The impact of research on policymaking in education

/ by

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This thesis contains no material which has been accepted or the award of any other higher degree or graduate diploma in any tertiary institution, and to the best of my knowledge and belief it contains no material previously published or written by another person, except when due reference is made in the text of the thesis.

Abstract

The purpose of this study was to investigate a commonly-held view that educational research does not contribute to policymaking. The general problem was to examine the outcomes of attempts to foster linkage between researchers and policymakers, and thus to develop greater understanding of the possible influence of research on policy. The research that was the subject of the study was undertaken by an in-house government research facility which sought to improve the link between research and policymaking.

The conceptual framework postulated four major components: *policy* comprising sub-components of operating environment, policy process and policymakers; *research* comprising sub-components of researchers and enquiry; *linkage* and *outcomes*. Elements within these components and sub-components were identified, leading to variables for data collection.

A case study method was adopted, using four case studies as a step towards generalisation. One case was selected from each cell of a two-by-two grid based on two elements of the conceptual framework. The elements forming the axes of the grid were (1) who initiated the research (researchers or policymakers) and (2) whether or not there were perceived policy outcomes (impact or no impact). A variety of data sources was used to construct the case descriptions. Interviews with participants formed an important dimension of the information collection. The four cases were subjected to analysis on the basis of the conceptual framework.

The findings indicated that research had an impact on policymaking in all four cases. The impact was variously in the form of (1) developing shared understanding and beliefs amongst policymakers as the foundation for corporate policy development, (2) refining the policymakers' working knowledge of the issues as a basis for decision-making and (3) creating a climate of expectation for policy development or implementation. Little evidence of the use of research in a linear sense in policy decisions was apparent. A wide range of factors was identified which impinged on the research-policy relationship. The notion of a relationship based solely on rational policy processes using scientific evidence was rejected.

A model of the research/policy relationship was proposed and implications for theory and practice were drawn. These have wide applicability for researchers, policymakers and research funding agencies.

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Chapter 1:   Introduction

Purpose

> *(There is a) common misconception held by significant others outside our research community that research does not contribute to policy or practice.*

Presidential address, American Education Research Association, R. J. Shavelson, April 8, 1988.

The purpose of this thesis is to challenge this misconception. It is manifest, not only amongst significant others outside the research community but also within the education research community, as a general lack of understanding of the relationship and of the potential contributions of research to policy and practice.

In recent years, understanding of the relationship between research and policymaking has moved from a view of research in a traditional, instrumental role in decision-making to a more subtle infiltration into the complex process of policy development. The work of Husen (1984), Weiss (1979), Nisbet and Broadfoot (1980) and others, demonstrates that research utilisation by policymakers is more extensive than once postulated. Nevertheless, the role of research in educational decision-making and the nature of the linkages or interrelationships between research and policymaking remain poorly understood. Concluding major international reviews in the field, both Nisbet and Broadfoot (1980) and Husen and Kogan (1984) call for extensive research from a number of theoretical perspectives and at all levels: practical, analytical and theoretical.

The purpose of this study was to investigate the relationship between research and policy processes in the context of a government education department. Specifically, the study sought to address the question of whether research does influence policymaking, and if so, which elements in the research process and in the policy process are significant in facilitating the linkage.

This thesis reports some research into research. It examines the attempts on a small scale to bring research and educational policymaking together. The study illustrates how a reflective approach improved action within a limited context and offered an opportunity to develop a theoretical framework which has wide applicability.

The theories and practices emerging from this study provide a framework for increased understanding and strategies for action to demonstrate that the proposition that education research does not contribute to policy is untenable. The study also provides avenues by which that contribution can be improved.

Background

In his address to the Twenty-third Annual Conference of the Australian College of Education, Holdaway opened with the comment that:

> several colleagues in both Australia and Canada have told me that any speech on the topic of the relationship between research and policy formation in education should not take long (Holdaway, 1982).

