contradictory aims in attempting to develop technical education, yet also opposing working-class educational advance. Secondly, the state gave primacy to maintaining an education system differentiated by social class. Finally, the links between the organizational context in which technical and classic education developed and the labour market, are important explanatory factors. Taken together, these factors illustrate how the forces I have examined from different levels of society, interconnect to form a totality in which the development of technical education is located.

First, the state can be seen as both for and against the development of technical education - or rather it took steps to develop school-based technical education for the working-class, yet not for the middle-classes. In fact, the state appeared riddled with internal contradictions (see Corrigan, 1980). On the one hand, it exhibited a
concern to improve the links between schools and the 'needs' of industry and to improve the standards of education generally in order to create a race which was 'vigorous and industrious and intrepid', as required for a country with an imperial role (see Simon, 1965; ch. 5). On the other, it was concerned to establish and maintain institutionalised differences between the education received by social classes. However, these 'contradictions' are, in fact, understandable concerns for a capitalist state faced with two demands. The state was faced with the need to maintain a supply of labour which would enable the domestic economy to compete in an increasingly competitive international context and maintain Britain's imperial role. It was also having to meet the rising social force of the working-class.

As has been seen, a number of Commissions and Committees pointed to the inadequacy of science and technology in schools, and the damage this could do to the economy. However, rarely did such reports undermine the institutional base occupied by those schools whose curricula paid scant attention to technical education. For example, the Clarendon Commission was critical of public schools, but concluded that 'among the services which they have rendered is undoubtedly the maintenance of classical literature as the staple of English education a service which far outweighs the error of having clung to these studies exclusively' (The Clarendon Commission [1864] Report vol 1 p 56 quoted in Roderick & Stephens, 1978: 168).

The seeming contradictions of a state which bemoaned the lack of technology and science in schools, yet refused to recommend wholesale changes in the education system is explicable. The state is not an homogeneous entity but is made up of a number of different permanent
and temporary) sites which are occupied by different people who may hold divergent interests. This is illustrated by the composition of the Clarendon Commission:

That the Commissioners should be so imbued with the value of classics is not surprising for they themselves were successful products of the system. In addition to the Earl of Clarendon (privately educated), the Commissioners included the eleventh Earl of Devon (Westminster and Christ Church, Oxford), the fourth Baron Lyttleton (Eton and Trinity College, Cambridge), the Hon. Edward Turner Boyd Twistleton (Balliol) and Sir Henry Strafford Northcote, first Earl of Iddesleigh (Eton and Balliol) (Roderick & Stephens, 1978:168).

Members of the aristocracy were serving on the state's Commissions and deciding, not surprisingly, that the schools which were continuing to serve the interests of their members were providing a fundamentally sound education for the nation. Now, it might be thought that to allow for the maintenance of what was considered by certain industrialists as an outmoded curriculum (see Reeder, 1981), was against the interests of the bourgeoisie. However, the situation is complicated by the fact that before the new ruling-class had achieved complete dominance over the aristocracy, a new opponent entered the scene in the form of an industrial proletariat threatening to extend the process of change.
In England, the bourgeoisie never held undivided sway. Even the victory of 1832 left the landed aristocracy in almost exclusive possession of all the leading Government offices. The industrial and commercial middle-class had, therefore, not yet succeeded in driving the landed aristocracy completely from political power when another competitor, the working-class, appeared on the stage (Engels, 1968; 390-391).

In this situation, the bourgeoisie 'preferred the renewal of compromise with the landed aristocracy to a compromise with the mass of the English people' (Marx, 1971; 220). Its role changed from being a motor force for change to attempting to prevent change. The 'renewal of compromise' meant that the British ruling class was not synonymous with the British capitalist class. Rather, the 'truce' between the bourgeoisie and the aristocracy was extended to the internal composition of the state. As a consequence, the bourgeoisie did not control the state in any simplistic sense, yet their power was used in the process of class struggle against the working class. In the sphere of education, this had to take place within existing institutional structures. One example of this process was how government Commissions were used to halt working-class educational advance.

As described earlier, the 1870 Act institutionalised educational class differences by providing separate elementary schools for the working-class. Elementary education was to provide working-class children with only 'strictly circumscribed' teaching. However, socialist success in School Board elections, coupled with wider class action by the labour movement, led to an increase in the educational
breadth and quality of many elementary schools. After only a short period of existence, some elementary schools taught a wide range of subjects, including technology and science, to a standard which enabled them to qualify for higher grade status (see Simon, 1965; 180). This trend may have been helpful to the economy, by providing an increased supply of technically educated labour. However, the Tory government of 1885 established The Cross Commission with the aim of reversing working-class gains, and its majority report made recommendations appropriate to this task. They argued that 'elementary' and secondary education ought to be strictly defined and delimited, the underlying assumption being that, for the working-class, education should be "elementary", but for the wealthier classes it should be "secondary" (quoted in Simon, 1965; 182). However, the different tasks facing the state were illustrated in the Commission's minority report. Its concerns reflected the demands made by industrialists, technical educators and others for an extension of vocationally relevant technical education:

The minority report...found that the higher grade schools were laying the basis for a widespread system of industrial, technical and commercial education. It was necessary to take a lesson from the continent where 'great efforts are being made to give a more extended elementary education, and to lead up through the elementary schools to technical instruction' (Simon, 1965; 182).

The dual concerns facing the state, of reversing working-class gains yet seeing the need for an extension of technical education, continued to
be evident at the end of the nineteenth and into the twentieth century. For example, in the last years of the nineteenth century, the Tory government changed the rules attached to the disposal of Department of Science and Art grants. This led to a reduction in grants to the working-class higher grade schools and their diversion to the Technical Instruction Committees (see Simon, 1965; 192). Superficially, this may seem to have been a move to boost technical education. However, in the context of the state's determination to ensure a dual system of education, and the 'liberal interpretation of technical education' made by the committees (Roderick & Stephens, 1978; 75), their development was clearly connected with reducing the flow of state finance to working-class education and diverting it towards the middle-class sites of grammar and public schools (see Simon; 237-238). A consequence of this was that developments in technical education were actually reduced. In short, it would seem that the Technical Instruction Committees did little or nothing to aid the development of technical education. This was because of their role as an organization involved in class struggle against working people.

The second reason technical education developed slowly was because the state's concern to cement an education system differentiated by social class took priority over the promotion of a technical curriculum. For the state to maintain secondary education as something different from elementary schooling meant recourse to the academic tradition of the grammar and public schools. To have two systems of education with the same curriculum would have presented problems of legitimacy. As a consequence, a parallel system of education could only be justified in
terms of something 'qualitatively different from what was provided in
elementary schools' (Simon, 1965:241). Indeed, this is exactly how a dual
system was justified and the existing grammar and public schools were
taken as the model for secondary schools of all kinds (Eaglesham, 1962).

The price of maintaining an education system differentiated on the
basis of class through the existing institutional structure, then, was
to reinforce the existing curricula in these institutions. The Liberal
Government's introduction of the requirement of 25% free places in
secondary schools in 1907, had the effect of fully establishing a
differentiated educational system. However, reducing the educational
progress of the working-class, was achieved only by reinforcing the
institutional position of a classics curriculum. This failed to meet
the demands of industrialists, technical educators, and those
politicians who argued in favour of an industrially relevant curriculum
to improve Britain's economic position and consolidate the country's
trading role.

It is the organizational context in which technical and vocational
education developed which constitutes the third important reason for
its failure to become widespread. From its origins, the growth of
technical education was associated with manual, working-class
occupations. It was strictly functional in scope and aimed towards
enabling a particular job to be done. As such, it evolved in opposition
to the 'mental' classics oriented education received by the aristocracy
and rising bourgeoisie. Consequently, 'technical education...became
associated in the public mind with the education of the artisan', the
philosophy of 'middle-class' education meanwhile being 'firmly based
on...a knowledge of classics' (Roderick & Stephens, 1978:2-3). From the
beginning of the nineteenth century then, education was perceived as having a content related to the social class of its recipients. This was reinforced by the different institutional contexts in which people were educated. The working-class received education at night-school, through participation in apprenticeships, and later through the introduction of elementary schooling. In contrast, the ruling-class received full-time education in the prestigious private education system.

The state left intact the links that public schools had with the traditional universities on the institutional level of society, the social role played by these educational sites, and their connection to elite jobs. As a consequence the traditional 'Oxbridge' universities remained dominated by a liberal curriculum which acted as an obstacle to the introduction of technical and science education in the public schools. As the Devonshire Committee noted:

Nothing...can have much effect on the grammar schools and middle-classes of the country, generally, until the universities which give the key to education in the country, allocate a fair proportion of their endowments to the reward of scientific studies. Till such knowledge 'pays' at the universities, the middle-class schools which look more or less to them, cannot be expected to change their course of instruction (The Royal Commission on Scientific Instruction, [1872] Appendix 1;15)

Part of this 'self-perpetuating cycle' was the interchange of personnel between public schools and the traditional universities. As Roderick
and Stephens (1972, 29) note, 'students who were taught classics in the schools continued their classical education at Oxford or Cambridge and returned to their schools as classics teachers.'

The Devonshire Committee identified the power of the Universities over the school curriculum. However, this was only a partial explanation for the slow development of technical education. The connections between public schools, the traditional universities and a classical curriculum, went beyond individual and cultural interchange. The classics dominated curricula provided a career route for individuals to the most prestigious and economically rewarding occupations of the time. In other words, the development of the meso-level of society (which consolidated the position of a classics dominated curriculum), was not congruent with the functional efficiency of the macro-level (which required a greater input of technical training). The classical curriculum provided a vehicle linking the institutional level and the mode of production which helped secure its own dominance. As a consequence, the classics represented not just a reflection of cultural values (Wiener, 1981), but an economic resource which could lead to substantial financial rewards. The very fact that these schools could provide a route to elite careers made them attractive to fee paying parents looking to secure the future of their (usually) sons. Given these links, there would appear to be an economic rationality to the public school defence of their autonomy — and with it their curricula. If technical subjects were incorporated into these schools, grammar and public schools may themselves have been worried about losing their privileged institutional links between economically affluent individuals in civil society and elite jobs in the
economy. It is not surprising, therefore, that despite efforts made by industrialists, technical educators and initially the state, the private education sector remained dominated by classic liberal curricula (e.g. see McCulloch et al, 1985:10-11).

Conclusions

These examples illustrate how forces from the micro, meso and macro-levels were inextricably related to the development of technical and vocational education during the 'entrepreneurial period' of education-industry relations. It has been seen how the state was not able or ultimately willing to change fundamentally the existing education system. In the face of a growing labour movement, its major priority became the maintenance of a dual system of education which prevented the working-class from gaining access to secondary schooling. Unless the state had been willing to build a completely new system, which it was not, this priority could only be realised on the base of the existing education system. As the private sector taught a curriculum dominated by liberal classics, this had negative consequences for the growth of technical education. The institutional associations technical training had with manual labour and the working-class, made it a subject which stood in stark opposition to the 'pure' academic approach of public schools.

In contrast to science, which eventually managed to be presented as theoretical study in line with the public school curriculum (see McCulloch et al, 1985), technical education was unable to lose its manual, working-class associations. Technical education developed in the context of institutions meant to serve the needs of the working-
class, and this was illustrated by the place it occupied in Mechanics Institutes. Technical education was something received by the working-class attending evening-classes in their own time, rather than by those attending fee-paying schools in the private sector. It was often directly job relevant and was in contrast to the education received by the ruling-class. This virtually excluded any subject which could be seen as 'industrially relevant' (for an examination of Mechanics Institutes and their purposes see Roderick & Stephens, 1978;57. Shapin and Barnes, 1976. Johnson, 1976).

The state reinforced this dichotomy even when attempting to extend technical education. The Technical Instruction Act of 1899 allowed for the raising of extra revenues to extend industrially relevant education. However, even though 'technical education' was defined as concerned with theoretical 'principles', the Act was to 'especially benefit artisans' (Roderick & Stephens, 1978;73). As a result, the links technical education had with the working-class and 'practical education' were maintained.

The interaction of forces from micro, meso and macro-levels of society during the 'entrepreneurial' period, established trends of central importance in shaping technical and vocational education throughout the twentieth century. The development of technical education was not determined by forces from any one societal level, but by an interconnection of elements from all levels. The declining performance of the capitalist mode of production in Britain provided a context in which certain educators and industrialists were prompted to call for an extension of technical schooling. However, economic decline
was not sufficiently severe to curtail the autonomy of forces from the meso-level. As a result, the public school movement and elements of the state were able to defend private education from government attempts to curtail its freedom and promote technical education. Furthermore, the career path afforded by a classical curriculum, gave little incentive to even those members of the bourgeoisie who saw the need for technical education, to promote it in their children's schools.

The importance of the events during this time was evident in the inter-war period when, despite state initiatives, technical and vocational schooling continued to be marginalised within the meso-level of society.

The 'Collective' Period.

a) The economic context

After a brief period of post-war growth, most of the 1920s was characterised by an economic recession, a recession which grew worse at the beginning of the 1930s. The trade and manufacturing opportunities provided by Britain's imperial role had diminished and while there were over a million unemployed in 1923, this figure grew to around the three million mark by 1933 (Bernbaum, 1967; Simon, 1974). Apart from brief signs of economic recovery in the mid-1930s, employment and growth did not really improve until the rearmaments programme which preceded the Second World War. However, there were important new trends in education-industry developments which had implications for technical and vocational schooling.

The dominant mode of education-industry relations in the 'collective' inter-war period was characterised by industrialists who
coordinated arrangements to exert pressure on the education system. Approaches by individual firms still played a central part, yet they were gradually superceded in importance by joint action.

The onset of this 'collective' mode of intervention has been seen as the 'inevitable outcome of the changes which began to take place during the first half of the C20th' (Esland & Cathcart, 1981:89). As a result of competition and the search for new markets necessary for the continued realisation of surplus value, capital became concentrated in fewer firms, while their size and scale of operation grew (see Marx, 1968:71-93. Sweezy, 1972). In this volatile economic environment, there was a considerable divergence in the performance of individual firms and different industrial sectors. This was evident in the continuing relative decline of the traditional industries, compared with the better fortunes of those 'new' industries developed in the last quarter of the nineteenth century and based on the techniques of science and technology.

The importance of applied technical and scientific research for these new industries grew rapidly after World War One for two main reasons. First, the military demands of the war gave an impetus to research as a result of the state dropping its laissez-faire role and organizing resources in such areas as radio, aircraft, motor vehicles and synthetic fibres (Sanderson, 1981:206). This served as an illustration to industry that universities, firms and government departments could be geared successfully to the solution of specific research problems. Secondly, the sheer scale of many chemical and mechanical processes meant that research to ascertain the feasibility of new operations was an economic necessity. As Sanderson notes, with mass
production 'modification on the job became far less possible when vast capitals had been sunk in plant for processes which scarcely allowed any possibility of interference when they were in train' (1981;206). As a consequence, applied research was becoming essential to the efficient operation of growing sections of industry.

In addition to the individual firms who formed their own research departments, a number of industrialists acted collectively in order to promote commercially 'relevant' education. In 1919 the Association for Education in Industry and Commerce was formed, and this was followed in 1931 by the British Association for Commercial Education. The two organizations merged in 1934 and sought to establish and promote an 'employer' view on education, and create systematic links between industry and education (see Perry,1976. Esland & Cathcart,1981). Employers with an interest in the educational system went beyond those operating in the field of science and technology. Indeed, during the inter-war period the demand for university education of all types grew, as many firms sought labour which was better qualified than that of the previous century. University education was becoming a pre-requisite to obtain a career route in these firms. One important reason for this was capital's need for individuals who could manage an 'increasingly complex organisational basis of production' (Sanderson,1981;207). This view was supported by the Liberal Industrial Inquiry of 1925 which saw the increasing size and complexity of industrial operations as a reason for selecting administrators with 'the broadest and most highly educated outlook' ('Britain's Industrial Future...Report of the Liberal Inquiry' cited in Sanderson, op cit).
The extent of technological change had become an important reason for sectors of industry to forge new links with the education system. On the one hand, the means of production had grown in technological sophistication and required research to ensure the efficient operation of the productive process. On the other, there had been a growth in the scale of units in which much capitalist production was conducted. Rather than technological expertise, this required individuals with a high standard of general education able to manage and coordinate efficiently the interactions between capital and labour in the firm. However, it was universities and colleges, rather than schools, which benefitted from the financial aid given by such companies as ICI, GEC, Shell, Debenhams and Imperial Tobacco (see Sanderson, 1981; 217).

In addition to action taken within higher education, industrialists did attempt to influence schools. Secondary schools provided what was seen as an inadequate training in relation to the continued demand for typists, clerical assistants and school leavers with general administrative skills (Musgrave, 1967. Simon, 1974. Reeder, 1981). Industrialists also complained about 'deplorably low standards in elementary and mental arithmetic' and that schools failed to give a broad enough training for 'general intelligence and adaptability' (Reeder, 1981; 186). As Simon notes, these complaints were aimed at different educational sites depending upon their perceived economic function. There was a widespread view among employers that the function of secondary schooling was 'to provide clerical workers on the new scale required by commerce and banking...[and]...build up a corps of teachers or feed other lesser professions.' In contrast, elementary schools should 'prepare manual workers for work with their hands in industries.
which made comparatively few demands in terms of skill over and above what could be acquired on the job' (Simon, 1974; 252).

Employers were generally satisfied with the few junior technical and trade schools established before the war. However, most of their efforts were not directed towards extending technical education through these schools. That which was required, was often provided directly by employers through the apprenticeship system (Perry, 1976). Rather, the dominant concern of employers in the interwar period was that elementary education should promote among the working-class 'a good character, qualities of subservience and general handiness' (Reeder, 1977).

In this period, employers developed an increasing sophistication in terms of the differentiated demands made of separate educational sites. It was not simply that capital wanted the 'education system' to promote a series of relevant knowledge, skills and attitudes. Rather, it was institutions of higher education that were targets for the establishment of industrially relevant research, secondary schools that should provide the numeracy and literacy required for administrative posts, and elementary schools that should provide a willing and reliable form of manual labour. This differentiation was not just meaningful in that it encompassed separate educational sites, as these sites themselves were divided by social class. It was, therefore, sections of the ruling-class that industrialists looked to for researchers and highly educated candidates for management, and the working-class for manual and lower clerical workers.

The vast majority of attention and resources given by capital to the education system was in the higher education sector. It was the modern colleges and universities which could be used for industrially relevant
research work where employers stimulated technical, scientific and vocational education. However, as in the 'entrepreneurial' period, there were reasons why most firms were not concerned with any form of technical education.

First, although increasing numbers of recruits were drawn from the universities during the inter-war period, it was general knowledge and attitudes which were sought more often than specific vocational skills (see Sanderson, 1981:209, 220). Secondly, in contrast to that large capital which relied upon applied research, many smaller firms had no such incentive to form links with the education system. Not only were a large number of firms unwilling to support technical education in general, they refused to provide training for their own workers. As Esland and Cathcart (1981:90) explain, they were incapable financially of doing so on a full-time basis, and they were unenthusiastic about day-release schemes which were viewed as disruptive to work. Furthermore, the increasing separation of the conception and execution of tasks in the production process meant that in many firms work had become deskillled. As a consequence, technical education was simply not necessary (see Braverman, 1974).

The varied responses of employers reflects the different needs of firms which operate in the same mode of production. However, when applied education and research was established, it was in higher and further education rather than in schools. Nonetheless, firms of all sizes had an interest in the production and realization of capital. To have children inculcated with knowledge and attitudes conducive to work in capitalist society was a general interest for industrialists, and it
was this which constituted the major concern for employers with regards to the schooling system.

b) Class struggle

Issues of access to the education system were central to class conflict in the inter-war period, just as in the late nineteenth century. The sacrifices made during World War One had led to demands for social change after the war, and the education system was seen as a vehicle which could aid this process.

The TUC brought into focus aspects of macro, meso and micro-levels of society through their campaigns against the extension of child labour during the war, the economy drive, and the reduction in the small number of free secondary school places. Instead of these conditions, the unions advocated widespread reform of the institutional level of society through an increase in the number and capacity of secondary schools (e.g. see Simon, 1965; 346). Although elementary schooling was now widespread, few working-class children had any sort of secondary education. However, employers opposed general educational expansion for reasons of economy and sufficiency. Industrialists benefitted from cheap labour provided by juvenile workers, which also served to keep down adult wages (Simon, 1965; 355 1974; 222). While employers may have benefitted from an appropriately socialized young workforce, many also believed that if educational opportunity was extended, the working class would be less suited to the mundane labour they had to perform in future work roles (Simon, 1974; 61). As the labour movement viewed education as a central part of the struggle for a new social order, such worries were not surprising. Furthermore, despite the establishment of industrially
relevant research by such firms as ICI, the majority of employers were primarily concerned with keeping educational expenditure within 'reasonable' limits. This was reflected in the recommendations of the Geddes Committee, a group of businessmen appointed by the government in 1921 to examine all state expenditures for the coming year and advise on financial economies (Bernbaum, 1967; Simon, 1974).

Proposals to reduce educational expenditure in the inter-war period were opposed by the labour movement and others interested in extending the state sector (e.g. Simon, 1974:184). Coordinated opposition to the most drastic education cuts was largely successful. However, this failed to reverse the dominant governmental view that educational expenditure should be minimised where possible. The consequences of this were all too evident. By the mid-1930s, the reorganization of the secondary sector, which had been proceeding in line with the Board of Education's interpretation of the Hadow Committee's recommendations (1926), had been virtually halted. Schools were seriously underfinanced; there were inadequate supplies of textbooks and other equipment, and the school meals and medical services were deteriorating (Simon, 1974:191).

Expenditure and access were the two themes which dominated the politics of education, not the position that technical and vocational schemes occupied within the country's schools. Neither capital nor labour were pressing for the extension of technical and vocational education in schools. Once again, it was left to the state to initiate developments of importance to technical and vocational education.
c) The state and education in the inter-war period.

During the First World War, the role of the state expanded to coordinating individuals, institutions and owners of capital in order to maximise the war effort. Although the rhetoric of politicians may have been concerned with reducing the role of government to its pre-war position, it was now clear that state interventionism could successfully pursue a variety of social, economic and political aims (see Gamble, 1985).

Despite the state's growing role and two brief periods of Labour rule, government was usually seen as synonymous with the Tory party who were considered the representatives of capital (Simon, 1974). However, insofar as the development of technical education was concerned, class interests were not necessarily a good guide to state action. True, the public schools with their classics dominated curricula were left intact. Nonetheless, there were several reasons why the demands made by capital for reductions in state expenditure did not appear to be in the long-term interests of maintaining a stable context for capital accumulation. First, increasing levels of unemployment were not just against the interests of labour. To have large numbers of unoccupied people 'roaming the streets' could be construed as a threat to the conditions best suited to profitable accumulation (see Reeder, 1977; Muncie, 1984 ch.2). One way of dealing with this was to absorb the age group most at risk into the education system. As it was young people who were disproportionately affected, the 'question of raising the school leaving age naturally came into focus' (Simon, 1974; 119). Secondly, the success of the Bolshevik revolution and the growing militancy of the British working-class, which culminated in the General Strike of 1926, served to
disturb traditional patterns of conceptualising education policy. As Simon notes, the concern for stability and social control made the state think about education as something more than a financial burden:

Such fears prompted a new understanding of the need to meet reasonable aspirations for a better education and not merely because these exercised an influence on votes, but because here was an opportunity to influence minds in such a way as to contribute to the stability of the social order... a skimping of education for the workers might be far from political wisdom; much better to develop education, of a kind that enabled the working class to see the benefits of maintaining the social order (Simon, 1974; 123).

The state's concern for the possible effects of mass youth unemployment and working-class militancy were not the only reasons for the gradual acceptance of expansionist educational strategies. The shortage in educational provision after World War One was manifest by the thousands of working-class children who qualified for free secondary places yet were unable to be accommodated. Moreover, the shortage of educational provision was also evident in the many thousand more who were seeking, yet not finding, places reserved for fee payers. This affected a much wider section of the population who were unable to afford the fees of the public schools (see Bernbaum, 1967; 15. Simon, 1974; 18). Now, the power of the ruling class in developing and maintaining the autonomy of their own private education had already been demonstrated in the late nineteenth century when the state failed to gain greater control over public schools. To leave educational provision in its obvious
state of shortage after the war would have meant the possibility of growing opposition from a wider section of the population.

As a consequence, educational expansion could be justified both in terms of the threat to the status quo posed by an increasingly militant labour movement, and also by the possibility of the state losing its own basis of support. The danger for the state was that these combined factors could have posed a threat to its dominance through a widespread loss of legitimacy (see Jessop, 1982; 241-252). In this sense, the state was performing something of a balancing act. On the one hand, it could only operate given the successful production and realisation of surplus value, and many employers were demanding a reduction in state expenditure in order that conditions conducive to this process, and hence to the operation of the state, be maintained (e.g. see Simon, 1974; 165). On the other hand, the state faced a 'legitimation crisis' (Habermas, 1975) among the labour movement and other sections of the population. The action which would support the demands of capital were the opposite to those which might bolster the credibility of the state. It appeared that with regard to educational policy, the state was facing a situation where its 'contradictory functions' had come into sharp focus (see O'Connor, 1973, Dale, 1982). The steps which would help the profitability of the macro-level, would also harm the meso-level space occupied by the state.

The conflicting demands faced by the state were represented by the positions adopted by the Board of Education and the Treasury. While the Treasury adopted the perspective of capital in advocating financial economy - a position which frequently dominated plans for educational expansion (Simon, 1974, Bailey, 1987) - the Board attempted to carry
through educational expansion. This expansion, though, was itself directed towards considerations of social control and economic development. The Board hoped to satisfy demands for increased educational provision, and bring into a closer relationship education (meso-level) and the 'needs' of the economy (macro-level).

The thinking taking place within the Board of Education was reflected in its attempt to expand technical education through elementary and secondary schools. From the mid to the late 1930s, the Board of Education instituted a survey (The T-Drive) with a view to 'developing proper supervision for technical training in those areas where...the existing facilities are not adequate' (President of the Board of Education cited in Bailey, 1987:50). The Board's rationale for the T Drive was linked to the economy. As evident in the Boards Circular (1444), the aim was to supplement the organization of education in a way which would improve the performance of the mode of production (see Bailey;56). The Board's survey identified over 300 projects in schools and further education which were necessary if industry was to be adequately serviced by the education system. It coordinated with local authorities in an attempt to ensure that these were carried through.

An increase in the provision of technical education was not the only way in which the basis for educational expansion was laid during the inter-war period. Most significant was the 'policy of planning a transition to secondary education for all' carried out by the Hadow Committee (1926), and its subsequent interpretation by the Board (Simon,1974;116).
In its proposals for reorganization, the Hadow Report recommended that all post eleven years education should be classified as secondary education. Secondary education should be regarded as an 'organic whole'. This required the introduction of secondary education for all under a common code of regulations providing for parity of staffing and conditions, and the abolition of fees and the installation of adequate maintenance allowances (Simon, 1974; 140). In order to make education an organic whole, the committee recommended that the school leaving age be raised to 15 years to ensure a four-year course of post primary education. However, this expansion was to be accomplished by bringing existing educational sites together. As Simon (1974;128-129) explains, this arrangement encompassed existing class inequalities where children were educated for different occupational roles.

The Board chose to emphasise the differentiated nature of the Hadow Report's recommendations and made it official policy that local authorities should provide 'secondary' education for the majority of the working-class simply by dividing the elementary system into two stages, primary and post primary (Simon,1974;139-140). Furthermore, the Board continued to charge fees for entry into existing secondary schools. As the NUT recognised, this development preserved 'the tradition of class differentiation' and allowed status distinctions between post-primary schools to continue (Simon,1974;140). As in the 1870s, the education system developed on the basis of pre-existing inequalities. Secondary education for all was not to be equal education for all and parity in length was not the same of parity of quality (Hadow Report,1926;78-79).

The state did not seem to have learnt the lessons of the previous period, when building on the basis of the differentiated nature of
existing educational provision meant incorporating pre-existing curricula divisions. The Board's officials recognised the importance of technical education. However, their main priority was 'to maintain the academic curriculum inviolate which in turn necessitates a separate institution' (Simon, 1974; 156). This was to significantly influence the development of technical education.

The state was taking on a role which sought to create and harness educational organizations within the meso-level of society, as a way of improving the operation of the macro-level. As the shortages of administrative staff during the nineteenth century had shown, education and training had never been totally separate considerations from the performance of capitalism. However, during the inter-war period, the connections between meso and macro societal levels were explicitly recognised by the state. Full-scale strategies emerged which attempted to develop education in general, and technical and vocational schooling in particular, in a way which would ensure a stable context for accumulation and provide a work-force with the knowledge, skills and attitudes desired by capital. However, despite the initiatives taken by the state, by the outbreak of the Second World War only twenty-one of more than 300 technical projects identified as necessary by the Board's T Drive had been started (Bailey, 1987; 61). Furthermore, reductions in state expenditure had halted the Hadow Reorganisation, leaving many local authorities with semi-completed plans.

These failures meant that by the end of the 'collective' period, the growth of technical and vocational education was confined largely to sites in two 'corners' of the education system. First, the coordinated
employer action which characterised education-industry relations of this time resulted in the operation of applied technical and scientific research in a growing number of higher educational sites. Here, the concern was to ensure the efficiency of a production process increasingly reliant on technological change. Secondly, technical education occupied a place in educational sites designed for the working-class. Far from being concerned with servicing high level technological change within the economy, its purpose here was with equipping working-class youth with the knowledge, skills and attitudes necessary for manual labour, and maintaining their subordinate position within capitalist social relations of production. Industry had managed to penetrate higher education to a greater degree than in the 'entrepreneurial' period, but the 'employer view' on education which the merged AEIC and BACE attempted to promote, was unable to influence most of the schooling system.

The state had made important initiatives in an attempt to extend technical and vocational education. However, with the failure of the Board's T Drive (and the collapse of the Juvenile Unemployment Centres, see Horne, 1983), the position of technical schooling was largely unchanged at the end of the Second World War compared to the 'entrepreneurial' period. The actual reasons for this situation illustrate the importance of the interrelationship of forces from different societal levels as they developed through space and time since the late nineteenth century. In particular, the interaction of three factors proved decisive for the continued marginalisation of technical schooling. These were the role of the state in attempting to develop technical education in the context of an economic recession; the
emphasis given by the state to the continued development of an education system differentiated by social class; and the organizational base of the education system in which these attempts were made.

First, as in the late nineteenth century the way in which the state promoted technical and vocational education appeared contradictory. Despite state initiatives to establish industrially relevant technical education there was no attempt to alter the pre-existing structure of the education system. Rather, state attempts to increase the provision of technical education centred largely on the working-classes. For example, with reference to proposed continuation classes, the Lewis Report (1917) argued that working class children should 'be as far as possible classified according to their occupations' (see also the Fisher Act, 1918). Even here, the Board faced constant opposition from the Treasury and this appeared a decisive cause of the ultimate failure of the planned expansion of technical education. Continuation classes ceased to operate in their original form, with the exception of Rugby's school (Bernbaum, 1967; 32-33), and few of the technical projects envisaged by the T-Drive had started by the outbreak of the Second World War (Bailey, 1987). The government's programme of Juvenile Unemployment Centres met a similar fate. As Addison (1975; 33) notes, it appears that 'the pace of change was left to be determined mainly by the permanent officials of the Treasury whom Keynes described in 1939 as one of the main obstacles to a more progressive social and economic outlook'. In short, competition between organizations within the meso-level of society prevented the promotion of a curriculum designed to facilitate the development of the macro-level.
Secondly, the Board of Education's interpretation of the Hadow Report and its subsequent instructions for reorganization were based on the aim of maintaining the differentiated nature of the schooling system. It was this objective that was of primary importance to the Board. As Simon (1974:148) comments, 'the great contribution of the Board's experts to the cause of education in the later 1920s was to keep the elementary school elementary'. As in the 'entrepreneurial' period, the state acted to limit the extent of educational advance made by the working-class. A similar justification was also employed. The differentiated system existed because it provided qualitatively separate forms of education which suited individuals of different inclinations and abilities.

The state sought to justify the differentiated nature of education and also legitimate the position where the working class was usually confined to the lower end of this system. It also left intact the autonomy of public schools. However, this action had serious implications for technical education, as the context for state action was a system which virtually excluded industrially relevant schooling from the curriculum received by the bourgeoisie. Applied research was the exception, but, as has already been illustrated, this was to be found only in higher education as a direct result of industrial sponsorship. As a consequence, technical and vocational schooling was confined to the elementary sector.

The third reason for the slow development of technical and vocational schooling in the 'collective' period, concerns the organization of the education system, a system which still had its roots in the nineteenth century. It was not that the meso-level pace
occupied by the education system had complete freedom from constraint. However, state action had created a context in which this the school system had what Dale has termed a 'licensed autonomy' (Dale, 1981). Similar to the 'entrepreneurial' period, the classics dominated the private education sector and there was no reason for these schools to be receptive to industrially relevant subjects. Indeed, given the continued links public schools had with Oxford and Cambridge and elite jobs in the economy (e.g. Simon, 1974; 272), there was every reason why they should be resistant to the encroachment of technical and vocational education. Their curricula provided career routes which made them attractive to individuals.

The curriculum, then, was divided both institutionally and by social class. State initiatives and private institutions had only served to reinforce the working-class connotations which technical education had as a result of its development in the nineteenth century.

Conclusions
In examining some of the conjunctions of events important to the development of technical and vocational education in the 'entrepreneurial' and 'collective' periods of education-industry relations, I hope to have illustrated the importance of examining forces from different levels of society across institutional space and through historical time.

The interaction of the economy, state action, class struggle, the education system, and career routes, served largely to marginalise the position of technical schooling in the meso-level of society. This was a result not of the combination of a number of completely separate
factors, but the product of social features which constituted each other through their interaction. For example, educational institutions affect the career routes available to individuals as a result of the clientele they cater for. They also shape the viability of state initiatives in technical and vocational schooling, and affect the efficiency of the mode of production in terms of their ability to produce individuals equipped with the knowledge, skills and attitudes suited for work in capitalism. This general trend hid some exceptions. A number of industrialists continued jointly to advocate the development of technical education in schools, and major companies such as ICI expanded considerably the applied research which had been established in civic universities during the 'entrepreneurial' period. However, these examples were not representative of technical developments in the school system.

The factors examined in this chapter were important to the development of technical and vocational schooling. However, the 'licensed autonomy' of the meso-level space occupied by the schooling system, can be seen as of 'deciding' importance during the 'entrepreneurial' and 'collective' periods. When technical education was promoted, the existing arrangement of educational organizations led to its differentiation on the basis of social class. For the working-class, technical and vocational schooling was to lead to manual labour and the inculcation of attitudes appropriate to a subservient role in the economy. In contrast, students in higher education were trained in those skills required to facilitate the operation of production in technologically sophisticated plants. As a consequence, 'technical and
vocational' education took on a different meaning depending upon its location in the education system.

Elements within the state had made serious attempts to ensure that education would service capitalism, yet these were largely unsuccessful up to the time of the Second World War. However, the meso-level space occupied by the schooling system was to become increasingly penetrated in the 'corporate' period of education-industry relations. The state faced a severe crisis in the mode of production, and decided to take measures which would bring into a much closer relation the education system and the economy.
NOTES

1. One of the few writers to have taken such factors into account is Brian Simon. As a consequence, his work is drawn upon extensively in the following chapter.

2. Science encountered a number of difficulties in gaining access to ruling-class educational sites. However, it was more successful than technical and vocational education, and its progress is a separate issue.

3. David Reeder identifies more than two forces in his account. However, these others are primarily important for the progress of scientific, rather than technical education.

4. This illustrates how the growth of education was also connected to Britain's development as a racist, imperialist state.

5. As a result of the interrelationship which existed between industry, the state, the economy and the education system, the term 'entrepreneurial' needs to be seen in the context of the opportunities and limitations set by the social whole as a totality, rather than as indicating the choices made by industrialists in any voluntaristic sense. This is also the case for 'collective' and 'corporate' periods of education-industry relations.
The 'corporate' period.
Since the Second World War, the British economy has become increasingly dominated by multinational companies and internationally oriented interests located in the City (Ingham, 1984). In this context, education industry relations shifted from a 'collective' to a 'corporate' structure, and the meso-level space occupied by schools was subject to greater control. It is not that 'collective' or 'entrepreneurial' arrangements disappeared. However, the most important education industry relations of the 'corporate' period were dominated by two main features. First, through sponsorship and direct involvement in further and higher education, business has affected the content and direction of educational institutions to a far greater extent than previously. For example, in contrast to the primarily local concerns of the civic universities in the nineteenth century, two national business schools were established in association with London and Manchester universities. National industrial involvement was also evident in the establishment of new universities in the 1960s. At Lancaster, the Institute of Marketing endowed a chair in marketing, and at Warwick the Institute of Directors endowed a chair in business studies, and Barclays Bank one in management information systems (Esland & Cathcart, 1981). Secondly, interests from both sides of industry have come to play a direct, if not equal, role in educational policy through tripartite arrangements with the state. For example, employers and unions are represented on the Manpower Services Commission, the body responsible for TVEI (Dale, 1985). The involvement of employers is also in
increasing feature of the Mini-Enterprise in Schools Project (MESP) (DTI, 1986). Industry has come to exert a direct influence on education policy in general, and the school curriculum in particular. At no time during the previous century was business involved in national school-based technical and vocational schemes, such as TVEI and MESP, which encompassed mainstream secondary provision.

The economic context and class struggle

The development and conjunction of the mode of production and class struggle since the war can be divided into two main phases. The period until the early 1970s saw the labour movement achieve considerable success in increasing living standards and expanding the provision of public services. During this time, the economy was largely buoyant, despite its underlying weakness, and enabled significant changes to be financed in both the scope and content of the education system. In contrast, the 1973 oil crisis marked a watershed in the deepening economic recession. This period was a time when many of the post war advances made by the labour movement came under threat. Successive governments sought solutions to the crisis which aimed to restore the viability of capital by placing the costs of recession on sections of labour and the family (Gardiner, 1983). The education system, in common with other areas of the state sector, has come under scrutiny in terms of its size and role, and a number of forces have sought to reorientate the content and direction of schooling towards the perceived needs of the economy (Hall, 1983).
a) **The immediate post-war period**

The Second World War left Britain in substantial debt, yet with a major role to play in reconstruction. This necessitated the maintenance of costly military expenditure (Gamble, 1985:109), and from this time onwards British capital failed to reach the rate of productivity growth achieved by its major competitors. For example, by 1970 increases in UK industrial productivity were well below those of the United States, France and West Germany (Glyn & Harrison, 1980). However, despite Britain's relative decline, the immediate post-war period was still one of growth and increased living standards for many sections of society (Gamble & Walton, 1976). Unemployment was a mere 1% in 1950 and for the next fifteen years there were no major increases in this figure.

Significant changes also took place in the education system, changes which altered fundamentally the context in which technical and vocational schooling developed.

The sacrifices made by working people during the war led to expectations that government would ensure an improvement in living conditions once the fighting was over (see Addison, 1975). In this context, the labour movement's campaign for universal education was finally successful. Following the 1944 Education Act, a tripartite system of schooling was introduced which included a number of technical schools elevated to secondary status. However, although schooling was for the first time universal, differentiation and inequality remained. The bourgeoisie dominated the grammar schools (Bernbaum, 1967:114), and the relative chances of going to university for the manual working-class remained static. For example, in 1960 as in 1928-47, sons of non-manual workers were six and a half times more likely to go to university than
sons of manual workers (Griffiths, 1971; 22. See also Banks, 1976; 20). As was previously the case, the educational organizations which catered for the most affluent, provided privileged career routes:

Not only was [the grammar school] the only [state] school leading to the universities and professions... but also it had long been associated with entry to white-collar rather than manual employment (Simon & Rubinstein, 1969; 59).

As Banks (1955; 7) notes, parents were unlikely to accord equal favour to all three types of secondary education while grammar schools provided the chief avenue within the state system to elite occupations. Indeed, a growing number of parents complained when their children were not selected for grammar schools, and substantial sections of the labour movement expressed their dissatisfaction at the tripartite form of the system (Parkinson, 1970). For a growing proportion of the population, the continued institutionalisation of different career routes within the educational system was unacceptable. This dissatisfaction grew into a movement that not only opposed the tripartite system as it stood, but was in favour of comprehensive schooling. For example, in 1963 several local authorities expressed their desire for a change in secondary organization. In the same year, Liverpool Education Committee announced its plans for comprehensive reorganization throughout the City.

The establishment of universal education, and the subsequent trend towards comprehensive schools, was crucial for the development of technical and vocational education. The 1944 Act raised technical schools to secondary status, and altered fundamentally the context in
which calls were made for closer education-industry links. Technical educators could now point to schools for where students were specially selected to pursue an applied course of education. These schools were not without their problems, though, and the Association of Heads of Secondary Technical Schools (AHSTS) was formed to fight the reluctance of certain exam boards to include technical subjects for metriculation purposes, and to defend generally these schools (McCulloch et al, 1985). Furthermore, the cause of technical educators was not helped by the generally poor support they received from industry.

Since the late nineteenth century, sections of industry had made a variety of attempts to promote technical and vocational schooling. The apparent decrease in their efforts during the immediate post-war period may appear a surprising departure from historical precedent. However, this situation can be explained by two related factors. As a result of changes in the demand for labour, industry's attention was directed toward those likely to progress to higher education, rather than technical schools or the school system in general. Another factor which deflected the focus of industry from the role of schools was a decreasing concern about the maintenance of a stable context for capital accumulation. The growing prosperity of the post-war years, reduced the threat of social unrest.

First, there had been a shift in the concerns of industry regarding the labour supply. The growing technological sophistication of the western economy directed attention toward the continued need for labour which was highly qualified in scientific, technical and business specialisms. For example, the Federation of British Industry expressed concern about the shortage of engineers in the 1950s and concluded that
the character of grammar school science was was a major cause. However, the FBI was less concerned with the cultivation of specific skills in those still at school, than with redirecting the interests of 'high ability' students who might be persuaded to study engineering at university. In a similar vein, the education committee of the Institute of Mechanical Engineers responded to the inadequate supply of high quality recruits by establishing a sub-committee which focussed on recruiting to the profession students from grammar and private schools (McCulloch et al, 1985;122-3. See also p.133). In 1965, the FBI became more explicit about such aims and, in its report 'Industry and Schools', urged teachers to 'redirect the abilities and enthusiasms of abler students towards the applied sciences' (Reeder,1981;192).