For many researchers, as well as educational policymakers and practitioners, this aptly summarises the

perceived links between research and policymaking. Over the years and across the nations in Europe and North America as well as Australia, concern has been expressed about the apparent lack of use and impact of research in policy processes (Cohen & Garet, 1975; Start, 1975; Selleck, 1981; Nisbet & Broadfoot, 1980; Holdaway, 1982; Worth, 1978; Steinle, 1981). In the last ten years, the relationship between research and policymaking has been the subject of research, enquiry and debate. The issues have been addressed in a variety of ways: by *post hoc* analysis of the impact of research (Suppes, 1978), by surveys of researchers and policymakers (Nisbet & Broadfoot, 1980; Weiss, 1980; Anderson, 1984) by convening symposia (Husen & Kogan, 1984) and through conference addresses and symposia (Hocking, 1984; Steinle, 1981; Vickery, 1986). More recently, two more positive approaches have been documented: a descriptive account (Cooley & Bickel, 1986) and a confirmatory study (Huberman, 1987).

Several explanations of the apparent non-use of research have been advanced. They can be summarised in the following way.

- Two communities theory perceives nonutilisation as a function of different and often conflicting values, reward systems and languages of the researcher and policymaker (Worth, 1978; Husen, 1984; Anderson, 1984).

- Policymaker constraint theory explains the non- utilisation of research in terms of the conditions under which policymakers have to operate. This includes the question of timing of research findings and the additional variables which policymakers must consider in making decisions (Worth, 1978; Start, 1975; Husen, 1984; Anderson, 1984).

- Knowledge generated by research may be too narrow in focus and limited in methodology to contribute to policy decisions (Start, 1975; Husen, 1984; Anderson, 1984; Worth, 1978; Mitchell, 1985; Dockrell & Hamilton, 1980).

- Dissemination of research findings to policymakers may be inadequate, and use in any case depends on policymakers' orientation towards research (Start, 1975; Anderson, 1984; Husen, 1984).

The nature of the use of research and indication of possible impact have been explained in the following ways.

- The meaning of research use is being interpreted more broadly. For example, Weiss (1979) describes seven ways in which research might contribute to the policy process.

- Distinctions are made between instrumental, political, and enlightenment uses in policymaking (Husen, 1984; Anderson, 1984; Kennedy, 1984).

- Some models of interrelationship between research and policymaking which recognise the complexity of policy processes have been developed (Angus, 1981; Postlethwaite, 1984).

The research problem

The general problem for research was to examine the outcomes of attempts at linkage between research and policy and to develop greater understanding of the possible influence of research on policy. Specifically, a situation was examined where deliberate attempts were made to develop a linkage between research and policy.

It was argued that this situation could illuminate the role of research in policy processes, illustrate some ways of linking the research and policy processes, demonstrate ways in which policymakers use research, and identify some factors which may intervene in the research/policy relationship.

The Research Branch of the Education Department of Tasmania (which provided the context for the study) developed a *modus operandi* to facilitate contact between researchers and policymakers yet, in some cases despite well executed, commissioned research, policy outcomes were not evident. What factors had intervened? Conversely, there were cases of research where specific outcomes did follow. In other cases there might be a generally accepted change of views among policymakers about a problem without specific decisions being implemented. In general, the efforts of the Research Branch suggested a more optimistic view of the link between research and policy than the prevailing belief that the relationship was weak and that little use was made of research.

The related literature on non-use of research, possible use or impact, nature of research and policy processes shaped the framework for addressing the research problem within the context of the interactive approach to linkage which was adopted in the Research Branch. The general problem was refined into questions and sub-questions for research in the following way.

1.   CAN RESEARCH INFLUENCE OR HAVE AN IMPACT ON POLICYMAKING?

    What is meant by impact or use?

    What is the time scale in which impact should be acknowledged?

    Which policymakers are influenced by research?

    What kind of research influences policymaking?