Industry was concerned to recruit 'high level' specialist skills and redirect the interests of those likely to continue to higher education. As a result, technical schools and the wider aspects of education-industry relations tended to be neglected:

the FBI in general showed little interest in secondary technical schools, and concentrated its efforts upon improving awareness of applied science, technology and engineering in grammar schools (McCulloch et al,1985;118. Emphasis added).

Secondly, as a result of the low rates of unemployment which existed through the 1950s and much of the 1960s, and the general growth in living standards, there was no longer the widespread concern for schooling to play a part in maintaining a stable context for the accumulation of capital. Despite its underlying weakness, British
capital was relatively buoyant and the assumption implicit within the educational concerns of industry was that levels of employment and living standards would continue to generate a stable context for economic activity. Furthermore, although industrialists were still concerned about the inculcation of appropriate attitudes among the labour force, they were often satisfied with leaving this to post-school training in the form of apprenticeships (e.g. Musgrave, 1970; 152).

The concerns of industrialists were, then, highly specific. They were directed to specific meso-level educational sites; grammar schools which provided a career route in applied science, to technology and engineering in higher education. When the tripartite system came under threat, it was not technical schools that industry was mainly concerned with losing, but the 'excellence' of the grammar schools. However, as the underlying weakness of British capital manifested itself in the late 1960s, the post-war environment changed dramatically.

b) Domestic and international recession
In the mid-1960s, the underlying weaknesses in the performance of British capital became increasingly evident. The decline in profitability accelerated and there were the first signs of instability in the traditional Keynesian economic indicators (Bank of England Quarterly Bulletin, Dec 1978; 51. Glyn and Harrison, 1980. Thompson, 1984. Gamble, 1985). Problems in the domestic economy were deeply exacerbated by the quadrupling of oil prices and the onset of world recession in the early 1970s. These developments marked an important change to the economy which altered fundamentally the context for education-industry relations.
One element of this changed environment concerned the labour market. From the 1970s unemployment rose, and this began to affect particularly craft, and other skilled manual occupations (Edwards, 1984). The decline of traditional industries also destroyed many semi- and unskilled manufacturing jobs. These trends reached the point where the MSC estimated that by 1985 there would be more white than blue collar workers and that unskilled work would continue to decline (MSC, 1982).

The changes in the labour market of the 1970s affected young people disproportionately (Eichengreen, 1987). The collapse in the apprenticeship system, which grew particularly acute when the Thatcher government withdrew support from the Industrial Training Boards (see Finn, 1987), meant that the opportunities for such a career route were substantially reduced. For example, in the 1960s, 40% of males leaving school at 16 or earlier were apprenticed, yet by 1980 this proportion had been halved (MSC 1982). The effects of a declining apprenticeship system and economic recessions, led to large increases in youth unemployment and the emergence of a distinct labour market for young people which was concentrated within a secondary sector characterised by poor working conditions and low wages (Eichengreen, 1987. Mukherjee, 1974. Finn, 1987).

In this changed context, employers refocussed their attention on the education system as a whole. It was no longer purely high level technological skills that were sought by industry. Rather, schooling itself came under scrutiny as a major cause of economic decline and the under-employment of youth. The analysis of many industrialists suggested that schools were not equipping students with the knowledge, skills and attitudes which would have enabled them to stimulate economic
growth or compete with other groups of workers in the labour market (Cohen, 1984. Jamieson, 1985). As a consequence, employers were shifting attention away from the crisis in the macro-level, towards the form and content of the meso-level space occupied by schools.

The way industrialists focussed on education-industry relations in the 1970s and 1980s, illustrates a sophisticated 'targeting' of demands as related to particular areas of the schooling system. From a dominant focus on universities and the career destinations of highly qualified students, industrial interest widened to a concern that schools should promote those skills, attitudes and knowledge required in different echelons of the economy. As Jamieson (1985) has argued, there has been overlap between these categories and difficulty in defining them with any precision. However, there has been a clear resurgence in demands concerned with social control and training which were evident in earlier periods of education-industry relations.

First, industrialists were still concerned with particular high level skills reported to be in short supply (Gordon, 1983). For example, the shortage of engineers was such that the Confederation of British Industry (CBI) took the progressive step of encouraging women to enter non-traditional areas of work by offering awards to female engineers. Though this action may have been forward looking, the Confederation appeared more concerned with tapping the reserve army of women workers, as a way of meeting the demand for a shortage occupation, than in promoting equal opportunities. As the CBI stated, these awards were being made 'in the realisation that the engineering industry needs to attract more young people of the right calibre' (CBI, 1985).
Secondly, there was a general concern with the attitudes of young people. Reports showed that for the majority of jobs, the most important qualities for employers were not specific qualifications, but rather such characteristics as punctuality, attendance, timekeeping, and discipline (ITRU, 1979; Gordon, 1983; 42). In the context of a declining apprenticeship system which was less able to cultivate these traits, employers were concerned that young people should be prepared by schools to work effectively within the constraints and disciplines of an industrial or commercial environment (CBI, 1985a). As the Director General of the CBI noted, industrialists sought from potential recruits 'evidence of...self discipline, loyalty and enthusiasm, the right attitudes to work.[and]...willingness to accept change' (Quoted in Beck, 1981; 93). That employer demands referred predominantly to characteristics associated with individuals reaching a particular stage of the 'life-cycle', did not prevent them from criticising schools (Moore, 1983; 25). Industrialists constructed the role of schools to include the inculcation of an appropriate set of attitudes conducive to work in capitalist society. Their failure to accomplish this satisfactorily was seen as a contributing to the creation of 'particular attitudes and social values relevant to our relatively poor economic performances' (Taylor, 1985). The socialization of values was seen to be especially important in the case of those young people who were to enter unskilled, routine work. As a representative from Thorn EMI argued:

The work ethic must be reestablished. Schools should educate for work...Emphasise discipline (involves) repetitive tasks and
regulating one's life to longer working hours (Quoted in Bonnen, 1983)

The third element of industry's focus on schools centred on the need to equip young people with the knowledge which would make a career in industry acceptable to them. As in the immediate post-war period, this was partly concerned with attracting students of high academic ability into industry. However, it extended to a desire to have schools contribute towards widening the general appeal of careers in industry. In this context, the director general of the Institute of Directors, Walter Goldsmith, launched an attack on school teachers:

many pupils choose not to work in industry or commerce because of the ignorant prejudice of their teachers. They have been brainwashed by a misguided belief that industry equals greed, exploitation and industrial pollution, rather than the generation of wealth to support a caring society (Quoted in Bonnen, 1983).

As the above quotation suggests, demands concerning the provision of 'appropriate' knowledge, were not confined to broadening the appeal of industry to prospective employees. They included a legitimation of industry's position within society. As Sir A. Weinstock, the managing director of GEC, argued, 'it is... particularly disturbing that many practitioners in our education system perpetuate attitudes which are unhelpful, to say the least, to industry in general and more especially to free enterprise industry' (TES, 23/1/76). In relation to such views, the CBI argued that 'Children need an understanding of... wealth creation
and the role of business if they are to be able to relate to it' (CBI, 1984). More specifically, the Confederation was arguing for an awareness of the 'subject of "industry"' to 'inform the curriculum as a whole' (CBI, 1985a), and for vocational training and work-experience to play an important part in schooling (CBI, 1984).

On a practical level, industrialists concerned with the above goals, took a number of steps to extend education-industry relations within schools. As individuals, the option was open for them to exert influence through participation on governing bodies, and Parent Teacher Associations. Employers also used the press to criticise schools for failing to develop an industrially relevant curriculum (Jamieson, 1985). Collective and corporate action achieved concrete results through the establishment of a number of projects which brought into direct contact schools and industry. For example, Project Trident was established in 1970 and provides students with periods of work-experience (Kerry, 1983). The Young Enterprise Scheme is sponsored by industry and arranges for students to set up their own businesses (Bray, 1983). Understanding British Industry was started by the CBI in the mid-1970s and provides teachers with work-experience in industry and acts as an advisory body in the field of school-industry relations (CBI, 1984a). The Mini-Enterprise in Schools Project has a growing number of industrial sponsors who support the Project's aim of providing education through, about and for enterprise (DTI, 1986). Increasing numbers of firms have also become involved in the large number of vocationally oriented national and local projects operating in schools, such as the Schools Vocational Programme. Involvement includes the provision of financial support, work-experience, and representatives to sit on the various
committees, steering groups, and advisory panels that preside over school-industry matters (Jamieson, 1985). Employers' organizations such as the CBI have also been involved in more ad hoc measures designed to transport the concerns of industry and commerce into the curriculum. For example, the CBI presented an award to a video which best conveyed 'the importance of a profitable business sector to the well being of the community as a whole' (CBI, 1985; 25).

The stress placed by industry on schools equipping students with certain traits was not directed equally to all standards of education. Rather, there was a emphasis on the role of schools in linking individuals and the macro-level of society, by providing young people with educational experiences which varied according to their likely post-school destinations. A widespread view among employers was that there was little point in students receiving the same kinds of vocational experience when they were likely to end up doing different jobs. As Bonnen argues, 'certain employees are well matched for jobs of a fixed routine and content while others will be looking for variety in their work and for them new problems will be an acceptable challenge' (1983; 5-6).

The onset of economic recession had contributed to a new context in which education-industry relations were formulated. As a result, the concerns of employers changed, and contributed to a climate which was much more conducive to the concerns of technical educators. Although there was no longer the possibility of defending secondary technical schools, the government responded gradually to the demands of industrialists. Industrial pressure was greater and far more widespread.
than in the 'entrepreneurial' or the 'collective' periods of education-industry relations. Furthermore, much of the labour movement had changed its mind concerning the appropriateness of vocational education. For example, it was only in the early 1970s that the TUC had opposed work-experience schemes. However, in the context of rising levels of unemployment, unions gradually changed their position (Watts, 1983; 9-10). The TUC had campaigned for government intervention to ease the levels of unemployment and was prepared to participate in vocational schemes (Jackson, 1986). Nonetheless, these factors still do not explain fully the promotion of technical and vocational schemes by the government. For this, a closer view of the growth of the state and the development of the education system and tripartite arrangements in the field of education policy is required.

The State and the organization of education

An examination of the state and education system in the 'corporate' stage of education-industry relations can be divided into two main periods. Until the beginning of the 1970s, the education system grew as part of the general expansion of the state which had taken place since the Second World War. However, after this time successive governments attempted to change the content and direction of the state and schooling. It was not that the state withdrew from economic and social organization. Rather, activity was reoriented in an attempt to achieve what Andrew Gamble has described as a 'free economy-strong state' (Gamble, 1979 & 1985a). This strategy included an attempt to bring into closer contact the education system with the needs of an economy in crisis. With the arrival of the Thatcher government, these moves were
intensified and included direct intervention to promote industrially and commercially oriented technical and vocational schooling.

a) The immediate post-war years

The second World War established social democracy in Britain. The basis of the war economy was organized and given direction by the state, and market forces were subordinated to administrative decrees over wide areas of productive activity (Harris, 1984). Although the basis of the economy was returned to the operation of the free market after the end of hostilities, a new consensus had been established among political parties. Compared to the pre-war situation, this included a substantial enlargement of the public sector, more detailed state regulation of the economy, and higher levels of state expenditure (Thompson, 1984; 83. Gamble, 1985; 102). As part of its expanded role, the state accepted responsibility for a larger proportion of social and economic life across and between levels of society. Keynesian indicators became accepted as evidence of economic performance, and governments developed the State's welfare role (Stewart, 1972. Gough, 1979).

The growth of this consensus had significant implications for the education system. In 1944, the Labour Government passed an Act which was to provide universal secondary education for the first time. However, this did not specify in detail the meso-level arrangements whereby local education authorities were to provide secondary education for all. As a consequence, the system developed on the basis of an interaction between the recommendations contained in both the Spens Report (1938) and the influential Norwood Report (1943), and the existing structure of educational provision (Bernbaum, 1967). The large
number of young people brought into the system for the first time, and the constraints posed by accommodating them, hampered the development of schooling. This created a situation where 'many local authorities concentrated on immediate necessities, accepting the structure that had developed and abdusing any idea of radical change' such as the development of multilateral secondary schools (Simon & Rubinstein, 1969; 35). However, the development of a differentiated system, which effectively reproduced many pre-existing educational inequalities (Griffiths, 1971; 100. Simon, 1971), did have the effect of enlarging the provision of technical education.

The 1944 Act led to the growth and promotion of technical schools to secondary status as a result of the conjunction of the government's strategy for expanding secondary education, and the pre-existing organization of the schooling system. Technical schools were for those suited to the 'practical' route of education (Ministry of Education, 1959). However, despite this State sponsored promotion of industrially oriented education, there remained reservations about just how vocational such schooling should be. For example, the first report of the Central Advisory Council on Education, which was established to advise on educational policy, argued that vocational relevance in the curriculum should be subordinate to the 'prior claims of the full development of individual personality' (CASE, 1947; 56). Two decades later, the same general caution was evident. The Newsom Report stressed the importance of the arts and the social and personal development of pupils and argued that vocationally oriented courses should be treated as 'vehicles of general education' (CACE, 1963).
In addition to caution concerning the vocational orientation of education in general, the actual scope of technical schools never reached the position envisaged by either the State or technical educators (see Ministry of Education, 1959. McCulloch et al, 1985). Indeed, for what was meant to be a central part of the tripartite system, the scope of technical schools was surprisingly small. As late as 1958, secondary technical schools still contained under 4% of the relevant age group, and in over 40% of local education authorities they simply did not exist (Simon & Rubinstein, 1969; 41. McCulloch et al, 1985; 43). Furthermore, although some of the schools which did exist extended a previously male dominated technical education to girls, they often did so through a gender specific curriculum which mirrored not only the segregated labour market, which usually confined women to certain types of work, but also the domestic labour that women were expected to perform in the family. For example, the Doncaster Technical School for Girls concentrated on such subjects as 'domestic science, biology and housecraft' (Woollett, quoted in McCulloch et al, 1985; 46).

Technical schools came under further threat with the gradual decline of the tripartite system. This took place for a number of reasons. First, the tripartite system suffered a loss in legitimacy within the micro-level of society. From about 1953 secondary modern schools began exploiting the inadequacies of IQ testing by entering successfully students for GCE examinations (Simon & Rubinstein, 1969). Many parents were dissatisfied with the selective system, and exerted pressure on headteachers to enter their daughters/sons for examinations was one way of achieving some of the career opportunities offered to those in grammar schools. The fact that secondary modern students were
passing examinations intended for those in grammar schools, contributed to the mounting evidence which discredited IQ testing as a method of selection. It became clear that such tests discriminated against working-class children (e.g. Halsey & Gardner, 1953. CACE, 1954. Floud & Halsey, 1957). As a result of such evidence, the tripartite system was further damaged by the concern expressed over the loss of ability caused by the organization of education. As Floud concluded, it could not be doubted that there was 'a substantial reserve of uneducated ability in the offspring of [the] working class' (see Floud, 1961; 66-68).

These factors may have served to discredit the tripartite system. Indeed, members of the Association of Heads of Secondary Technical Schools eventually withdrew from the strategy of defending their schools, and concentrated on advocating the general practice and extension of technical education (McCulloch et al, 1985). However, by itself the view of a schooling system which was unfair and wasteful was not sufficient to replace tripartism. Nonetheless, it did much to aid the Labour Party's strategy of comprehensive reorganization (see Griffiths, 1971).

In July 1965, Labour issued Circular (10/65) to local authorities asking them to submit, within a year, plans for reorganization on comprehensive lines. The government's aim was to end selection at 11+ and eliminate separatism in secondary education. Although the Circular had no statutory power (see Kogan, 1971; 189), and was effectively revoked by the subsequent Tory government (who also refused to pass the plans of various authorities who wanted to reorganise along comprehensive lines [Simon & Rubinstein, 1969]), it changed fundamentally the context in which technical and vocational education existed. By as
early as 1970, just under a third of secondary school students were being educated in comprehensive schools, a figure which continued to grow through the decade.

The importance of these events was not that educational differentiation or class inequality was eradicated, as it was not. The private education sector remained, and comprehensives perpetuated social class differences in a number of ways (e.g. see Ford, 1970. Simon & Rubinstein, 1973; 106-127. Ball, 1981). However, with the growth in comprehensive schooling, the number of technical schools fell and a new context was provided for the development of technical and vocational education. From then on, it was difficult for technical education to be confined to particular schools which catered for a particular 'type' of student. The development of comprehensive schools created an environment where the only option open for technical educators, and others wishing to promote technical and vocational education across the state sector, was to develop it within comprehensive schools.

b) Recession and reorientation

As Britain's economic crisis grew worse in the 1970s, the basic consensus which had governed the running of the economy since the War came under an intolerable strain. The first signal of its breakage has often been seen as Jim Callaghan's speech at the Labour Party conference of 1976:

We used to think that you could spend your way out of a recession, and increase employment by cutting taxes and boosting government expenditure...that option no longer exists...it only worked...since
the war by injecting a bigger dose of inflation into the economy, followed by a higher level of unemployment as a next step (Labour Party, 1976: 188).

Callaghan's comments signalled the start of deflationary policies which entailed a reexamination of the size and scope of the public sector. As the Labour leaders' Ruskin College speech (which began the Great Debate) was to demonstrate, this had significant implications for the education system. One of the main themes of the speech, and the series of regional conferences which were to follow, was the lack of a relationship between education and industry. As the summary contained in the subsequent Green Paper put it, underlying the many criticisms of schools and teachers, was 'the feeling that the education system was of touch with the fundamental need for Britain to survive economically in a highly competitive world through the efficiency of its industry and commerce' (Green Paper para. 2). Furthermore, technical and vocational education was placed firmly on the political agenda through the Prime Minister's call for 'a more technological bias in science teaching that will lead towards practical applications in industry' (TES 22/10/76).

The State's focus on the schools-industry debate gave a direction and added a legitimacy to existing complaints made by industrialists about the education system (For accounts of the Great Debate and Green Paper, see CCCS, 1981. Salter & Tapper, 1981. Donald, 1981. Bates et al, 1984). The State also increased its own activity in the broad area of education-industry relations. For example, the Department of Trade and Industry financed developments in school science and technology, and
helped LEAs to set up an increasing number of 'change agents' - the network of Schools-Industry Liaison Officers (Jamieson, 1985:30,34). However, perhaps one of the most significant effects of the Great Debate, was the boost it gave to the role and activities of the Manpower Services Commission.

The 1970s was a period of sharply rising unemployment and a dramatic decline in the apprenticeship system. For example, the number of apprenticeships in engineering and shipbuilding almost halved between 1964 and 1974, and in the same period the number in construction fell by well over a quarter (NYEC, 1974:20). As a consequence, the State intervened in the provision of training with the creation of the MSC in 1974.

The MSC is a corporate body in which both business and unions are represented. In fact, the TUC played a major part in the 1973 Act which set up the MSC, and the very constitution of the Commission guaranteed union representation (Eversley, 1976). This continued arrangement represented an aspect of the 'social contract' period where the labour movement was offered a direct role in the management of the macro-level in return for a curb on wage claims and industrial action. As a consequence, the union movement were committed to the Commission as a progressive body, and this seemed to be confirmed when, in the face of rising youth unemployment, the Callaghan government expanded the MSC's training activities by supporting the declining apprenticeship system and developing special programmes for the unemployed (Finn, 1985; Jackson, 1986). The largest programme that the MSC was involved in during this period was the Youth Opportunities Programme, which was started in 1978 at the request of the TUC (Benn & Fairley, 1986:265).
Part of the significance of the MSC was its standing as a state body involved in the expansion of education and training, yet belonging to a Department (Employment) whose aims were concerned with the promotion of enterprise and the preparation of young people for work. Unlike the Department of Education and Science, the MSC is not obliged to ensure a broad and balanced curriculum (Dale et al, 1988). With the creation of the MSC, the government had provided the means whereby the meso and macro-levels were linked by the state provision of training designed to restore economic performance.

The activities of the MSC took on a new significance with the arrival of the Thatcher government in 1979. Initially the MSC budget was slashed, and it appeared as if it would disappear as part of the government's anti-statist approach toward managing the economy and labour market. The government was determined to alter the role of the state, cut public spending and reduce the power of the trade unions, and the MSC appeared a prime target. However, with youth unemployment still rising and the occurrence of a series of inner-city riots, the government did what has been seen as a 'U-turn' (for details see Finn, 1987). From this time on, the activities and budget of the MSC grew (Jackson, 1986). However, this was not a straightforward expansion of the MSC's approach as evident under the Labour government. Rather, it included a reorientation of the Commission's role, in at least three ways, to bring it in line with the general policy of the Conservatives. The state was to still coordinate the provision of training, but it was to do so through a changed and extended set of meso and macro-level relations.
Firstly, the influence and representation of the unions was effectively reduced. In particular, a total of 17 ITBs which had 'imposed some coherence on patterns of training' were abolished (Finn, 1985:117). However, the government's role in training was not abandoned. Government concern about the maintenance of a stable context in which capital accumulation could take place had grown after the inner city riots of 1981. Furthermore, there remained the question as to how the government would respond to employer calls for a labour force which was equipped with appropriate skills, knowledge and attitudes. The influential 'Think Tank' report (The Central Policy Review Staff, 1980 'Education, Training and Industrial Performance' HMSO) pointed the way forward by arguing that this should be accomplished by training programmes more in line with the direct needs of employers. Government strategy followed this logic, and the second change in the MSC's role was its management of a greatly expanded Youth Training Scheme, which was replacing the Youth Opportunities Programme (Watts, 1983b. Edwards, 1984. Walker & Barton, 1986). Although the unions viewed this as an improvement, the government clearly intended the Scheme to reduce wage levels and provide employers with a cheap source of labour on a scale far greater than had been the case with the previous YOP (see Benn & Fairley, 1986:4). As the newly appointed head of the MSC, David Young, said, the 'young should be a source of cheap labour because they can be trained on the job' (Observer, 7/2/82). That the YTS was to work towards this aim became clear when he invited employers to participate in the scheme:
You now have the opportunity to take on young men or women, train them and let them work for you almost entirely at [the government's] expense, and then decide whether or not to employ them (Quoted in The Director, October, 1982).

The YTS gave employers the opportunity to screen young people for an extended period to see if they were able to develop those skills and attitudes considered necessary for a particular job. Furthermore, the reorientation of initiatives aimed at bringing education and training closer to the needs of employers was not to stop at the post-16 years stage, and the third change in the MSC's role was its intervention in the schooling system. This was justified as necessary on economic grounds. As the Chair of the MSC argued, 'new curricula are required in education in order to lay the foundations for economic growth' (TES, 12/7/85).

The Great Debate marked the forging of a cross-party consensus in terms of the legitimate terrain on which education could be scrutinised. As a consequence, it appeared reasonable for the Thatcher government to implant the 'needs of employers' as the dominant criterion for education and training policy, and posit schooling as a cause of economic crisis. For example, in 1979, Neil Macfarlane argued that a contributory factor to Britain's declining share of world trade and falling industrial production was the 'mismatch between educational content and industrial/ economic need'. In fact, he went considerably beyond this by stating that 'the key determinant of economic success is the skill and motivation of the individuals concerned, and these must be nurtured in schools' (quoted in McCulloch et al; 194). It was clear that
industrialists were not the only ones concerned with shifting attention from an economy in crisis. The Thatcher government was attempting not only to refocus attention, but to transport the crisis in the macro-level to meso-level educational organizations.

This same line of thinking was being encouraged by the Government's 'Think Tank', and in 1981 a CPRS report took on directly the question of how so-called 'low ability' working class students could be inculcated with the skills, knowledge and attitudes required by employers:

> What appears to have been lacking so far is an attempt to identify what range of skills and knowledge the bottom 40 per cent, say, of the ability range ought to have acquired by the end of their compulsory school education, and what method of assessment is most cost effective in motivating such pupils, testing their achievements, and measuring what employers want to know (CPRS, 1980:50)

The CPRS report also called for the expansion of work-experience schemes within schools and, as Finn (1987:139) notes, their recommendations 'contained the genesis of the government's subsequent initiatives'. However, it was not until 1982 that the government was to come up with its major proposals for bringing schools into closer contact with industry and commerce. Following a meeting of the National Economic Development Council, in which the relationship between education and industry provided the main item for discussion, Thatcher asked the MSC to extend its role into the schooling system by establishing what was to become the Technical and Vocational Education Initiative.
The significance of the introduction a large scale technical and vocational scheme into schools should not be underestimated. For years, the expansion of technical and vocational education had been hampered by its 'practical and working-class connotations'. Indeed, it was only in the 1960s that the Council of the AHSTS expressed the view that alternatives to 'technical' and 'vocational' needed to be used because the 'connotations of these words was debased' (AHSTS Council meeting quoted in McCulloch et al,1985;130). However, from 1983 a scheme characterised by these words was made available to a growing number of schools across the state secondary system through the TVEI.

Conclusions
A number of factors have been seen as significant in creating the conditions for the promotion by the state of technical and vocational schooling. The contrast this represents to the relatively minor progress made by industrially oriented schooling in the 'entrepreneurial' and 'collective' periods of education-industry relations, can be explained by a combination of forces from the state, education system, economy and social class. In particular, the interaction of three main events were important for the establishment of technical and vocational schooling as a significant part of the state education sector.

First, the growth of the labour movement led to the most significant change in the organization of the education system since the establishment of elementary education in 1870. The intersection of expectations for increased post-war living standards, pressure from the labour movement outside of the state, and a Labour government inside the
state which was forging and working within a new political consensus, led to the establishment of universal secondary education. In itself, this did not abolish the existence of educational differentiation by institution. Grammar schools still catered overwhelmingly for the affluent, and although the 1944 Act created secondary technical schools, their scope remained minor. In this context, technical and vocational education was confined to a small minority of students. Furthermore, the organizational base of the system meant that, similar to historical precedent, future initiatives could easily be confined to schools catering for a minority of students. However, the establishment of universal secondary education also stimulated ambitions for advance among the working class which remained largely unfulfilled. In this context, the progress of comprehensive reorganization reduced the number of differentiated sites in which students received their education. The private sector remained, but as the 1970s progressed, the majority of students in the state sector received their secondary schooling in comprehensive schools. Although this had the effect of ending the impact of technical schools, it meant that education-industry relations within the state sector now had to operate in the context of a common, comprehensive system. In itself, this would have been meaningless had it not been for moves designed to reorientate the curriculum toward technical and vocational schooling. However, the establishment of comprehensive education was crucial in altering fundamentally the meso-level organizations in which future initiatives had to operate.
The second reason behind the widespread promotion of technical and vocational education concerns the change in strategy which took place within the labour governments of the 1970s. Labour's industrial strategy of 1973-75 included the objective of increasing the accountability of employers in two main ways:

First, it was argued that government financial assistance to private industry should only be given in return for an extension of public control... The second main way in which the Industrial Strategy sought to make employers more accountable was through the planning agreements proposals which involved a very significant extension of industrial democracy (Beck, 1983: 213-214).

The reaction of employers was the prelude to a sustained campaign of class struggle against these attempts to 'democratise' capital. A business organization launched a £100,000 campaign against nationalisation (Lewes, 1978), and the Chair of the CBI's Companies Committee warned of the measures capital would take to oppose the proposals. He warned that 'the private sector of industry could soon be driven into a policy of confrontation with the government in which its "muscle power" would be used in the same way as trade unions were now using their power to achieve their aims' (quoted in The Times, 13/5/77). A similar reaction was evident to the Callaghan government's revised industrial strategy. This political opposition coupled with a rapidly deteriorating economic situation, which would have exacerbated any investment strikes, contributed to the failure of the Labour government
to implement any of its original controversial proposals (see Beck, 1983; 216-218).

It was in this context that the Labour government took on many of the themes popular with industrialists and sections of the state. The growing criticisms made of the education system were constructed into an explanation for economic decline which absolved the government from direct responsibility. However, the effect of taking this step was that the Labour government was now operating on the terrain of the political right. The attack on the education system had been constructed initially by industrialists, the authors of the Black Papers, and the Tory press (CCCS, 1981). However, it was now given an added legitimacy by the position of the Labour government. By March 1986, Fred Mulley, who was briefly Secretary of State for education, identified publically the education system as a key to industrial regeneration:

I am concerned that young people appear to attach little esteem to careers in the wealth generating industries and in commerce upon which the country's economic future depends...If the country does not concentrate more of its talents on the basic necessities of earning its living, our present problems are almost certain to multiply (CBI, 1976; 27).

This change of direction on the part of the Labour government, created a cross-party consensus concerning the standards by which the education system could be judged. Education-industry relations became a central part of the political agenda. Consequently, the ground was prepared
for a large rise in the number of local schemes which sought to link education to the 'needs' of the economy, and a future government to intervene directly in the school curriculum through the promotion of industrially oriented initiatives.

The establishment of comprehensive education, and the positioning of education-industry relations as a central part of the political agenda, provided two crucial elements of the educational context at the time the Thatcher government came to power in 1979. The third factor of importance in the promotion of technical and vocational schooling was the government's decision to intervene directly in the curriculum. Governments had worked toward such measures before through the establishment of a variety of commissions (see chapter two). However, the education system and those class forces which defended the classical liberal curricula (which provided their members with a career route to the upper echelons of the labour market), prevented concrete action from being taken. In contrast, the Thatcher government operated in a changed educational context. The career routes public schools provided to the elite professions was not threatened by changes in the curriculum of the state sector, and the balance of class forces was now in favour of such intervention in the state sector. However, the government did not simply reflect the agendas of external forces when it announced the development of the TVEI. Rather, it represented a positive decision to extend the influence of industry inside the schooling system, and the power of the state over the meso-level of society.

In contrast to the 'entrepreneurial' and 'collective' periods of education-industry relations, which were characterised by the 'licensed
autonomy' of the school system, there was a fundamental shift in the balance of forces which shaped the form and content of education during the 'corporate' period. The autonomy of the meso-level space occupied by schools became increasingly 'regulated'. The ability of educationalists to determine the operation of schools was reduced, and the macro-level 'needs' of employers were installed as the dominant criteria of education policy.⁴⁵

As the dominant forces within the social totality changed, so did the determinations which constituted technical and vocational schooling. From being concerned with the education and institutions of the working-class, it came to occupy a position of greater diversity in the state system. In practice, working-class students may still have predominated on vocational schemes. However, by operating within comprehensives, technical and vocational schooling reached a far greater section of the population than it had done in previous historical periods.

The government had taken on board the need to promote industrially relevant skills, knowledge and attitudes in schools. However, despite the decisive action taken by the state in pursuit of these aims, there is no guarantee that vocational schemes will prove a satisfactory vehicle for their accomplishment. The third part of this thesis is concerned with exploring the actual impact of two vocational schemes; the Schools Vocational Programme and the Technical and Vocational Education Initiative. This begins with an exploration of how the aims of these schemes interact with teachers, students and the organization of schools. Chapter four examines not only how these vocational schemes may impinge upon schools, but how the organization of schools may shape the very outcomes of SVP and TVEI.
NOTES

1. Although in the case of MESP, the participants in the tripartite relation are employers (especially the Nat West Bank), the Department of Trade and Industry and the Society of Education Officers.


3. It is not just the state that has a vested interest in a healthy economy. Labour, of course, campaigns for and benefits from low levels of unemployment and rising standards of living - a situation which gives rise to some contradictions when it comes to formulating strategies for change (see Offe, 1985a).

4. As Jamieson (1985;34-35) notes: 'The rise of the silo has been dramatic. The first recorded post was in 1966. . by 1985 three-quarters of all LEAs had one. Their rise was fostered by two big national projects, SCIP and UBI (over three-quarters of all the SILOs belong to the SCIP organization); by advice from the DES which recommended, "that wherever practicable, one member of the CEO's staff should be given full-time responsibility for the promotion of schools-industry links": and finally, and most significantly, by funding from the Industry/Education Unit of the Department of Trade and Industry.'
5. Although comprehensive schools cater for particular geographical areas and are affected by their contrasting catchment areas.

6. Although the impact of technical schools was ended, technical education was still provided in some comprehensive schools. Furthermore, in some cases the small minority of LEAs that retained a selective secondary system still have technical schools.

7. This next section draws heavily on the work of Beck (1983).

8. The government's new City Technology Schools represent more than an extension of state control over the meso-level space occupied by schools. They constitute a state and industry sponsored extension of the meso-level space which is occupied by technical schooling.
4 The Formation and Development of SVP and TVEI.

There is now a vast body of literature which suggests that the actual outcomes of curriculum innovations are rarely those intended by their sponsors (e.g. Fullan, 1982). However, a sensitivity towards four factors provides a framework in which the actual outcomes of technical and vocational schemes may be examined. These are the aims with which schemes are invested (mandate), the willingness and ability of schools to achieve those aims (capacity), the consequences of the schemes for teachers' work (career), and the nature of participating students (clientele). As with the central categories of the previous chapters, these can be located on different levels of society.

This chapter concentrates on the micro and meso-levels of society. The mode of production is not forgotten, but focus is shifted to individual and institutional factors by examining the details of SVP and TVEI. Analysis is concerned with their general, structural features. However, once these have been established, they will be used to examine how SVP and TVEI operate in the contexts of Borough and Stonegate schools.

a) The Mandate of Vocational Preparation

Educational mandates consist of 'conceptions of what is desirable and legitimate for the education system to seek to bring about' (Dale et al, 1988:4). While there are many 'conceptions' of desirable educational
goals, mandates are distinguished through being held by bodies with the potential power to translate them into policy.

Dominant educational mandates have been formed by shifting forces from different societal levels. However, they have revolved around the three major categories of 'individual development', 'preparation for citizenship', and 'preparation for work' (Dale et al, 1986;4). These forces have not been of symmetrical importance at any one time, though, and there has been a substantial shift in those with the power to shape educational mandates (see Dale, et al 1988). From the mid-1970s, central government emerged as the major force and there was a much greater emphasis on the preparation of workers and citizens. A 'mandate of vocational preparation' had achieved a position of dominance within education policy.

In examining specific vocational schemes, a focus on the mandate of vocational preparation leads to a consideration of three related questions. First, it is necessary to ascertain the aims and objectives of vocational schemes which are located within this mandate. This involves allowing for possible disjunctions between the mandate of vocational preparation and the aims of specific schemes. There is no guarantee that the two will be synonymous. Secondly, knowledge of the terms on which schools participate in schemes is useful for determining the degree to which the aims of a scheme may be challenged and changed in a school. For example, a vocational scheme which involves schools in having to demonstrate that its objectives are being fulfilled as a condition of their continued participation, may be difficult to restructure. Thirdly, a focus on the curriculum innovations of a vocational scheme, alerts one to the way in which planned changes to
students' experiences of school are meant to contribute toward its aims. Again, there is no guarantee that the intended changes in students' experience of education will be congruent with the actual outcomes.

As these points suggest, the rise of vocational schemes cannot be equated with the acceptance or full implementation of the mandate of vocational preparation by schools. Mandates do not stand on their own, untouched by the people and institutions they are operated in. They are forged in and through interaction with schools, teachers and students. The degree of efficacy associated with an educational mandate, then, is an ongoing process which depends upon the interaction of a number of structures and processes.

b) The Capacity of Schools

To establish the effects of a vocational scheme in a school requires analysis to go beyond those who have the power to shape educational mandates, to focus on another aspect of the institutional level of society. *Capacity* refers to the willingness and ability of organizations to implement educational aims and objectives (see Dale et al pp.13-18). Irrespective of the nature of an educational mandate, its aims and objectives will remain unrealised if a school lacks the capacity to implement its component parts.

The notion of capacity allows for the possibility that schools have their own agendas which may not coincide with the government's mandate, or the aims and objectives of specific schemes. For example, schools may participate in a vocational scheme to gain additional funding rather than reorientate their curriculum, and may seek to make as few changes
as possible to what they teach. Alternatively, schools may participate in order to import a curriculum development which they consider might solve specific problems they face.

This focus on capacity should not be taken to imply that schools have an autonomy which enables them to impose their own designs on vocational schemes. The degree of control available to schools will depend upon the interaction of their own agenda with the form of specific schemes. For example, schools participating in TVEI are contractually bound to implement a specified programme of study. Now, within this agreement there may be substantial room for manoeuvre. However, if the terms of the contract are seen to be broken, funding may be withdrawn. As a consequence of this relation, capacity can only be understood fully in its interaction with the form and objectives of particular schemes.

If schools are willing to implement a scheme in line with its aims, they may still not possess the ability or resources to do so. At its most basic, a vocational scheme seeking to reorientate the curriculum will require organizational change (Sarason, 1971; 63). Teachers, students and financial resources must be (re)deployed to certain activities in specific spaces at particular times. In the case of such activities as work-experience, this is by no means a straightforward process (see chapter seven).

For the purposes of this study, a consideration of capacity makes important an examination of two major elements of school life. It is important to understand why schools adopt the SVP and TVEI, to ascertain their agendas for vocational education. Related to this is an understanding of the financial and other resources they have for
implementing these schemes. For example, schools may find that they lack sufficient resources to implement fully the aims and objectives of a programme. It is also important to take into account the general organization of schools. This involves such factors as who is to teach and be taught the new courses, and the support services that are available to ensure satisfactory delivery of the programme. For example, if it involves teachers in new roles, is sufficient training provided for them to cope and adjust?

From this brief description of what is involved in the ability of schools to implement a mandate, it is clear that their capacity is not separate from the aims of a particular scheme or the individuals who work in school. For example, capacity is related to the acceptability of programmes to those subject to them, and the ability of teachers and students to impinge upon the aims of schemes by shaping the school's agenda for vocational education. Central in considering the capacity of schools, then, are the effects vocational schemes have on the micro-level factors of teachers' careers, and their reception by the student clientele. These factors impinge on the capacity of the school and, consequently, shape the efficacy of the mandate of vocational preparation.

c) Teachers' careers and vocational schemes
The responses of teachers to vocational schemes are an important variable in a school's ability to realise the aims of a particular programme (Becher and Maclure, 1978:89-90). These responses are likely to vary according to how a scheme affects teachers' careers. The organization of vocational schemes in schools is likely to benefit some
teachers more than others in terms of resources, promotion prospects and teaching loads. However, it is not just the direct effects of vocational schemes which may affect teachers' responses. Teachers' views on the validity of the aims and objectives of schemes are also important. For example, some may be ideologically opposed to a scheme which creates financial and status asymmetries between subjects (Shilling, 1986).

A consideration of career as central to the capacity of schools, requires that the factors mentioned above are taken into account. To examine the effects teachers may have on SVP and TVEI, it is necessary to ascertain who is to teach the courses, their ability to teach the component parts of the schemes, and the effects of SVP and TVEI on the labour process and promotion prospects of particular teachers. A sensitivity to such issues may help reveal the potential divisions caused by these innovations and some of the discontinuities likely to exist between their intended and actual outcomes.

d) The clientele of vocational schemes

The second micro-level factor which has been identified as central to the capacity of schools to realise the aims of technical and vocational schemes concerns the clientele. Students and their parents/guardians, those who are to a greater or lesser degree the potential recipients of a new curriculum, are the very material of the mandate of vocational preparation. The extent to which the intended outcomes of this mandate are congruent with the actual consequences of schemes, is largely dependent on the interaction of vocational curricula with its clientele. For example, the mandate of vocational preparation has no chance of
being successful unless sufficient numbers of students participate in relevant schemes.

If a vocational scheme is made compulsory for all, or a group of students, then this problem may be minimised. However, dissatisfied parents could still attempt to change such a decision on an individual or institutional basis - by removing their child from the scheme, or attempting to make vocational education an option through utilising an ideology of 'choice' (see Lacey, 1970; Woods, 1979; Ball, 1981). Alternatively, if a vocational scheme becomes an option then other variables relating to its value as a subject become important. These include the scheme's implications for the career prospects of students, its status as 'valid knowledge', the extent to which it leads to recognised qualifications, peer group influence, and alternative options on offer. Furthermore, depending upon the form and content of a scheme, these factors may be interpreted differently depending upon the race/gender/social class of the clientele.

If a vocational scheme is an option, then it is especially vulnerable to the decisions of its potential clientele at option choice time. At the most basic level, if there is not sufficient demand for the course within the school, then it may cease to be a viable option. On the other hand, if this scenario is unacceptable to the school because of such constraints as contractual obligations, then the status of the vocational scheme as an option may be threatened. Teachers may be forced into recruiting drives to meet the required 'quota' of students (see chapter five).

This consideration of clientele makes necessary a further set of questions when examining the progress of vocational schemes from their
formulation to operation in schools. To ascertain how the aims of a programme may change in their interaction with the clientele, it is useful to know how students come to participate in vocational education schemes, which students participate in these schemes, and the changes which occur in their schooling as a result of vocational education.

The four factors of mandate, capacity, career and clientele have been identified as important to an examination of the relationship between the aims of vocational, and their actual operation. Although these categories can be treated as distinct for analytical purposes, they are not separate but interrelate and are shaped in and through each other. Basing analysis around these factors, I shall now examine briefly the history and organization of the two schemes in this study. This will include an identification of some of the central features of SVP and TVEI which are important to the relationship between their intended and actual consequences.

It is important to make clear that the scope of this chapter is not to provide a thorough history of the vocational schemes, nor to give an account of the two schools. Rather, it is to identify those structural aspects of the interaction between the SVP and TVEI, and the conditions in which schools operate, which are most salient to the realisation of their aims and objectives. Having identified these factors, they will form the focus of the rest of this study.
The Schools Vocational Programme

a) Aims and objectives: negotiation and change

The aims and objectives of the SVP were initially formulated by two teachers responding to an existing problem of capacity within special education. The aims of the Programme are clearly located within the mandate of vocational preparation. However, the development of SVP illustrates how this mandate may be negotiated depending on the capacity of institutions, and the scheme's effect on teachers' careers and its clientele.

The SVP was started by two teachers working in an ESN(M) school in 1976-77. In this year, educational provision for these students was reorganized locally from a single 'all age' school to a lower and upper school. A new headteacher was appointed to take charge of the upper school and was 'faced with the problem of what to do with 15 and 16 year olds in their final year of schooling' (interview).

The headteacher responded to this challenge by appointing a senior teacher to work with him in initiating a 'new and relevant curriculum' for final year students 'which would engage their interests and be of value to them after they had left school' (interview). The outcome of this effort was an innovatory course which linked schooling to the labour market.

The SVP, then, can be seen as a pragmatic 'student-centred' response to the reorganization of special school provision in one LEA. This was evident in the agendas of the two teachers who established the SVP, and the Chair of the LEA Education Committee. The Chair was a local Tory politician who, after attending a meeting early in the life of the ESN(M) school, helped start the scheme by using his contacts with
industry to secure the school industrial equipment and work placements. However, the agendas of the three founders of the Programme show that its aims and objectives go beyond 'student-centred' concerns, and are not determined simply by the context of special school reorganization.

The agendas of the Programme's founders were dominated by two main features. First, there was a concern to improve what 'low achieving students gained from the education system.' The founders all argued that those who were not 'academically oriented' received few educational benefits from school. As the local Tory said, 'most of them go through the system and come out the other side without even being touched by it. It's a complete waste of time for them.' SVP was designed as a response to these inadequacies which would operate in a 'special' school. It was to produce independent individuals, to 'push them out of the school nest in a supportive way' so they could make 'their own decisions once they had left school' (headteacher). The emphasis in the Programme's curriculum was on achievement and success rather than on negative labelling, with the objective that 'students who have been deemed failures are given a chance of being "winners" in another environment' (senior teacher).

The second main feature to the founders' agendas was that of cultivating in students 'realistic' attitudes towards industry. This was not to be separate from, but rather an integral part of, individual education. It meant that the expectations of students should be adjusted as suitable for 'being a small cog in a large machine and having to do what are possibly very boring jobs' (local Tory). As the senior teacher put it, 'SVP is a vocational course, and we aim to develop attitudes which are appropriate to working in industry. This is
part of the process of growing up for young people.' The implications of this agenda for the Programme's student clientele, entailed 'developing the ability to concentrate, work consistently over long periods of time, learning to be punctual and follow instructions with care and precision' (headteacher).

The possession of this agenda for SVP is no neutral exercise. Rather, it is a commitment to developing in students a set of qualities congruent with the positions of subordination they are likely to occupy in the labour market as members of the working-class. Furthermore, as the importance of these attitudes are differentiated according to gender and race in the workforce, it is also to accept implicitly preexisting inequalities which exist not only between capital and labour, but between men and women and different races in the mode of production. This was stated, perhaps unintentionally explicitly, in an interview with the Tory politician. He argued that 'SVP caters for kids who have different needs from those met by the academic diet. It shouldn't be seen as inequality, just meeting separate needs. After all, we can't all be chiefs, not everyone can do the top jobs and we need people who are going to be good indians, be reliable workers' (my emphasis).

In examining the agendas of SVP's founders, I am not trying to suggest that their aims and objectives were identical. Indeed, the senior teacher was adamantly opposed to the idea that SVP might be creating passive wealth producers. However, their approaches were similar in viewing individual development as facilitated by participation in industrially relevant learning experiences which aided the assimilation of students into working life. An educational organization on the meso-level was seen as a terrain where individual
development could be contextualised within, and harnessed to, the production of a labour force equipped with attitudes appropriate for firms within the capitalist mode of production. As a consequence, the aims and objectives of SVP could not be and were never autonomous from or determined by the mode of production. The very design of SVP linked individual education to the fortunes of the macro societal level. This is evident in the Programme's curriculum.

On establishment of the Programme, the ESNW school provided fifth year students with a curriculum containing three industrial 'skill sampling' courses. These each lasted for a term, took one day a week of the school time-table, and included such activities as constructing industrial components and catering. At the end of each course, students took part in a week's work-experience with a firm whose business corresponded to the activities of the preceding 'skill sampling course'. The Programme's curriculum, then, was closely related to the labour market and had as its main objective equipping students with those skills, attitudes and knowledge required for working life:

From the outset, entry into full time open employment is set as a major goal...[SVP] is aimed at those for whom entering the labour market could present serious problems....the principal objective of the scheme [is] the inculcation of good work habits and the development of an understanding of working life (SVP Discussion Document, 1978. Emphasis in original).

The aims of SVP were clearly congruent with the government's mandate of vocational preparation. However, they were directed toward a clientele
educated outside of the comprehensive system, who were considered to
have needs that were not met by standard educational provision, and who
were normally excluded from normal working life. Indeed, the Programme
was successful in meeting its aim of aiding transition to the labour
market. In 1976-77, the first year of SVP transformed the usual post-
school outcomes of final year students. From the one or two who usually
found work, 'the majority were taken on. It was an unprecedented
situation. They were successfully being fitted into being acceptable
members of the community' (senior teacher founder). Students made
substantial gains in self-confidence from successfully completing a
week's work in a context other than that of school. They realised their
usefulness to employers who, in turn, had the benefit of seeing
prospective employees at work.

The aims and objectives of SVP were not static, however, and the
progress of the scheme illustrates how the location of a particular
course within the mandate of vocational preparation develops through an
interrelationship of factors from micro, meso and macro-levels of
society.

Once SVP was considered a success by its three founders, they
viewed it as a project which could benefit students beyond those from
the special school. As the senior teacher argued, 'it was the type of
practical, work based curriculum which would benefit many [students] in
the comprehensives.' The three discussed how the Programme could be
expanded, and were able to secure from the LEA the resources which
enabled the senior teacher to research the feasibility of extending
SVP. This feasibility study, alongside further political lobbying by
the Tory politician, led to the Programme receiving organizational
support from the LEA. This very support, though, served to involve a body external to the founders of the Programme in shaping the aims and objectives of the scheme.

The LEA agreed to support the expansion of SVP as a course which would facilitate the transition of young people from school to work. As the Chief Education Officer noted, SVP was allowed to expand into comprehensive schools 'as a response to particularly high levels of youth unemployment in the [locality]' (SVP Discussion Document, 1978; 1)

It was to provide 'participants with a realistic experience of working life and the demands it may make on them' and aimed to help students adjust to employment or training after school. However, the LEA supported the scheme purely as a result of its 'employability' value. It was seen as worthwhile not in the same terms as expressed by the founders, as a course which would aid transition, and individual development, but in terms of its value at a time of 'particularly high levels of youth unemployment.' The point I am making is not that the LEA changed radically the aims and objectives of the scheme, but that the involvement of a body necessary for the Programme's expansion served to shape and place limits on the aims and objectives of the course through the capacity of that organization.

The sponsorship from the LEA was a necessary condition for the growth of SVP. However, as the adoption of the Programme by schools remained voluntary, it was not a sufficient condition. SVP's expansion remained contingent on the response of local comprehensives. In fact, the scheme proved highly popular with schools and expanded into 'remedial' and 'low ability' streams of local schools through the late 1970s and early 1980s. By 1987 SVP was operating in twelve schools and
was catering for over 260 students. The central structure of the course has remained largely the same. However, the skill sampling courses now take place in the local college of further education, and there has been an element of standardisation in the school side of the Programme's curriculum. The Project Director has organized courses and planned lessons which are designed to be used alongside work-experience and some of the skill sampling courses. These do not have to be used by school teachers, as the school side of SVP remains in the control of individual schools. Nonetheless, certain of the curriculum suggestions, such as the 'Factories and Industry' course, have come to be widely used by participating schools (see chapter six). School control over the classroom components of the Programme extends to decisions concerning how many periods each week students spend taking SVP courses, and which lessons they are withdrawn from in order to pursue these courses. However, one rule embodied within the Programme is that it is an option for those considered suitable - albeit one with substantial teacher guidance - and that the Project Director has the final decision concerning which students are accepted to the course.

The Programme was considerably expanded as a result of its uptake by local comprehensives. However, the very growth of SVP placed its original aims and objectives at risk, as schools accepted the course for reasons other than its initial rationale. First, finance was an obvious attraction to schools. In addition to that provided by the LEA, the founders had successfully applied for a grant from the Department of Trade and Industry. This local and central government support effectively 'double funded' those students on the course. In 1986 the expenditure for each student who took part in the Programme was £300 - a
figure which did not include finance for those teachers who were responsible for, or taught on, SVP. As a consequence of this finance, class sizes for those on the Programme tended to be smaller than average. Secondly, this coincided with a growing realisation among Heads and other teachers of local schools 'that the traditional academic curriculum was just not suitable for a significant minority of their pupils.' A number of schools in the area were looking at possibilities for developing some sort of 'alternative' curriculum which might meet the needs of these students. Thirdly, the senior teacher appointed responsible for SVP met the heads of local 'remedial' departments and presented the scheme as 'a promising new innovation which presented an interesting and realistic alternative to an entirely school-based timetable' (senior teacher founder). In this way, support was gained for developing the scheme through these schools in the locality without the vocational preparation aims of SVP always being made explicit.

The spread of the Programme into local comprehensives removed from the founders the control they had had over its operation in a single special school. SVP was promoted by the senior teacher and accepted into local schools as a flexible scheme which could help solve the needs of schools and their students, rather than a highly detailed course.

As a result of its expansion, then, SVP became exposed to the agendas of the local education authority and individual schools. Whether the initial aims of the Programme were to be realised was now dependent upon the capacity of schools to implement the vocational aims and objectives of the Programme. Schools were clearly committed to SVP as an educational course, but it was not clear if they were committed to
achieving that education through and for vocational purposes. It is to general questions of school capacity that I now turn.

b) The capacity of schools to implement SVP

Schools participated in SVP for reasons related to finance, persuasion, and their desire for a 'non-academic' curriculum. As SVP appeared to meet some of their educational needs, it is reasonable to suppose that schools would be willing to implement the curriculum designed to achieve the Programmes' aims. However, for these aims to be realised also requires that schools have the ability to deliver this curriculum. It is questions concerning the general ability of schools to deliver SVP that this following section will concentrate on. I shall focus on the two central elements of the Programme's curriculum: work-experience and industrially relevant courses. These are both activities which involve the transportation of macro-level features of society into the meso-level space occupied by schools.

Work-experience takes students from the classroom into a place of labour to give them a realistic taste of working-life in capitalist enterprises. This purposes of work-experience extend beyond the 'educational', as this activity has the potential to facilitate an insertion into waged labour in terms of part-time work and the securing of future jobs. Depending upon the economic climate, work-experience may lead to 'many students getting Saturday jobs and even full-time employment' (Project Director - interview). Work-experience provides students with the opportunity to assess their 'proficiency at and liking for the type of work chosen' and is meant to equip them with 'some of the skills involved' in particular jobs (Evaluation, 1983; 7). It also
serves as a screening process for employers. As the project director noted:

Work-experience is a sorting process for employers. 'O' levels served the purpose in the past but this is a much better method for them. They get to have a good look at prospective employees in work situations (interview).

However, a course which relies upon firms to deliver part of its curriculum is also dependent upon the capacity of schools to make contact with, and involve those firms in the provision of work-experience. In this respect, problems have arisen both in terms of the quantity and quality of work placements available. At times, the demand for placements has risen above their supply. The pressure on employers has become 'manifested by way of clashing in timing and in some cases, withdrawal altogether under the volume of widespread and duplicated requests' (Evaluation, 1983; 27). The economic context in which firms operate places limits on the amount of time and supervision employers are able to give to students. This has meant that 'pupils occasionally find themselves in a replica of the "boring" situation connected with repetitive work' (Evaluation, 1983; 18).

Work-experience can be seen as providing not just one, but two problems of capacity. Schools require the capacity to liaise successfully with firms, and firms require the capacity to provide the time and resources to supply appropriate work placements. In an attempt to solve these problems, it is the SVP project director who has the responsibility of organizing work-experience for participating schools.
SVP has also brought individuals and aspects of the mode of production together within the meso-level through importing work practices to the classroom itself. Courses such as 'Factories and Industry' (see chapter six), and the skill sampling courses which take place at the local college of further education, are heavily influenced by the labour market. Skill sampling courses have consistently responded to perceived shortages of skilled labour in the local economy, and are 'reviewed annually in the light of changing needs of industry' (Evaluation; 15). For example, in the early 1980s, this review led to the conclusion that 'courses need to react to developing technology, particularly in the area of computer skills' (Evaluation, 1983; 15). Adapting these courses in relation to the requirements of the local economy means that students may leave the course with skills which better equip them to gain employment. However, this takes no account of the attitudes students may have developed during vocationally relevant college or school courses. For example, there is always the possibility that such courses may alienate students from sectors of work.

The Schools Vocational Programme has made as part of its clientele's education a number of practices imported from the mode of production. However, its capacity for ensuring the effective delivery of these is reliant upon interaction between school, college and the workplace. Participating schools have the responsibility of liaising with employers and college lecturers. They have to ensure that 'adequate' provision exists for work-experience, and should deliver vocationally relevant school-based courses. In particular, schools should facilitate the adjustment of students to the norms and values of employers. For example, work-experience preparation 'is undertaken in school with the
object of encouraging good work attitudes and discipline as well as an understanding of personal responsibilities and requirements of the firm' (Evaluation, 1983; 9). These aspects of the SVP's operation point to the importance of teachers' careers and the student clientele as important elements of the capacity of schools.

c) Teachers' careers and SVP

The extension of education into sites other than the school has implications for teachers' careers which may affect detrimentally the capacity of schools to deliver the Programme. It is teachers, who must coordinate the cultivation of a set of knowledge, skills and attitudes traditionally associated with the world of work rather than that of school. Their willingness and ability to take on this role is not something which can merely be assumed. Many teachers have worked for a number of years within a liberal educational tradition and may not want to assume such a role. For others, the job of coordinating work placements and the college side of SVP extends to organizational tasks involving sites previously outside the scope of the teacher's career. In the context of ever-growing demands being made on teacher time, the efficient completion of such tasks may become a major problem.

Teachers working in the school-based component of the SVP may also experience changes in the labour process which can affect the capacity of schools. SVP teachers are dealing with students considered unsuitable for an academic curriculum who often have a reputation for 'causing substantial discipline problems in the classroom' (Project Director - interview). As a consequence, the Programme might become unpopular with teachers, and constitute 'a part of their job that some
are glad to get rid of.' Such an approach may well impinge detrimentally on the capacity of schools to realise the aims of SVP. However, the way in which SVP has affected the labour process of teaching, meant that it would probably lead to a more complex set of responses.

First, although teachers working on the Programme may be faced with a greater number of 'problem groups' than their colleagues, the scheme's funding provided for extra scale points and class sizes which were frequently as low as thirteen. Consequently, achieving a position of responsibility in SVP was one method of gaining promotion, and working on the course meant having smaller groups to teach. The appeal of promotion possibilities to teachers should not be underestimated given the stagnancy which has existed in the profession over the last decade. Moreover, for those who did not benefit immediately from SVP as a career route, the fact remained that it allowed for much smaller classes - a factor which may more than compensate for dealing with 'difficult' students.

Additional funding may, then, constitute an incentive for those involved. However, by regarding this as 'unfair' or privileged, the attitudes of other teachers, and their advice to students considering SVP, may serve as an obstacle to the course's aims. Initial reports from headteachers of participating schools confirmed that some teachers were dissatisfied with the Programme's position in their school. There was some 'initial jealousy/rivalry from [some] departments because of the low pupil-teacher ratio and assumed initial heavy funding' (Evaluation, 1983). This response was mitigated, though, by the fact that for teachers not sharing directly in extra resources, there was the
indirect benefit of having 'troublesome' students removed from some of their lessons. To the extent this occurred, many teachers who did not benefit financially from the Programme gained an improvement in their working conditions. As a consequence, the financial selectivity built into the SVP need not necessarily have alienated any section of teachers.

The second reason that unpopularity cannot be assumed among other teachers, concerns SVP's success in involving students to a greater extent than the traditional curriculum. To the extent this occurred and teachers recognised it, the Programme may be welcomed on educational grounds irrespective of the effects it had on their careers in terms of promotion prospects or working conditions. As one headteacher commented, the attitudes of teachers not involved in the scheme 'became far more positive as they have begun to appreciate the value of SVP to the personal development of the pupils' (Evaluation, 1983).

c) The clientele of SVP
The interaction between the Programme and its clientele is also significant for the capacity of schools. At its beginning, SVP catered for students receiving 'special' education at a single ESN(M) school. After its expansion into comprehensive schools under the official status of an 'option', its clientele changed. There were now more students following the course, and most of them were educated in comprehensive schools. However, in practice the Programme still caters for a specific clientele who are not viewed as 'academic', but are seen as having the potential to be made into 'good, reliable workers'. There is, then, a tension between the status of the Programme as an 'option
choice' and the fact that in practice it caters for certain students considered of 'low academic ability'. As the Project Director explained, 'SVP is a choice, but a choice with heavy teacher guidance. In the third year, students are identified as appropriate by teachers and guided towards the course' (interview).

The notion of 'appropriateness' employed for the course immediately excludes students who are considered capable of following successfully an academic curriculum. This might be seen as a relatively minor point in relation to the capacity of schools to deliver the aims and objectives of SVP. However, the Programme's reliance on notions of 'appropriateness' has the consequence of importing practices from the work place which exclude other groups of students from the course, irrespective of whether they might benefit from it.

It is very difficult to have handicapped kids on the course because of the work-experience component. There's usually a lack of suitable facilities for them on employers' premisses and we cannot do anything about that (Project Director).

The importing of practices from the economy has also served to exclude students from elements of certain courses within the Programme. In particular, the hiring practices of firms have prevented some girls from participating in work-experience. For example, 'some building firms won't take girls because of unsuitable changing and toilet facilities' (Project Director-Interview).

These practices serve to structure and place limits on the way in which SVP is able to prepare students with industrially 'appropriate'
skills, knowledge and attitudes. The interaction of schools and the mode of production limits the course to a position where it is responding to the existing macro-level, not only in terms of those values and abilities which are required in the economy, but in terms of which individuals are allowed to participate in their acquisition.

Having examined some of the general processes whereby the aims of SVP, the capacity of schools, teachers' careers, and the clientele, interact to bring about possible disjunctures between the original intentions and actual outcomes of the Schools Vocational Programme, I shall now examine the case of TVEI.

**The Technical and Vocational Education Initiative**

a) **Aims and objectives: the power of the state**

On 12th November 1982, the Prime Minister announced the government's intention to launch a pilot scheme of technical and vocational education. In September 1983, just ten months later, students in fourteen local education authorities had embarked upon their first year of TVEI.

The Initiative marked a new mode of educational change which sought to alter the aims and objectives of schooling through a major curriculum innovation. In the past, change had been formulated by practising educators (the Schools Council model), or interested parties such as teachers and local education authorities were consulted and made recommendations and amendments to new projects (the Plowden model), or change followed a legislative route much like the introduction of comprehensive education. In contrast to these, TVEI followed an executive mode of change, central to which was the use of commercial
criteria to move 'resources into a new "line" when the existing one is proving ineffective' (Dale, 1985:43-44). The Prime Minister's announcement was made before any consultation had taken place with teachers unions, local education authorities, the DES, or even the body which was to have the main responsibility for implementing TVEI, the Manpower Services Commission.

In direct contrast to SVP, then, TVEI was a scheme initiated by central government without the participation or immediate cooperation of teachers. Its distance from the meso-level world of education was further illustrated by the extent to which corporatism was to characterise its implementation. It was the MSC, a body which constituted part of the Department of Employment, that was the dominant state apparatus involved in the operation of TVEI. In contrast to the DES, which is a department of state headed by a cabinet minister who is formally accountable to the electorate through parliament, the MSC is a corporate body. It consists of representatives of particular interests, prominent among which are those of business and labour, and its operations are not restricted by the bureaucratic 'rule-following' model characteristic of the DES (see Dale et al, 1988. Shilling, 1988).

The introduction of TVEI, then, marked not only a change in the content of what is taught in schools, but an alteration in the process of educational change. The government was restructuring relationships in the meso-level of society between state organizations and the education system. While the government was at pains to stress that it was not imposing TVEI on schools, David Young, then Chair of the MSC, warned that if schools failed to respond to the Commission's lead, the government might establish a network of separate technical schools.
outside of the auspices of local education authorities (‘Education’ 19/11/82). It is perhaps only now, with the advent of City Technology Colleges, that the significance of this restructuring is becoming evident.

The Initiative itself embodied a particular version of the government's mandate for vocational preparation. TVEI was to be a four year course of technical, vocational and general education for a clientele aged between 14-18yrs. It was to cater for students across the ability range and provide equal opportunities for both sexes. Moreover, it was to be voluntary for the young people concerned. Work-experience was to be a central and compulsory component of schemes, and the school side of the curriculum should lead to nationally recognised qualifications. The involvement of industry was considered vital to the success of the scheme and this was not just in terms of the provision of work placements. As with SVP, subjects incorporated into TVEI were expected to be relevant to local industrial need (MSC, 1984).

The broad national guidelines which set boundaries to the formation of local schemes makes it impossible to specify in detail the component parts of TVEI as a curriculum development. However, TVEI represented a form of vocational education which was to provide students with industrially relevant generic and specific skills, and an awareness of the 'real world' of industry and commerce. As the Chair of the MSC made clear, these were to promote attitudes congruent with the needs of employers which would ensure that by 'the time they leave, our youngsters will be highly employable' (‘Education’ 19/11/82):
What is important about the initiative is that youngsters should receive an education which will enable them to adapt to the changing occupational environment (Young quoted in 'Education' 19/9/86).

Similar to the Schools Vocational Programme, TVEI was a project attempting to harness the meso-level school as a site where individuals and practices from the labour market would be brought together. However, despite its state sponsorship, schools did not have to accept this project as it remained an option. The finance on offer to local authorities and schools, though, made this 'option' difficult to refuse.

At a time of severe constraints in educational expenditure, TVEI was one of the few sources of finance available to schools. The expenditure involved in the Initiative for the fourteen local education authorities in the first round of the pilot scheme was estimated to be £46 million at 1983/84 prices. Despite some initial resistance in Labour controlled areas, most authorities submitted proposals in the two years after the project was launched. By the end of the pilot scheme, the MSC estimates that £228 million will have been spent on schemes in 102 local education authorities (MSC,1985).

The majority of local education authorities are now participating in TVEI and it is difficult to envisage an alternative outcome. As McCulloch points out, TVEI provided much needed resources, and for LEAs to have ignored the Initiative would have excluded them from influencing its future development (McCulloch,1986;45). Furthermore, the broad national guidelines that TVEI was constructed around gave substantial room for experimentation. TVEI was not a completely determined package (see MSC.1985. Dale,1986). However, it is important to remember that
TVEI is a vocational scheme which orientates the curriculum toward certain areas and away from others; the inclusion of industrial and commercially relevant courses necessitates the removal of others from the education of participating students. As a consequence, the autonomy schools and LEAs have through involvement in TVEI is very much relative autonomy. As Dale argues:

though LEAs and schools have not been forced to do anything they would not have wanted to given the funding, this does not mean that they are spending TVEI money as they would have, given a free hand. To this extent, at least, the Initiative has succeeded in shifting the pattern of education in the schools involved (Dale, 1985:55).

A sign of the extent to which the MSC believed they were able to reorientate the curriculum through TVEI came in July 1985 when 'the new chairman of the MSC, Bryan Nicholson, [expressed the] confidence that the influence of the TVEI would soon pervade the education system' (TES 12/7/85).

The degree to which effective change could actually occur in a period of economic recession and educational 'doubt, uncertainty and scepticism' has been questioned (Pyart, 1985:329). However, the restructuring of meso-level relations between the state and education brought about through TVEI laid the foundations for increased government control over the form and content of the school curriculum. The contract entered into by local education authorities is monitored in four ways. First, through an annual planning dialogue which takes place between representatives of local TVEI schemes and the central TVEI Unit
of the MSC. The Unit formulates a response to local authorities and can request more or less major changes. Secondly, TVEI schemes are overseen at the local level by local steering groups made up of representatives from both sides of industry, teacher unions, local politicians, and possibly other interests. As Dale notes, there is wide diversity in terms of how these groups operate in practice and in what direction any 'steering' might travel:

it could be in the direction of seeking either to minimise or to maximise the impact of TVEI on existing educational provision; steering committees might seek to identify and follow closely the educational requirements of local industry, or they might seek to retain control of the scheme tightly within schools (Dale, 1986; 34).

Thirdly, participating LEAs are required to submit regular financial and other returns to the TVEI Unit. These include details of how TVEI money has been spent, the gender, race, and ability-level of participating students, and 'curriculum database' information which covers the entire timetables of fourth and fifth years in TVEI schools. Fourthly, there is a widespread programme of evaluation. Two national schemes, being carried out by the National Foundation for Educational Research, and Leeds University, and a number of local evaluations collect data on various aspects of the implementation and operation of schemes. Local evaluations report to local steering committees and, through them, to the LEA and TVEI Unit at the MSC (Dale, 1986; 34-36).

The structure of this contractually based relationship provides the potential for state control over the general direction and specific
content of each local scheme. In contrast to SVP, the monitoring of the schemes available to the MSC means that the participation of increasing numbers of LEAs and schools in the Initiative does not necessarily mean that those involved in its expansion will suffer a loss of control over the content or direction of the scheme. However, this meso-level arrangement does not tell us how the relationship will work out in practice, or how particular programmes will operate, or what general effects they may have on schools and students.

b) The capacity of schools, teachers careers and the clientele
TVEI has forged a number of links between individuals, schools and the mode of production. In contrast to the SVP, these links have been placed on a contractual basis by the state. Local authorities had to bid to the MSC by submitting a proposals for local TVEI programmes. Once accepted, this constituted a contract, and schemes which breached this contract stood to have their funding withdrawn.

The consortium responsible for writing the LEA's proposal in this study, included the four Headteachers whose schools were to be involved in the scheme. Without exception, their reasons for applying for TVEI were financial in that they saw the scheme as a way of bringing desperately needed resources into schools. However, they also insisted that TVEI would '(take) the curriculum in the general direction we wanted it to go' and rejected the idea of TVEI as a training course (Borough Headteacher. See also Davies,1984). Despite the rejection of vocationalism as training, though, the concepts of 'employment', 'industry' and 'work', were central to the LEAs proposal (Davies,1984). This illustrates the importance of the form vocational schemes take. In
contrast to SVP, where schools were under no obligation to deliver a particular curriculum and simply had to agree to involvement in the scheme to be accepted, TVEI required schools to enter a competitive bidding process which contained explicit vocational guidelines.

As the LEA's proposal was a bid for money, and the MSC would not expect every detail of it to be observed, it should not necessarily be taken at face value. Nonetheless, a successful proposal does constitute part of the contract which exists between LEAs and the MSC. Furthermore, proposals involve schemes which have only to meet broad national guidelines (MSC, 1984). As a consequence, LEA proposals can be taken to indicate priority areas of the curriculum for particular schemes. The room for manoeuvre they have within the national guidelines allows for an interpretation which can be taken to represent elements of the authority's own agenda for participation.

The proposal submitted by the LEA was 'work centred' and dominated by an orientation toward the enhancement of economic performance rather than individual development. The LEA's proposal made clear that its TVEI scheme was to equip students with both general and specific skills which would enable them to 'work in a technologically complex society'. It was also designed to promote 'adaptable and innovative attitudes' which would develop in students 'an awareness of the place of the young person in an adult society' (LEA Proposal). The term 'adult society' should not be seen as neutral in its use. Rather, it is defined in terms of existing society. The mix of industrial and commercially relevant knowledge, skills and attitudes the proposal was interested in developing, are related to the features of the existing macro-level:
The submission being made under TVEI recognises the need to take account of the needs of both the local and national economy, and particular attention has been paid to future employment trends which show the continuing decline...of manual work and the corresponding rise in the proportion of non-manual workers (LEA Proposal).

The LEA's proposal embraced the government's mandate of vocational preparation. In terms of the authority's capacity, its emphasis on the macro-level signalled a willingness to construct a curriculum sympathetic towards the 'needs' of the economy. As with SVP, the local TVEI scheme was to import 'educational experiences' from the labour market to participating schools. Central to this was the aim of facilitating the transition from school to work through vocational college courses and work-experience:

One of the deficiencies in the relationship between industry and education is insufficient exchange of information and ideas about education and the training of young people as they transfer from school or college to work. By placing vocational experience at the centre of the programme we aim to improve contact and understanding, so as to facilitate transition (LEA Proposal).

The LEA was clearly willing to deliver a curriculum geared to producing a suitably prepared future labour force. To accomplish this goal, it was to rely on a 'careful integration of the industrial component of the scheme with learning experiences in school.' Work-experience was to be combined with vocationally oriented school courses, and industrially
relevant college courses (LEA Proposal). However, the nature of this curriculum raised questions concerning the ability of the authority and participating schools to satisfactorily deliver and implement its scheme.

Similar to SVP, TVEI places an emphasis on the coordination of individuals from school, college and the workplace. TVEI also places schools in the position of having to achieve a supply of work placements which are of sufficient quantity and quality for the scheme. Problems of achieving an adequate supply of placements had already been identified by the SVP evaluation. The extra demand placed on local industry by TVEI, was only likely to exacerbate the situation and create potential problems of capacity for participating schools. In addition to organizing work-experience, TVEI requires schools to design and teach such approved courses as information technology and business studies. While the funding of TVEI may overcome the need for sufficient resources, schools are still left with the task of employing sufficient teachers in what have been perceived as 'shortage' subject areas.

The relevance of teachers to the capacity of schools goes beyond the employment of those working in appropriate subject areas. The effects of TVEI on the labour process of teaching may affect the ability and willingness of individual teachers to deliver TVEI courses, and their readiness to promote the Initiative to its clientele. Similar to SVP, TVEI is likely to disadvantage certain teachers in terms of class sizes, departmental budgets, resources, promotion prospects, etc. However, due to the amount of funds provided by TVEI the extent of such disadvantage is likely to be far larger and more noticeable than with SVP. This would be exacerbated if the organization of TVEI actually
increased the workload for certain teachers not compensated by career benefits. For example, in contrast to SVP, TVEI's clientele should come from 'across the ability range.' Consequently, it is less likely that non-TVEI teachers would benefit from having 'disruptive' students removed from their classes.

For teachers involved with TVEI, many will be working in sites that their previous career experiences may not have brought them into contact with. Students have to be visited on work-placements and at college, and certain teachers will be involved in the search for an appropriate quantity and quality of work-experience for those on the Initiative. Whether such teachers have sufficient time and experience to carry out these tasks is not something which can be taken for granted.

A further factor important to the capacity of schools is the process of interaction which takes place between the Initiative and its clientele. As with SVP, TVEI is targeted towards a specific clientele. TVEI is different, though, in that participating students are meant to be drawn from a variety of social and academic backgrounds. The NSC's guidelines also state that programmes should provide 'equal opportunities' to girls and boys (NSC, 1984). The LEA's proposal chose to emphasise the role that structured guidance would play in providing such opportunities:

The counselling process before the course starts will have regard to the need to ensure a gender balance, and the advertising and information will stress the aptness of the course for pupils of both sexes...there will be a major investment in a programme of guidance and consultation, including pupil self-evaluation, individual
discussion with tutors, teachers and careers advisory staff; there will be a particular emphasis on the need to avoid sex stereotyping (LEA Proposal).

The proposal also states that the counselling process is to take place 'within the participating institutions.' This is a feature of the LEAs scheme which points to the importance of the capacity of the subject options choice process within each school for recruiting students. In particular, the prevalence of the form group as a site in which options advice is given within participating schools requires that ordinary teachers be prepared to help in recruiting individuals 'across the ability range from both sexes' (MSC, 1984). As with SVP, the extent to which individual teachers are prepared to accommodate this 'requirement' may depend upon the way in which TVEI impinges on their careers. A scheme which created substantial asymmetries between the promotion prospects and resources on offer to teachers, might not predispose teachers favourably towards promoting the Initiative.

As already stated, the contract based nature of TVEI meant that the involvement of a growing number of schools did not necessarily lead to a loss of control over the aims of the scheme. However, as the above examples illustrate, this is not to say that interaction between the aims of the scheme and the capacity of schools, teachers' careers, and the clientele, will lead to outcomes congruent with the original intentions of the state. Furthermore, the national TVEI guidelines allowed for an amount of interpretation and mediation by LEAs. In this example, the LEA chose to emphasise its programme in relation to certain of the guidelines rather than others. It was the themes of vocational
relevance and equal opportunities which characterised the submission. The simultaneous fulfillment of these two aims can, however, be seen as a further problem of capacity.

To the extent that the scheme was successful in providing equal opportunities to girls and boys through recruitment onto the course and through the chance to study and sample work in a variety of areas, it can be seen as going beyond a passive reflection of the pre-existing inequalities which exist in the economy (c/f SVP). This aim, though, sits somewhat uneasily beside the objective of vocational relevance; of accommodating the needs of local industry. Most local labour markets have a heavily gender and racially differentiated nature (Beechey, 1987). As a consequence, it is difficult to see how schools could actually realise the aim of 'equal opportunities' when they are meant to be oriented towards the 'needs' of such markets and, moreover, depend upon them for work placements. The way in which TVEI attempts to link individuals to the labour market, then, causes another potential problem of capacity for the scheme. It is a problem which stems from the form of a vocational scheme which aims to offer equal opportunities in the meso-level space occupied by schools, yet at the same time aims to be relevant to, and depends on, the structure and functioning of a macro-level dominated by the imperatives of capital accumulation.

Conclusion

This chapter has illustrated how SVP and TVEI embody the government's mandate of vocational preparation. It has also examined some of the structural features of interaction between the courses, the capacity of schools, teachers' careers and the clientele, which might bring about a
disjunction between the original aims and the actual outcomes of SVP and TVEI.

The development of the Schools Vocational Programme can be seen as the increasing diffusion of practices drawn from the macro-level of the capitalist economy by individual educators, parallelling the educational mandate which was in the process of being formulated by the state, and projected into schools across one LEA. This took place firstly in the form of a vocational scheme originating in an ES(N) school, and, secondly, through the LEA accepting the scheme and funding from the Department of Trade and Industry being secured. Thirdly, the Programme was expanded through comprehensive schools in the area by gaining the interest and support of Headteachers and Heads of relevant departments.

In contrast, TVEI was a project originating within the meso-level from the state. It was transported into schools on a contractual basis. Local education authorities had to submit proposals for consideration by the Manpower Services Commission who were able to ask for amendments, and approve or refuse individual projects. Guidelines for the project allowed for variation and a degree of autonomy. However, a central part of schemes had to be concerned with 'industrial relevance.' The most obvious example of this was the fact that work-experience constituted a compulsory part of TVEI schemes. Through this requirement, TVEI embodied practices from the labour market and projected them into schools.

In contrast to SVP, the state is responsible for TVEI and it has a much wider scope in terms of the number of participating schools. In fact, the government has recently announced that TVEI is to be extended
across the country to provide all students with the opportunity of participating in technical and vocational education.

There are many differences between the two schemes in terms of their origins, the amount of finance they receive, and their scope in the education system. Indeed, their separate sources of origin and different clientele illustrate the salience and relative autonomy of micro, meso and macro-levels of society. Neither SVP or TVEI were 'automatic' responses to a crisis in the mode of production. They originated from different societal levels (from individual educators and the state), and their aims were not identical. While SVP was concerned initially with achieving the employability of 'special' students in one locality, TVEI sought to reorientate the school curriculum. Furthermore, this chapter's brief examination of general features of interaction between the structure and content of courses and schools, illustrates there is no necessary 'correspondence' between societal levels. Instead, this process may cause disjunctions between the intended aims and actual outcomes of SVP and TVEI.

The relative autonomy of micro and meso societal levels is also an autonomy which can explain the contradictory nature of school-based schemes. For example, it has been seen how TVEI is a course which includes notions of 'equal opportunities', yet is tied to a macro-level which operates on the basis of inequality and exploitation. Similarly, TVEI is meant to cater equally for students 'across the ability range', yet should prepare them for a labour market which is heavily stratified. The crisis in the mode of production may have necessitated
a response from the state, but it did not ensure that this response would be an accurate or adequate one.

The general features of interaction between SVP, TVEI, and schools, point to the importance of similar areas in examining further these schemes. In particular, the operation of work-experience and school-based vocational courses are central to whether the curriculum provided by both SVP and TVEI can deliver their intended aims. Similarly, aspects of the reception of the schemes by teachers and students are important for the delivery of these courses.

It has not been part of the purpose of this chapter to investigate the specific capacity of Stonegate and Borough, the schools in my study. However, when investigating the actual outcomes of SVP and TVEI, it is necessary to take into account how the general structural features of interaction are located within and affected by particular schools. As a consequence, analysis will now focus on some of the features of importance which have been identified in this chapter, as they operate within Stonegate and Borough schools.

First, the subject options process is essential to both innovations for recruiting their target clientele. My study of this will focus on the official options sessions received by students, and the way in which form teachers perceive and advise their groups. The perceptions and actions of form teachers, the options process and student perceptions of SVP and TVEI will constitute chapter five. Secondly, the school side of these courses is important for the delivery of their aims and the realisation of the government's mandate of vocational preparation. Chapter six will analyse what can be seen as a paradigmatic example of a vocational course; the 'Factories and
Industry' course. This has as its central aim the 'opening up' of students to the possibility of working in industry. Thirdly, chapters seven and eight will concentrate on the central extra-school element of both SVP and TVEI; work-experience. The problem of achieving a sufficient supply of placements has been mentioned, and chapter seven will examine factors pertinent to this element of school-industry links. Chapter eight will focus on the actual experiences students have while on work placements in an attempt to ascertain if the practices of work placements complement the aims and objectives that this activity has been invested with by SVP and TVEI (see Appendix).

NOTES
1. The SVP operates in Stonegate school (a mixed gender, comprehensive school of about 800 students) and Borough school (mixed, comprehensive school of over 1200 students). TVEI operates in Borough school.

2. For details of fieldwork see the Appendix.

3. Although the SVP director did all he could to place students into placements of their choice.

4. However, TVEI schemes are required to be technologically oriented, relevant to local labour market conditions, and work-experience is compulsory.
The previous chapter examined how the structural features of SVP and TVEI may interact with the organization of a school, teachers' careers and the student clientele, to affect the aims of vocational schemes. This chapter takes the analysis one stage further by looking in detail at some of these micro and meso-level factors as they become evident during the subject options process at Borough school. The social context of the school will be outlined before examining the options programme.

**Borough school and the introduction of vocational education**

Borough is a co-educational comprehensive school which caters for over 1200 students aged between 11-18 years. It is located at the end of a council estate which constitutes a major part of its catchment area. The estate is known in the local town for high levels of social deprivation, and its unemployment rate stands at over twenty per cent. The council estate was designed originally to house 'problem families' in the town, a definition which often referred to those who were not paying their rent, and is seen by the local police as a 'difficult' area. The young people on the estate live in an extremely alienating physical and social environment, and evidence of the problems they have to cope with is clear in the use of drugs and alcohol, which is described by certain teachers and social workers as 'depressingly common.' The major part of Borough's catchment area covers this, and a neighbouring council estate. The school's intake is overwhelmingly working-class and white.
The problems caused by this deprivation inevitably had consequences for Borough. Some of the staff I spoke to gave the impression that Borough was a school on the verge of crisis. Staff turnover appeared to be high, and I was told by one teacher that it was often a problem retaining new staff for any length of time. While I was unable to obtain exact figures, an event which seemed to support this occurred during a conversation with a head of department:

Well, are you interested in a teaching job here as well as your research? There's a [...] job going here for next term. If you wanted it you could probably have it (Head of Department).

But I couldn't teach [...], I'm trained in the humanities. Besides that, I only just scraped through the [...] 'O' level (CS).

That's the least of the qualifications you need to teach here! If you want to teach here, there's a job going. Don't worry about not being qualified. You know what it's like here...that gives you an advantage (Head of Department).

A major reason for staff turnover appeared to be the stress involved in teaching students with severe problems which could erupt into classroom incidents. The extent of this was indicated when I attended a pastoral meeting of senior teachers who were attempting to alleviate discipline problems. First, they were trying to choose from a number of potential candidates who should be referred to a special school, and, secondly, they were trying to redistribute the 'balance of troublemakers.' After
much discussion, it was decided that little reorganization could take place as 'there's at least four, five or six [students] with serious problems in each [form] group. Any moves could actually make things worse' (senior teacher).

In the context of these difficulties, both SVP and TVEI were welcomed by senior teachers. They were seen as 'relevant' curriculum developments because of their vocational orientation, which provided 'the type of structure... students required', and as schemes which had the potential to relieve some of the school's problems. Both the mandate of vocational preparation and what can be seen as the school's own internal mandate of survival entered into the acceptability of these schemes for senior teachers. However, this acceptability does not guarantee that the aims of SVP and TVEI will be realised. As illustrated in the previous chapter, there are a number of factors stemming from the structure of the schemes and their organization within the school, which may affect the reception of SVP and TVEI. These assume particular importance in the options process, during which both schemes seek a particular 'target' student clienteles.

At Borough, it was traditional that senior teachers would recruit to SVP 'low academic ability' students who might benefit from the course. However, the school Head of SVP decided to make the Programme an 'open' option, and aimed to attract a 'mix' of students to the course. Those who wished to take a number of exams, though, were still to be excluded. In contrast, TVEI programmes are required by the MSC to 'cater for young people across the ability range and offer equal opportunities to boys and girls' (MSC, 1984). As a condition of acceptance, schools had to undertake to achieve this goal. Moreover, while the MSC has permitted
considerable deviation from the recruitment of a 'balanced intake' to TVEI, it does monitor the progress of schools towards this goal through requiring such details as the number of girls and boys on the course.

The Organization of Option Choices

Borough's 1986 option choice process started four weeks before the end of the Spring term. Students attended options talks given by teachers whose subjects were on offer in the fourth and fifth years, and career advice lessons examined the details of particular jobs. Advice sessions were set aside where form teachers discussed and explained options with their group, and answered specific questions concerning the relevance of subjects for individual students.

The school was keen to involve parents in this process. They had the opportunity to attend an 'information evening', where the option choice procedure was explained, and a parents' evening, where subject choice and academic progress was discussed with teachers. Subject specialists were also available during the parents' evening to explain the content of courses.

The form teacher is central to the options process. S/he is in the best position to gather information on students, and is a figure who represents a 'bridge' from school to the family - from the meso to the micro-level of society. The form teacher performs such activities as attending 'parents' evenings' and summarising, in termly reports which are sent home, the general performance of students at school. The influence of the form teacher, then, can be important in presenting vocational schemes to students and their parents during the options process.
Form teachers and the options process

All of Borough's third year form teachers asked their students to think about a number of factors when making their decisions. Among the most common were the student's ability, and the usefulness of a subject for post-school plans, whether a subject was enjoyable, the content of new courses, and the importance of consulting with parents. Form teachers considered the provision of such advice a central aspect of their role, and were equally keen to stress that final option decisions were the responsibility of individual students. These form teachers can be seen as creating an 'enabler' relationship, whereby general advice is offered to students, but they are left to make their own final decisions (Blackburn, 1975; 215).

a) The target clientele of vocational schemes

The decision to make SVP an 'open choice' and the MSC requirement for a 'balanced intake' to TVEI courses, necessitates that form teachers become 'policy bearers' (Blackburn, 1975; 6). By implication, form teachers should make known to their forms that SVP is no longer confined to 'low ability' students, and should positively encourage students from both sexes across the ability range to consider opting for TVEI. However, form teachers are not passive individuals willing to take on board external requirements without question. As those I spoke to at Borough made clear, they had their own views concerning the advice they gave to students at options time. Form teachers sought to construct an 'enabler' relationship with their students, a relationship not always conducive to recruiting a 'mix' of students to SVP or TVEI. For
example, a form teacher may view TVEI as a course suitable for only the most 'able':

[TVEI] is a subject I'd advise only those of high ability in my form to take (Mr Brown, [teaches TVEI]).

There are other reasons why form teachers may not take on board the MSC's requirement for a 'balanced intake' to TVEI, or accept SVP as an open option. Form teachers are not just individuals with a general advisory role, they are also usually subject specialists. As such, they may be influenced by a number of other factors pertinent to teachers generally, and their specific position within the school structure. For example, it may not be in the interests of a form teacher who is also a non-TVEI subject specialist to promote the Initiative to students. Success in encouraging students to opt for TVEI may lead to a fall in language recruitment (see Shilling, 1986).

In short, the views and interests of form teachers may impinge upon the advice they give to students and affect detrimentally the target clientele of SVP and TVEI. The identification of factors, or sources of influence, which may affect form teachers' advice assumes particular significance when it is realised that schools bear close similarity to what Dorothy Smith has characterised as a 'front line organisation' (1965, 381):

In a front line organisation the locus of responsibility for organisational performance and policy making at the center is peculiar in being divorced from the locus of organisational
Features of front line organizations include the peripheral units performing their tasks independently of other like units, and the existence of obstacles to the direct supervision of the activities of such units (p.388). If peripheral units are seen as teachers operating in classrooms, the relevance of Smith's work becomes obvious. The success or failure of much educational policy is dependent upon the classroom teacher, working in an environment far removed from the policy making centres of LEAs or government. At the same time, teachers are usually autonomous agents within the classroom. For the most part they work independently of colleagues without formal supervision. The organization of teachers into groups via 'the department', is sharply contrasted with their entry into the classroom as individuals. Similar features apply to form teachers in their role as advisors. With regard to the objective of recruiting a 'balanced intake' to TVEI or a 'mix' of students to SVP, it is up to form teachers, not central policy makers, whether they use their influence towards achieving these goals. In short, the present organization of teaching and classrooms makes them resistant to close supervision or control (c/f Loveys, 1988). To the extent that teachers form strong views about SVP and TVEI, their autonomy allows for these to be translated into action via the advice they give to students. An important set of questions relevant to this, then, concerns identifying the sources of influence which are encountered by teachers, how they interact, and their outcomes.
Three major sources of influence will be identified as relevant to form teachers and TVEI and SVP's target clientele. These are 'dissemination', 'divisiveness' and 'ideology'. Divisiveness concerns the potential rifts which may be caused in schools by curriculum developments which concentrate resources in certain subject areas. Dissemination refers to the degree of effectiveness with which information about TVEI and SVP in general, and the objective of their target clientele in particular, is communicated to teachers. Ideology concerns the rationality with which the Government and MSC have imbued TVEI, and that which has been attached to SVP by its founders and contemporary operators. These both present vocational education as a substantial response to the problems of youth unemployment and an attractive alternative for students unsatisfactorily catered for by existing curricula. Throughout this discussion of the role of form teachers in the options process, I will include three additional factors. These are, the recurring themes associated with the school as a front-line organisation, the deskilling of teachers, and the politics of TVEI and SVP within the Borough curriculum.

b) Form teachers, sources of influence, and the target clientele of SVP and TVEI

Eight form teachers were responsible for guiding the 1985/86 third year through their option choices at Borough. They are listed below in figure six according to their subject specialisms, whether they were involved in teaching TVEI groups (none taught SVP groups), and whether they were in charge of an 'alpha' or so called 'mixed ability' form group.
179

Table One Here.

1. The Dissemination of SVP and TVEI

In a school which requires or aims for a particular composition of students on curriculum innovations, the effective dissemination of information concerning such goals is a precondition for teachers to become 'policy bearers' (Blackburn, 1975). However, the evidence is that this had not occurred at Borough.

The Schools Vocational Programme was introduced to Borough through consultation between senior staff and the SVP project director. This was followed by the appointment of a senior teacher responsible for the development and coordination of the course at Borough. However, the majority of staff were not consulted as to whether SVP should be adopted by the school. The situation was not much different when, several years later in 1984, TVEI was introduced to the school. At the beginning of the term in which TVEI started, an afternoon's in-service training was devoted to the implications of TVEI for the school. This was the first, and, for at least two years, the only time teachers were brought together and given the formal opportunity to discuss the course. An indication of the inadequacy of this afternoon was that only two form teachers mentioned it as a source of information.

It is notable that unlike many other curriculum developments (such as Schools Council projects), classroom teachers were not involved in the formation of TVEI or in the decision to have it in their classroom. In contrast, SVP was formulated by teachers. However, its method of
<table>
<thead>
<tr>
<th>Form teacher</th>
<th>Form group</th>
<th>Subject</th>
<th>Teaches TVEI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr Bacon</td>
<td>Mixed</td>
<td>Technical Design</td>
<td>Yes</td>
</tr>
<tr>
<td>Ms Hill</td>
<td>Alpha</td>
<td>Art</td>
<td>No</td>
</tr>
<tr>
<td>Mr Stone</td>
<td>Mixed</td>
<td>English</td>
<td>No</td>
</tr>
<tr>
<td>Mr Miller</td>
<td>Alpha</td>
<td>Metalwork</td>
<td>Yes</td>
</tr>
<tr>
<td>Mr Graham</td>
<td>Mixed</td>
<td>Music</td>
<td>No</td>
</tr>
<tr>
<td>Mr Brown</td>
<td>Mixed</td>
<td>Science &amp; Technology</td>
<td>Yes</td>
</tr>
<tr>
<td>Ms Smith</td>
<td>Mixed</td>
<td>Business Studies</td>
<td>Yes</td>
</tr>
<tr>
<td>Mr Ball</td>
<td>Mixed</td>
<td>English</td>
<td>No</td>
</tr>
</tbody>
</table>
introduction to Borough was similar. It was brought into the school largely through the decision of a few senior teachers.

This lack of consultation, which is especially pronounced in the case of TVEI, can be seen as an aspect of the contemporary deskilling of teachers' careers (see Lawn & Ozga, 1981. Apple, 1982 & 1986). Teaching has been identified as undergoing a process akin to 'proletarianization', whereby the capacity of teachers to initiate and execute their work has been diminished. This is reflected in the introduction of curriculum developments which bypass teachers in their conception and formation, and adoption in schools. Now, the deskilling of teachers' work started long before the introduction of TVEI (e.g. Apple, 1982 and 1986). However, the formation of the Initiative at the level of government, and its often hasty adoption within schools by headteachers, can be seen as part of a complex process which redefined the traditional responsibilities and skills of teachers.

At Borough, an indication that the adoption and initial implementation of both SVP and TVEI had bypassed many teachers was provided by those form teachers dissatisfied with their knowledge of vocational education at the school, and those who felt unable to offer adequate advice about it to their students (see Table two). Furthermore, of direct relevance to the target clientele of the vocational schemes, six form teachers were unaware of TVEI's 'balanced intake' requirement, and, none of the eight form teachers knew that SVP had been made an 'open option'. They continued to view it as 'special' provision for 'low ability' students who were identified as suitable by senior pastoral staff. The effect of this was that form teachers were free to form their own judgements about who was suitable for these
vocational schemes. As a consequence, there was no guarantee that form teachers would promote TVEI to both sexes across the ability range, or convey to students that SVP was available as an option to a greater mix of students than had previously been the case. These are the opposite conditions to those suggested by Smith for realising centrally formulated goals in front line institutions. Here, form teachers would be left 'ideally' with the 'minimum leeway for judgement' (Smith, 1965; 39).

Form teachers received no direct information about SVP during the options process. However, some were exposed to a source of information concerning TVEI through escorting their groups to a TVEI 'exhibition'. Established by the school TVEI coordinator, the exhibition illustrated what was done on the Initiative. Form teachers who attended, viewed it as 'an extremely good display.' However, in some cases it was the coordinator who showed third year groups around. Here, there was no necessity for form teachers to be involved, as the job of guidance was performed by the senior teacher in charge of the Initiative. A source of information directed towards form teachers, was literature about TVEI. This was distributed regularly by the school coordinator, but appeared to have been received by only four form teachers. One possible explanation for this breakdown in communication was an erratic internal mail system (see Shilling, 1986).

The absence of any dissemination of information about SVP and the erratic nature of information concerning TVEI, meant that only one and three form teachers respectively were satisfied with their knowledge about SVP and TVEI at Borough. The indirect effects of 'separating' form teachers from detailed information, was that they were largely
removed from being able to advise students about vocational schemes. As a result of the perception of SVP as an 'exception' from the options process, this was acceptable to form teachers. However, for both courses, form teachers were largely unable to advise students, and had instead to refer them to those who possessed the relevant information. Typical were the following remarks:

I know nothing about TVEI, I've received no information about it whatsoever... As a result, I couldn't advise my group and I had to tell those that were interested to see [the TVEI coordinator] about it (Ms. Hill, Art).

I told those who were interested that they'd have to go and see [the coordinator] if they wanted to know anything about TVEI. The same was the case with SVP, only with that they'd see [the Head of SVP] (Mr Ball, English).

...as I didn't know much about either, I told the couple who were interested [in TVEI] to go and see [the coordinator]. Other subjects I knew about and could advise about, but not that one (Mr Graham, Music).

From perceiving their role to be concerned with generally advising students about subject options, these form teachers were distanced from the role of academic advisor. Instead of being able to construct an 'enabler' relationship with their form, they were placed in the role of an intermediary with regard to SVP and TVEI, becoming agents of referral.
to those who have the necessary knowledge. Again, the indirect effect of these vocational schemes can be seen as accentuating the process of deskilling identified by Apple, Ozga and others. Instead of being able to inform and advise about the whole option choice process, the referral of students interested in TVEI to others brings the 'breakdown' of that advisory role with tasks effectively 'assigned to different individuals' (Ozga, 1981:40). For certain teachers, this may constitute a welcome distancing from an unwelcome intrusion. However, this does not negate the fact that their ability to advise has been removed.

The cause of this deskilling can be seen as the interaction of the structural requirements of schemes (concerning their target clientele), and the way in which this 'demand' was translated into school. SVP and TVEI were introduced without widespread consultation and while a change in their management within the school to involve teachers was not ruled out completely by the schemes' structural features, it would have required a major reorientation on the part of senior staff. That this did not take place is unlikely to be a feature specific to Borough. However, it meant that the capacity of form teachers to carry out an advisory role was reduced or removed.

Now, such a situation might be seen as overcoming the problems faced by those responsible for the decision to make SVP an 'open option', and those in charge of recruiting a 'balanced intake' to TVEI:

The dilemma of those occupying central position (in front line organisations) is that they are responsible for making policy and maintaining standards of performance for the organisation as a whole, while occupying positions from which this responsibility can
least effectively be exercised as authority (Smith, 395).

Bypassing form teachers may place those in charge of SVP and TVEI in a better position to 'exercise effective authority' over the recruitment of students. However, a feature of front line units is the difficulty of controlling the activities of those in them. Form teachers may have their advisory role reduced, but their position had not been deskilled insofar as their classroom autonomy was concerned. As a consequence, the distance form teachers may feel from SVP and TVEI may prevent them from encouraging any of their students to opt for vocational schemes:

I didn't say anything or advise anyone to take SVP. We don't have the information necessary to do that - that's with those who run the course. It's not really an option anyway (Mr Bacon, Technical Design).

I don't know anything about It CSVP, so advice is up to some other teachers. As I understand, advice and recruitment are up to the teachers in charge of the course (Mrs Smith, Business Studies).

No, I didn't have much to say or advise anyone to take TVEI. It was just an option choice which they needed to find out about from TVEI teachers (Ms Hill, Art).

As I've not had any information about TVEI, I couldn't tell any of my kids about it and I certainly wouldn't promote it to any of them (Mr Stone, English).
Even if these form teachers assumed the role of being an agent of referral to the Head of SVP and the TVEI coordinator, this does not ensure a satisfactory meeting. The Heads of Department may be more than willing to provide advice, but 'many pupils will need an initial introduction before they will feel free to approach them' (Blackburn, 1975;105).

The lack of a close source of information in the familiar figure of the form teacher, may prevent SVP and TVEI from being considered by some students. At Borough, no form teacher promoted SVP, and three of the five form teachers who felt distanced from TVEI did not promote it to any in their group. The other two promoted the course, but to 'those who were enthusiastic about it in the first place' (Mrs Smith, Business Studies), and 'those individuals who I considered to be suitable for a vocational course' (Mr Miller, Metalwork). Indeed, not in a single case did any of Borough's third year form teachers promote the Initiative to both sexes across the ability range.\textsuperscript{3}

The lack of information about SVP, the erratic dissemination of knowledge concerning TVEI, and the 'enabler' view Borough's form teachers had of their role, appeared to contribute to this outcome. These factors illustrate the importance of the school as a site whose terrain may affect the operation of vocational schemes, and the interaction of factors from different societal levels which have historically combined to produce and legitimate in these teachers a view of their job in which an 'enabler' view of their advisory role is dominant. However, a number of other sources of influence also impinged on form teachers to contribute to to this outcome.
The Potential Divisiveness of Vocational Schemes

The potential divisions generated by vocational schemes are a source of influence which may also endanger the recruitment of a specific clientele to SVP and TVEI.

SVP had established new teaching posts and enabled staff to buy extra curriculum materials. It had also provided for funding whereby certain teachers involved with the Programme were relieved of their normal teaching duties for the purposes of visiting students at college or on work placements. This funding benefitted previously 'remedial' departments in participating schools across the local education authority. TVEI has injected millions of pounds into selected areas of the education system across England and Wales. At the level of the school, favoured subject areas have received thousands of pounds extra to their usual capitation allowance. In common with other schools, science and technology were benefitting at the same time that certain other subjects were struggling with falling resources at Borough. The very structure of both SVP and TVEI, then, led to asymmetries in the financing of school subjects.

I will mention two, interrelated factors which can lead to divisions in schools with vocational schemes; the distribution of resources, and what will be presented as the vocational 'paradigm of relevance'.

The distribution of resources

SVP resources had enabled Borough to expand its provision for 'youngsters not suited to the academic curriculum' (Head of SVP). The
beneficiaries of this funding were the few teachers involved in the SVP department. The financial resources available were small in comparison to those provided by TVEI, but still led one form teacher to question their deployment:

I understand it [SVP] gets quite a lot of extra money. I'm sure [the teachers involved] there do a good job but I can't help thinking that it would be fairer if resources were spread around more evenly, especially when all these cutbacks are going on (Mr Ball, English).

Despite this concentration of funding leading to one form teacher questioning the position of SVP, this was not general and did not seem to impinge widely upon the views of form teachers. This may have been due to a lack of knowledge about the scheme. However, there is reason to believe that an increased awareness of SVP would not have led to resentment. The Programme took students out of the classes of non-SVP teachers for a number of lessons each week. This may have created problems for those teachers who had to arrange lessons in the knowledge that certain individuals would often be absent. However, this may well have been more than compensated for by the smaller classes they had, and through having 'some very badly behaved individuals' removed from their responsibility (Head of Year). Furthermore, the view that senior teachers at Borough had of the Programme as involving many students previously alienated from schooling (see chapter 4) was reflected in the comments of those two form teachers who appeared to know anything about the content of SVP:
I'm not happy with the amount I know about SVP, it seems to operate a bit in the dark in this school. But I think it's for those classified as 'no hopers'. They seem to enjoy it from what I hear, and it gets them out of school which is good for them and the staff. It has an apparent relevance for those that do it, doing and dealing with physical things instead of reading about them (Mr Stone, English).

The impression given is that it's for those that no one else will take, though I don't think that's completely fair. It gets them out and about and I think [the teachers involved] give them [the students] a curricula which is more suited to their interests and abilities. To that extent it has got to be good for them (Mr Bacon, Technical Design).

The SVP may receive more funding than most of the subject departments at Borough. However, it provided staff not involved in the Programme with indirect benefits of relevance to the labour process of teaching, and was seen by some as a worthwhile course which benefitted its clientele. Furthermore, even if the knowledge that a subject was receiving greater than average funding did lead to resentment, the position of SVP would have been eclipsed by that of TVEI. If teachers were opposed to privileged funding, TVEI was by far the largest and best known example of this.
The concentration of TVEI resources at Borough had equipped certain subjects with new 'up to the minute' hardware. Classrooms had been filled with new computers, and other electronic equipment. Furthermore, it was not simply 'core' TVEI subjects such as Information Technology and Business Studies which benefitted. The head of the maths department went to the Headteacher and explained the extra strain which would be placed on ordinary classes as a result of having TVEI sets of fifteen. As a result, the maths department won extra money and teacher time for participating in the Initiative. Similar problems were created for the PE department through having to teach TVEI students in a separate group. Physical Education teachers had to cope with a TVEI group of 60, followed by the rest of the year group which consisted of well over a hundred students.

The differential allocation of resources within and outside TVEI areas is clearly another source of influence which may impinge upon form teachers' views. Furthermore, the resources factor is unlikely to stop at differences between subjects. TVEI has provided for some activities to be funded while their pre-existing counterparts within the school remain unfunded and often 'voluntary' activities. For example, residential experience forms a central part of TVEI and is heavily resourced. This is in contrast to the usual school trips which are funded from school finance, contributions from students and parents, and require teachers to volunteer time and take the responsibility for looking after students. As the recent deaths of children from Bucks, and the subsequent resignation of teachers involved in the outing
illustrates, this entails a substantial unpaid risk for teachers (TES, 15/11/85). The asymmetrical allocation of resources extends to reports and their TVEI equivalent, student profiling. Profiling requires that teachers (including form teachers) and students spend a number of periods over the year together as individuals, negotiating formative and summative profiles. At Borough, this amounted to finding the time to enable students to write, in close consultation with teachers, up to 50 per cent of their profile report. The MSC has provided resources to enable this to take place. However, such financial support contrasts with the long standing practice of teachers having to complete hundreds of reports in their own time. It would not be surprising if this left a 'bitter taste' with those teachers who did not benefit from MSC resources.

The funding allocated to TVEI was much greater than that attached to SVP. Furthermore, in contrast to the Programme, TVEI benefitted a number of specialist subject departments, rather than a single departmental group. Another feature of the Initiative was that it provided few indirect benefits to non-TVEI teachers, yet could create more work for them through the creation of large disparities in TVEI and non-TVEI groups. As one form teacher said:

As far as I see, it [TVEI] just makes more work for us. We didn't get extra funding, as certain other departments did, yet I've ended up having to teach a group which isn't taking TVEI which is much larger than usual. Teachers with TVEI groups have much smaller groups; it doesn't seem right. There's big inequalities that have appeared with TVEI since it came to this school (Mr Ball, English).
The Vocational 'Paradigm of Relevance'

In establishing SVP and TVEI, local teachers on the one hand, and the Government/MSC on the other, have created what can be seen as a paradigm of relevance. This consists of those subject areas considered as meeting the 'rules and standards' which prepare students for working life (Kuhn, 1970). The content of the paradigm of relevance depends upon the relationship between the structure of the courses and the managerial decisions of individual schools and, in the case of TVEI, local authorities. While schools influence the content of both schemes, certain elements such as work-experience are compulsory.

The SVP has as its primary aim the preparation and eventual incorporation of students into waged labour. It was established as a result of the deficiencies in the existing curricula for students who were not motivated by traditional academic subjects. As such, the SVP places itself in opposition to other school subjects as a scheme which can cater adequately for a specific group of students and equip them with skills and attitudes relevant to work. By definition, other subjects do not fulfill this task and fail to meet the needs of 'low academic ability' students. If this was communicated to other subject teachers, antagonism could grow towards the scheme.

In TVEI there is an emphasis on 'technical and vocational education'. This alone may not, perhaps, create status differences between 'applied' subjects and others. Indeed, much evidence attests to the difficulty applied technical and vocational subjects have had in attempting to achieve equal standing with 'traditional sciences' (McCulloch et al 1985). However, the existence of financially privileged areas of the curriculum (which may include traditional and
applied science) considered 'relevant' to students needs across the ability range, creates areas of exclusion. Subjects left outside have, by definition, something about them which is irrelevant to the objective of enriching and widening 'the curriculum in a way that will help young people to prepare for the world of work, and to develop skills and interests, including creative abilities' (MSC, 1984). This also applies to teachers. It is those within TVEI subjects who are implicitly defined as having the skills to help young people in these ways. Moreover, their skills are often rewarded by finance, far greater than that available for SVP teachers, which enables their departments to be lavishly equipped with new resources. What then of the teachers excluded from involvement with TVEI? The implication is that the MSC does not view them as having the skills necessary to contribute to the above objective. Such teachers may see themselves demoted to 'second class' status and object to the structure which created such differences.

I'm against it [TVEI]. It creates a hierarchy between subjects making them into 'first' and 'second' rate parts of the curriculum. It's elitist and divisive. The MSC are telling teachers in subjects like mine [humanities] that we're irrelevant to the education of children (Quoted in Shilling, 1986; 408).

I'm not in favour of it [TVEI]. It favours some subjects while relegating others; almost creating a two-tier structure of subjects some of which are deemed more relevant to a child's education than others (Mr Ball).
As mentioned earlier, form teachers do not just 'look after' groups of students. They are also subject specialists who have to work within the confines and demands of their departments. If the interaction of sources of influence which are seen to revolve around and stem from TVEI are experienced by form teachers as a burden, this may affect their opinion of the Initiative and their advice to students. Such a tendency may be reinforced by the possibility that it could be rational for form teachers of subjects outside of the Initiative not to promote it. Heavy student demand for TVEI would serve to 'confirm' the second class status of other areas of the curriculum implied by the MSC, and the lack of relevant teaching skills held by those within these areas. An undersubscribed Initiative, however, releases students for recruitment to other subjects. This would create a situation whereby the consumers of options contradict, by their choices, the MSC's paradigm of relevance, and, for non-TVEI teachers, reaffirm the importance of other subjects.

Up to now, I have examined certain sources of influence which may work against the promotion of SVP and TVEI. However, elements of the politics of the Borough school curriculum had a different effect on some form teachers.

Senior teachers viewed both vocational schemes as curriculum developments which coincided with the direction in which they wanted the school to develop (see chapter 4). However, it was not only senior teachers who were concerned that Borough should move towards a more 'practically based curriculum'. A concrete rationale existed in the minds of many teachers which supported such a view. This stemmed from
the day-to-day problems they and their colleagues often faced in the classroom which stemmed from the living conditions of their students.

As a result of the social and economic deprivation which characterised the living environment of many young people, Borough's students often brought emotional problems with them to school. Teachers sometimes had an exhausting job just coping with these, as they manifested themselves in the eruption of discipline problems in the classroom. Many teachers I spoke to were grateful for any course which was 'more practical' and 'got the kids out of school'. Although this did not lead any form teachers to express strong opinions about promoting SVP, as they saw this as someone else's job, for two teachers it overrode the reservations they had about TVEI:

If it gets them occupied and takes them out of school it's probably better than what's on offer to them otherwise. Those I thought would benefit from that type of curriculum, I suggested they should find out about it and maybe opt for the course (Mr Graham, Music).

I answer individual queries as they come up, but for some of my kids I thought it might be good for them. They're not doing anyone any good by being in school so if TVEI gets them out perhaps we'll all feel a bit better! (Mr Miller, Metalwork).

This mitigating factor can be seen as a consequence of the interaction between the structure of vocational schemes, in that they removed students from school for a period of time, and the social context in
which Borough operated, which had created the school's own 'mandate of survival'.

**Ideology: a countervailing tendency**

Before tabulating information relevant to the recruitment of a 'mixed' intake to SVP and a 'balanced intake' to TVEI, which I gained from the eight form teachers I spoke to, it is important to mention a further countervailing source of influence.

The rationale which the founders of SVP attached to it, and that which has been used by the Government in promoting vocational/training schemes, gives great significance to equipping young people with 'relevant' skills and attitudes. Since the Great Debate, this has been built into a political and ideological discourse which views a lack of training as a major reason for youth unemployment, and posits schools as being responsible for this inadequacy. TVEI has been promoted as a major response to this, and SVP fits into the same frame of reference.

To the extent that form teachers believe that vocational schemes may help students gain employment, or even a sought after YTS course at sixteen, they may encourage their group to opt for SVP or TVEI irrespective of their subjective experiences of the courses. This was the case for Mr Bacon and Mrs Smith, both of whom were involved in teaching TVEI and viewed it in terms of the ideology attached to the course:

> It should help them gain the type of skills they need to get jobs after they leave school. In the current environment, that's no small accomplishment (Mr Bacon, Technical Design).
If they get stuck in to what's on offer to them, they should come out of TVEI extremely employable (Mrs Smith, Business Studies).

Over the last few pages I have mentioned a number of factors, or sources of influence, which could affect form teachers' views of SVP and TVEI. These factors do not exist separately, but often combine in the school and may intersect at different points depending on individual form teachers. I have also noted the importance of schools as front line organizations, which make it difficult for those responsible for SVP and TVEI to reduce the autonomy form teachers enjoy, even if they manage to reduce the advisory role of such teachers. A centralised recruitment process may attempt to bypass form teachers by removing them from the information necessary to give 'considered advice' about the scheme, but their influence is likely to remain while the school is organized into form groups. This potential 'control' is one aspect of teachers' working conditions that has not been deskill ed by the introduction of vocational education. In the front line units of the classroom, form teachers are free to translate their views and experiences of SVP and TVEI into advice to students. At Borough, not once did these lead form teachers to promote SVP to a 'mixed' target of students, or TVEI to both sexes across the ability range. Table two summarises some of the views of Borough's form teachers more systematically than would have been appropriate in the main body of this chapter.

Table Two Here.
Table two.  **Form teachers' views and experience of vocational education**

<table>
<thead>
<tr>
<th>Mr Bacon</th>
<th>Ms Hill</th>
<th>Mr Stone</th>
<th>Mr Miller</th>
<th>Mr Graham</th>
<th>Mr Brown</th>
<th>Ms Smith</th>
<th>Mr Ball</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Satisfied with their knowledge about TVEI within the school?</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes?</td>
<td>Yes</td>
</tr>
<tr>
<td>Satisfied...SVP?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>'Deskilling' TVEI. Expressed experience of distancing from any role SVP concerned with advising students</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Did form teachers benefit (TVEI) from TVEI/SVP resources?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Aware of aim to recruit a 'balanced intake' to TVEI?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Aware..'mixed' intake to SVP?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Promoted TVEI to a 'balanced intake'?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Promoted SVP to a 'mixed' intake?</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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</tbody>
</table>
The interaction of form teachers and vocational education at Borough illustrates the importance of allowing for the interaction of factors from different societal levels. The structure of a vocational scheme, the obligations schools and teachers assume and the room for manoeuvre they have in operating the scheme, are outcomes of an interaction of factors as they are translated within the school and classroom.

However, the interaction which takes place between form teachers and their students in the classroom is not the only part of the subject options programme. At times the front line units are either bypassed or penetrated by other teachers participating in this process. This happens in two ways. For a number of general subject and career advice sessions, students are removed from the front line units of the classroom and taken to the 'public' arena of the main school hall. The private domain of the individual form teacher working in a classroom is also 'invaded' by other classes and teachers. Several sessions in the options programme consisted of form groups meeting together in classrooms to hear a talk or watch a video.

The Options Programme

The option sessions contained a number of common themes which drew on elements from different societal levels, and were then articulated to students through several distinct messages. The timetable for these sessions was dominated by careers advice and subject information lessons, and is outlined below in figure six.

Figure Six Here.
Figure Six. The Options Programme

Session:

1. TVEI Coordinator options talk to the third year in the main hall.

2. a) General careers talk.
   b) Talk on jobs in the construction industry.

3. Options talk on "Cars, Bikes and Outdoor Pursuits."

4. Head of SVP options talk to the third year in the main hall.

5. Careers Video: "Technicians in Industry."

6. General Careers and Options Video: "Which Way Now?"

7. Careers Video: "Leisure Pursuits."

8. Careers talk by outside speaker on "Jobs in Engineering."

9. Form group session concerned with general advice and demonstrating how to fill in the options form.

10. Form group session (same as above).

11. a) Drama option session.
    b) Media Studies option talk.

12. Head of Year talk concerned with filling in options forms.
It should not be assumed that the content of the sessions was always communicated to those they were intended for. A significant number of students at Borough had 'no interest whatsoever in academic work' (Head of SVP), and this was reflected in their behaviour during the subject option sessions. Students often talked among themselves about issues unrelated to the official curriculum, or attempted to initiate diversionary and disruptive incidents (e.g. pinching or hitting a neighbour out of sight of teachers). Subject sessions constituted part of the official curriculum of the school which did not intersect with the interests of a significant proportion of students, and, as a consequence, was rejected by them. As Moore suggests, this does not necessarily indicate a lack of competence on the part of these students:

Non-conforming behaviour can indicate...a deliberate policy of performances which undermine and reject official expectations and which are grounded in a deep but sceptical awareness of the implicit requirements and assumptions of the school culture (Moore, 1984: 73).

The lack of interest exhibited by many students was not conducive to teachers communicating information about subject options. However, if the popularity of talk about part-time jobs and future work in the form group I was with was representative of the year group as a whole, the career sessions may have been in a better position given that they intersected with students' own concerns. Although the career sessions were part of the official school curriculum, in contrast to the subject sessions, they coincided with the interests of students. It is these career sessions that I shall examine first.
a) Careers sessions

The careers information sessions appeared to intersect with the interests of many of Borough's third year. This was not, perhaps, surprising, given the way work is often connected to the activities and interests of young people through participation in part time jobs, domestic labour and speculation concerning future careers (e.g. Finn, 1987). Furthermore, an indication of student interest in the careers sessions was given by the high priority accorded to job relevance as a factor which would enter into subject choice. Out of the twenty-three students present in the form I was following, eighteen mentioned that some measure of the 'job usefulness' of a subject would influence their option decisions.

There were a total of six sessions which focussed on career advice at Borough. Characteristic of all of them was that despite being situated in a timetable invested with the ultimate aim of 'aiding students in making subject choices' (Year Head), their starting point was a description of the content of work, rather than the relationship between subjects and careers. The careers sessions illustrated three tendencies. First, the relationship between school subjects and career outcomes was neglected. No links were drawn between the aptitudes students may have for certain subjects, and their implications for work. Secondly, the connections between the courses taken at school and the post-school education which might be required to enter certain careers were not articulated. Thirdly, these sessions were often permeated by a discourse of masculinity, whereby the majority of jobs described in the sessions were implicitly defined as male.
Firstly, then, students were advised to start thinking about their future work role, rather than prompted to consider possible links between subjects they may opt for and the post-school implications of these jobs. This was the focus of the first, general careers session:

I know it's difficult to decide what to do after you leave school but now is the time to start thinking. Start thinking about yourself, your strengths, weaknesses, what you like and don't like. You could start by making a list of the jobs you definitely don't want to do (session 1).

This may have focussed the thoughts of students on the world of work, but no information was given concerning links between future job aspirations and present subject choices (c/f Lacey 1970). Instead, students were advised on sources of information they could utilise to find out about the labour process, pay, hours, holidays, etc., of particular jobs. This approach continued throughout the careers sessions. For example, the video used in session five detailed the work involved in a variety of technician jobs. However, it failed to connect the labour process to those school qualifications which were required, or would have constituted a good basis, for further study leading to such work. The same omission was evident in the 'Leisure Pursuits' video. Indeed, this representation of a young man who had just started work in a sportscentre started from the premiss that he had 'no real qualifications to speak of'. Here, option choices were implicitly relegated in their importance for future work. In stating this I do not intend to imply that there is necessarily a close relationship
between subjects chosen in the third year of school, qualifications gained, and post school destinations (see Hussain, 1976). Indeed, there is much evidence to suggest that even where qualifications in specific subjects are important to employers, this is usually only within certain sectors of the labour market (see Ashton et al. 1982, Moore, 1986). However, as these sessions were part of an overall options programme, this does appear a curious gap. It would seem that although the careers sessions were part of a larger programme, they were treated by those involved as a separate, rather than related, part of the programme. Identifiable teachers had particular roles which were concerned with either careers presentations or subject presentations. One explanation for this could be that these teachers belonged to the 'liberal humanist' tradition, and deliberately kept separate careers from subject choice considerations; not wanting student choices to be affected by vocational considerations.

The second feature of these sessions was a lack of connection between subjects opted for at school, and that post-school education which might be required for particular jobs. The careers sessions made it clear that further study was required to enter most of the occupations portrayed and to 'get ahead in your job' (general careers session). For example, the Technicians film talked about the need to 'study science at college or university', and the engineering talk mentioned engineering degrees, and further education qualifications. However, these qualifications were not related to school courses such as SVP or TVEI. Students were not made aware that careers which necessitated particular further education qualifications might also necessitate that certain subjects be studied at school. Again, it
appeared that the careers sessions were seen by those teachers involved as a separate part of the third year programme.

The third feature of the careers sessions was that, with occasional exceptions, they were pervaded by a discourse of masculinity. This was evident in the career presentations (the sessions where speakers presented a talk), and the choice of videos. Firstly, detailed information was given to students on careers which have traditionally been viewed as male dominated; those of construction, engineering, technical work and sportscentre management. When I asked the girls in the form group I was accompanying to give me their impressions on this aspect of the careers sessions, they were disappointed:

A lot of us were interested in being secretaries, and there won't one film on that or one speaker. It wasn't fair, it was all boys stuff

Not one girl in the form group was interested in this aspect of the careers sessions. Moreover, it was not as if these sessions attempted to break with stereotypical ideas about what work was suitable for women. Possible exceptions to this were the 'Technicians in Industry' and 'Which Way Now?' videos, which at least showed women working in industry, and girls and boys engaged in a variety of activities. However, there was no teacher follow-up to this positive portrayal of women, and the remaining sessions were dominated by the perceived interests of the male audience. Typical was the session on careers in the construction industry:
Several lads I know have gone into the building trade and it's something that's going to take you a few years to learn. But you've got to think carefully if you're thinking of working in this area. A lot of boys come to me and say 'nice job that, working outside and getting a tan' but it can be rough. You've got to be hard to take the weather you get in the rest of the year; when it's cold and pouring with rain (my emphasis).

The audience reaction to this showed the importance of the approach used in portraying jobs. Several girls could be seen to 'switch off' during this paragraph of speech. This correspondence cannot be taken to imply that the speech caused their loss of interest. However, I managed to speak to one of the girls who appeared to stop listening at this point after the session, and she at least was alienated at the point when construction was associated with a representation of the social 'male' through the use of 'lads', 'boys', 'rough' and 'hard':

I thought it were interesting, but then it wasn't as he said it were a job for boys.

Why did you think it was a job for boys? [CSI]

Well, you know, he said you had to be 'ard to do it and that it were only boys that do it.
This career talk gave the impression that construction and male were synonymous, a representation that was hardly likely to succeed in gaining a female audience.

b) Subject option sessions

In contrast to the career sessions, few subject option sessions held the attention of students for any length of time. In opposition to official educational values, a large proportion of students exhibited a lack of concern about the intrinsic interest of school subjects. An indication of this came at the beginning of the options programme when I asked individuals in the form I was with what type of factors might influence them in choosing a subject. Out of the twenty-three present in the form I was following, none mentioned that enjoying a subject, or finding it interesting or valuable in its own right might influence their option choices. A possible consequence of this attitude, if widespread across the year group, is that even when the front line unit of the classroom had been bypassed, the lack of interest on the part of many students would make it unlikely that information concerning SVP or TVEI would reach them.

Those students who listened to the subject options sessions found them characterised by two major features. Firstly, there was a distancing of option information from the career implications of studying particular subjects. This was evident even in the presentation of vocational education at Borough, and had important implications for the way it was received by the potential clientele of SVP and TVEI. While most students did not seem to be interested in the inherent value of school subjects, they were concerned about the 'job value' of the
options on offer. SVP and TVEI were the easiest courses to present in terms of their value for the labour market, yet the teachers presenting them appeared to deliberately steer clear from such a strategy even when adopting it may have helped achieve their target clientele. Again, one explanation for this could be the importance of liberal educational views, which mitigated against the strategy of promoting a school subject on the basis of its vocational value. Secondly, there was a discourse of selection in the sessions which consisted of messages concerning the clientele teachers viewed their subject as unsuitable for.

The school TVEI coordinator presented an information session for the entire third year in the 'public' arena of the school hall. Three themes dominated his presentation. These were, the fierce competition which would probably exist for TVEI places and the subsequent teacher selection which would operate, a clarification of what 'technical' and 'vocational' constituted in terms of their educational implications, and an emphasis on equal opportunities. However, these educational statements were divorced from their possible relationship with the labour market. For example, technical and vocational education was not related to technical skills which would be required for specific jobs. Similarly, the policy of equal opportunities was not linked to its possible implications for work in a heavily gender differentiated workforce.

Now, there's an equal number of male and female teachers in this school, and we've got a woman Prime Minister, so girls should not be put off. TVEI is not a course for boys or girls only. The
'vocational' tells you it's to do with jobs. But TVEI is not a training for a job and there's an emphasis on variety. This is not a training programme and it's not meant to prepare you for work, TVEI is more general than that. It's about giving you a broad education.

As in the careers sessions, there was a seemingly deliberate distinction maintained between the worlds of education and work. The significance of this presentation lies in the way it interacted with the agendas of the students, most of whom only appeared interested in a session when it coincided with the presentation of a career they were interested in. TVEI could have been 'sold' to its potential clientele in terms of the government's mandate of vocational preparation, as a scheme which would equip young people with the knowledge, skills and attitudes necessary to enter and remain in waged labour, and there is evidence that this has occurred in other schools. This would have probably increased the possibilities of gaining the attention of students and stimulating demand for the option (see earlier discussion). However, the Initiative was presented as an educational subject and deliberately distanced from the sphere of work. As the coordinator said to the year group; 'TVEI is not training for a job.' The result of this presentation was that over half the year group present did not appear to pay any attention to what was being said once it had been established that TVEI was about a school subject and not closely tied to work.

The Schools Vocational Programme received a somewhat similar presentation in the main hall. The work-experience and college components of the scheme were articulated, as was the policy that SVP
was open to both sexes and did not exclude 'those who might be taking a few exams in two years time' (Head of SVP). However, the way in which the Programme could be relevant to students interested in particular careers was not articulated. Furthermore, a discourse of selection permeated the presentation:

Whether or not you choose SVP is a really big decision that you have to make. You have to make the right decision for you as an individual, it shouldn't be based on what your friends have decided. But once you start this course you must stick with it, and remember, it goes on for two years. That means you must attend every day a college course is on, and it's absolutely vital that you turn up every day you are on work-experience. I don't want anyone doing this course who thinks it's an easy option or isn't going to put a lot into it (Head of SVP - my emphasis).

As with TVEI, SVP could have been presented to students in terms of the government's mandate of vocational preparation. However, once again the senior teacher emphasised the Programme as an educational course.

...the point of SVP is not to get you ready for a job. It is a course which will give you a wide variety of experience and a major aim is to see how different organizations work and how people work in them.

The clear distance which was maintained between subjects and their career implications can be explained by two major factors. Firstly,
through the continuing strength of ideological elements from the 'old humanist' tradition (Williams, 1960). Even among teachers who could be seen as having an interest in presenting their subjects as 'work schemes' in order to maximise their attraction to students, there was an emphasis on them as 'general' education which was quite different from something which offered preparation for specialised positions in industrial society. Those in charge of SVP and TVEI at Borough may have accepted the mandate of vocationalism for the content of their courses, but they had explicitly rejected it as a basis on which to present the courses to students. The second aspect to this division concerned teachers' perceptions of the tenuous links which existed between education and work. The categories of education and work are not synonymous, and there is no straightforward progression from studying certain subjects at school, to occupying positions in the labour market (Hussain, 1976. Moore, 1986 and 1987). Teachers recognised this distinction, clearly cared greatly about the information they were giving students, and embodied it in their presentations in order not to mislead them in any way. This explanation also illustrates the salience of different social levels and the relative autonomy which can exist between them. Here, there was no correspondence between perceived macro-level needs and the presentation of schemes by teachers. Instead, the government's mandate of vocational preparation was mediated by teachers within the meso-level site of the school.

I have not yet dealt with the implications of the prominent discourse of selection which was evident in the subject sessions. This might be considered as a 'sensible' process whereby teachers issued warnings to students who were unsure whether to opt for a particular
course. However, the prevalence and strength of such 'warnings' throughout the subject options sessions gave them a dimension which went beyond this and became transformed into a discourse of exclusion. The clearest example of this came in the option presentation given by the teacher responsible for 'Cars, Bikes and Outdoor Activities'. It is worth quoting in length:

"We should have gone to [...] mountaineering this half term but because of the atrocious behaviour and attitudes of half the group the rest have had to suffer. The problem is that some idiots think it's an easy option just because there's no exam to do... The last two years of the course have been a complete failure and I've never been able to get the quota to go to [...] It's not going to happen again. So if you're one of those wallies who sit on the bench with notes about having a cold or a bad leg or other ridiculous excuses, you won't even be considered. Nor will you if you're a 'waster' and never do any work - and that applies to a lot of you so you needn't bother applying. I want to keep the number of useless people on this course down to a minimum. As you've all got to choose something I know I'll get landed with some morons but if it's only one or two I can manage."

I asked the form I was following what teachers meant when they were asked to think carefully before taking a subject. The four students who answered demonstrated the way in which this discourse of selection could be communicated to students:
It means they don't want you to do it [their subject] unless you're brainy. They don't want divvies like (...) who ar'n't gonna do any work and just piss about,

No-one wants us to do what they teach.

'Cos we give 'em a 'ard time 'n' they donwannat.

When a teacher says 'think careful', it means 'please don't end up wiv me'.

In short, there was a competition taking place between teachers to put off what they perceived as an 'undesirable' clientele, and attract those students considered suitably enthusiastic for the subject. The lack of interest shown by many students towards the subject sessions meant that this message may not have been communicated to all of those it was intended for. However, as the above comments show, it clearly had some effect.

This discourse of selection/exclusion illustrates the importance of teachers' careers when it comes to the option process. To have a substantial number of alienated students in a subject makes the labour process of teaching more difficult than it would otherwise be. Problems of control or simply having to occupy disinterested students can easily take precedence over educational aims, and this was an understandable concern of a number of teachers. As Woods (1976;45) found in his study, teacher mediation in the options process often operates 'on considerations of status, career and professionalisation' rather than
'in the interests of the individual pupil'. The Year Head recognised and sympathised with this concern, yet could not allow too many teachers to be successful in deflecting students. As he said, 'students have got to take enough subjects to have a full timetable.'

It has been seen how the options sessions embodied a number of messages which, through interaction with the agendas of students, developed into several trajectories which were not conducive to the aim of achieving a target clientele for SVP and TVEI. First, students exhibited more interest in careers than school subjects. As the careers sessions were not linked to the school subject options process, the information on offer was concerned with the details of jobs rather than how these may have related to present educational choices. This may have been useful for many students considering careers in related areas. However, it would have been unlikely to stimulate interest in the process of choosing subject options. Furthermore, the presentation of careers sessions served to exclude girls in terms of the way traditionally male dominated sectors were portrayed as being of interest to 'lads.' While the information given in the SVP and TVEI subject sessions stressed an educational policy of equal opportunities in such areas as mechanics, electronics and engineering, these were not supported by career presentations which indicated the openings for women in such careers. As a consequence, girls who may have been interested in such work and may have been considering opting for vocational schemes on that basis, were given the message that although they may study these subjects at school, their career 'counterparts' were male and, therefore, inaccessible. The 'lesson' embodied within these sessions,
then, was that vocational education was not functionally effective for
girls in creating openings to a whole sector of traditionally male work.
This focus on careers illustrates how questions concerning the outcomes
of a mandate for vocational preparation require a whole array of extra-
educational factors to be taken into account. Schemes which seek to
prepare students for the world of work, mirror the existing macro-level
labour force, differentiated as it is by gender, race and social class.
In one sense, all the careers sessions were doing was reflecting the
existing gender differentiated pattern of the labour market.

Secondly, for those students who listened to the subject
information sessions, yet may still have been interested predominantly
in their utility for career routes, school subjects were not related to
career possibilities. This appeared to be the result of a dominant
'liberal' view of education, and a recognition on the part of teachers
that as there were no straightforward links between education and the
labour market, they should not be embodied within subject presentations
to students. As a consequence, further opportunities for getting
students to consider their subject choices may have been lost. Thirdly,
a discourse of selection pervaded the teacher presentations to the
extent that certain students articulated the aims of teachers as
'telling us not to do their subject.' This would have been unlikely to
help cultivate a positive interest among students in the process of
shaping their subject timetable.

Student choice, teacher recruitment and parental influence

The seeming ineffectiveness of the options sessions was supported by the
results of a questionnaire I distributed to those 146 students present
at the end of the choice process. Only fourteen had any idea about what TVEI was or consisted of, and only six knew anything about SVP. As Ball concluded in his study, despite the existence of options talks, students' 'understanding of some of the subjects from which they had to choose was extremely vague' (1981;156-157). Despite this, 35 and 14 of those students questioned opted for TVEI and SVP respectively. It seemed curious that students should opt for subjects that many of them knew nothing about. Indeed, only four and two of those students who opted for TVEI and SVP had answered on the questionnaire that they knew anything about them. However, the questionnaire data and interviews I carried out with those who opted for the vocational schemes suggest two, very different, explanations for why students opted for vocational schemes at Borough school (see Appendix).

There was a comparatively straightforward explanation for why fourteen students opted for SVP. The two students who knew something about the Programme and opted for it, did so because they perceived it to be useful for a job. The options programme succeeded with them. They were interested in SVP, considered suitable by the Head of the Programme and taken onto the course. Of the others, only four gave a reason, and these all concerned the advice they received from 'subject teachers'. When I talked to these students it soon became clear that despite the Head of SVP's aim, it had not become an 'open' option. Rather, the traditional pattern of recruitment had continued to operate. Consultation between form teachers, subject specialists and the Head of the third year since the start of the school year, had 'built up a picture of who was suitable for the course' (Year Head). During the options process, the four who mentioned 'subject teachers' advice' as a
reason for their choice, and the other eight students, had all been approached by the Year Head or Head of SVP (whose aim of attracting a 'mixed' clientele did not prevent recruiting those students thought especially likely to benefit from the course) and, in the words of one of them, 'told SVP was the right course for me.' Furthermore, as fewer students had 'opted' for the Programme than the twenty-seven places available, this process of teacher recruitment continued into the following term.

The reasons SVP had not become more of an 'open' option appeared twofold. Firstly, the Head of SVP had not adequately communicated his goal to the rest of the staff in general, and form teachers in particular. Secondly, there appeared to be different agendas held by teachers with regards to the Programme. Although the Head of SVP wanted the Programme to be opened up, this aim was not shared by the Year Head or, it seems, other senior teachers. As the Year Head said, 'SVP is really a course that we decide who takes. It's for those low ability pupils who we think would benefit from it, not for those taking exams.' Once again, these events illustrate how central components of the operation of vocational schemes are determined not by macro-level factors, or even the State, but by individual teachers working in the school.

This view of SVP as 'special' educational provision was also shared by the senior teacher who gave an introductory advice session to the parents' information evening about subjects on offer to their daughters and sons. This teacher had been informed about the change in status desired by the Head of SVP but, for whatever reason, also made clear to parents the 'special' clientele who were expected to take the course:
The structure of the course means that pupils often get taken out of and miss out on other lessons. Because of this, SVP is not suitable for pupils taking external exams. We would strongly advise against them taking it. Often those who take the course are nominated as suitable by the relevant teachers.

The different interpretations of SVP evident during the options process illustrate the importance of teachers' views of their career roles. In the case of the Head of SVP, it appeared that an attempt to increase the status of his subject, and diversify the clientele the subject catered for, was of foremost importance in the decision to make SVP more of an 'open' option. In contrast to this, the Year Head and the two other teachers responsible for third year pastoral matters all perceived the Programme's primary importance as being 'special' educational provision which catered for non-examination students likely to benefit from the course.

In contrast to SVP, where teachers dominated the process of selection, the reason why thirty-five students opted for TVEI illustrates the potential importance of the interaction between parents and their daughters/sons. Lacey's 'Hightown Grammar' identified the family as a crucial resource which affected the educational performance of students. Since then, studies such as Wood's and Ball's have confirmed through further empirical work the importance of the family as an educational resource. One example of this is parental influence during the options process. In the case of TVEI, out of 146 students questioned, twenty-eight indicated that their parents had been keen for them to take the course. This was twice the figure for any other
subject and illustrated a correspondence between parental interest and student option choice, as twenty-two of these students actually opted for the Initiative. While this indicates only a correspondence between parental interest and student choice outcome, it does point to a possible causal explanation. As only four students who opted for the Initiative said they knew anything about it, parental influence represents one possible explanation for their decisions. However, if this was a reason for their choice, one needs to ask what affected parents' views of the Initiative, and how they received the information which may have shaped their opinions. Again, a number of correspondences point to a possible explanation.

In addition to the substantial intersection which existed between those parents who were keen for their daughters/sons to opt for TVEI and those students who actually did, there was a positive correlation between 'parental keenness' and parental attendance at a subject information evening or option advice evening session. Out of the total of the 146 parents of the students in my sample, twenty of the 71 (28.2%) who attended a parents' evening were keen for their children to opt for TVEI while this was true of only eight out of the 75 (10.7%) who did not attend. Furthermore, this correlation between attendance at a parents' evening and enthusiasm for TVEI stretched across gender, ability grouping and occupation. Differences existed as to the proportion of parents with boys or girls who were keen for them to take TVEI, as existed among parents with children in alpha and 'mixed' ability groups, and for parents from different occupational backgrounds. However, in each of these groupings, a greater proportion of those who attended, than did not attend, a parents' evening were keen for their
daughters/sons to opt for the Initiative. For example, of the 75 parents of boys in my sample, 15 out of 40 [37.5%] of those who attended a parents' evening were keen for their sons to take TVEI compared with only 5 out of 35 [14.3%] of those who did not attend one of them. This information is detailed below in figure seven.

Figure Seven Here.

Two hypotheses may be drawn from this data. Firstly, parental interest in the Initiative may have been stimulated by the school parents' evenings. Secondly, the actual effects of parental influence may have caused students to opt for TVEI.

In order to ascertain the possible effect of the TVEI presentation at the parents' information evening, it is necessary to contextualise the evening session within political events of the time. The third year options process in 1986 occurred in the middle of teacher action over pay and conditions. Many of Borough's teachers were working to rule and did not participate in 'voluntary' extra-curricula activities. The results of this were that few subject specialists attended the information evenings. As a consequence, parents received fewer subject presentations than was usual. A general talk on careers and subject options, was followed by a substantial presentation by the school TVEI coordinator, and a brief talk by the Head of a Department. The interaction between different elements within the meso level of society (teacher action and the parents' information evening), meant that
Figure Seven. Attendance at parents' evening and enthusiasm for daughters/sons to opt for TVEI.

<table>
<thead>
<tr>
<th>Parents of</th>
<th>Keen to take TVEI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boys: 75</strong></td>
<td></td>
</tr>
<tr>
<td>Attended Parents' 40</td>
<td>15</td>
</tr>
<tr>
<td>Evening</td>
<td></td>
</tr>
<tr>
<td>Not attending: 35</td>
<td>5</td>
</tr>
<tr>
<td><strong>Girls: 71</strong></td>
<td></td>
</tr>
<tr>
<td>Attended Parents' 31</td>
<td>5</td>
</tr>
<tr>
<td>Evening</td>
<td></td>
</tr>
<tr>
<td>Not attending: 40</td>
<td>3</td>
</tr>
<tr>
<td>&quot;Alpha&quot; Students: 48</td>
<td></td>
</tr>
<tr>
<td>Attended Evening: 27</td>
<td>7</td>
</tr>
<tr>
<td>Not attending: 21</td>
<td>2</td>
</tr>
<tr>
<td>&quot;Mixed&quot; Students: 98</td>
<td></td>
</tr>
<tr>
<td>Attended Evening: 44</td>
<td>7</td>
</tr>
<tr>
<td>Not attended: 21</td>
<td>2</td>
</tr>
<tr>
<td><strong>Non-Manual Jobs: 38</strong></td>
<td></td>
</tr>
<tr>
<td>Attended Evening: 25</td>
<td>5</td>
</tr>
<tr>
<td>Not attended: 13</td>
<td>0</td>
</tr>
<tr>
<td><strong>Manual Jobs: 76</strong></td>
<td></td>
</tr>
<tr>
<td>Attended Evening: 34</td>
<td>12</td>
</tr>
<tr>
<td>Not attended: 42</td>
<td>6</td>
</tr>
</tbody>
</table>

\[N.B. Manual/non-manual sample smaller due to lower responses to a question asking for details of parental occupation.\]
parents received less information than they would have usually done on most subjects and much more on TVEI.

The TVEI presentation at the parents' evening demonstrated none of the clear divisions between this vocational scheme as an academic subject and its career value. The school TVEI coordinator's view of his career role and responsibilities clearly had different implications for interaction with parents than with students. While still recognising the tenuous links which existed between school and work, parents were judged as being able to cope with such ambiguities, and the job utility of the Initiative was stressed:

As a subject, TVEI concentrates on science and technology and provides the usual number of exams for those taking it. One or two might be of a lower level than GCSE but they are vocationally relevant and should give pupils a good start in the relevant jobs markets... But TVEI is more than a subject. It is also a preparation for working life, and by that I don't mean it resembles a watered down YTS. We look at occupations, especially those in the areas of science and technology, for both boys and girls. The barriers in careers that used to be for men only or women only are breaking down and it's important for pupils that they get the background which will allow them to make a choice in their future job which won't be constrained by old fashioned ideas. TVEI is a course which gets right away from the idea that there are [separate] subjects for girls and boys or separate jobs for girls and boys.
The coordinator went beyond stating the policy of equal opportunities embodied within the course and, in contrast to the presentation to students, linked it to the aim of widening job opportunities. For the first time in the options programme, vocational education was portrayed in terms of a functionally efficient bridge from education to work, which worked for both sexes. For example, the coordinator detailed to parents some of the ways in which TVEI 'linked' students to the workforce:

There are four, half day courses at the technical college where pupils learn skills relevant to particular jobs, they then consolidate this by a further week's course there in the summer. On offer to pupils is a total of thirty hours of information technology at the Tec, an experience which will set them up well if they want to work in that area. Another part of the course is work-experience which has been a great success...it gives pupils vital practice for when they come to face interviews, and provides useful contacts with employers which can even sometimes lead to work. The general reaction of employers is 'when are they coming back.' The course is presided over by a panel of fourteen local employers to keep us going in the right direction. At the end of the course those TVEI pupils who stick well at the course for at least two years should emerge well-equipped for starting a useful career.

A further point of contrast with the presentation to students, was the lack of a discourse of selection. The coordinator made it clear that there was a limit on the numbers who could take the course, and that
only those who would 'stick' at the course should consider opting for it. However, this was accompanied by an enthusiastic endorsement of the course for 'all pupils irrespective of their academic ability.'

If you think your sons or daughters might be interested in the course then come and talk to me, ask any questions that you think would be useful, and get them to talk to me about it. No one will be automatically disqualified from taking TVEI. It's a course which will benefit a wide variety of pupils.

The TVEI coordinator's presentation to parents illustrates the point that the subject options programme is not necessarily a single process, but rather two different processes depending upon that part of the clientele being addressed. The career roles that teachers hold may have quite separate implications for their interaction with parents compared to their interaction with students. Teachers made clear distinctions within the micro-level between 'adults' and 'children'.

The TVEI presentation was reinforced by a similarly informative booklet distributed to parents. Entitled, 'A Guide to TVEI at Borough School' the information portrayed TVEI as both a school subject and a vocational path to a number of profitable career routes. Parents were encouraged to view TVEI as a course for students of both sexes from across the ability range. This emphasis was repeated in the options booklet that parents received detailing information about all subjects on offer. TVEI aimed 'to ensure that pupils are well prepared to seek work in a fast changing world', and noted that 'TVEI pupils may be
starting on the road to apprenticeship or degree work, to commerce, industry or the professions.'

A possible explanation for the correlation between attendance at an information session and students stating their parents had been keen for them to opt for TVEI, is that many parents had been impressed by what they heard and attempted to persuade their daughters/sons to opt for the Initiative. That eight parents who had not attended a session were still keen for their daughters/sons to take TVEI need not invalidate this explanation. Those parents may still have received some of the information on offer at the evening session, but through the options literature which had been sent to them.

The importance of parents as a factor in the decisions of those who choose TVEI was confirmed when the 35 students who opted for the Initiative were asked to give the reasons for their decision. Twenty-two stated that 'parents advice' was a reason for them opting for TVEI. Other factors mentioned were that TVEI was 'useful for a job' (19 students), and that it was 'useful for higher/further education' (16 students). As only four of the students who opted for TVEI at the end of the options sessions said they knew anything about TVEI, these figures may appear in contradiction to the students' earlier replies. However, it may be that even though few students personally knew anything about the Initiative, they had received information from their parents and had, therefore, been told that TVEI was useful for a job, etc. This interpretation was supported by the twelve students I interviewed whose reasons for taking TVEI appeared to show a knowledge of the subject which contradicted the total lack of awareness they signified earlier (others in this category were absent or unavailable on
the day I was able to speak to individual students). Without exception, they detailed how it was their parents who gave them information about TVEI. Typical were the following comments:

It was my choice but my parents thought it was a good idea, would be better than other options for getting a job.

My mum and dad spent a whole evening going through it (subject options discussion) with me - that's when I found out about TVEI. They said if I did it, I'd have a better chance of getting a job or going to college.

I wanna go to the Tec after the 5th year and do computers and the computers on TVEI should help' [Did you hear about that from school?] 'No, my parents told me about it.

My parents heard the tec courses were very good and that they'd help me get a job.

I was going to do other options but they (parents) went to the parents' evening and ended up talking to (TVEI coordinator). I want to be a nurse and after that we thought it (TVEI) would be the best course for my job.

'Parent' is not a homogeneous category, though, and the influence of this group may vary according to such factors as gender. For example, if parents are important in deciding who opts for the Initiative, then
they are also important in deciding whether it is girls or boys who opt for it. The equal opportunities policy of TVEI in this case is taken out of the hands of the school and placed in the hands of parents. The presentation of the TVEI coordinator emphasised the course’s policy of equal opportunities. However, there was a much smaller proportion of parents with girls, compared to boys, who were keen for their daughters to opt for the Initiative (see Figure 4). This suggests the importance for parents of gender stereotyped views concerning what is a ‘suitable’ curriculum for their children. For example, parents may or may not relay information about the Initiative and/or encourage their children to opt for TVEI.

The above analysis points to the importance of examining the arena of the family, the power relations within it, and the way in which vocational education is located in familial perceptions of what constitutes a suitable education for their daughters/sons. This was illustrated by one girl who opted for TVEI as a result of parental influence, or rather maternal influence.

My mother stressed it (TVEI) to me but my father didn't want me to do it. He didn't think it was suitable for me, but my mother said that the business studies in it would help me get a job after I left school and she talked to him about it, so I took it.

Although I was unable to undertake such analysis, the possible importance of such dynamics within the micro/individual level of society is suggested by the fact that only 16.1% of those parents of girls in my sample who attended a parents' evening were keen for their daughters to
take TVEI compared with 37.5% of those with sons who attended. Furthermore, only ten out of 104 [9.6%] girls in the year group opted for TVEI compared with 25 out of 115 [21.7%] boys.

The options programme and the advice given by form teachers had relatively little success in encouraging students to opt for the Initiative. However, the parents' evenings bypassed these and reached students in the site of their home through their mothers and fathers. Parental pressure, though, was not the only reason students 'chose' TVEI. Twelve students gave as a reason for taking TVEI their 'dislike of other subjects/lack of alternatives' or simply could not give a reason. It appeared that despite their lack of knowledge of the Initiative, they fitted into the category of those students who opted for TVEI as they had to do something (see Woods, 1976. Ball, 1980).[13]

At the end of the options process only thirty-five students had opted for the sixty available places. There was a male bias to those who opted for TVEI. Two and a half times as many boys had opted for the Initiative as girls (25 out of 115 [21.8%] compared to 10 out of 104 [9.6%]). Furthermore, although a slightly greater proportion of students from 'alpha' form groups had opted for the Initiative (13 out of 52 [25%]) than 'mixed' (22 out of 94 [23.4%]), this was considered an intake with a 'low ability bias' by the coordinator. Similar to SVP, there was an initial shortage of students opting for TVEI, and the school TVEI Coordinator was left with the task of continuing the recruitment process into the following term.
Conclusions

Three major features of the options process have been identified as important for the achievement of 'target clientele' to SVP and TVEI at Borough. First, within the meso-level site of the school, the form teacher working in the front line unit of the classroom was able to maintain and act on a view of her/his role which did not involve promoting TVEI to students from both sexes across the ability range. Similarly, the view of SVP as remedial educational provision outside of the options process remained unaltered. A recognition of this by those responsible for SVP and TVEI would seem to lead to two possible policy conclusions, both of which are relevant to the 'enabler' role of form teachers, and their position within front line organizations.

Policy makers within the school could introduce 'mechanisms of control adapted to regulating autonomy' (Smith, 1965; 397). An intensification of centralised recruitment to TVEI (this already occurred with SVP) could help bypass form teachers. However, this would exacerbate what has been seen as the deskilling of form teachers as their ability to give advice would be further limited. Furthermore, this would not alter the fact that teachers antagonistic to the Initiative have the autonomy within the front line units of the classroom to influence students. To change this would require a reorganization of the school away from the form group. Alternatively, senior teachers responsible for recruitment to the Initiative could take on the role of 'charismatic leaders'. Instead of bypassing form teachers, this would facilitate their extensive supervision. As Smith (p.398) notes:
Control of front line agents is maintained by intensive ideological conversations, which expose front line performances to the corrections and advice of the leader.

How form teachers would react to such 'conversations', however, is a variable which might not work in favour of senior teachers seeking a 'balanced intake' to TVEI.

Secondly, although the careers sessions drew on aspects of the labour market and generally held the attention of students, they did not link this element of the macro-level of society with the subject choice process occurring within the school. In contrast, the subjects sessions focussed exclusively on the available choices to students. The problem here, though, was that they did not interest a significant proportion of the potential clientele. Students were interested in the 'job usefulness' of subjects on offer but were not given information relevant to this.

As a way of increasing student recruitment to vocational schemes at Borough, this distinction between careers and subjects might be removed in the option programme. In this case, the presentation of subjects may hold the attention of students by intersecting with their interests. However, for this to be achieved a shift would be required in the liberal view of education and the career role that teachers at Borough appeared to hold. Even if this were accomplished among those responsible for vocational education, such a style of presentation might cause resentment in those whose subjects were less amenable to such an orientation. Furthermore, this would also require a major shift in the orientation of Borough school towards the macro-level of society;
education would become something which was sold to students in terms of its relevance to work rather than learning.

The third feature of importance to the recruitment of a target clientele to SVP and TVEI came from the individual/micro level through the influence of parents. In the presentations to parents, TVEI was presented as a subject and a route to waged labour or further and higher education. The distinctions which were so obvious during the student sessions were collapsed when the audience was parents, and this appeared to have the effect of impressing parents to the extent that they used their influence to persuade students to opt for the Initiative. However, parental influence was heavily stratified along gender lines. There was a major difference in the proportions of parents with boys and girls who were keen for them to take the course (see Figure 7), and this illustrates a problem with strategies seeking to implement a policy of equal opportunities. In short, parental support cannot be assumed for a course which is presented as providing equal opportunities for girls in non-traditional areas of the curriculum. For the school to achieve a 'target' clientele involves more than persuading students to opt for the Initiative. It is also necessary to convince parents, whose views will have been shaped by their particular locations within societal levels, of the validity of technical and vocational education for their daughters.

Intensifying efforts to involve and persuade parents about the value of vocational education may increase those students who opted for TVEI or SVP. However, this need not necessarily be the case, especially when it is considered that the parents' sessions in the year I studied were exceptional in that teachers' action meant that most subjects were not
represented by specialist teachers. In future years parental influence may not favour TVEI in comparison with other subjects. Furthermore, a greater reliance on parents may serve to reproduce gender inequalities in the student composition of vocational education.

Having examined the process whereby students come to study SVP and TVEI, analysis will now move within the meso level of the school to examine one part of what is studied within vocational schemes.
Notes

1) At a minimum, form teachers have a responsibility for the pastoral care of their students and have a legal obligation to maintain a register of attendance for those in their group.

2) I interviewed Borough's third year form teachers of 1986/87 in order to establish what advice they gave their groups concerning option choice, their views and knowledge of SVP and TVEI and how they had experienced these vocational schemes.

3) The term 'mixed ability' was only partially accurate, as those students who were expected to take a number of exams were 'creamed off' into the 'alpha' groups.

4) For example, on presenting a previous version of this paper to the Open University's TVEI Evaluation Group, several of its members remarked on how few teachers were aware of this requirement in the schools they were concerned with.

5) Mr Brown said he would advise only those who were suitable and of high academic ability in his form to opt for TVEI. However, he did not actually promote the course to anyone.

6) Whether such activities are voluntary was at the centre of the recent dispute and despite the new conditions teachers are working under, is likely to remain an issue for some time to come.
7) There are dangers in generalizing the findings of this paper to other schools with a different organization to Borough's. However, Borough's LEA recognizes the promotion of TVEI to be a general difficulty, and similar findings have been confirmed by members of the Open University's Evaluation Group.

8) In order to examine the options process with reference to vocational schemes, I negotiated with a form teacher, the Year Head and the two teachers responsible for the options sessions to follow one 'mixed' third year form group through their subject and career sessions. In an attempt to ascertain how effective the dissemination of knowledge had been with reference to SVP and TVEI, and the role of parental influence, I distributed a questionnaire to the third year. This was answered by all 146 of the 217 students in the year who were present and available on the two days during which they were distributed. After establishing personal details, students were asked what, if anything, they knew about SVP and TVEI, and what subjects, if any, their parents had been 'keen' for them to take. After students had completed their option choices, those students who had opted for SVP or TVEI were presented with a second questionnaire which asked them why they chose that particular vocational course. The options provided were 'lack of alternatives/Dislike of other subjects, Parent's Advice, Form Teacher's Advice, Subject Teacher's Advice, Advice from others already on the course, Discussion with other Third Years, Choices friends have made, Usefulness for a job, Useful for higher education/further education, Out of school activities provided by subject, Other (please state).
Follow-up interviews were then conducted with the four SVP students who gave as a reason for their choice the advice they received about the course from subject teachers. These interviews took place to enable me to ascertain the degree of teacher guidance which had operated on the course. Subsequent interviews were also conducted with twelve of the fifteen students (those present on the day of interviewing) whose replies to the second questionnaire indicated a knowledge of TVEI that was not present when they completed the first questionnaire. The reason for these interviews was to establish where this additional knowledge had come from.

9. I judged them to have 'switched off' through a change in behaviour which occurred at that point in the talk. From being apparently attentive to the talk, these girls started talking to their neighbours/looked away/switched their interest to other events within the classroom.

10. It would be inaccurate to say that the attention of the majority of students was never held during these sessions. Although few students may have been concerned with the intrinsic value of options, many were curious and attentive when a new subject was presented to them in an unusual way. For example, when drama teachers and students performed a humorous sketch to convey information about their subject, it seemed to interest a large majority of those present.

11. In other TVEI schools, the course has been presented to students in a different style altogether. For example, in one school, TVEI has been
associated with 'the holiday', a reference to residential experience. This was seldom mentioned in the presentation at Borough. It is, of course, possible that had TVEI been stressed as 'novel' and exciting, this may have held students attention and encouraged more of them to opt for it.

12. I was only able to attend the parents' information evening. However, I gained details about the option advice evening by talking to several teachers who had attended and there was substantial similarity. In particular, the TVEI coordinator was able to talk to those parents and present a similar image of the Initiative.

13. This leaves the reasons for one student's choice of TVEI unexplained. He put down 'job usefulness' as the sole reason for opting for the Initiative. It is possible that he gained this information from the options booklet.
The variety which exists within and between vocational schemes makes it impossible to point to a single representative school-based course. It would be possible to spend more than a chapter merely surveying the range and content of subjects in vocational schemes. The government's mandate of vocational preparation has not made possible the wholesale importing into schools of programmes whose only visible purpose is to serve the macro-level economy. For example, TVEI projects include within their curricula courses as diverse as business studies, dance, and television and film. However, rather than undertake such a descriptive examination, this chapter is concerned with how a single SVP 'Factories and Industry' course impinges upon students. My rationale for making this selection is that 'Factories and Industry' embodies many of the transitional aims of SVP and TVEI, even though it does not reflect their diversity. As a consequence, the 'Factories' course can be seen as a 'critical' example, where the reactions of students to school-work lessons may be scrutinised in the meso-level setting of the classroom. Before examining the course itself, it will be contextualised briefly within the scheme of which it forms part, and the school in which I observed it.

'Factories and Industry' as part of SVP
The SVP has changed radically education provision for many students of 'low academic ability'. New curriculum developments have been introduced within such areas as health, communication and film, and in an attempt to stimulate debate and participation, an emphasis has been
placed on active, experiential learning. Teachers involved in the Programme tend often to minimise the time they are involved in didactic teaching, and maximise that which involves students in a variety of 'learning through doing' situations made as relevant as possible to their own lives and interests. Through such methods, the SVP has often been successful in engaging student interest. In short, teachers have used a vocational course, for what many would view as highly educative purposes. However, irrespective of the variety of pedagogic practices employed on such courses as 'Factories and Industry', the Programme is also a deficit project which caters for predominantly working-class youth. Educational innovations exist within the major aim of creating employable individuals. The SVP is designed to compensate. It posits a discourse of deficit which focusses on two main factors; the inadequate attitudes and habits of students, and their lack of 'suitable' experience of a working environment. This discourse of deficit serves to legitimize the practice of separating SVP students into identifiable groups who follow a 'special' curriculum for part or all of their school day. However, it is important to distinguish between the content of the scheme and the changing context in which its courses developed.

When SVP was confined to an ESN(M) school, its founders viewed the course as filling a genuine deficit. The experience and future of unemployment in the local town during the mid-1970s was confined largely to a small minority of youth with 'individual' problems and needs not met by mainstream schools. The Programme's curriculum focussed on such areas as 'getting on with others', persistence in completing tasks', and 'increasing the self confidence required for getting and keeping a job', and it was successful. Most of those on the scheme gained employment,
whereas this had not happened before the introduction of SVP. However, as the 1970s progressed, the context in which the Programme operated changed. Comprehensive schools became involved in the scheme at the same time that unemployment became an experience associated with age and a far wider range of characteristics. Despite this, the scheme's curriculum continued to compensate for individual deficit at the very time that the problem of youth entry into waged labour was increasingly a structural condition, differentiated according to gender, race and social class (Benn and Fairley, 1986. Walker and Barton, 1986). From being a 'realistic' response to the problems involved in gaining employment faced by a small minority in the area, SVP evolved into a project of legitimation. Through no intention of its founders or those in charge of the Programme, it continued to individualise what had become the structural problem of youth unemployment.

This concentration on the supposed deficiencies of young people will not identify the cause or contribute to the cure of youth unemployment. However, a curriculum which attempts to 'inculcate good work habits' (such as punctuality, versatility and the ability to follow instructions) which employers search for most in potential recruits, may give its students an advantage in securing those jobs which still remain for young people (ITRU, 1979. Gordon, 1983). In this context, the dominant themes within 'Factories and Industry' clearly aimed to play a part in establishing such an individualised route to employment, and this was reflected in its use within Stonegate school.
6 'Factories and Industry' in Stonegate School

Stonegate Comprehensive is a co-education school which caters for approximately 800 students. The vast majority of students are working-class and white. However, the school's catchment area is less homogeneous than Borough's in terms of the social and economic problems experienced by its students. The local reputation of the school is good and its senior teachers work hard to maintain this image in the local community. Students are expected to wear school dress, and Stonegate places an emphasis on home/school relations. For example, days are regularly set aside for parents to come to the school and meet with teachers.

In Stonegate school, as in Borough, SVP is a course which caters for students considered to be of 'low academic ability'. Recruitment to the course is accomplished by a significant amount of teacher guidance which comes into operation before, during and after the options process to aid students in making what are considered 'suitable' choices. Although SVP caters for what are often considered the most 'difficult' of students within Stonegate, teachers generally have far fewer problems of survival than their equivalents at Borough school. As a consequence, a 'mandate of survival' was the priority of fewer Stonegate teachers, and educational concerns were able to receive greater priority.

At Stonegate, the 'Factories and Industry' course consisted of one morning block each week for six weeks. For the rest of their time, students spent nearly two-thirds of the school week on other SVP courses and just over a third following part of the mainstream curriculum. During the course, 'active learning' sessions included the simulations of establishing a small business and working on a production line. In
the latter, the class was divided into two groups and assembled 'flashing light' units. A number of videos were shown concerning automation, starting work, and the importance of industry to the community, and discussion sessions followed. The group also visited a local factory and Information Technology Centre. Figure eight details the content of the six week course:

Figure Eight Here.

The assumptions within this curriculum, which is addressed towards remedying the 'deficiencies' of youth, are highly questionable. A substantial body of research illustrates the experience many young people have of the 'world of work' (e.g. Willis, 1977. Finn, 1984 and 1987), and the SVP group was no exception. Of the thirteen students on the course, eight were presently engaged in part-time waged labour and a further two had experienced such work. Ten of the thirteen, then, had direct experience of the constraints, obligations and rewards of wage labour. Furthermore, the parents' occupations of the five girls and eight boys on the course provided them with a further source of information about the 'world of work' (or lack of it due to redundancy) which contradicted the discourse of deficit within 'Factories and Industry'. All but four on the course had parents who worked full or part time in manual occupations such as building, cleaning and plumbing. Two sets of parents were unemployed, while another two sets were in the professions of teaching, estate agency and quantity surveying.

In summary, students on the course had a readily available source of information about work from their parents and part-time jobs. This was
Figure Eight. The 'Factories and Industry' course

Week One - Introductory session where outline of course presented to students. In preparation for the factory visit and assembly line simulation, some of the elements involved in electronics assembly line work were explained.

Week Two - a) 'Robots' video  b) related worksheet, 1.
  c) Discussion concerning themes raised by video.
  d) Simulation: 'Setting up your own business'.

Week Three - Factory visit to 'Seevision'.

Week Four - a) Complete Worksheet, 1.
  b) 'Starting in industry' video.
  c) Related worksheet, 2.
  d) 'Industry and the community' video.
  e) Discussion concerned with themes raised by video.

Week Five - Assembly line simulation exercise.

Week Six - Visit to Information technology centre.
drawn upon regularly by them throughout the course as an alternative source of knowledge about the macro level, 'world of work' from that presented to them in the classroom. This did not lead them to confirm or refute the dominant themes within the course in any simplistic manner. Rather, it was an additional factor which was taken into account by students assessing the validity of their school lessons. In other words, the school was not in a position to impose on students a representation of the macro level.

That the assumptions of individual deficit embodied within the course may not exist in the sense I have interpreted them - as students have plenty of information about, and experience of, wage-labour - does not mean they lack a reality. Attitudes and experience of work which are sufficient for youth to 'hold down' part-time jobs in the present, and which made their transfer to full-time work in the past unproblematic, are not the same as those employers may be able to demand in the present period of recession (see Gordon, 1983). The discourse of deficit within 'Factories and Industry' can be seen as projecting a view of individual deficit within students. They are placed in a position of subordination in relation to the main themes of the course, and there is a submerging of the structural position whereby the demands or 'needs' of employers exist in an economic context where youth labour is largely surplus labour. If this was accepted passively by students, it might aid the efficacy with which the experiences provided by 'Factories and Industry' were able to inculcate attitudes congruent with both the major themes of the course and the contemporary 'needs' of employers for a workforce equipped with 'appropriate' knowledge and attitudes.
However, there are two reasons why this may not occur. First, as has been mentioned, students have an alternative source of information from micro and macro-levels. Their families and part-time work provide them with the experience and information with which to 'evaluate' the major themes of the course. Secondly, because of the resistance young people often exhibit towards those values embodied within the official school curriculum. As theorists from Lacey (1970) and Lambart (1976), to Willis (1977) and McRobbie (1978) have illustrated, young people (especially working-class youth, and those labelled 'failures') often develop their own counter-cultures in and through the process of mediating or rejecting the curriculum. Active participation in the time-tabled activities of the school is rejected in favour of such 'unofficial' pursuits as talking about boyfriends or girlfriends, disrupting lessons, etc. If the students on 'Factories and Industry', who are working-class and have been labelled 'failures', rejected the course as an 'invalid' activity, there is no reason to suppose that the main themes of the course would be effective in inculcating industrially 'appropriate' knowledge and attitudes. Indeed, the assertion of an aggressive anti-school culture, were it to happen, may have the opposite effect. Students might rebel against those habits and attitudes in line with the 'needs' of employers and cultivate such acts as poor time-keeping, disliking supervision and refusing to follow instructions (see ITRU and Gordon). If this were to occur, it would seem to offer little positive help for the reproduction of a labour force equipped with 'appropriate' knowledge and attitudes, and no evidence to support theories which suggest that a capitalist mode of production can be supported through specific practices within schools. Such a scenario
would also provide a clear illustration of the salience of different levels of society, as they are 'connected' within the site of the school, yet maintain a relative autonomy from each other.

I shall now examine the articulation and consequences of the two dominant themes of the 'Factories' course; the necessity and desirability of automation, and the normalcy of capitalist relations of production and the work ethic. Student reactions to these themes will be considered before analysing how successful the 'Factories' course had been in its primary aim within the school; 'showing students the importance of industry so they may be more open to and aware of the possibilities available to them' (teacher of the course).

The 'Factories and Industry' Course

People have misconceptions of many things...One of these is what industry is all about ('Industry and the Community' video).

1. The necessity and desirability of automation

The necessity and desirability of automation was a clearly identifiable theme within the course. It was articulated through the message that automation was universally beneficial to capital and labour. Technical innovations were portrayed as leading inevitably to improvements in efficiency, productiveness and working conditions. However, the acceptability of this theme was made problematic by the female and male students' experiences of automation within a capitalist mode of production.
The 'Robots' video was preceded by a teacher introduction which equated automation with success by using an example of the Japanese car industry. This 'produced cheaper and more efficiently than Britain's and took a larger share of the market.' 'Robots' reinforced the equation of automation with success by using examples drawn from ICI, British Leyland and other factories. An interview with a union official, who supported the introduction of an automated system, confirmed the validity of this 'consensus' even where jobs were at risk:

'We've carried far too many people...We have to compete and export...the only way to success is to improve performance at home so we can export abroad.

Despite the ever present possibility that automation might lead to redundancies, the course repeatedly coupled examples of the efficiency of such innovation with illustrations of its advantages for labour. Firstly, by considering only the effects on present labour, the video mystified the implications of the rising technical composition of capital for future labour. 'Robots' illustrated only those examples of redeployment which consisted of moves to 'easier' and 'less dangerous' jobs, and not one example was given of automation leading to significant job losses among the work-force. Secondly, debate concerning the potential deskilling of many jobs as a result of automation was bypassed through an exclusive focus on the removal of present unskilled work (Braverman,1974. Wood,1982). For example, one 'case-study' concerned skilled technicians whose work had been enhanced by automation.
However, no mention was made of the changes in the work process for those on the production line:

Initially workers were against it (introduction of automated system) but if anything (it) satisfies skilled welders - takes away most of the repetitive work they had to do ('Robots' video).

I am not arguing that automation always deskills the labour process. However, the way in which this theme was articulated within the 'Factories' course did not contain any suggestion that technical innovations could affect detrimentally the labour process for all workers, or lead to differential consequences according to the gender of workers. In the above example, innovation not only upskilled the labour process for male welders, it deskilled work for production line workers who were largely women. Students were presented with a 'message' which posited the necessity of automation for competitiveness and its universal desirability for labour. Dangerous, repetitive and heavy jobs were 'eliminated', while the largest inconvenience was shown to be redeployment rather than redundancy.

This same message was articulated to students during a visit to a local video manufacturers. 'Seevision' employ nearly 350 people, most of whom work on an assembly line which dictates the pace at which they labour. Japanese work practices permeated the factory and these were highlighted to visiting groups of students. The group I was following were given an introductory talk by a manager which included the history of the factory and its production and employment practices. They were then given a guided tour of the factory, which enabled working
conditions to be witnessed at first hand, before a final 'debriefing' session allowed the manager to speak again to the students and answer questions.

The assembly lines at 'Seevision' produced 9,000 videos each week for the European market. As the manager who talked to the group stressed, this required a disciplined work-force who needed to maintain high quality work through the week. An example of this was their vigorous quality control measures. For instance, if one screw was found to be loose in an assembled video, that entire day's production was rechecked. Arriving late for work, taking too long over breaks, and making mistakes on the line, resulted in warnings which were followed by dismissal. 'Seevision' imposed a rigorous discipline on its workforce. However, this was presented by the manager as part of a 'package' which was highly beneficial for labour. Automation had not led to redundancies, merely 'natural wastage', and had made possible 'good conditions and prospects':

You're constantly working while on the line, and earn a good wage for it - £102 a week, with Friday afternoons off. We're an efficient organisation and if you show ability and enthusiasm, there's no reason why you can't go to the top.

After these 'lessons' from the video and 'Seevision' visit, the group took part in a simulation which, though it had more to do with the advantages of the division of labour than automation, was relevant to the factory visit and again embodied a theme concerned with the desirability of automation. The class assembled a number of 'flashing
lights' (units consisting of various components) as individuals, before repeating this in two groups utilising a division of labour which simulated a production line. On both occasions, the time it took to make a set number of units was recorded. The group found that not only was the assembly line method more productive than individual construction, it could also undercut the cost of individually produced units while providing higher wages.

The three activities described above were consistent in illustrating the 'desirability and necessity of automation'. However, student reactions demonstrated the problems involved in any theory which posits a correspondence between school experiences and their internalisation by those subject to them. Drawing on their own family and part-time job experiences, students mediated and reinterpreted the automation theme within the course. This was not a fundamental rejection of the content or values of school lessons, as with Willis' 'lads', but a reorganisation of the validity attached to various aspects of the course. The students had a far greater knowledge of the possible effects of automation than the narrow image presented to them in the 'Factories' course, and exhibited many critical insights. They were fully aware of the increased production automation could bring, yet, were also aware of its possible consequences for workers within a capitalist mode of production:
They (robots) do lose jobs. My dad used to work in a factory where a load o' people got laid off 'cos of a new assembly line...all thrown on the dole. [Dave]

They've got all these new machines where I work (washing up). You just stick 'em in (the plates) and they get done. They don't need so many people working there now. [Mike]

In answer to the worksheet (1) question 'Some people say "Robots take away jobs". What is your opinion?', all eleven students present answered that jobs could be lost. However, in three cases this was supplemented by a realisation that automation could also create jobs and reduce the hazards faced by workers in certain jobs. For example:

Robot better to work in crappy environment than people

[Mike].

losses and gains (in automation). People have to do different jobs and some might get jobs [Sharon].

When asked to list the advantages of robots, all students mentioned those benefits which can accrue to labour in certain cases, such as reducing the physical demands of work.

The experiences of students during the course also led to reactions which illustrate the unintended consequences which can occur on courses designed to make young people more receptive to careers in industry (MSC,1984). From the comments I heard during the visit to 'Seevision',
a four and a half day, £102 a week for sixteen year olds did not compensate for the discipline and boredom of the job:

Oh no, you just 'ave to sit there on yer own...can't even talk to others much. [Maria]

Yeh, I couldn't stick this for long. [Gary]

It's alright this pee break you get each half hour, but what if you want a shit? [Simon]

Christ, it's not like school. Three warnings and yer kicked out. I couldn't cope with this. It's shit...so boring doing this all the time. [Dave]

No fun, can't even talk to yer mates properly. [Richard]

In the minibus travelling back to school, I asked the group what they thought about the possibility of working in a factory. This question was met by a loud chorus of 'shit' from the girls and boys who answered. Furthermore, only two out of the ten on the trip answered 'yes' to the worksheet (2) question asking 'would you like to work at "Seevision"'. For both of these (male) students, the 'easy work' and 'good money' were the attractions. For the rest, such factors were not sufficient compensation for the labour process they would have been subject to. Students comments about 'Seevision' did not take place in a
situation where a job was on offer to them there. As such, they may be seen as unrealistic given the limited post-school opportunities likely to face these individuals. However, the very high turnover of workers at the factory suggests that these comments were not completely artificial. Many people that joined 'Seevision' also appeared to have arrived at the conclusion that they 'couldn't cope with this' work for long.

Reducing the possibility that students may work in a sector of industry is not the only unintended consequence that vocational courses, designed to achieve the opposite, may lead to. Instead of helping to stimulate the interests of students to a greater extent than that achieved by a 'traditional' academic diet, they may create boredom (c/f Jamieson and Lightfoot, 1982). In the classroom simulation of the assembly line, students quickly made the connection between 'efficiency' and 'monotony'. It soon became obvious to the group that utilising a division of labour was quicker than individual construction (see earlier discussion). However, the class soon became bored with this 'replication' of an assembly line. As a consequence, the teacher had to deal with a class which was becoming restless near the end of the lesson. This illustrates one of the fundamental differences between the institutions of school and work. With students, there's no 'three warnings and you're out' as with 'Seevision'. Boredom can soon be translated into classroom disruption which can lead to a 'crisis of control' for the teacher. Top industrialists may call for 'industrially relevant education' in schools (RSA, 1986), but if such practices engender boredom in students, they will not find a welcome reception.
This incident illustrates the salience of different levels of society. The boredom produced among students when certain macro-level concerns were imported into the meso site of the classroom, shows the difficulties faced by a strategy which seeks to facilitate a simple correspondence between societal levels. In particular, the unintended consequences which may stem from vocational courses points to the problems associated with a curriculum which seeks to inure students 'to the discipline of the work place' (Bowles and Gintis, 1976:131). Although the life-experiences of the 'Factories' group did not lead them to reject all that was presented to them, they helped these young people interpret critically the automation theme. As a consequence, they rejected the idea that automation was always universally beneficial. Furthermore, far from making students 'more open' to the possibilities of working in industry, this part of the course had alienated the majority from working in a large factory.

ii. The normalcy of capitalist relations of production and the work ethic

The second major theme of the course was established as valid through the illustration of a particular concept of 'teamwork', or, to be accurate, two such concepts. 'Factories and Industry' often presented teamwork as collaboration between individuals outside of a structured power relation. In this context, it makes obvious sense for individuals working together to cooperate in order to achieve common goals. However, capitalist relations of production were then 'smuggled' into this, creating a second concept of teamwork. From this flowed the message that the 'way forward', for joint success, was for labour to cooperate with capital on the terms of the latter. For example, in the
'Robots' video, labour, represented by skilled technicians, found that in contrast to their own doubts they had benefitted from a new automated plant. 'Teamwork' became transformed into acquiescence in, and support for, the consequences of the 'rationality' of capital as mediated by management.

These two concepts can be seen as equating with two different perceptions, a cooperative and an instrumental view of teamwork as articulated, firstly by the 'Factories' group of students and, secondly, by the manager of 'Seevision'. Thus, while students viewed teamwork as something near solidarity - working for their mutual benefit and interest, the manager's view is instrumental, involving a willingness to be coordinated for external interests and purposes.

At a time when young people are nearing the end of their schooling, worries concerning their entry into a full-time working situation are commonplace. Irrespective of the amount of vocational preparation they receive at school, the prospect of meeting and working with new people in a different environment can be daunting.

'Starting in industry' was a video which addressed such worries and, as such, commanded the attention of the group for some time. It examined a young school-leavers 'settling-in' period at a factory, and how he overcame his early mistakes by changing his attitude to work and his colleagues. Through failing to listen or follow instructions, and establishing poor relations with other workers, 'Clive' got into trouble with his supervisor and became depressed with work. The turning point came one day when an older colleague covered for a serious mistake made by Clive. The male colleague told Clive that if he wanted to survive, he had better realise that his job was all about teamwork; working hard
for and helping each other. This lecture from a 'father figure' was the central point of the video and from then on Clive became almost magically transformed into a 'model' worker. Careless mistakes ceased and relations with workmates improved immediately.

The validity of this cooperative concept of teamwork, constituted throught the importance of the work ethic and collaboration for mutual benefit, was reinforced by a particularly well organized lesson which involved students working in small groups, simulating the setting-up of a small business. After an introductory session, in which the teacher detailed a real-life example, each group had to work out the initial costs and overheads for their own cooperative venture. Examples included a window cleaning enterprise, a car security engraving firm, and a home-care visiting service. A report-back or 'public stage' (Barnes, 1976) shared among the class the problems, opportunities and potential viability of each group's plans. Students were involved in stimulating the creation of their own jobs through pooling ideas and sharing their own experiences of the 'world of work' with friends. However, both the above lessons introduced a gender differentiation to the context in which teamwork occured. The video portrayed women and men in stereotypical settings (e.g. female secretaries, male shop floor workers), and focussed on a young man's problems. The business simulation allowed students to introduce a sexual division of labour. The groups were mainly single sex, and it was girls (perhaps showing a realistic view of what bank managers would lend them money for) who established the home-care visiting service.

In total contrast to the video factory was a morning's visit to a local Information Technology Centre. Trainees worked individually and in
groups in a relaxed atmosphere. Work was rarely repetitive or boring, but allowed for a large degree of trainee autonomy. After learning the basics of computers and word processing, trainees decided what they wanted to do within certain topic areas and worked at their own pace. As they talked to trainees, students heard how interesting, enjoyable and rewarding working at the Centre could be:

It's really good, yeah. We're working together (a group of four) setting up this stuff for computer graphics. After we've done this project we'll go onto something else 'n' if another lot wanna, they'll do sommat with this equipment. [Trainee]

You can get 'extras' 'ere as well. Once you know how to use that electrical equipment over there, as long as you make one thing for the Centre - mend sommat or the like - you can make sommat for yourself. Paul's just flogged the last thing he did for £60 - alright eh? [Trainee]

The nature of this work and the 'extras' the trainees spoke of, appeared the main reasons why the Centre was well received by students. Work appeared interesting, and with the boredom of the labour process at 'Seevision' fresh in their minds, the prospect of learning new skills via operating equipment at the ITEC was an obvious appeal. However, there was a third 'reason' which seemed to make the Centre a site for 'solidarity' in the eyes of students. A factor which could not be missed on visiting the Centre was the cooperative nature of much work. Even when trainees were not working in groups, they could be seen
helping each other and working together to overcome problems individuals had with particular tasks/machines. The cooperative concept of teamwork was reflected in the learning practices of the ITEC, an example of which was evident during the students' visit. They were not just given a tour of the Centre, but under the guidance of the trainees were able to use the computers/graphics equipment.

The validity of this cooperative concept of teamwork was accepted by students during the above episodes. Although the concept was often illustrated through a gender differentiated content, it was articulated through the categories of cooperation, hardwork and mutual reward outside of the direct capital-management/labour relationship. The video 'Starting in Industry', examined the benefits of teamwork for workers between workers. The setting-up of a business reinforced this through students establishing cooperative ventures, and the ITEC visit illustrated the supportive benefits of teamwork between trainees. However, some of the practices of 'Factories and Industry' served to import an instrumentalist concept of teamwork, which was articulated through the capital/labour relationship. In this way, an attempt was made to legitimise cross-class cooperation.

The talk given to the group by a 'Seevision' manager illustrated the process of positing the validity of teamwork as a 'thing-in-itself'. A second concept relevant to the capital/labour relation was then 'smuggled' into the talk. This sought to mystify the asymmetrical consequences of cooperation for labour and capital and introduced an instrumental meaning to teamwork. I shall illustrate the articulation of this concept by detailing three extracts from the manager's talk to
the group. First, the validity of teamwork between 'equals' is asserted, articulating what I have seen as the cooperative notion of teamwork. Secondly, the notion of teamwork between individuals occupying different positions in the workforce is introduced, and then mystified through the notions of 'respect' and 'pride'. Thirdly, through changing the context but not the actual meaning of 'respect' and 'pride', the instrumentalist view of teamwork is introduced and its consequences for workers in a capital/labour relation are both revealed and justified:

1. If you come here to work you'll find we are all in the business together - all in the same boat if you like. We're not like some places where managers are never seen on the shop floor. We're all workers and we all work as a team. If we have a large order and time is running short, management get stuck in and help shifting boxes, helping on the production line, or whatever is necessary.

2. We treat you as adults from the moment you come here to start work and we expect a similar respect from you. I'm not talking about having to 'doff your caps' each time you pass one of us, but we each have our jobs to do. If we didn't work like that, as a team together, we'd all go down the plug-hole...

3. ...maintaining high standards is crucial. I'll give you an example. With Japanese workers, if their daily quota hasn't been met they'll stay on for an extra hour or two or however long it takes. They take a respect and a pride in their work which won't allow them
to leave a job half finished. Now, imagine what response you'd get if that was suggested to British workers as an example to follow... No chance!

The original concept of 'teamwork' had been transformed through an instrumental view. 'Cooperation' and 'hardwork' had been changed from their meaning in a context of 'solidarity', where individuals worked together for their mutual benefit and interest. In contrast, 'teamwork' had been transformed into legitimising a macro-level process whereby individuals are coordinated for external interests and purposes - labouring to create surplus value for capital.

The cooperative concept of teamwork, illustrated through the business simulation, video and Technology Centre, made a marked impression on students. Moreover, the validity of the notion of 'teamwork' could be said to have been held by the group throughout the 'Factories' course, and for both its cooperative and instrumental versions. This was illustrated through a worksheet (2) question asking whether students agreed with the statement 'Industry is all about teamwork.' All present answered 'yes' and the following comments were typical:

Yes I agree you want other people to help you and they need help otherwise nothing will get done. [Gary]

Teamwork is a good idea because you get on better with each other. [Maria]
These positive views concerning teamwork in industry were unchanged by the end of the course. Asked whether they still thought it important, all ten present answered 'yes' (two of these had not been present to reply to the worksheet question).

Once again, the life-experiences of students were an important factor in their reception of this theme. They had 'learnt' the effectiveness of teamwork in many areas of life - from participating in team games, to cooperating with friends in completing homework. Several had experienced the benefits of mutual cooperation with colleagues in their part time jobs through such exchanges as clocking on for each other when late, and swopping paper rounds with friends. Most of the students had also probably heard of similar examples from their parents' work (see Willis, 1977). Furthermore, the validity of these experiences of teamwork were reinforced by aspects of the 'Factories' course, such as the business simulation and the 'Starting in Industry' video, even though they were sometimes differentiated by gender.

From this data, it could be concluded that the notions of cooperation and good work relations, high on the list of preferred 'qualities' for employers (ITRU, 1979. Gordon, 1983) had been accepted as valid by students within the capital/labour relation. However, there are qualifications which need to be made to this, as students' reaction to the 'Seevision' manager's talk revealed their ability to disintangle the two concepts of teamwork in the course. On the journey back from the factory visit, I asked the group what they thought of the 'example' of the Japanese workers as illustrates by the manager. They had already been talking about this and, with the others nodding in agreement, three shouted out:
They must be fuckin' mental - nutters!

This reaction suggests that students may actually view teamwork and hardwork as valid only in an equitable, mutually beneficial context - in other words in what I have seen as the cooperative concept of teamwork. When giving their opinions concerning teamwork in industry, students may well have been responding to the theme outside of the direct capital/labour relation. Talking to the group after the course had finished supported this hypothesis. Students made it clear that teamwork, whether inside or outside of industry, was valid only in what they perceived to be mutually equitable contexts. The following comments are representative of those made:

Question: Why did you react to the example of the Japanese workers in that way? Wasn't that a good example of "teamwork"?

No, it's not the same is it? I mean it's stupid working longer hours for a piece of piss, for someone else. I'd help someone else, cover for 'em like, if we were working together like in that film ('Starting in Industry' video), but that's not the same.

[Dave]

...you'd help your mates out, if they were skiving you'd say they'd had to go to the doctors or something. But then they'd help you out...Those [Japanese] weren't doing anything like that.

[Sally]
Teamwork don't mean sweating your bollocks off for some lousy job. You've gotta work together, but there's limits! [Simon]

No it's different. On a paper round, teamwork was helping out your mates when they had sommat on 'n' couldn't do it for a day. You helped each other out like that. [Gary]

Whether 'Factories and Industry' had been successful in inculcating the normalcy of capitalist relations of production and the work ethic remains an open question. However, if my analysis is correct, it suggests that many examples of 'teamwork' in the context of a willingness to be used for external purposes, would be rejected by students. Now, certain types of capital/labour teamwork may be regarded as fair and valid by students. However, as illustrated by the comments above, other examples of this second concept are likely to be rejected on realisation of their practical consequences (in this case, for Japanese workers).

This 'distinction' by students between the two concepts of teamwork, provides another example of the problems involved in arguments suggesting that a 'pro-capitalist' schooling will be internalised by those subject to it. For this group of students at least, the wider educational experiences provided by their part-time jobs, their parents' tales of work, etc., allowed them to examine critically the official curriculum. As with the automation theme, students did not reject all that was presented to them in the course. However, they distinguished between those examples of teamwork viewed as equitable, and those judged as an asymmetrical exchange which no 'reasonable' individual would want
to engage in. The 'Factories' course introduced them to an example of instrumental teamwork, through the 'Seevision' manager's talk, which they rejected as unfair. Far from opening them up to the possibilities of working in industry, this theme served to reinforce their alienation from factory work. This was not just as a result of disliking the set-up in 'Seevision', but because of the general relationships they saw as existing in most large factories as a result of their visit to the video manufacturers. In contrast to the rationale of the SVP, 'Factories and Industry' did not help to prepare these young people for labour in capitalist industry. By the end of the course nine students no longer wanted to work in any large factory.

Conclusion
There is no guarantee that a different set of students would have reacted in the same way to the 'Factories' course. Furthermore, a differently organized vocational course may have exposed students to a set of messages dominated by gender or racial divisions (as opposed to social class division) in the workplace. Again, this may serve to evoke quite different and less homogeneous responses from students than were evident in this study. However, drawing on the insights made by the group I was with, certain points can be made concerning the sociological consequences of vocational courses designed to transport macro-level industrial concerns into the schooling of young people.

Students are not passive agents who can be formed malleably by the official values contained within such courses as 'Factories and Industry'. Indeed, it can be argued that the life experiences of the majority of students likely to be confronted with 'factory' education,
make it improbable that a discourse of deficit will be internalised by them. Most working-class youth 'know' about the disciplines, obligations and rewards of work from part-time jobs, older friends and family. Furthermore, young women are usually aware of the sexual division of labour between and within sectors of work which restricts the type of jobs available to them. The consciousness of students cannot be transformed simply by partial representations of the macro-level from a single meso-level site (i.e. school). Rather their views are affected by complex processes which take place in a range of sites within different societal levels (e.g. family, youth club, etc). The life experiences of young people may not lead them to reject all the values embodied in such curricula, but a course which attempts to equip students with attitudes appropriate to work in our present society is unlikely to be accepted unquestioningly. This is particularly probable when those involved are perceived as 'professional tutors', rather than 'legitimate' craftspeople who are able to form an exchange relation based on skills of direct relevance to the labour market (Rees and Atkinson, 1982).

In the case of the 'Factories' course the majority of students reacted against the dominant themes of the 'necessity and desirability of automation' and the 'normalcy of capitalist relations of production and the work ethic'. At the end of the six weeks, the majority of students said that they were less likely to work in any large factory than they had been at the start of the course. This illustrates some of the unintended consequences of vocational courses which operate within capitalist society. Rather than 'reproducing' individuals who are reconciled to work in a labour market differentiated by gender, race and
social class, vocational education may merely operate to make them more 
dissatisfied with these divisions.

However, school-based courses are not the only component of 
vocational schemes. In order to gain a greater idea of the effects of 
vocational education, the next two chapters concentrate on the very core 
of vocational education — work-experience. Work-experience is central 
to and a compulsory part of SVP and TVEI, and is an activity which most 
students on vocational schemes will undertake at one stage or other. As 
a consequence, questions concerning the organization and effects of 
work-experience can be seen as central to SVP, TVEI and the general 
future of vocational education.
7 Work-Experience and Industry

The Schools Vocational Programme and the Technical and Vocational Education Initiative, are just two of the many vocational schemes which have contributed to the large increase in the use of work-experience in schools since the 1970s. This is, perhaps, the most concrete way in which the mandate of vocational preparation has been translated into explicit links between education and industry. Work-experience has served directly to transport the workplace into the education of young people. As a result, capitalist industry no longer has to pressurize for the inclusion of an economically relevant curriculum purely as a force external to the education system. Rather, firms are now able to position themselves as a constituent element in the schooling of young people, and may attempt to play a direct role in the inculcation of 'appropriate' attitudes, knowledge and skills.

There has been a general concern about the educational consequences of young people spending periods of their schooling in a place of work (e.g. Eggleston, 1982. Watts, 1983 and 1983a), and this theme will be examined in the next chapter. However, little attention has been paid to factors which influence the quality of work-experience. This is a curious omission, as industry receives no subsidies from the State for the provision of work-experience to schools. The State does not socialize this cost (O'Connor, 1973), nor are there sanctions which could be used against firms who decide not to participate with schools.

The general increase in the demand for work-experience has been reflected in the LEA which contains Borough and Stonegate schools. In
recent years, the local college of further education has increased its demand for placements through such schemes as the YTS, and further calls on industry have been made as a result of the expansion of SVP, the establishment of school work-experience schemes, and the introduction of TVEI to the authority. However, by 1986, there was a general view among educationalists in the authority that work placements of sufficient quantity and quality were becoming difficult to secure. Both Borough and Stonegate schools were spending more time on arranging work-experience and, as this activity had recently expanded to include all their students for a week in their final year, this was the cause of some concern.

In the case of SVP and TVEI, securing work placements is of central importance to their operation. Work-experience is a compulsory element of both schemes, and requires that something approaching 1000 weeks of placements be found in the locality each year. As with the rest of the school curricula, the school-based elements of these schemes can be seen as a relative 'constant'. Once funding decisions had been made and priorities established, there are few variable outside of a school's control which can interfere with this situation. However, the work-experience components of SVP and TVEI may always struggle to achieve such 'constancy'. Suitable firms able to offer appropriate placements need to be sought out by those responsible each time a group of students is to undertake work-experience (c/f Kerry, 1983 for an attempt to regulate this situation in Project Trident). The participation of industry, and hence the ability of SVP and TVEI to be delivered, depends upon the capacity of firms (their willingness and ability) to supply appropriate placements. In short, work-experience is another element
of vocational schemes which illustrates the salience of different sites and levels of society. Experience of meso or macro-level work sites is not something which can be unproblematically reproduced for school students. It depends on the specific nature and capacity of those sites, located as they are within a particular societal level.

The potentially unstable nature of schemes which involve work-experience, makes necessary an understanding of the reasons behind a firm's decision to provide placements. Although a greater number of industrialists have involved themselves in promoting education-industry relations in the 'corporate' period than ever before, it cannot simply be assumed that this will automatically translate into the growing provision of work placements. This is important both for educationalists who are responsible for the operation of vocational courses, and because if the supply of work-experience falls behind demand, the material base of a central component of the government's mandate of vocational preparation will be inadequate.

**Rationale for industrial involvement in work-experience**

Of the twenty firms I interviewed who were involved in the provision of placements for SVP and/or TVEI, five main reasons can be discerned for their participation with schools. They are a 'student-centred' approach, an 'instrumentalist' approach, and others which constitute the 'receptive', 'obligatory', and 'community-care ethos'. These were not always mentioned singularly, but were occasionally combined by firms in explaining their involvement. I shall present these initially as organizational categories. However, I hope to demonstrate that the reasons firms have for providing work placements have an explanatory
and, when combined with an examination of other factors, partly causal value in analysing the extent and quality of work-experience.

a) 'Student-centred' (mentioned by nine firms):
The 'student-centred' approach consisted of two, closely related strands, both of which focussed on a concern for the situation of youth at a time of mass unemployment. Several of those interviewed remembered the inadequacy of their own 'preparation for work' at school, and became involved in work-experience because they viewed it as 'a worthwhile effort which can help kids when they leave school and try to find work - to give them a better start' (owner of a domestic appliance repairers). For example, the training manager of a local builders expressed the hope that their involvement would help prevent a repetition of his school experiences:

To be frank, we got absolutely fuck-all in the way of careers advice or preparation for work. One lad in the fifth year was even expelled because he got himself a trial with Everton and got taken on as an apprentice, which started before the end of the school year.

The second strand to the 'student-centred' approach consisted of those involved as a result of the concern they had for their own daughters/sons, or young people in general:

I think that youngsters nowadays have a rough time. They are expected to make decisions which will affect the rest of their
lives at an early age and at a time when unemployment is high. One of the reasons we became involved was to help them make up their minds about where they might want to work (personnel manager of a department store).

I've got a son at school in his final year but one, and I know he hasn't a clue what he wants to do. The main reason I involved this firm was to help young people like him have a chance to try out different jobs to see if that's what they want to do (owner of a domestic appliance repair shop).

Many individuals coupled the concern they had as a result of personal experiences (their own school days or worry about their children's future) with a realisation of the 'depressing employment situation which will hit all young people when they leave school' (district dental officer). Indeed, the current recession was highlighted by one personnel manager who contrasted the problems facing contemporary youth with the climate which existed when he left school twenty-five years ago, when 'you could just walk into a job.'

The concerns embodied in these responses were not focussed on the functioning of the macro-level, mode of production. Rather, they embodied a concern with the 'development' of individuals, and their transition from micro and meso-level sites (i.e. the family and school).
b) 'Instrumentalist' (mentioned by four firms):

Those firms that expressed a rationale for providing work-experience involved with the short or medium term benefits they would gain, are viewed as possessing an 'instrumentalist' approach. There were two elements to this. Some firms were involved as a result of those benefits they gained from student labour during their placements, and others were concerned with the less tangible benefits that participation could bring in terms of public relations:

We are a big store in a small community area and providing such a service to local kids can help spread our name. Plus which, I've got to say it's free labour while they're here. Students can be of real use...after all they get given all the grottiest jobs around here (manager of DIY store).

The building trade has never had a good image and anything we can do to improve it we'll try. Work-experience is one aspect which may help this (director of a building company).

c) 'Receptive' (mentioned by five firms):

All those firms involved with schools were obviously 'receptive' in that they agreed to provide work-experience. However, this category is reserved for those whose only stated rationale was because they were asked to provide placements.

[...] approached me and I agreed. That was the only reason (director of a furniture makers).
A number of schools approached us and we simply agreed to participate (training manager of a building firm).

It is always possible that certain firms in this 'receptive' category, as in any other categories, may not have disclosed their full motivation for involvement with schools. However, their comments illustrate the benefits which can accrue to schools who make positive efforts to involve firms in work-experience. A simple request from a teacher may be all the motivation required for many firms to agree to participate with schools.

d)'Obligatory' (mentioned by two firms):

This category includes those individuals who felt that the position of their firm in the local community, or their own position on local training boards/parent-teacher associations, placed them under an obligation to involve themselves in work-experience when they were approached by schools. The clearest example of this was provided by the owner of a hairdressing salon who gave the impression he would never have become involved with schools if it was not for his 'commitments'. A large retail store was the other firm which had an obligatory rationale for involvement. The very size of their operations meant that they 'had no real choice but to become involved' when approached by the coordinator of SVP.

I thought it would be a nuisance from the start and I wasn't proved wrong. As I was Chair of the Hairdressing Federation and on the employers committee at the local college, I was expected
to get involved - I couldn't not do really. I suppose it was an extension of my involvement in education and training. It was expected of me really.

We're well known in this area and you are expected to get involved in these activities. In many ways we are obliged to. It's not our only reason for getting involved - I think it does the kids a lot of good to have a taste of work - but it certainly plays an important part (deputy manager).

These 'obligatory' firms had a sense of their dependency on the local community (from which come the buyers of their products/services etc.), and involvement in work-experience followed as a result of the responsibilities they believed followed from that position.

e)'Community care ethos' (mentioned by four firms):
In reality, it may be difficult to separate those firms whose involvement in work-experience stemmed from a 'genuine concern for the young in our community' from those expressing their rationale in terms of 'public relations', or even firms with an obligatory approach. However, as several firms placed great stress on their 'policy of caring for the community', I have made this a separate category. For example, the manager of a large department store expressed her firm's involvement in work-experience as one element of a general approach toward the locality:
philosophy has always centred on the importance of community care. Work-experience is clearly another element in this involvement and that's why we started providing it.

Three main points can be highlighted concerning the diverse reasons expressed by those questioned about their firm's involvement. Firstly, these should not be seen as the only possible reasons firms may have for participating with schools, and they are unable to explain fully why firms do not participate with schools. Furthermore, they do not reveal the selectivity that is sometimes built into a firm's involvement with schools in terms of the time during which they are able to provide placements, and the students they are prepared to accept. Many firms might be unable to provide placements at certain times of the year, such as when stocktaking is in progress, and some may discriminate against certain students. For example, it is quite possible that none of these firms would have taken on disabled students. Furthermore, some firms may refuse to take girls for a variety of spurious reasons such as the lack of suitable toilet facilities (see chapter four), or may build racist components into their demand for students of a 'suitable appearance' in order to exclude black students. If discriminatory practices do not actually exclude students, they may still confine them to certain types of labour during their placements. There is plenty of evidence to show that this has been the case in the government's YTS (see Benn and Fairly, 1986). In short, the involvement of industry with schools may serve to transport discriminatory labour market practices into the education of young people.
The second point to be made is that irrespective of the rationale given by firms, they all provided placements which helped Borough and Stonegate schools deliver SVP and TVEI. The very act of providing work placements, is also one of providing the industrial capacity which enables these schemes to operate. However, the diversity of reasons given by firms for their involvement has other implications for work-experience schemes. A standardized, uniform method of recruiting firms, may not be the most efficient way of maximizing work placements available to schools. Alternatively, if the method of recruitment allowed individuals from education to get to know the firms they use, or intend to use, their various rationales might be exploited. For example, the Stonegate careers teacher often includes in his search for placements the comments 's/he is a good worker', or 's/he'd really benefit from a few days experience with your firm.' In these examples, a sophisticated approach towards the collection of placements is being used through an awareness of 'instrumentalist' and 'student-centred' rationales. Such an individualized approach may appear to take more time and effort than simply phoning firms with a standardized request, but it allows for the opportunity of maximizing the effectiveness of approaching firms, and possibly reducing the overall time spent on securing each placement. In the local area, it is just this individualized approach which has been so successful for the SVP project director."

The third point concerns the consequences a firm's rationale may have for the quality of its placements. While in no way can the reasons for a firm's involvement be seen as determining the time and supervision given to students or the type of work they are allocated to during their
placement, it may well affect it. For example, a firm taking part in work-experience for reasons concerned with public relations would, perhaps, be unlikely to neglect those students with them. For these firms to make students labour at one task all week, fail to adequately supervise or explain to students their responsibilities, or fail to provide them with an interesting week's work-experience, would do little to fulfill such an aim. In contrast to this might be the firm whose primary rationale concerned the use of students as productive labour. The quality of such placements might be limited to boring, repetitive, even the 'grottiest jobs available' (see earlier discussion). It would be an exception for a student coming to a firm for just a week to engage in interesting and varied work which was also economically productive to any great extent.

This discussion of the reasons firms have for engaging in work-experience, introduces one aspect of the differences between what can be seen as 'overt' and 'unofficial' aims towards work-experience. For example, while the government's mandate of vocational preparation simply assumes that firms will participate in work-experience in order to provide an early 'bridge' from school to work (see next chapter), the responses of firms show that they have their own 'unofficial' agendas. These have implications for the experiences students have during work placements, and illustrate the relative autonomy which exists between societal levels. For example, a firm using students as productive labour and giving them monotonous and dirty jobs to perform may well put them off the prospect of full-time work in a similar environment. Far from creating a 'bridge' to help the 'transition' of these students, such firms may alienate young people from wage-labour. Furthermore, it
is difficult to see how such an oppressive week's work-experience could have the result of, or be intended to, 'mystify' capitalist relations of production (e.g. Simon, 1983; Cole, 1983). While being told to sweep floors for hours on end or clean dirty machinery may not reveal fully the realities of capitalist relations, it is hardly likely to endear many students to relations of domination and subordination in the workplace. Here, the intentions of a government may be subverted by firms operating within the macro-level of society.

The agendas of firms also have implications for the continued supply of work placements. Whether the aims embodied in the rationales held by firms are achieved could affect their continued participation with schools. A firm disappointed by the results of its involvement with students may decide not to continue its involvement with students. However, before anything less speculative can be said about the quantity and quality of work-experience placements, further factors need to be considered.

**Economic considerations**

One of the most important considerations that needs to be taken into account when examining the quantity and quality of work-experience is the fact that companies operate within a market economy. In the current recession, huge numbers of companies, including large sections of manufacturing industry, have been forced to close. Many of those surviving have done so by rationalising their operations. These economic pressures can affect the provision of work-experience in a number of ways, the most obvious being its discontinuation in the event
of bankruptcy. The reduction of a labour force, and the introduction of new technology to a plant/office, can also create problems.

We won't be involved in work-experience any longer as we are shutting down... It has become impossible to compete with the larger companies in the present environment (director of machine tool manufacturers).

I'm having to do more all the time. Coping with staff training and liaising with schools are just two of my responsibilities. There's pressure coming from 'above' to do more as it's Industry Year, and half the personnel team is going in a couple of months! (personnel manager of a large utility)

We enjoy taking young people and giving them a taste of office life. They get to try out a number of different jobs and we get an insight into today's youth... Unfortunately, I don't think we are going to be able to continue. It looks like our operations are to be moved... There are plans to centralize and computerize the whole system (office manager of a breakdown service).

The effects of economic pressures on individual firms will obviously vary. The size of a company, the market in which it operates, and the resulting changes in the labour process of its employees, are just three variables which may influence attitudes towards, and the ability to continue with, work-experience. For example, a contraction in business may provide the conditions conducive for those with an 'obligatory'
rationale. Rather, it occupies a *dynamic interrelationship* with these two considerations. In short, the initial rationale for involvement selects those aspects of experience which will be most salient for a firm. The total experience of a firm's involvement in turn reacts back upon their rationale. It may confirm and perpetuate it, change the firm's reasons for participating, or even undermine any motivation they had for providing schools with work placements. Economic factors set *limits* to the importance of these two factors. No amount of positive experience and fulfilled expectations will override a bankruptcy in determining the future of particular placements. However, both rationale and experience may mediate a multiplicity of other economic factors. This process has been illustrated diagrammatically in figure nine, and can be further demonstrated through an examination of those encounters industrialists have had with students and teachers, and their experience of receiving increased demands from schools.

**Figure Nine Here.**

a) Encounters with students

In Borough and Stonegate schools, both SVP and TVEI provided students with work-experience in weekly blocks (see chapter four). This was considered by nineteen of the twenty firms in my sample as providing 'a good long time to discover what they are like at work' (personnel manager of a food store). All but three of those interviewed had formed firm general opinions regarding school students. They represented the 'public face' of schools and, in some cases, were the basis for
concerning work placements are the experiences firms have during their involvement with schools. The continued provision of placements may also depend upon the advantages and disadvantages of providing work-experience, and whether a firm's rationale is confirmed as valid. Both of these become evident through the process of organizing and delivering work placements.

Experiences of providing placements

When a firm becomes involved in work-experience, it is inevitable that those liaising with schools will build up a catalogue of impressions and views about the education system and those within it. These may not be accurate or representative, yet can be crucial for decisions relating to their future involvement with schools.

The experiences that firms have with schools during their provision of work-experience, can be seen as occupying a relational position between their initial rationale for involvement, and those economic factors which affect the extent of their participation. Irrespective of a firm's rationale, their experience of these education-industry relations may shape the future provision of work placements. The nature of a firm's experiences may help create a store of goodwill towards schools which may be tapped for other purposes (e.g. providing students interview practice in a place of work), or it might alienate a firm from continuing involvement with schools. In such cases, the tendency will have been for meso-level educational sites to have been isolated from, rather than brought closer to, the 'needs' of the economy.

'Experience', however, does not exist as an isolated factor to be considered separately from economic forces and a firm's initial
rationale. Rather, it occupies a dynamic interrelationship with these two considerations. In short, the initial rationale for involvement selects those aspects of experience which will be most salient for a firm. The total experience of a firm's involvement in turn reacts back upon their rationale. It may confirm and perpetuate it, change the firm's reasons for participating, or even undermine any motivation they had for providing schools with work placements. Economic factors set limits to the importance of these two factors. No amount of positive experience and fulfilled expectations will override a bankruptcy in determining the future of particular placements. However, both rationale and experience may mediate a multiplicity of other economic factors. This process has been illustrated diagrammatically in figure nine, and can be further demonstrated through an examination of those encounters industrialists have had with students and teachers, and their experience of receiving increased demands from schools.

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Figure Nine. Factors affecting the supply and quality of work-experience

Selects aspects most salient

Rationale for involvement with schools

Reacts back and structures

Limits the importance of

Mediates

Economic factors

Mediates

Limits the importance of

Experiences of involvement
judgements which determined a firm's future involvement with work-experience:

They are absolutely useless the ones I get. They can't see when there's work to be done; I'll tell them to sweep the floor once and then I'll have to tell them again half an hour later when it needs doing again. They've no common-sense and no initiative. It's an awful lot of work organizing these placements and I've had enough. I'm getting out of it and having a rest (owner of hairdressing salon).

Such experiences have obvious implications for the quantity of placements available to schools, as a series of 'undesirable' incidents may prompt a firm to withdraw from work-experience. However, three points need to be taken into account when interpreting this scenario. Firstly, such experiences may reflect the poor quality of a placement rather than be an accurate reflection on students. For example, firms may bring undesirable experiences on themselves if they make students 'sweep the floor' all day. This may also happen if an employer is not prepared, or is unable, to spend sufficient time with students in areas of work where they may not be able to participate fully such as hairdressing. The use of racist or sexist language and practices by employers, or their tolerance in other members of the workforce, may also result in withdrawal, go-slow or even confrontational tactics on the part of the affected student. Secondly, a firm's experiences may be dependent upon the students they are given for placements. As Borough and Stonegate schools covered different catchment areas, and as SVP and
TVEI cater for a different composition of students within those respective areas, it should not be surprising if the experiences of firms are affected by the scheme and school they are involved with. This poses an interesting problem for educationalists responsible for organizing placements. On the one hand, they could inform firms of those students who require close supervision because they are, for example, 'poorly motivated'. This would alert firms to possible problems and might help ensure a successful placement. However, the danger with this approach is that issuing warnings might serve to label a student and prejudice a supervisor against her/him before the placement has even started. It may also lessen the chances of a firm being willing to take on such students. Alternatively, if firms were not given background information on a potentially 'difficult' student, individuals might be more likely to be judged solely on their time with a firm. However, if firms built up a catalogue of bad impressions about students as a result of their involvement in schemes which catered for those considered difficult to motivate, this might be translated into a general view of students which did nothing to improve the image of schools. In practice the history and organization of SVP, where a project director arranges placements for all schools involved in the scheme, is rather more able to cope with this 'dilemma' than TVEI, where each school coordinator is responsible for arranging placements for their own students. The SVP director had occupied his job for a number of years and had built up excellent relations with a large number of local businesses. As a consequence, he had got to know the firms who would provide suitable placement for students who required a little extra supervision than was usual. In contrast, TVEI coordinators
had not been involved in education-industry relations for the same length of time, nor did they deal with the same number of placements. As a consequence, there was simply not the room for manoeuvre that was available to SVP.

The third point which needs to be considered in examining the experiences of firms, is that certain events will be more salient than others as a result of their rationale for involvement. It is not perhaps surprising that the salon owner quoted above had an 'obligatory' approach. When other firms described disappointing experiences, it did not lead them to consider withdrawal but, in the case of 'student-centred' approaches, reflect on the 'good' work-experience can do for students. For example, a 'receptive' director had experienced some 'unfortunate episodes', but remained keen to continue as a way of helping 'kids prepare for work'. He felt work-experience might also improve problems of recruitment:

They really don't know the first thing, they turn up at interview for a job, say 'watcha', stick their feet on the chair and they have a cigarette hanging from the corner of their mouth!

In this example, experience had not reversed the firm's decision to participate with schools. However, it had restructured the director's reasons for providing placements. He now viewed work-experience not only as an activity which would help students, but as a way of changing the behaviour of job seekers so that they would be 'acceptable' to prospective employers.
The above comments are not the only example of how a firm's initial rationale had been changed by their experiences of involvement with schools. Indeed, the majority of firms in my sample soon came to realize the advantages of a benefit which had little to do with their initial rationale. Fifteen out of the twenty companies mentioned that work-experience provided a steady flow of potential labour which could be closely screened for its suitability. Though few were in a position to recruit when interviewed, eight had taken on students they had provided work-experience for in the past. This can be seen as part of the employer's unofficial agenda for work-experience. Here, firms had developed a concern with minimizing the risks involved in employing new labour. Individuals interviewed were explicit in stating this as an advantage of, and a 'reason for continuing', work-experience. The following comments are typical of those made:

One benefit we get is the chance to see what they are like working. How hard they work, if they get on well with staff and customers, if they're willing to do that bit extra, it all becomes evident. It's a much better way of finding potential recruits than interviewing...Work-experience is a much more thorough method of selection (personnel manager of a department store).

If they do well...I make sure I have a word with them before they leave. Having seen what they are like over a week, we've got a good idea of how they will fit in and get on with us (personnel manager of a food store).
The implications of this attitude are far reaching. Once employers start involving themselves in work-experience for employment oriented reasons, this can easily be related to students as a set of 'employability criteria' which they must develop if they want the chance of a future job. It will soon become general knowledge among students that in a particular firm the boss' attitude is one of 'if they do well...I'll...give them an application form if they are interested in a job with us.' In this context, the unofficial approach towards work-experience becomes based around a process where employers and students can 'pre-select' each other. The power of this approach is that it is not just employers who stand to gain from student's demonstrating a set of attitudes and knowledge which is congruent with the government's mandate of vocational preparation. For participating students, the development (or at least demonstration) of such standards has its own benefits in a time of mass youth unemployment:

One consequence of such a scheme (work-experience) is, inevitably, that it offers participants an 'early start' in job selection (Eggleston, 1982:14).

Indeed, there is evidence to suggest that the job oriented approach of employers is of more importance for young people than any educational objectives SVP and TVEI may have. Summarizing his report concerned with the views of British youth on work-experience, Watts (1980) notes that 'it would seem from the available evidence that the vocational
anticipatory and placing effects are more valued by young people than the social-educational effects...

The significance of this approach also has implications for the supply of work placements. The initial rationales of firms who had come to use work-experience as a method of monitoring prospective employees, included 'receptive', 'community care' and 'student-centred'. All of their rationales had changed as a result of involvement with schools; their experience had reacted back and restructured their approaches. The potential benefits to be gained from screening was now one of the reasons these firms continued their provision of placements. However, economic considerations may set limits to the realization of this rationale. As the director of a garage noted, 'Unfortunately I've not been in a position to recruit...But there's a couple I've had here who I'd have jumped at the chance of employing.' Now, if such firms are unable to take advantage of such benefits as screening which have become important to them, it may undermine their motivation for continuing involvement with schools.

The examples given above illustrates how a firm's experiences with students, their significance varying according to the rationale for involvement, may affect the quantity of work-experience. The way in which encounters with students may affect the quality of placements is, perhaps, more difficult to assess. However, the interaction of rationale, experience and economic factors, is likely to play an important part in this. For example, the owner of a domestic appliance repairers with a 'student-centred' approach and a 'healthy business', continued to be concerned with providing interesting and enjoyable placements, despite having experienced a 'cross section' of students.
Alternatively, a firm with an 'instrumental' rationale, highly dissatisfied with its involvement, may spend less time helping and supervising students.

b) Encounters with teachers

In the local authority under study, as is generally the case (Watts, 1983), it is usual for teachers to visit students during their work placements. This is also the case for those teachers at Borough and Stonegate who are responsible for SVP and TVEI. Teacher visits may allow for the quality of placements to be checked, for students to air any grievances they have, and can help solve problems that employers may be experiencing from disruptive individuals. As such, they constitute an important part of education-industry relations which can aid the effective operation of work-experience. In addition to enabling teachers to check on the quality of placements, they can monitor the working environment in which complaints concerning students' behaviour are made. For example, the SVP coordinator has found such visits vital as a means of ensuring quality placements for students:

I was phoned by the manager of [...] restaurant with a complaint about the student they had with them. Now I immediately visited [...] and spoke to both the manager and [...]. It was clear to me that the placement was unsuitable - he was being treated a bit like a skivvy and not having a worthwhile experience. I withdrew him immediately and placed him with [...] a catering firm I've known for a long time.
Teacher visits can also do much to maintain the 'goodwill' of a firm and its willingness to continue or even extend involvement with a school. For example, the Heads of SVF at Borough and Stonegate and Borough's TVEI Coordinator had contributed towards the following viewpoint:

The careers teachers of several schools we are involved with make a point of seeing me when they visit their pupils. They keep us in touch with what is going on in schools and always ask if we are having any problems with any of them [students]. It keeps the whole thing ticking over very nicely. If we ever have any real problems, we can get on the phone to school and have a known face to contact (personnel manager of a department store).

A majority of firms in my sample were satisfied with their contact with teachers. They appreciated the time they took in organizing work-experience, and were conscious of the 'significant contribution teachers make towards the smooth running of work-experience.' As firms were eager to point out, they were in business to 'make a profit' and 'couldn't afford the time to go chasing after kids that don't turn up.' When firms were conscious of particular individuals they could contact to 'sort things out', this was not a problem (staff manager of a large department store).

The existence of regular teacher visits and the ready availability of educationalists who would help firms with 'problem' students, can be an important factor in maintaining the commitment of companies involved with work-experience. However, teacher visits did not elicit a favourable response from all those I interviewed. Dissatisfaction was
expressed over two points; the irregularity or non-existence of visits from certain schools and the timing of visits. Four firms were dissatisfied with the irregularity of visits from teachers involved in SVP and TVEI:

I would like to see more teachers. There are kids from certain schools who never see their teachers during the week they are here. I know they are under a lot of pressure, but I think they should be able to visit their pupils once during the week (owner of domestic appliance firm).

To these individuals, teacher visits denoted that they 'cared' about students and were ready to 'lend a hand with any problems.' The irregularity or absence of visits was a cause for concern, and it sometimes encouraged an 'if they don't care why should we' attitude on the part of firms. This should cause concern to those worried about the quality and quantity of work-experience on offer. Though none of these firms had translated such an attitude into action (e.g. planning to cease involvement) this may well become the case for a firm with an 'obligatory' approach. The second aspect of teacher visits, which three firms expressed dissatisfaction with, concerned their timing:

I'm glad they visit, but oh, the inconvenience! They'll turn up here, unannounced, and I'll be dragged from some meeting and have to take the teacher to where they [students] are working. This doesn't just happen once - again and again, it's a right pain (personnel manager of a utility).
These experiences were translated by some firms into a plea for teacher visits to become 'appointments' which were arranged well in advance. However, this illustrates one aspect of contrast between the labour process of industrialists and teachers. While it may be convenient for those in industry to arrange visits days in advance, this may not be so for teachers who are liable to be called upon to 'cover' or deal with any number of problems in school at a moment's notice. Nonetheless, experiencing inopportune visits is likely to be a source of friction for firms. It could even, as was beginning to happen with one firm, react back and undermine the motivation to continue involvement with schools. If other experiences, such as realizing the benefits of screening, did not compensate for such inconveniences, a firm's continued involvement might be at risk.

c) Experiencing increased demands for placements

The demand for work-experience placements has risen sharply over the last few years in the authority local to Borough and Stonegate schools. As one personnel manager argued, 'the saturation point has been reached', and there are signs that this is so across the LEA. Perhaps as a result of the demands being placed on industry, the practice of 'pairing' with a nearby school appears to have become popular with many firms. Four firms in my sample provided placements for students predominantly from a single school. This had simplified the process of organization for them.

Most of our placements go to Borough's school. I've got to know the teacher there well, and this arrangement works. It makes
As economic recession has often placed more constraints on the time available to a firm for supervising and organizing work placements, pairing may become increasingly commonplace. In the above example, financial cut-backs had placed an increasing work-load on the firm's staff. Pairing with a single school was viewed as a convenient way of minimizing the problems caused by involvement in work-experience. This is likely to be the case irrespective of a firm's rationale. Once 'paired', further requests for work-experience from other schools can easily be rejected. Moreover, for the school involved, pairing with a local firm may bring benefits additional to work-experience. As the personnel manager of one of the utilities I spoke to noted:

We are most heavily involved with [...] school. It's close to us and that makes organizing the whole business somewhat easier. It's not just work-experience we provide them with, either. The other week we went over there and talked to a fifth year group about job interviews; how to dress, what approach to take, that sort of thing. They then came to us individually for mock interviews and after that we went back to the school for a 'de-briefing' session.

The two companies cited above provided more than 200 weeks of work-experience to schools each year. While neither of them was as yet involved exclusively with one school, it seemed it would not take much for them to become so. The utility cited immediately above was seeking
ways to reduce and regulate its involvement, and the 'final straw' may prove to be an approach they had just received to interview over seventy students from a local school.

A laissez-faire approach whereby schools competed to secure firms they could pair with might, in the short-term, benefit the most successful. However, in the longer term it could be detrimental for all schools in the area. Pairing would concentrate certain types of placements with particular schools. These would not, then, be available to students from other schools. As a result, there would be a general loss of variety, and SVP and TVEI may struggle to provide placements corresponding to their main 'skill sampling courses'. This scenario would be bad enough for the prospects of an extension of work-experience in order to facilitate the government's mandate of vocational preparation. However, it could develop into a situation with even more far reaching and damaging consequences. Pairing still takes considerable organization on the part of firms. Moreover, with the small number of large employers in the locality, this would not be feasible for every school involved in work-experience. Those large firms in my sample realised their importance to local schools, and were receiving increased demands for further work placements. They had a reputation for providing quality placements and this had spread among a number of schools in the area. If economic pressures became more intense, it may be that such firms would pull out of work-experience altogether, rather than continue to limit their involvement among schools in the context of rising demands. In this example, experience of rising demands coupled with economic pressures, could undermine even
a 'community-care' approach. This scenario is illustrated diagrammatically in figure ten.

Figure Ten Here.

Across a particular geographical area, this could have a 'knock-on' or 'multiplier' effect, as schools search elsewhere for placements lost due to a large firm's withdrawal. Other firms, both large and small, would come under increased pressure to make up the lost placements, and this could lead to further firms withdrawing as demands became unbearable. This could develop into a vicious circle (see figure eleven), the start of which is already being experienced by several schools in the area.

Figure Eleven Here.

While this is clearly a 'worst-case' scenario, in that the interaction and effects of, rationale, economic factors and experience, would probably not lead to a continuing reduction in supply, it represents a real tendency. If the quantity of placements did not suffer under the pressure of increased demands, there is always the possibility that their quality might be affected adversely. If firms accepted more students than they could handle comfortably, the amount of supervision accorded to each individual might suffer. Furthermore, it need not be the experience of increased demand which creates a deterioration in the quantity of work-experience. Bankruptcy is just one further factor which could initiate such a dynamic.
Figure Ten. **Demand and economic constraints undermining a firm's rationale**

Rationale for involvement → Experiences of involvement

Reacts back and undermines

Economic factors
Figure Eleven. **Destructive dynamic leading to a reduced supply of placements**

- Firms withdraw because of the increased demand from schools for work-experience placements
- Schools place pressure on other firms in an attempt to meet their demand for work-experience placements
The possibility that work-experience provision may be reduced at the very time demand was rising, was causing concern among those involved in SVP and TVEI at Borough and Stonegate schools. Both schools had recently increased the amount of students they had to arrange placements for as a result of extending work-experience to their entire fifth years. However, neither school was able to find suitable placements for all its students on SVP and TVEI. Furthermore, those responsible for securing placements were having to search further afield. Teachers at Borough and Stonegate had also experienced instances of what was seen as the growing practice of 'poaching' placements traditionally used by them. It is not surprising that resentment was growing between certain schools, as more energy was being expended to secure placements which had become 'positional goods' (Hirsch, 1977).

Conclusion
In the authority local to Borough and Stonegate schools, as in most areas across the country, TVEI, CPVE, and a host of other schemes are increasing the demand for work-experience. In considering whether industry is able to meet such demands, this chapter has taken as problematic the assumption that firms will automatically participate with schools. I have argued that a careful consideration of a firm's rationale, economic factors and its experiences of involvement, is able to provide insights into the quantity and quality of work placements. Furthermore, the ability of teachers and schools to affect a firm's experiences of involvement, opens up the possibility of educationalists being able to mediate economic factors. The results of these factors
depend upon the actions of individuals working in a variety of sites within different levels of society, which are constrained by a multiplicity of specific circumstances (e.g. managers by the need to make a profit, teachers by timetabling constraints, etc.). However, despite these variables, there are two dominant tendencies in the locality of Borough and Stonegate which makes unlikely the prospect of an extension of work-experience in line with the government’s mandate of vocational preparation.

Firstly, economic recession continues to deepen and unemployment continues to rise. Few firms are unaffected by these conditions or the pressures that stem from them. Irrespective of a firm’s own approach towards work-experience, or those experiences which stem from its involvement, this is bound to make the regular provision of quality placements problematic. This instability will always exist in an unplanned mode of production which relies on the market forces of supply and demand to fulfill social and economic needs. Secondly, because of limited resources and the introduction of such innovations as the GCSE, teachers face growing demands on their time. This is making regular visits to work placements increasingly difficult to sustain. If there is a reduction in teacher visits, this is exactly the opposite of what most firms want (i.e. teachers as 'familiar faces' who check placements are running smoothly and can help when problems arise). The consequences of this may lead to a reduction in those firms providing work-experience, and may trigger the 'destructive dynamic' illustrated in figure eleven. As individuals from firms throughout my sample stressed, work-experience schemes do not run themselves. They need educationalists who are available to sort out problems firms do not have
the time to deal with. Furthermore, a decline in teacher visits may also harm the quality of placements as they can no longer be monitored as before.

The evidence contained within this chapter points to the instability of the material basis on which a central component of the government’s mandate of vocational preparation is based. If there is an insufficient supply of work-experience, then the opportunity of inculcating young people with industrially relevant skills, knowledge and attitudes through the workplace will not even exist. However, just as the participation of industry in work-experience programmes cannot be assumed, neither can the effects of placing young people in a place of work for brief periods of time. It is an examination of the consequences of work-experience that concerns the following chapter.
1. 'Work-experience' is defined as the experience by a student of work tasks in a work environment without taking on the full identity of a worker. 'The key distinctions are that an individual on work-experience is "employed" on a short-term basis and is not (officially) paid by the "employer" (apart perhaps from covering travelling expenses, etc.)' [Watts, 1983;3].

2. The definition of 'quality' used throughout this chapter is that of the SVP coordinator. Quality placements should have the following characteristics: Students should have adequate supervision from the firm and should not be given dangerous tasks to perform. There should be someone from the firm involved with the student who is able to 'relate' to young people. They should be provided with an 'interesting' time and given a variety of tasks to perform during their stay. They should not be treated as unpaid 'skivvies', and the firm should provide the student and school with feedback.

3. No subsidies are paid to industry by the State for providing work-experience in schools. This is in contrast to its provision for post-school training schemes such as the YTS, and is almost certain to have an effect on the provision of work-experience for school students. As Wray et al. argue for the promotion of the UVP: 'While it could be argued that an employer who sees the advantages of training would neither need nor expect any compensation, the incentive grant was found to be a powerful factor in motivating some employees to participate in a UVP scheme' (1982;79-80).
4. This is not quite so straightforward in the case of securing appropriate college placements for SVP and the residential experience component of TVEI. In both cases, further negotiation and coordination is required to deliver these parts of the programme.

5. I interviewed individuals from twenty businesses in the locality which provided work placements to Stonegate and Borough schools for the purposes of SVP and TVEI. They had a common responsibility for their firm's involvement in work-experience. Each firm in my selection provided placements corresponding to the 'skill sampling' courses of SVP and areas of work relevant to the TVEI course. Placements included the areas of building and construction, office and clerical, retail, computers, hotel and catering, community-care, domestic appliance maintenance and motor mechanics.

6. Before 1986, SVP had a surplus of placements from which to choose. This had been the case since its inception in 1979.

7. Though this was exactly what the DIY firm in my sample did. Despite having a concern with public relations, their desire for students as productive labourers overrode such considerations. However, such an approach appeared to have had predictable consequences. During the interview, the manager of the store expressed his surprise at the fact that 'none of those we've given work to have come back to us looking for a job, even though they know we have a fairly high turnover here.'
8. A reasonable hypothesis which could be drawn from this is that firms cannot achieve both elements of the 'instrumentalist' rationale.

9. The practice of paying students, or buying them presents, appears to be widespread. For example, a large stationers gives students who have been of help during their week a number of record tokens. However, this is considered 'against the rules' by many (see Montgomery, 1983. Watts, 1983).

10. I do not want to suggest, however, that those students who are seen as poorly motivated at school will also be those who display similar characteristics at work.

11. The SVP project director was particularly sensitive in placing students in appropriate placements. His thoughtfulness went so far as placing students who were poorly off in those placements where financial renumeration was common.
The placing of students in work settings for short periods of time has variously been seen fit for educating, socializing and even controlling students. For example, writers such as Eggleston (1982), Watts (1983), Kerry (1983), and Montgomery (1983), have illustrated the educative potential of work programmes. Work placements are able to contribute toward the general development of students, through exposing them to a set of circumstances and experiences which exist outside of the context of the school. In contrast, critical educationalists have viewed work-experience as an activity which has changed the curriculum in order to occupy large sections of youth who face a jobless future (Stronach, 1984), and to reinforce 'the perception that the burden of adjustment to the labour force is...the individual's responsibility' (Cole, 1983; 24). Others have pointed to the radical possibilities of an activity which can stimulate a 'greater understanding of the attempts to control workers and the oppositional forces which occasionally arise to contest these controls' (Watkins, 1987; 34). However, since the Great Debate, the dominant view of a central feature of work-experience has altered. In line with the government's mandate of vocational preparation, the focus of state education apparatus has shifted from a concentration on the educative purposes of work-experience, to an approach concerned with how it can facilitate the transition of students from school to macro-level work sites. Work-experience is no longer to contribute toward the general development of young people. Rather, it is to facilitate the acquisition of industrially relevant skills, attitudes and knowledge.
Work-experience and state educational apparatus

The Department of Education and Science has traditionally taken a reactive role in relation to school-based work-experience. It was not in the business of determining the precise nature of schemes, nor on passing detailed value judgements on their worth. Rather, it has sought to ensure through 'general guidance' that work-experience remains an educational activity and is not used by employers as a recruiting strategy or a short-term form of free labour (DES,1974). The orientation of the aims and objectives of schemes should stem from the educational rather than employment system:

The principle which should underlie any work-experience is that pupils should be given an insight into the world of work...schemes for pupils of compulsory school age must form part of an educational programme...Employers should be made fully aware of the [educational] aims of the scheme and should be invited to plan their part in cooperation with the schools. (DES,1974)

However, the DES shifted the emphasis of its approach towards work-experience in the political climate established during the Great Debate. Government and employers were expressing increased concern about the 'relevance' of schooling to the needs of an industrial society, and this was reflected by the Department. Work-experience no longer had to be part of a purely educational programme. Rather, it should also be used in relation to the 'needs of an industrial society' (DES,1977).

In contrast to the early approach of the DES, the MSC has taken a proactive role in attempting to shape work-experience. In its promotion
of vocational schemes such as the Youth Opportunities Programme, the YTS and the TVEI, the MSC has made clear that work-experience is to play an integral role in providing an 'early' and 'permanent bridge between school and work' (Edwards, 1984. Finn, 1986. Dale, 1985 & 1986. MSC, 1982 & 1984). This 'bridge' is concerned with the preparation of youth for work through two strategies which can be seen as constituting a view of work-experience which has marked differences from that expressed by the DES.

First, work-experience is to familiarise students with a job environment in order that they should 'adapt' to the demands of work in a 'changing occupational environment' (MSC, 1984. Young, 1986). The onus is on the individual to develop attitudes and the knowledge which make a career in industry attractive and which accept the demands of work as defined for them by the representatives of capital in a time of economic recession. Secondly, students are to be better equipped to enter full-time labour through the actual acquisition of specific and, in particular, generic work related skills (MSC, 1984. See also Jamieson, 1985). While work-experience is not expected to achieve this by itself, it is to play an integral and major part in programmes which are aimed at this goal.

In propounding its view of work-experience, the MSC has invested the aims and objectives of this activity with a content which is drawn predominantly from the macro-level world of employment, rather than the education system. As an activity which structures the experiences of young people (Mouffe, 1979), work-experience is viewed not so much as something which will enhance education. Rather, it is to enhance the potential of young people for work in a capitalist society through
The dominant view of work-experience

The relative importance which should be attached to these two views of work-experience is shaped by the fact that in terms of their ability to sponsor vocational change in schools, the HSC has rivalled and even possibly replaced the DES as the dominant state education apparatus in England and Wales (CCCS, 1981. Benn & Fairley, 1986. Dale et al, 1988). However, it cannot be simply assumed from this that schools will take on board the NSC's aims and objectives for work-experience. As noted earlier, the capacity of schools may serve to attach quite different purposes to this activity. Nonetheless, there is growing evidence to suggest that the dominant view of work-experience is that of a practice congruent with the mandate of vocational preparation. The objective of 'preparing' youth for work through work-experience is shared by both industry (see chapter seven. Kerry, 1983. Montgomery, 1983.), and many schools which aim to achieve 'a more effective linkage between the role of the student and the role of the worker and help facilitate transition between school and work with the minimum disequilibrium' (Eggleston, 1982;19).

This view of work-experience as a 'transitional' activity extends to both SVP and TVEI. Although the MSC are not responsible for the Programme, both schemes employ work-experience as a means of aiding the transition of youth from school to work. In SVP, work-experience 'is at the centre of getting our pupils ready for work after school' (Project Director). It is meant to aid the acquisition of skills and the
'inculcation of good work habits and the development of an understanding of working life' (SVP Discussion Document, 1978). The TVEI uses work-experience for similar purposes. Work-experience is meant to contribute towards making students 'better equipped to enter the world of employment which will await them', and constitute 'the construction of [a] bridge from education to work' (KSC, 1984). That such preparatory objectives were shared by Borough and Stonegate schools was confirmed when I interviewed sixty-two students who had just returned from a week's work-experience. In Stonegate, twenty-four students had been on work-experience as part of SVP (large majority working class, 11 girls), while at Borough thirty-eight students had been at a place of work as part of TVEI (mostly working class, 13 girls).

At both schools, students mentioned that they had been made aware by teachers that 'work-experience was about helping them prepare for future work.' A further factor which might appear favourable for work-experience serving as a 'transitional' activity was the attitude of students prior to their work placements. Fifty-four of the sixty-two students were looking forward to their work-experience without any reservations, and thought they would enjoy the week. A majority were also interested in full time work in an area related to their placement. As Cope and Watts suggest, students have their own agendas for work-experience in which vocational anticipatory reasons are central (Watts, 1983a. Cope, 1983). The only reservation, expressed by just eight students, concerned being apprehensive of entering an unknown environment.

The rationale of work-experience as embodied within SVP and TVEI, and the initial attitudes of the students, appeared conducive to the
dominant view of work-experience as an activity which facilitates the process of 'transition' for young people. In short, there appeared a ready base on which the government's mandate of vocational preparation could be constructed. However, when the actual practices of work-experience are explored, the problems in assuming consistency between the intended and actual outcomes of this activity become clear (Boudon, 1974). Work-experience is not a homogenous or completely controllable activity. As the previous chapter illustrated, the tasks and experiences with which students are confronted during work placements are likely to vary widely according to factors in the market place which are largely outside the control of schools or, indeed, government. Students are placed into a variety of work sites where they may be exposed to and experience the economic and cultural conditions and contradictions of capitalist production and reproduction. As a consequence of the exploitation and inequality in the production process, which revolves around gender, racial and social class divisions, there is no guarantee that the actual practices of work experienced by students will lead to their preparation for waged labour.

Work-experience as practice

Whether the students' responses to work-experience could be said to indicate that they were 'better prepared' to enter full-time employment, depended upon the interaction between two major aspects of the environment they experienced. These were firstly, the structure of the social relations they experienced and how these affected the quality of interpersonal communication in the place of work. This included such factors as the hierarchical or cooperative nature of working relations.
they were placed into, the interest taken in them by those they had been placed with, the encouragement and advice they received while working and, above all, the social or unsocial nature of the work they were involved in. Secondly, the nature of the work they were required to do clearly had a major impact on student's evaluation of their placements. This involved the monotony or variety of the tasks they performed, the number of different aspects of work they were exposed to during the week, and whether they were rewarded in cases where they had been used as productive labour. Students also found that the structure of social relations and the nature of work they undertook were not separate but related factors. For example, the most hierarchical relations were often found in places where work was at its most monotonous.

In examining students' responses, I shall briefly outline their overall pattern before concentrating on the largest group, those with negative experiences. The implications of those nineteen students who had positive experiences (which actually confirmed their ambition to work in a particular job) will be discussed later in the paper. It will be suggested that although such positive experiences may constitute part of a 'transitional' process for students who enter jobs offering similar environments and experiences after they have left school, they are unlikely to be relevant to the working conditions most young people face in the contemporary economic climate.

1) The Social Relations of Work

The practices experienced by students concerning social relations did not always complement the view of work-experience as producing young people who were 'prepared for work'. In response to a question asking
'how were you treated by the manager-supervisor and other workers', sixteen out of the 62 students (3 SVP, 13 TVEI) were satisfied (e.g. 'it were alright', 'OK, no more than that', 'could 'ave been better but could 'ave been bad as well. 's alright I suppose') and sixteen (7 SVP, 9 TVEI) were positive about their experiences. However, a total of 30 students (14 SVP, 16 TVEI) expressed disappointment and criticism about some aspect of the social relations of production they experienced.

These experiences occasionally created a straightforward resentment among SVP and TVEI students as a result of having to work in such an environment (e.g. 'they treated me like an idiot. It was terrible, there was nothing I could do. It just wasn't fair', 'I wasn't allowed to do much. They just left me hanging around on my own.' 'The man in charge didn't give me the breaks I should 'ave 'ad, that the rest 'ad'). However, the comments of the majority of students in this category included insights into the structural relations they were subject to. These six examples are representative of the comments made:

Karen (SVP, Retail Placement):

The manager, right, was 'orrible. He kept on putting his arm round me and, you know, touching me... There was nothing I could do, I mean he's in charge. What do yer do if the top person's doing sommat like that - there's no one to go to. He'll just say your lying 'n' no, one would believe yer. I mean, what if that happens
Figure Twelve. The social relations of production

Treatment by manager/other workers.

<table>
<thead>
<tr>
<th></th>
<th>SVP</th>
<th>TVEI</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>7 [29.2%]</td>
<td>9 [23.7%]</td>
<td>16 [25.8%]</td>
</tr>
<tr>
<td>Satisfied</td>
<td>3 [12.5%]</td>
<td>13 [34.2%]</td>
<td>16 [25.8%]</td>
</tr>
<tr>
<td>Negative</td>
<td>14 [58.3%]</td>
<td>16 [42%]</td>
<td>30 [48.4%]</td>
</tr>
</tbody>
</table>
at work after school. They've got everything on their side, they can give you the sack. Girls shouldn't have to work in a place like that 'n' there shouldn't be someone who was able to get away with touching yer up (My emphasis)

Mike (SVP, Butchery Placement):

(the owner) took advantage of me really. The whole set up wasn't fair. He made me do boring jobs all the time and kept me late, I missed my bus more than once. It made me think. At school, teachers can't make you do things like that. You've got rights. But at work, they can do stuff like that to you and just sack you if you complain. You haven't really got much you can do. It's not fair - that one person can have all that say over things. (4) (My emphasis)

Richard (SVP, Hotel & Catering Placement):

From the start it didn't seem like they were interested in me. I was just stuck in the kitchen and left to get on with it. The manager didn't show me around or explain what I had to do. And then the man supervising me was a right bastard, 'do this', 'do that', that's all I got. There's nothing you can do in that situation - you know, when yer 'boss' is there all the time - i's a bit much. Yer just being told what to do 'n' there's no come back. Their word goes, like he said to me 'if you don't do what your told it's not like at school. You'll be out on yer ear 'ole'. There's no room to breathe, 'n' you realise what it's gonna be like. I don't wanna do a job like that. My part time job's better, at least
I'm on my own a lot. (My emphasis)

Peter (SVP, Carpet Fitting and Laying Placement):

The owner was alright, but I was just put with one lot and that was 'orrible. They said 'right we're in charge and you have to do wot we say'. Some showed off to me and a couple had a go at me. It wasn't even as if they were in charge. I was just someone who was below them. It shouldn't be like that, I got (the teacher) to take me off but it's not right, there shouldn't be anyone in charge that can treat you wrong or make you do things you don't want to. (My emphasis)

Mary (TVEI, Clerical) It was very boring and I had to do three days of photocopying. It's not right, that they make one person do the same job all the time. I should've been switched round with some of the others. I wouldn't want to do that for a job all the time. (My emphasis)

Bill (TVEI, Building) I was meant to do proper jobs but I was treated like slave labour. I hated it and left after a day. They were 'aving a go at me, telling me to do this and not doing it themselves, so I told 'em to fuck off and went home in the afternoon and didn't go back again.

All but one of these students had been 'looking forward' to their work-experience, yet they were still disappointed by aspects of the week. Their criticisms were not confined to examples of personal
authoritarianism and/or mistreatment they experienced, but were usually generalised to include features of the structural organisation of the workplace into which they had been placed. For example, as a result of suffering sexual harassment, Karen did not just have a (perfectly rational) personal 'hatred' of the manager. She used her experience to recognise the gendered, capitalist power relations which aided such acts ('They’ve got everything on their side...they can give you the sack...What can you do if the top person’s doing sommat like that'), criticising situations where a man's position as manager 'allowed' him to sexually assault women ('Girls shouldn’t have to work in a place like that...there shouldn’t be someone who was able to get away with touching yer up').

As Karen's experiences illustrate, the existence of hierarchy, control and exploitation is not confined to the capital-labour relation. It is inextricably related to the operation of capitalist society also being that of a patriarchal capitalist society (Cockburn, 1986. Beechey, 1987). Furthermore, Richard's experiences with his supervisor illustrate the obvious but important point that relations of domination and subordination extend to the attitudes and actions of individuals within the work-force. The lack of control, autonomy and power ('There's nothing you can do in that situation...there's no come back') alienated him from any job with similar characteristics. There were many more examples of students viewing as 'unfair' demands made on them by their supervisor. These were not always responses to authority in itself, but were often thought out criticisms of what students viewed as 'unreasonable orders which... no one in their right mind would have thought fair' (Sharon).
If the critical responses expressed by these students are in any way common of those evoked by other work-experience courses, this element of the curriculum is unlikely to help build any 'bridges' from school to work.

One point which could be made regarding some of this data concerns its possibly limited applicability to labour outside of work-experience. Many students are likely to feel more isolated, intimidated and 'ordered about' during a single week's placement than in a full-time job. A week's work-experience does not provide enough time in which to 'know the ropes', form satisfactory working relationships with colleagues, or generally become adjusted to a new environment. As a consequence, the importance and significance of experiences are likely to be magnified by students, perhaps leading to a reevaluation of their post-school intentions. However, simply because students' experiences may be 'magnified' in concentrated forms, does not negate the fact that various forms of authoritarianism, sexual discrimination and harassment are characteristic of capitalist social relations in a patriarchal society. Capitalist production always provides someone in charge who may demand that 'you do things you don't want to' (Peter). For example, exploitative economic relations are an essential aspect of capitalist production. A capitalist has to appropriate surplus labour in order to remain in the market place (Marx, 1968). The conditions in which this is done may be more or less humane, but the fact remains that economic exploitation must occur (Gough, 1979). That students may not actually be used by employers to produce surplus value on a work placement, does not prevent them from experiencing oppressive practices which may be associated with economic exploitation. Furthermore, that young people
may have such experiences during work placements does not negate their validity or potential effects for post-school employment situations. This may also be the case for experiences such as 'isolation' (felt by twenty-five students [40%], (13 SVP [54%], 12 TVEI [32%]) which may appear initially wholly due to the organization of work-experience.

A common complaint made by those interviewed concerned the unsociable nature of their work-experience. Many simply felt that they 'didn't have many people to talk to'. While this may seem trivial to some, its importance to students is indicated by the fact that ten of them (4 SVP, 6 TVEI) re-evaluated their initial interest in that area of work as a future job partly because of its unsociable nature. Such reactions are not surprising when those involved in organizing work-experience have suggested that students assess their placements primarily according to the quality of contact they have with adults at work (Montgomery, 1983).

In organizing work-placements for students, teachers / course coordinators generally contact owners or individuals from the management of businesses they hope to use (Cope, 1983, Kerry, 1983). As Fortune notes, 'teachers' access is through management' (Fortune et al, 1983). As a consequence of this (unavoidable?) practice, students are inserted into their work placement via contact with managers from an organization. There was no initial point of contact with a union or group of workers which may have made their first days less isolating. Though an individual supervisor may have been assigned (more often than consulted with) to 'look after' the student, there was no structured introduction to other workers. In fact twenty-seven (44%) (11 SVP [46%], 16 [42%] TVEI) of the group had only the manager of the firm to
go to if they needed help or had any problems. In the present economic recession, few individuals will have much time to spend with those on work-experience other than that required to keep an eye on what they're up to. An indication of this was that for many students the work they were doing was 'checked up on' more frequently than someone asked them how they were 'getting on'. This may well be a result of the student being the sole 'responsibility' of one manager from the firm. Without a structured introduction, other workers are unlikely to have the information which would enable them to welcome a new person or make a point of checking informally if they were having problems. Indeed, in many companies, a student may be working in a separate area from much or all of the work-force. If this explanation is correct, it may also provide a reason for why thirty-three (53%) (16 (67%) SVP, 17 (45%) TVEI) students were given no kind of general introduction to their firm. These students were provided with no information concerning the aims and objectives of the company, its history or present organization.

The resources required to provide what might be regarded as a satisfactorily social and informative work placement may well need the active involvement of more than one or two individuals. While students are projected into work-experience through a relationship which involves teachers and management, and excludes workers, this may be difficult to achieve, and the complaint concerning the unsociable nature of work is likely to remain.

The organization of work-experience could be improved and this might reduce students' experiences of isolation and hence reduce the possibility that they may be alienated from an area of work because of its unsocial nature. However, as a satisfactory explanation for the
complaint of isolation, the above is overly voluntaristic. An exclusive focus on the organization of work-experience suggests, firstly, that the problem of isolation is limited to students on work placements and, secondly, that purely organizational changes may eradicate this student complaint. What it neglects is the possibility that the organization of the forces of production in certain enterprises may serve to isolate workers. The division of labour may be utilised to arrange people in a way which mitigates against conversation during work. For example, many cleaning jobs are done by people working on their own.

The experiences of students on work placements concerning the unsociable nature of certain jobs should not, then, be viewed as applicable merely to work-experience. Indeed, the comments of students support the explanation that it is not just the organization of work-experience which leads to isolation, but that the arrangement of the forces of production through the division of labour is also responsible (see Watkins, 1984 pp.110-111). In response to a question asking students if they enjoyed the types of work they did, the replies of seventeen students (27%) (7 SVP [29%], 10 TVEI [26%]) included comment on the organization of the workplace. The following remarks were typical, if not exhaustive, of those made:

We could 'ave all worked together packing stuff, it would probably bin quicker 'cos you could 'ave 'elped each other. But they wouldn't let you. You 'ad to work on own... made it really boring. They just kept it like that, to keep you apart. (Gary, SVP)
I was cooking in (...) kitchens and it was boring. You couldn't talk to the others much because they (machines) were organised in separate sections and you worked in one section or another. It was stupid really. They didn't have to work it like that. They just did. (Jackie, SVP)

I wasn't allowed to do much, they were all men who did it (mechanics). Often I spent all my time just watching them work or hanging about doing nothing. (Liz, TVEI)

I was treated well, but it was all men and it was a bit off-putting working with men only. You know, it was difficult to talk sometimes, it was their job. There should be more women doing this work, then it would have been easier. (Sally, TVEI)

Students did not simply experience isolation in the work place, but often reflected on their experiences and achieved critical insights into the factors which created such isolation (c/f the critical insights achieved by Willis' 'lad's'). Several recognised that a particular division of labour was the cause of the organization of the work place (Jackie 'they were organized in separate sections and you worked in one section or another'; Martin 'they even had different parts of the office to do different jobs'). Students also recognised that this was not the only feasible way in which work could be organized (Jason, 'If I was in charge, I wouldn't have them set out like that'; Jackie, 'they didn't have to work like that'). The experiences of others illustrated that part of the division of labour in the economy which is a sexual
division of labour. Both Sally and Liz encountered some of the difficulties of entering a traditionally male area of work, and the exclusion experienced by Liz alienated her from working in a job in which she had previously been interested (see Cockburn, 1983). The rigid sexual division of labour which operates in most sectors of the labour market poses a problem for work-experience as 'preparation for work.' To the extent that the practices of capital and, in many cases, labour, pose difficulties for students wanting to enter into non-traditional areas of work, 'transitional' programmes which include work-experience may serve merely to reproduce the sexual division of labour which operates within and between firms and sectors of the economy. The danger is that gender specific guidance practices may become imported into schools by teachers responding to sexist work practices in the economy. For example, it is not difficult to see how teachers responsible for placing students in placements might interpret and translate experiences such as Liz's into an unofficial policy which directed girls into 'safe', traditional areas of work. However, by taking quite understandable steps to protect female students from sexism in the workplace, such teachers would themselves be serving to reproduce the sexual division of labour.

It appears that the isolation experienced by students is another practice which exists in a relationship contradictory to the dominant view of work-experience as aiding the 'transition to work'. Of the twenty-five students who made mention about unsocial aspects of their work, only six (4 SVF, 2 TVEI) said they were better prepared for work in that they 'now knew what to expect'. Others were either simply
alienated from such work, or even objected to the 'unnecessary' organization of the forces of production which precluded social contact.

ii) The Labour Process

The extent to which the training and labour process experienced by many students was relevant to the dominant view of work-experience (in terms of aiding the acquisition of specific and generic skills) appeared limited. In response to a question asking if they enjoyed the jobs they did during their week, twenty-one students (7 SVP, 14 TVEI) were positive about the tasks they performed and fourteen (5 SVP, 9 TVEI) gave neutral responses which indicated, at most, that they were 'satisfied'. However, the remaining twenty-seven (12 SVP, 15 TVEI) of the sixty-two students interviewed viewed the jobs they did on work-experience as often little more than monotonous, unskilled manual labour.

A representative sample of their comments is detailed below. They support the argument that in short-term work placements, 'participation tends to be confined to completely unskilled or routine operations' (Watts, 1983a:13).

Chris (SVP, Retail Placement) All I did all week was hump tiles around non-stop. It were slave-labour really, I got £40 for it but it won't worth it. Dead boring it was, same all the time. There's no way I'm gonna do a job like that after school, not unless there's
**Figure Thirteen. The labour process**

Assessment of tasks performed

<table>
<thead>
<tr>
<th></th>
<th>SVP</th>
<th>TVEI</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>7, [29.2%]</td>
<td>14, [36.8%]</td>
<td>21, [33.9%]</td>
</tr>
<tr>
<td>Satisfied</td>
<td>5, [20.8%]</td>
<td>9, [23.7%]</td>
<td>14, [22.6%]</td>
</tr>
<tr>
<td>Negative</td>
<td>12, [50%]</td>
<td>15, [39.5%]</td>
<td>27, [43.5%]</td>
</tr>
</tbody>
</table>
nothing else going.

Amanda (SVP, Secretarial Placement) I didn't really do any typing. It was disappointing. For the first day I just opened letters and for the next four days I did filing, putting bits of paper in different draws. It was boring really, I didn't learn anything much.

Mike (SVP, Butchery Placement) I just washed these trays all the time and made tea. They were taking advantage really. You know, we're meant to learn how to do things on work-experience yet I didn't learn anything. It put me off the whole idea really. They didn't give me anything for it either, not a penny. All I got was two marrowbones for my dog, and I had to ask for them as well! A bit much wouldn't you say?

Richard (SVP, Hotel and Catering Placement) It taught me what hours you have to work but I didn't learn much. I swept the floor and cleaned the sink most of the time, but I could've done that anyway.

Lucy (SVP, Catering Placement) It was dead boring. I just worked on these few machines. I suppose I learnt how to push buttons when you had to but that's not going to help me in other jobs really is it?

Christine (TVEI, Hairdressing Placement) I was looked after alright, but I wasn't allowed to do much and I spent my time watching or making tea or sweeping the floor.
Valerie (TVEI, Painting & Decorating Placement) Boring, I was meant to do painting and decorating but I just sat in the truck all day. They said I couldn't do anything. If I'd have been a boy that wouldn't have happened.

Jack (TVEI, Plumbing) It was boring and I didn't get to do much when they were fixing things; held tools, that sort o' thing. It was better when the radio was on.

John (TVEI, Mechanics) I didn't get up to much, just sat and drank tea most of the day. They didn't have anything for me to do.

In contrast to these negative comments, the thirty-five students who gave positive or neutral replies when asked whether they enjoyed the jobs they did, also usually felt they had learnt some skills from their week. However, the 'skills' which can be learnt on work-experience are strictly limited. As Watts suggests, 'clearly only the simplest of operations which can be learned quickly can be undertaken during a short period of work' (1983a:13). This is supported by the comments of students in the groups I interviewed when I probed further, asking them exactly what skills they had learnt during their week:

I learnt that I could make a good cup of tea because nobody complained.

I made coffee properly.
I learnt how to sweep a floor.

After the week at the garage, I can change oil.

I can now put addresses on envelopes.

How to answer the phone.

I don't want to dismiss the importance of learning how to perform such tasks as changing oil in cars or addressing envelopes 'correctly' (or even learning to make tea on the basis of a lack of complaints?). However, it is an altogether different proposition to argue that these activities give sufficient reason for spending a week in a place of work, or that they constitute 'skills' which serve to prepare students for work in our rapidly changing society. It is also difficult to imagine how such 'abilities' constitute those 'generic skills' which the MSC has been promoting through making work-experience a compulsory part of vocational schemes (MSC, 1984). Even if we take seriously the proposition that young people may actually learn how to sweep a floor during work-experience, an ability they may then transfer between different environments (from one floor to another?!!), it would seem difficult to justify the millions of pounds spent on vocational schemes designed to promote such 'skills' (MSC, 1984) as an 'economic investment'.

From the student comments above, three preliminary points can be made concerning the dominant view of work-experience. First, for many, if not all jobs, a short period of time spent within a firm will not
provide the opportunity for students to be able to learn specific or so-called generic skills. The pressures of work on employees and the short duration of work placements make it improbable that 'skills' relevant to catering, hairdressing and typing, for example, will be acquired. This is a situation likely to be exacerbated if students are inserted into work-experience solely through contact with individuals from school and management. Secondly, the tasks that students are often given during work placements reflect a sexual division in the labour process (see Beechey, 1982). The number of girls who spent time making coffee and tea were not only allocated to tasks which have traditionally been seen as 'women's work' in a firm, they also reflect a domestic role whereby women are placed in a position of serving others. Once again, through the activity of work-experience, schools can be seen as transporting discriminatory practices from the (macro-level) labour market and the (micro-level) family into the education of young people.

Thirdly, a point which arose from interviewing these students was their very sharp sense of injustice which stemmed from a failure of the firm to provide some sort of remuneration when they had been used as productive labour (for an interesting comparative example, see Watkins, 1983;200). This was not a matter of 'greed' as some may assume. Students who thought they had learnt something valuable from their week were less worried about pay. For example one girl who had been on a computer placement said, 'It would have been nice to have got some money like some of the others but I can't complain. They showed me how to do a lot and I learnt a lot about programming and things. They spent a lot of time with me' (SVP). However, when a student was employed on such tasks as 'shifting tiles', they expected reasonable reward for their
labour. That they had been made aware that pay was not a feature of work-experience (DES, 1974. c/f Watkins, 1983) did not affect the judgement of students. They 'knew' from their own life-experiences that in the 'real world' people received a wage for such work. Furthermore, this reaction to their experience was legitimised and reinforced through discussions with their parents and friends.

It was slave-labour and me Dad thought so as well when I told him about it. I should've been paid more. I was doing the same as some others in there who must have been getting three times what I was. (Chris, SVP)

I should have got some money for it, and me Mum agreed. As I said t'ya it was boring and I was doing much the same as full timers. (Gary, SVP)

I think I should have got some money for what I did. It was mainly sweeping floors and making drinks but that's the same as what most apprentices do. I know some of them and they get paid. Could you tell them that? (Christine, TVEI).

The validity of the assumptions within the government's mandate of vocational preparation are brought into doubt by comments such as those quoted over the last few pages. Experiencing the practices of work placements did not make these students more willing to enter jobs similar to those they 'tasted' in a place of work. Many were disappointed by the labour process they experienced and the fact that
they did not get paid (sufficiently) for their work. It is not, perhaps, surprising that evidence from other work-experience schemes shows the negative effects periods at work can have on students' career aspirations. Stronach and Weir (1980:29) found that 74% of students in their survey had been influenced by work-experience in terms of the jobs they did not want to do. Ryrie and Weir (1978) illustrate how negative work identities and even alienation can follow work placements, and the Institute of Careers officers have reported how a number of girls came to reject a career in management after experiencing a monotonous labour process in their work placements (ICO, 1974).

The experiences of the students in my sample also point to some further problems with the dominant view of work-experience. In contrast to what is assumed in MSC reports, technological advance does not always require a 'more highly skilled' and 'better educated' workforce (e.g. MSC, 1981 & 1981a & 1984). Not only does the rising technical composition of capital tend to displace workers, it also descills the labour process for many others; a process which may have asymmetrical consequences for different sectors of the economy and for women and men (Widwick, 1976. Blackburn & Mann, 1979. Hill, 1981. Crompton & Reid, 1982. Cockburn, 1983). Related to this is the fact that the few jobs which are left for young school leavers tend to be concentrated in 'secondary labour markets' characterised by low pay, poor working conditions and a concentration of unskilled work (Tipton, 1983. Williamson, 1983). In a very real sense, the practices of work-experience foreshadow the realities of work/training as many young people are likely to find it. If students are put off boring and low paid spells of work-experience, they are unlikely to be any more satisfied with jobs in the 'secondary
labour market', or inadequate Youth training Schemes (Finn, 1986; Pollert, 1986).

So far in this paper I have concentrated on what might be seen as the 'negative' experiences of young people on work placements. That these or similar experiences have been shared by some students in other vocational courses has been documented in a number of studies (e.g. Millward, 1977; Gray et al, 1978; Stronach & Weir, 1980). However, in an examination of the work which has been done in this field, Watts has concluded that 'the available evidence is reasonably positive' (Watts, 1983a: 96). I will make two points concerning the relevance of this conclusion to this study. Firstly, using one indicator, the evidence of this study could also be viewed as concluding in a 'positive' vein for work-experience. All but nine (4 SVP, 5 TVEI) students preferred their week to the alternative of staying at school. However, this cannot be taken in itself as evidence for the success of work-experience. It would be surprising if students did not find a week's work placement more 'enjoyable' than school. Students are not comparing like with like when comparing a week's 'work' with a lifetime of school. At the very least, the negative experiences many of them related took place in an environment which was different to the negative experiences they usually received at school. Furthermore, most were of the view that in contrast to most school lessons at least work-experience was 'relevant' to their own interests. Secondly, a number of students had far more positive comments about their placements than those I have focussed on. Indeed, as mentioned earlier, the experiences of nineteen
students (31%) (7 SVP [29%], 12 TVEI [32%]) confirmed their ambition to work in a particular job.

Sixteen of these nineteen students were positive about both the social relations and the jobs they did during their week. They were in placements they described as 'interesting' which were characterised by a labour process providing what they regarded as variety and/or autonomy. The following were representative of the responses of these students when asked if they enjoyed the jobs they did on work-experience:

Debbie (SVP, Nursery Placement) I really enjoyed it. We did lots of different things with the children and I even had my own group for a while that I was able to decide what to do with. I talked to the teacher about it but I was allowed to work with them (children) on my own.

Phil (SVP, Computer Placement) I got to do lotsa different things; serve, work in their stores, work the machines and show how they worked to customers. I din get 'assled either. After a while I could do wot I wanted, so I did some time in the stores and some serving. I swapped with this other guy.

Jenny (SVP, Secretary Placement) I wanted to be a secretary before but I want to be one even more now. It was a nice office where I worked and I got to do lots of different jobs. Not just type, but file, help this woman with some bookwork, take messages about, and work on their new word-processor.
Jim (SVP, Building Maintenance Placement) I did roofing, concreting, plumbing, fencing and some woodwork. It was good 'cos you didn't do one or two things all the time. I got to do all the things (the firm) did and work with different people who did different things. I'd like a job like that if I couldn't have my first choice (of job).

Tom (TVEI, Mechanics Placement) I was well looked after and had a variety of jobs to do. They said I could choose what I wanted to work at and I wasn't made to do anything I didn't want to. It was really interesting.

Michael (TVEI, Computer Placement) They treated me like an adult. It was good, not like school. I could do what I wanted to and they spent a lot of time helping me. I was helping them with designing on the first day. It was good fun.

Amanda (TVEI, Nursery Placement) There were lots of interesting jobs to do and I was working closely with other teachers. I really enjoyed it.

Work-experience had been a success for these students. They enjoyed positive experiences of work, and sampled a variety of interesting tasks within a reasonably supportive and social environment. Furthermore, they were considering a future career in a related job. To this extent, work-experience could be seen as aiding their 'preparation' for full-time work. Far from being alienated, these students were looking
forward to the prospect of full-time waged labour - to completing the 'transfer' from school to another meso-level or macro-level work site. The same was true for the other three students whose experiences confirmed their ambition to work in a particular job. They had misgivings about certain aspects of the work they had done, but enjoyed most of their time and, in addition, one of them had been offered a job on the basis of her work-experience. However, the nature of this 'preparation' is problematic. To the extent that students are being 'prepared' for work, they are being prepared for jobs which have a particular labour process and social relations of production. The experiences of variety and autonomy which contributed towards their successful work placement are characteristic of only a very limited number of jobs in the labour market. This is even more so for those jobs which may be available for young school leavers. If it were to reflect the realities of the labour market, the MSC's treatment of the category of 'work' should not refer to a homogenous set of characteristics. As it is, if work-experience can help students prepare for full-time labour, it is likely to prepare students for a particular kind of full-time labour which may not be reproduced in the work available for them, or in youth training schemes. For example, access to the further education necessary to pursue an intended career, may be blocked due to a lack of appropriate qualifications.

There is no reason why preparation for one type of work should also constitute preparation for work with different characteristics or in a different sector of the market. In the above examples, the satisfaction gained by students from placements which allowed them variety and interest is unlikely to be repeated for many of them upon entering full-
time work. They will have been 'prepared' for work quite different from that they are likely to experience.

The specific nature of what 'preparation for work' actually represents in work placements illustrates that what I have characterised as the dominant view of work-experience may be inappropriate even if it does prepare some students for certain types of work. Moreover, in such cases, work-experience may result in the unintended outcome of contributing towards the creation of frustrated and alienated young people who have set their sights on working in the type of job they have little chance of getting. However, it would be wrong merely to dismiss the positive experiences that some students have during their placements.

Even given the present low levels of youth employment, a few school leavers still manage to gain interesting jobs which offer an environment with some similarities to that experienced during 'successful' work placements. As work-experience expands through such schemes as SVP and TVEI to students from a wider section of the population, this is increasingly likely to be the case. Here, work-experience might actually play a successful part in facilitating the process of 'transition' in terms of preparing students for what to expect once they start work. Furthermore, if a period of renewed economic growth involved the creation of a far greater number of jobs which young people considered 'interesting', the number of students for whom work-experience acts as a transition between schooling and full-time work may well increase (c/f Atkins, 1986:51). Having introduced these qualifications to my analysis, it must be said that the economic conditions which may enable work-experience to become a truly
'transitional' activity for a large number of students are nowhere to be seen. Achieving high levels of employment which consist of jobs characterised by an interesting labour process and a socially supportive environment, will require a major transformation of society. Furthermore, if employment becomes easier to find, there is little historical evidence to suggest that work-experience is necessary for young people to achieve a successful 'transition' to the labour market (see Roberts, 1984).

**Schemes, schools, and work-experience**

There were few consistent differences between the responses of students in the two schemes and two schools under study, and this is not surprising. The placements used for both SVP and TVEI were usually similar and a few students from both schemes even attended the same firm for work-experience. Furthermore, the school organization of work-experience was similar in Stonegate and Borough schools. Both schools provided good support facilities for most of their students. Teachers visited the majority of students in their placements, and were understanding and took action when serious student grievances came to light (e.g. when Mike was removed from his placement after complaining to a teacher.) There was also a phone number available for SVP students where they could reach a member of staff if they encountered serious problems. This organization may well have served to minimise the number of difficulties encountered by students, and maximise those who had a reasonable time during their placements.

If there had been large differences in the nature of placements sought and chosen by the schemes, and the support services provided by
the schools, one might then have reasonably expected a difference in the experiences of students. Furthermore, if the racial, gender or social class composition, or age range of students were different to those in this study, the experiences of young people may again have been different. I am not trying to argue that the responses of students in this study are necessarily representative of others who have undertaken work-experience. For example, Moore (1986) cites evidence which suggests that employers may take more time over organizing placements for 'high ability' and sixth form students as a result of their concern that these young people should receive a positive image of industry.

However, irrespective of the differences schemes, schools and teachers may make to work placements, the fact remains that they are reacting to the structure and process of work as it exists in contemporary capitalism. Once 'work' becomes part of the education of students, then it is going to be difficult in the extreme for individuals outside of that environment to determine the nature of that education. Furthermore, given the rapid growth in demand for work experience and the difficulties that some schools are having in securing sufficient placements, the degree to which schools are able even to carefully select placements is problematic. In addition to problems of satisfactory supply, the ever growing demands which are being made on teachers may mean that many will simply not have the time to visit a large number of students who are located in firms stretched across a geographical area.
Conclusion

Throughout this chapter I have attempted to demonstrate that the dominant view of work-experience held by the MSC alongside many schools and industry, and embodied within the government's mandate of vocational preparation, often stands in a contradictory relation to the practices experienced by students during their work placements. For many young people, work-experience will not constitute preparation for the jobs that are likely to be available to them. Students may also be disappointed by the work they have 'tried out' during their time away from school. With the group of students I interviewed, criticism was focussed on two features of the working environment: the social relations they encountered, and the labour process. Far from inculcating in students the 'correct attitudes needed for the fragmented, routine jobs of the work-place' or legitimising 'the social relations of production' (Watkins, 1984;112-113), the experience of work placements had led seventeen students (27%) (8 SVP [33%], 9 [24%] TVEI) to discount an area of work in which they had previously been interested. However, it should be noted that all the students in this study took part in a single week's work-experience. This is shorter than the usual three weeks to be found, for example, in Project Trident schemes (Kerry,1983), and may affect students' evaluation of their work-experience. For example, if these students had been at work for three weeks, some of them may have got to know more of their fellow workers and found the working environment somewhat more congenial.

Students who were generally satisfied with their placements often appeared to have had a set of experiences which were unlikely to be repeated in their future work given present economic circumstances. In
such cases, the nature of these places, valuable though they may have been in providing students with an enjoyable week, were essentially redundant in terms of their use in preparing youth for mundane manual labour.

As long as work-experience remains defined through such ideologically loaded concepts as 'preparation' for and 'transition' to labour in capitalist society, it will remain an aspect of the curriculum which is often embedded within practices contradictory to the dominant view of this activity. Individuals such as Karen and Mike were well aware of the power relations which defined them as 'passive' individuals and made it 'legitimate' for those 'in charge' to assault and exploit them. Unlike Willis' 'lads', the experience of work for many of the working-class girls and boys in this study did not lead to a glorification of it as an escape from school (Willis, 1977), but rather an awareness of some of the central features of capitalist production. At their most acute, these went beyond the Gramscian notion of 'common-sense' or 'good sense', in which critical insights might be combined with ideas which serve only to confuse understanding (Gramsci, 1971; 321-323). The ultimate effects of such insights are contingent on a whole array of factors. However, the effects of placing many of the students in this study in work placements, are not in line with the 'transitional' view of work-experience held by the MSC or the more general mandate of vocational preparation. Rather, they represent some of the unintended consequences of work-experience as it operates in a capitalist economy.
NOTES

1. In recent years, there has been some evidence to suggest that the DES, or elements within the DES, appears to have moved even closer to the MSC in viewing work-experience as a 'transitional' activity. For example, see the 'Low Achievers Project' (e.g. Maxfield, B. et al (1984) 'Evaluation of Northamptonshire Local Education Authority's 14-16 Curriculum Project').

2. Though this situation may now be changing with the Baker Act.

3. Gaining this data posed some interesting problems. My original intention was to examine work-experience through distributing questionnaires to students. However, when I gave them out to students, the two teachers present in the classrooms stressed to their students that although they could write down what they wanted, they should be 'constructive' in the comments they made. I was worried this may prejudice the comments of the students and decided to interview them individually while the questionnaires were being completed. Through talking to students, I discovered that not only did their verbal answers provide me with much more data, they also occasionally contradicted some of their written statements. Talking to several of them about this discrepancy it became clear that there was a general reluctance to commit certain information to paper. This was hardly surprising given some of the experiences they had during work placements. Some were worried that what they wrote might 'get back to teachers', while others said that they would 'prefer to tell me' about certain events as 'they took too long to write down.' As a consequence, apart from such basic
details as the name of the firm they were with, the data in this paper stems from interviews rather than the questionnaires I distributed.

4. This may appear unusual given how students often complain of the opposite; that they have no rights at school and that this would be different if they were at work. As well as a comment on how students may be treated on work-experience, Mike's complaint may reflect a condition which has grown worse as the youth labour market has shrunk. Put crudely, when there are fewer jobs than people chasing them, the power relations existing between management/supervisors and workers increasingly favour the former group. The way Mike was being treated may reflect the way supervisors are able to treat many young workers when jobs are scarce.

5. Peter was removed from the placement after complaining to a teacher about the treatment he was receiving.

6. With Karen's consent, I saw the teacher in charge of work-experience within her school and the SVP Coordinator and told them what had happened. The Coordinator is not sending any girls who have chosen retail placements to this shop and is contemplating 'further action'.

7. I am not trying to suggest that these forms of domination are always equally important. Rather that their relative importance will vary for different individuals in different situations and locations on work experience.
8. An examination of the specific relationship between work-experience as a 'transitional' activity and the Youth Training Scheme, the usual post school destination for most students, is not part of this chapter.

9. In fact slightly more TVEI than SVP students had their ambitions confirmed, and slightly fewer had them negated as a result of work-experience. This could be a result of a slight difference in the degree of match achieved between job aspirations and placements.
9 Conclusion

This study has attempted to trace the development of what is recognised today as technical and vocational education. Rather than undertake a straightforward chronology of the institutional positioning of vocational education, I have been concerned primarily with ascertaining the variety of forces from different societal levels that have impinged upon its progress. During the 'entrepreneurial' and 'collective' periods, the interconnection of class struggle, economy, the state, education system and career, created a 'space' within the meso-level whereby the organizational base of the existing educational system enjoyed a 'licensed autonomy'. This retarded the growth of vocational education and allowed for the continued domination of the classical liberal curriculum within the schooling of the bourgeoisie. When technical education did develop, it was either in a minority of working-class schools, or, in the 'collective' period, outside of schools in institutions of higher education.

After the Second World War, though, technical and vocational schooling entered two periods of growth. Both of these were initiated by the increasing intervention of the State in the meso-level of society. First, as part of its plans for universal secondary education, the post-War Labour government allowed for the upgrading of existing technical schools to secondary status. As a result, technical education formed one element of the tripartite system. However, technical schools were beset by a number of problems, remained small in number, and were unable to combat the opposition to them which grew as the popularity of the selective system declined. The second period of growth coincided
with the decline of the 'social democratic State', and the growth of the 'strong State' under the Thatcher government. During this period, which began around the time of Callaghan's Ruskin College Speech in 1976, technical and vocational education gained growing acceptance alongside the view that schools were failing to provide adequately for the 'needs' of industry. With the failure of Labour's industrial strategy, a political consensus was formed around the themes of 'industrial relevance' and 'accountability'. This installed a view of economic need as the dominant criterion for educational policy. Education-industry links grew substantially during this time, not only on an 'entrepreneurial' and 'collective' basis, but, more importantly, they developed a corporate dimension. Employers, and to a far lesser extent trade unions, gained a direct voice in educational policy through the MSC and in the school curriculum through the establishment of the TVEI. It had become acceptable for the adequacy of meso-level educational sites to be judged on the basis of macro-level criteria.

The development of technical and vocational education also illustrates the changes which have taken place in the determinations constituting this concept since the entrepreneurial period. Before the First World War, vocational education was confined mostly to working-class educational sites and came to be associated with the education of the working-class (male). The concept stood in direct opposition to the classical education received by the privileged in separate and exclusive educational sites. During the inter-war period (the 'collective' period of Education-industry) relations, there was a bifurcation of technical education and a corresponding variation in the determinations of this concept. On the one hand, it retained its
working-class connotations in the schooling system. On the other, technical education spread to sites in higher education where it catered for a more diverse clientele, and served to facilitate a mode of production which was developing rapidly in terms of its technological sophistication. During this time, technical and vocational education denoted a different content and context according to its location in the meso-level.

In the period following the Second World War, technical and vocational schooling became associated with a somewhat broader clientele. This took place when technical schools were upgraded to form part of the tripartite system. However, difficulties remained in establishing a coherent definition or rationale for this type of education (see McCulloch et al, 1985). From the 1970s, though, vocationally oriented education schemes came to play an increasing role in the schooling of many young people. With the arrival of the Great Debate, technical and vocational education was invested with a far wider role than had previously been the case. By the time the Conservative government launched TVEI, vocational schemes were aimed at equipping young people of various abilities, gender and racial backgrounds, with industrially appropriate skills, abilities and knowledge.

The government's promotion of the TVEI illustrates changes in the relative importance of forces from different societal levels. From a position where the education system enjoyed a 'licensed autonomy' within the meso-level, which allowed for the maintenance of a curriculum antagonistic to the 'needs' of industrial Britain, the State became occupied by successive governments who increased controls over the
schooling system. In the case of vocational education, these controls culminated with the government sponsored promotion of the TVEI.

A central feature of the recent growth in education-industry links has been the place that the macro-level has come to occupy. Local and national schemes such as SVP and TVEI have demonstrated that it is no longer adequate for schools 'merely' to educate individuals. They are now charged with the responsibility of *servicing a capitalist mode of production* by transporting macro-level concerns into the classroom. However, I would argue against the proposition that we have now reached a stage whereby the macro-level is determining education policy. The influence of economic crisis since the early 1970s has been clear. However, this has not operated in an effectively unmediated fashion—whereby governments have no option but to respond in a particular way. Rather, the Thatcher government has chosen to install one version of the needs of capital as a principle of education policy. Furthermore, it is not merely economic criteria which have been evident in educational policy during the 1980s. For example, plans to allow schools to opt out of local authority control may actually increase the amount of State expenditure on schools. Perhaps the best way to describe contemporary trends with regard to vocational education is as a result of interaction between the State and a mode of production in crisis. This has taken place in a context which has seen a weakening of the labour movement, and a conspicuous lack of alternative conceptions of education. The State has extended its power over the meso-level of society, and there has been a growing congruence between education policy and one perception of the needs of the macro-level.
Vocationally oriented schemes aimed toward facilitating the performance of industry, have come to occupy a position of unparalleled prominence in the contemporary education system. However, as I have stressed throughout this study, there is no simple correspondence between the intended aims and the actual consequences of particular policy initiatives. For example, in the 'entrepreneurial' period, a government committee appointed to promote technical and vocational education, consisted of a number of aristocrats who used their position to reaffirm the legitimacy of a classical, liberal curricula (chapter two).

A gap between the intended and actual outcomes of educational initiatives has also been evident in the contemporary operation of vocational schemes. A theme running through the case-study component of this work concerns the unintended consequences of vocational education. This has been especially evident in school-based vocational courses and work-experience. Both SVP and TVEI aim to ease the transition of young people from school to work. However, elements of both courses served to alienate young people from full time waged-labour. The students in this study were also stimulated into thinking which was critical of those capitalist and patriarchal social relations of production, and gender and class specific labour processes that students encountered. The significance of different societal levels is central in explaining how this could occur.

SVP and TVEI are both designed to import macro-level concerns into the schooling of students. However, these schemes did not originate in, nor were they designed by, the macro-level. SVP stemmed from individual teachers, and TVEI originated within the State. As a result, there was
no guarantee that the form or content of the schemes would be that desired by various sections of capital. Indeed, given the many sectors of capital operating in the macro-level (e.g. big business/ small business, finance capital/ industrial capital), it seems difficult to envisage a scheme which could satisfy these demands. Furthermore, SVP and TVEI are schemes which operate predominantly in schools. They are located on a social level (meso) which is constituted by different determinants than those of the economy (macro). Consequently, there are almost bound to be disjunctions between schemes which operate on one level, yet seek to import the concerns of a different level of society. For example, work-experience may seek to prepare students for the disciplines of the work place. However, while they live in a family unit in which another is the main wage-earner, there is not the material necessity in the micro-level which so often underpins the 'readiness' of adult workers to 'follow instructions', 'turn up on time', etc.

The subject options programme provided a further illustration of the causal efficacy of different levels of society. In the recruitment of students to vocational schemes in the meso-level site of school, teachers assume great importance. In Borough, teachers did not generally act as agents of recruitment for SVP or TVEI. Rather, they appeared to hold liberal views of their role which precluded them promoting vocational schemes on the basis of their exchange value in the labour market. Despite the contraction of the autonomy enjoyed by schools in the meso-level, teachers still have the space and power to affect courses in sites they operate. Furthermore, in contrast to the present stress on vocationalism and centralisation in education policy, some teachers still hold traditional views of their role. This
illustrates the importance of individual consciousness. The micro-level is not immediately responsive to changes in other levels of society (see Ball, 1987).

The 'Factories and Industry' course at Stonegate school is an example of a course constructed around themes which legitimise aspects of the macro-level. However, its operation demonstrates how societal levels may interact to produce outcomes different from those intended. For example, individual students came from working-class families in which there were abundant sources of information concerning the effects of automation. They gathered this information from the micro-level, took it with them to the meso-level site of school, and used it to evaluate critically the presentation of the macro-level they received. Again, the different determinants which constitute societal levels makes problematic the importing of macro-level concerns to educational sites in the meso-level.

Work-experience represents a separate approach to vocational education in that instead of macro-level concerns being imported into schools, students are transported to work sites. Here, they receive education direct from those in the macro-level (or in the case of institutions, meso-level) of society. However, the operation of work-experience has demonstrated two major problems with this approach. The growing demands for work placements over the last decade have placed unparalleled pressure on firms to provide work-experience. In many areas across the country, this has revealed a shortage of capacity in work sites on the meso, and especially on the macro-level. An economy which is decreasingly reliant on living labour for the production of surplus value, has created a shortage in the supply of work-experience.
This demonstrates that even when vocational education may take place on the macro-level, there is no guarantee that this level will have the long-term capacity to assume such a role on a sufficient scale. Indeed, the determinants of the macro-level make the possibility of capital assuming a large-scale 'educational' role highly problematic.

In our mode of production, capital operates through the necessity of making a profit. To assume a large scale role which does not contribute to that aim in the short-term, requires either that it be extremely successful in national and international markets in the long term, or that it receive substantial economic subsidies (as in the form of cheap labour in YTS).

One consequence of these factors for work-experience is that a range of alternatives are being sought to ease problems of supply. Examples include work shadowing (where students follow a worker through their routine for a period of time), production line simulations (similar to that in chapter six), and 'workshops' (classrooms set aside for students to gain an experience of work, often with the help of industrial tutors). However, these alternatives are automatically problematic in terms of their ability to encourage industrially relevant skills, knowledge and attitudes. Most of them operate in meso-level educational sites which are separated in distance and enjoy a degree of autonomy from the macro-level. As a result, there is no guarantee that teachers or others will have the willingness or ability to ensure the type of experiences industrialists may view as suitable.

The other problem demonstrated by the operation of work-experience in this study is that the consequences of students spending a period of time in a place of work, may not be the same as those intended.
Exposure to work in capitalist society is no guarantee of a voluntary acceptance of work in capitalist society. Without the material necessity of survival to face in the short-term, many young people are free to 'stick two fingers up' at the conditions of work they find on work placements. This scenario may rapidly change once they are faced with unemployment. However, it does not change the fact that many jobs in meso- and macro-level sites are undesirable and alienating. Moreover, those that appear attractive to many young people during work-experience, are jobs which will be unobtainable for the vast majority of working-class youth.

It is difficult to speculate as to the representativeness of the case-study component of this work. For example, if I had studied students of different gender or social class backgrounds, or if my sample had been racially diverse, student responses to vocational education may have been quite different. However, this study has illustrated certain mechanisms at work in vocational schemes which are general to them and may well lead to student responses similar to those reported here.

Vocationally oriented schemes such as SVP and TVEI serve to import gender, racial and economic divisions from the workplace to the education of young people. As a consequence, students of whatever background may be exposed to a wide range of practices which can be seen as inimical to the aim of equipping them with a range of industrially appropriate skills, knowledge and attitudes. For example, during work-experience, students will be working in sectors of industry, firms and particular jobs within firms that often reflect a gender,
racial and social class division of labour and labour process. However, the discrimination faced by students in allocation to firms, or during their time at work, does not serve to reproduce these divisions in any straightforward sense. Rather, as many of the students in my study illustrate, they may be alienated from such work as a full time option. Here, although these categories will have been reproduced in terms of the experience of those subject to them, there is no necessary reproduction of their validity or acceptance by individuals.

The outcomes of school-based vocational schemes are contingent on an array of factors. This is relevant not only to full-time waged labour but to what has become the usual post-school destination of young people, the Youth Training Scheme. Although it has not been part of my study, vocationally oriented school schemes have important implications for the YTS. Insofar as students are alienated from work in a particular sector of commerce or industry, they may also be alienated from participating in a YTS course in a similar area. In this case, the resistance that has been shown against YTS by many young people is, perhaps, just an indication of what might happen if growing numbers of young people undertake vocational schemes at school and then find themselves having to take another course in the form of a YTS (Finn, 1987. Benn and Fairley, 1986. Walker and Barton, 1986). Having been 'promised' a permanent bridge from school to work by school-based schemes such as TVEI (MSC, 1984), YTS trainees may create growing motivation crises for college lecturers and work supervisors/managerial staff (see Hopper, 1971).

In concluding this study, I want to end on what I see as a few tentative policy and curriculum recommendations. The present vocational
strategy is clearly not going to contribute toward the creation of jobs or the long-term rejuvenation of a capitalist mode of production in crisis. However, with the present balance of class and political forces, vocational education may well be here to stay for some time to come. In this context, progressive educators might be able to build aspects of radical educational practice into vocational programmes. As demonstrated in this study, there is still the space in the meso-level for the intended outcomes of schemes to be mediated and even transformed.

1. In order to provide students with a democracy of choice in terms of economic organization, firms which are organized along cooperative lines could be used as sites for work-experience. This could be supplemented by giving students a variety of work placements which reflect degrees of progressive/regressive practice. School-based follow-up lessons could be aimed towards exploring the possibilities for a different form of economic organization which might explore the economic foundations which would be required as the base for a free society which did not encompass gender, racial and class division and exploitation.

2. The experiences of students on work-experience could be used as a basis for exploring the mechanisms of power as they exist within the economy. For this purpose, students could be given group projects which use their own work-experiences as the basis for investigating exploitation and inequality as it exists within and between jobs, firms, sectors of the economy, and countries. Here, school-based courses would supplement and build on students' experiences.
3. Negotiations could be started by project directors and teachers with responsibility for vocational schemes to make education-industry relations more of a partnership than they are at present. Vocational schemes, import work practices into schools. In a relationship of greater symmetry, it seems perfectly reasonable to expect an exporting of educational practices to the workplace. Here, industrialists would have the responsibility for creating the space and support for students wishing to enter non-traditional areas of work without being subject to sexual or racial abuse.

4. Trades unions should be brought into closer contact with vocational schemes, to provide students with information about their legal rights, and to inform them about the economic and wider aims and objectives of the union movement.

In suggesting these steps, I am not underestimating the difficulty of achieving them in the present political climate, or the enormous workloads which teachers have to endure in their present conditions. Furthermore, if teachers were able to build such an approach, there is the real danger that the State would seek to extend its power even further over the meso-level space that schools occupy. However, it is not inconceivable that a broad based educational movement could campaign for vocational curriculum developments which provide students with a democratic choice, rather than a mindless initiation into the demands of work in capitalist society. Even if these steps were successful, though, they would only be the start of a far wider programme that is required to change fundamentally those relations and institutions which
embody gender, racial and social class exploitation on micro, meso and macro-levels of society. The building of a movement capable of accomplishing such change is long overdue.
Appendix

The methodological details of the case-study component of this thesis appear here as I felt that recurring details of how I collected data would detract attention from the main body of this text. The aim of this appendix, therefore, is to provide the interested reader with the rationale behind this study of vocational education, and details of the procedures used in the collection of data.

In the now classic study of 'Hightown Grammar', Colin Lacey presents the rationale for his project by citing one of the founders of the Manchester studies, who argued that an essential element of the social sciences was:

'...a methodology in which the discussion of small segments of society in great detail is used to throw light on the general... It is my firm view that only the particularistic can illuminate the universalistic' (Frankenberg, cited in Lacey, 1970; xi).

'Hightown' exemplified this approach. Lacey examined the relations between a changing industrial base, an altered schooling system, and intra-school and classroom processes. However, there has been a tendency for work within the case-study/ethnographic tradition since that time to concentrate on the particularistic to the exclusion of the universalistic. Put crudely, we have a number of fascinating accounts of school and classroom settings and processes, but little idea of what consequences these have for wider social structures."
My aim in this study was to reinstate the 'universalistic' as centrally important to a case-study approach, to use the 'general' to throw light on the 'particular' without denying the explanatory importance of individual acts or organizational forms such as schools. It is for this reason that I was concerned to contextualise my study both historically, and theoretically, rather than launching straight into the results of my fieldwork. For a site to even exist in which fieldwork can take place, implies a multiplicity of social processes which have enabled that site to come into being. To leave out these factors in the formation of a research project would be to run the risk of neglecting the most important areas of social inquiry which may remain hidden in a focus on phenomena which are currently observable. Consequently, the questions I was concerned to explore during my fieldwork, were connected to matters arising from the historical development of technical and vocational schemes. For example, as governments had invested vocational schemes with the aim of equipping youth with industrially relevant skills, knowledge and attitudes, I was concerned to study the actual outcomes of such activities as work-experience. An ethnographic account of work-experience that focussed purely on observable interaction, actors accounts, etc., runs the risk of neglecting such factors. However, taking into account the social history of vocational education in setting an agenda for research, does not prevent the problems of access, data collection, etc., which have been so widely described as an integral part of the research process (e.g. Hammersley, 1983. Burgess, 1984. Walford, 1987).

My collection of data was opportunistic, based upon the nature of the access I gained. At the start of my fieldwork in October 1985, I
had in my mind a number of broad questions I wanted to ask concerning vocational schemes. As a result of research I had conducted into the history of vocational education (chapters two, three and four), I wanted to know what effects they had on teachers and the organization of schools, how student recruitment took place, and what effects they had on participating students. I was also interested in establishing the attitudes and experiences of employers involved with work-experience. However, the way in which I attempted to address these questions in my case-study depended wholly upon the access I was able to gain in educational and work sites.

The first 'breakthrough' came as a result of being introduced by a friend to the SVP Project Director. The director was himself engaged in research and was extremely helpful in providing me with the names of the Programme's founders. From there, I was able to arrange interviews with them, and construct a picture of the origins of SVP (chapter four). The Head of the special school still occupied that position, and agreed to an interview in his office. The senior teacher appointed to develop what became SVP had retired, but was willing to be interviewed at home. The local Conservative councillor was also most helpful and provided a full and frank account of his involvement and the motives behind it.

As I was not a full-time teacher, there was no 'easy' entry into a school that I had existing contacts with. The route I was able to gain was through supply teaching, and the first piece of research I conducted in this role consisted of interviewing teachers during the periods in which I was not working (see Shilling, 1986). I then repeated these interviews with form teachers of the present third year at that time. I asked these teachers about the advice they gave to their form groups
during the options sessions, what their views and knowledge of SVP and TVEI were, if they taught on these courses, whether they felt able to advise adequately or if they felt distanced from advising students, and whether they recommended either of these courses to students. Borough comprehensive was chosen simply because it was the TVEI school nearest to where I lived. I did not own a car and a geographically accessible school was a necessity. Fortunately, Borough was in need of supply teachers and the deputy-headteacher accepted my offer to teach in the realisation that I was 'hoping to do a bit of research into vocational education while here.' In fact my entry into the school was dependent on a heated exchange between the deputy head and an LEA official over the need for a supply teacher on the first morning I was at Borough. A class of over thirty students were without a teacher, yet the official still took some convincing that the school could not cope with their existing, already over-stretched resources.

The advantage of this approach was that I enjoyed a certain credibility with teachers who, as a result of my supply teaching, did not see me as 'just another researcher.' Furthermore, in a school which often found it difficult to retain staff and supply teachers, my working role offered an implicit 'bargaining chip' with senior teachers in return for access. For example, my teaching at the school was undoubtedly a factor which entered into their decision to allow me to distribute a questionnaire during the options programme. Furthermore, my explanations to form teachers were often preceded by the fact that I was 'doing a bit of supply teaching at Borough'. On more than one occasion, this was met with the response, 'well as you've actually been in the classroom...'
This arrangement allowed me to establish relations with members of staff which enabled me to continue research at Borough after I had stopped teaching there early in 1986. I wanted to follow a form group through the options process and was able to negotiate this with a sympathetic member of staff. The questions I asked the form group about their responses to the options programme (see chapter five) were sometimes in the presence of this member of staff, and sometimes when I had been left to look after the form 'for a few minutes.' This was no irregular occurrence, and although I accepted it as a fair exchange for having the privilege of being allowed into the classroom, it threatened to become more trouble than it was worth on several occasions. Once, I found myself the only adult in a classroom full of over seventy increasingly restless third years who were waiting for an options video to begin. On another occasion, I was in the position of attempting to control a class of nearly forty 13-16 year olds who had been sent to me by mistake. The nature of many of the students in this group meant that they were usually taught in much smaller groups. My task was made more difficult when a number of them decided to continue an inter-family dispute in the classroom. I knew it was going to be an event filled double period when I had to stop three of them fighting before they even reached my classroom. One of them was intent on splitting open another's head against the corridor wall.

Teaching at Borough could be an extremely difficult task, and I greatly admire those teachers who are struggling to work constructively with some of their students. It was not surprising that they were eager to show 'outsiders' the reality of their jobs, and some of the experiences I was faced with during my time at the school certainly
allowed me to understand, in the words of one teacher, 'what it was all about.'

During my time at Borough, I was interested in establishing how TVEI and SVP had been received by teachers, what effects it had on the labour process of teaching, and the how students were recruited to these vocational courses. I was able to talk to the senior teachers responsible for TVEI, interview third year form teachers, and distribute a questionnaire to the third year during the options process of 1986. This was answered by all 146 of the 217 students in the year who were present and available on the two days during which they were distributed. The questionnaire attempted to ascertain how effective the dissemination of knowledge about SVP and TVEI had been, and what the role of parental influence had been in student option choices. After establishing details about their background, students were asked what, if anything, they knew about SVP and TVEI. They were also provided with a list of subjects and asked if there were any which their parents had been keen for them to take. After students had completed their option choices, those who opted for SVP or TVEI filled in a second questionnaire asking for reasons why they opted for these courses. The alternatives provided were 'lack of alternative/dislike of other subjects, parent's advice, form teacher's advice, subject teacher's advice, advice from other students already on the course, discussion with other third years, choices friends have made, usefulness for a job, usefulness for higher education/further education, out of school activities provided by subject, other (please state).'

Follow up interviews were then conducted with the four SVP students who gave as a reason for their choice the advice they received about the
course from subject teachers. These interviews took place to enable me to ascertain the degree of teacher guidance which had operated on the course. Subsequent interviews were also conducted with twelve of the fifteen students (those present on the day of interviewing) whose replies to the second questionnaire indicated a knowledge of TVEI that was not present when they completed their first questionnaire. The reason behind these interviews was to establish the source of this additional knowledge. I was also able to speak to these students during their form periods. I knew which form groups they were in, and negotiated with teachers to talk to them quietly during 'gaps' in form periods.

In addition to this survey, I wanted to establish some of the processes which were at work during the options programme. Consequently, I negotiated with a form teacher and the teachers in charge of the programme to accompany a form group through the career and options sessions. These were usually held in one classroom with up to 70 students. As a result, I was often able to sit inconspicuously in on lessons without attracting attention. However, following one form group also gave me the opportunity to examine at close range what was presented in these sessions, and ask students specific questions about their experiences (chapter five).

My interest in vocational schemes went beyond the organizational implications they had for schools. I was also interested in establishing the effects that 'industrial education' had on students, and was unable to gain access to a suitably representative course in Borough. Vocational courses such as TVEI were being promoted by the government to equip students with industrially relevant skills,
knowledge and attitudes, and facilitate their transition to the labour market. As a consequence, I felt it was a necessity to examine the effects of such a curriculum on the consciousness of students. I was eventually able to examine such a course as a result of my contact with the SVP Director.

The increasing number of teachers who are taking higher degrees in education can have a number of implications for researchers. On the one hand, teachers are becoming 'wise' to questioning and research techniques. As a result of conducting their own research, teachers are aware of the uses to which data can be put and, as a consequence, often exhibit a close control over the information they are prepared to reveal and the impressions they wish to give (see Burgess, 1986). This makes the 'cross-checking' of information particularly important. On the other hand, teachers may become more sympathetic to the value of educational research, and the difficulties facing those engaged in this activity. The SVP Director was himself engaged in PhD research and was enormously helpful in enabling me to continue my research. It was he who arranged a point of contact for me with a senior teacher in another local school. As a result, I was able to the sessions of a 'Factories and Industry' course, and ask the participating students numerous questions concerning their background, and reactions to the course (chapter six). Given the small size of the group, this was a more obvious intervention than that in the options programme. However, the content and delivery of the course did not appear to have been significantly different from usual judging by the course outline.

Switching schools in which I was researching meant moving across organizational sites in the meso-level of society. As chapters one to
three suggest, this can alter the effects of schemes as different individuals and organizational forms are involved. One inadequacy of my data, then, is that I was unable sometimes to check these possible variations as they might exist between the two schools. The only comparisons I am able to make in the main body of this study are on the basis of the reactions of students to their work placements.

The collection of data concerning students' reactions to work-experience was the easiest to organize, and also allowed comparison of students on SVP and TVEI. I arranged with the school coordinators of these schemes to interview participating students, and this took place during two double periods at Borough, and one double period at Stonegate. Follow-up sessions were necessary in both schools as a result of absences and for the completion of interviews which were longer than I had expected. I was simply unprepared for the enthusiasm with which some of the students related to me their experiences, frustrations and successes. I asked them how they came to choose/ have their placement, if they received an introduction to their placement (e.g. history of organization, production/workforce details), if they were introduced to other workers, and how frequently their work was checked on and how frequently they were asked how they were getting on. Questions also covered the tasks they completed (variety and regularity), the social relations they experienced, and if they received renumeration (chapter seven). However, the depth of student's replies provided me with far more information that I had expected. Many were also keen for me to pass on advice for future students who might share the placement from which they had just returned. For example, I was
often provided with details about what others should and should not do, and who they should and should not speak to.

These interviews made clear the extent of responsibility someone in my position had to those agreeing to participate in the research. This was demonstrated most clearly by the young woman who complained of sexual assault during her placement. She spoke clearly and articulately about her experience and was eager that action should be taken to prevent such incidents from happening again. After gaining her approval, I spoke to the (male) teacher in charge of work-experience, and the (male) SVP director, and had to negotiate a certain amount of scepticism before they concluded that girls would not again fill that work placement. This action should at least prevent a repetition of harassment in that placement. However, this whole event is an example of a solution to a problem (male violence) discriminating against the offended party. Thinking back upon the event reminded me of the outcomes of many child abuse cases in families when it is the abused daughter, rather than the abusing father, who is removed from the home. Once again, the female becomes a double victim as a result of male abuse.

The use of such findings presents major problems to the process of research. The dilemma experienced by some was pointed out to me via a response to a conference paper I gave on my work-experience research. Though it was not confined to the above example, the comment of one participant illustrates the dilemmas that researchers face:

If...research comes down to collecting muck on employers...

then I'd rather pack my bags and go home.
My response to this comment is that of course research should not become muck-raking journalism, but that if instances of exploitation are uncovered and the researcher is in a position to do something about them, then that should be a priority. The way in which an individual goes about that is a different matter which raises all sorts of questions about strategy and consequences, relations of trust, continued access to a setting, etc., but I feel that the principle is one which educators from a wide variety of viewpoints can agree upon.

The SVP director was again instrumental in facilitating my study of employers' attitudes towards and experiences of work-experience. He agreed to me carrying out the work and confirmed my credibility with employers when they phoned him to 'check my credentials.' In organizing the interviews, I sent letters to thirty employers/personnel managers etc., involved in the provision of SVP and TVEI work-experience. The firms I wrote to were chosen to represent a cross-section of work-experience, and included placements in retailing, clerical, computer, hotel and catering, domestic appliance repairers, engineers, motor mechanics and building trades. I received twenty positive responses, which I then followed-up with a phone-call in order to arrange interview appointments.

The switch from the school to the work place represented a shift from the sites within the meso-level, and from the meso to the macro societal level. In my position, this had some positive consequences for the labour process of researcher. Firstly, I was able to arrange interviews which were, with one exception, kept. Secondly, when I was talking to an employer/personnel manager, there was far less chance of
being interrupted. Thirdly, I was in surroundings which were often quiet and comfortable, and represented a refreshing change from the noise, dirt, and decay of many schools. This is not to criticise teachers or denigrate schools as organizations. Rather, it represents my experience of real differences in the working environment of those who possess power in industry/commerce, compared with teachers who are often forced to work under immense strain in buildings which are in need of extensive repair. Those who believe that teachers are overpaid should take time to think of the conditions in which many labour—conditions which would seldom be tolerated by equivalent groups of workers in other professions, or among highly qualified workers in the private sector of industry.

The demands of teaching in the contemporary political climate make the researcher acutely aware of the value of time teachers are able to devote to the research process. Consequently, I was keen to feed back to teachers aspects of my work. For example, a version of the 'Factories and Industry' chapter was as a source of information in the rewriting of the course. It was also used by a teacher, though I did not intend it and was somewhat disturbed when the teacher informed me of this, to evaluate the 'fairness' of his teaching. As far as I was concerned this senior teacher was an excellent classroom manager, organized lessons to involve and interest students, and was meticulously fair in dealing with young people. The bias in the course did not stem from this teacher, but from the structure of the materials used. Early versions of the work-experience chapters have been used by schools and a local authority as information in their reorganization of work-experience coordination, and the research I conducted into the options
process was used as the basis of discussions with teachers concerning the promotion of equal opportunities. Events such as these illustrate that the researcher is not an individual who can stand above and outside of the context s/he has entered into. The results of research may be used in a variety of ways. They can help promote progressive practice, or may be used and appropriated in ways the researcher may not have intended. This latter possibility has been an ever present danger for those engaged in research through the role of a full-time evaluator (e.g., Loveys, 1988a).

I finished the last substantial piece of fieldwork in December 1986, and was then faced with the task of moving between the analysis of data and the formulation and clarification of theory. As explained earlier, I was concerned to illuminate the operation of vocational education through an examination of its position within the social whole. However, the Marxist framework I use to examine the data was not fully elaborated before I started my fieldwork. Indeed, far from a theoretical perspective determining the analysis of the data I collected, the case-study reacted back upon the formulation of my theoretical approach.

In employing a schema of societal levels, I was concerned to move away from simplistic notions of economic determinism, to a materialist view which allowed for varying degrees of autonomy. In outlining my theoretical approach through the use and definition of societal levels, I hoped to make clear they were irreducible to each other. Following Marx's 'Grundrisse' (1973:100-108), I wanted to make clear that society is a 'rich totality of many determinations and relations' whose levels
could not simply be explained by an overriding notion of determinism.
The complexity of the historical and contemporary data I collected on
technical and vocational schooling necessitated an approach, such as
Marxism, which allowed for varying degrees of autonomy and determination
in analysing case-study data. However, my outline of micro, meso and
macro-levels of society is only a first stage in accomplishing an
adequate theoretical approach to the social totality which allows for
the inclusion of case-study material. I hope to have made a tentative
start to examining some of the differences in societal levels and the
relationships which exist between them. What remains to be accomplished
is an adequate theorization of the relations which exist between factors
within societal levels, and how a set of social relations which are
initially located on one level may qualitatively develop, and hence move
onto a different level of society. In other words, there is much to be
done in specifying the determinations which constitute levels of the
social totality, and the conditions under which certain relations will,
and will not, hold between them.

Notes
1. There are obvious exceptions such as those studies by Willis (1977),
and Valli (1986).
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