2.   HOW CAN THE RESEARCH PROCESS BE USED TO FACILITATE THE RESEARCH/POLICY LINKAGE?

    What linking processes should be established?

    How can the policymakers participate in research?

    How can research integrity be preserved?

    What dissemination processes should be adopted?

    What are the consequences of linkage through the research process?

3.   WHAT ELEMENTS IN THE POLICY PROCESS ARE SIGNIFICANT IN THE RESEARCH/POLICY LINKAGE?

    What kinds of policymaking are influenced by research?

    Who are the key policymakers?

At what stage in the policymaking process can research have an influence?

What aspects of the policymaker's role can research address?

How might key policy issues be identified?

4.   WHAT OTHER FACTORS FACILITATE OR INHIBIT THE RESEARCH/POLICY RELATIONSHIP?

What part does timing play?

What is the influence of the external environment?

What other factors intervene?

Definition of terms

For the purposes of this study, the following definitions were adopted.

Policy is a course of action or inaction toward the accomplishment of some intended or desired end (Harman 1980a).

Policy process refers to a complex process by which needs, values and goals are translated into concrete actions. The policy process has several phases.

Policymaking is one phase of the policy process by which a course of action is defined. A written statement of policy may or may not be produced as a result of this phase.

Policy implementation is a phase of the policy process concerned with translating policy into action.

Policy actors are those groups or individuals with an interest or stake in a particular policy area, and who participate in any phase of the policy process.

Policymaker is an individual whose official role involves participating in the policy process.

Policy statement is a written statement of policy which provides guidelines for a course of action towards effecting specific policy goals.

Issue is an unsettled matter of public import that requires attention and resolution (Tymko, 1979).

Research is a systematic form of enquiry.

Linkage is a term used to indicate the interfaces created between research and policy processes.

Significance

Although the recent work in the field of research and policy relationships has given a more positive view of the use of research, the concepts remain poorly understood. Huberman's (1987) assertion that "we already know a great deal about research utilisation in the social sector" (p.586), and therefore should be behaving in a confirmatory rather than exploratory way, is clearly based on the assumption that this is not the position from which researchers are operating. Likewise the theme of Shavelson's presidential address (delivered at the American Education Research Association Annual Conference, New Orleans, April 1988) was to challenge the disillusionment and uncertainty about contributions

of social science research. The restrictions on government funding for institutional educational research have added emphasis and impetus to researcher concerns about the perceived role of research in improving education delivery. Government financial support for research has been reduced, as exemplified in Australia by the demise of the Educational Research and Development Committee in 1983 and the cessation of this source of funding. One interpretation is that in the view of government, research does not play a significant role in educational policymaking nor improvement in practice. While some researchers may be ambivalent about the involvement of government and policymakers in determining research priorities, most would certainly like to see their work perceived as having value. Researchers who endeavour to argue the case for reinstatement of funding for educational research need evidence of the nature of the contribution of research to policy and practice and strategies to make this more effective.

Cooley and Bickel (1986), Huberman (1987) and Shavelson (1988) all demonstrate that the links between research and policy and practice are a continuing issue, yet offer more positive evidence. Cooley and Bickel describe the outcomes of a close relationship between a school authority and education researchers. Shavelson also describes, from a more intuitive perspective, the effects of particular research activities on policy developments, and hints at some partial theories to be addressed. Huberman provides both theory and practice based on a model of dissemination effort. Their evidence supports the contention that there is, or can be, a relationship between research and policy, but does not provide a general theory.

The significance of the study lies in its contribution to the development of such a general theory, which has importance for both policymakers and researchers, not simply to increase understanding, but more importantly, as a basis for action towards educational improvement.

Context

This research was undertaken in the Education Department of one Australian state. The following section describes the geographic, constitutional and organisational settings in which education policy emerged. It outlines the changes in organisational structure of the Education Department during the period of the study which were intended, at least in part, to strengthen policy processes. The location and role of research services in the same period is also described, especially in relationship to policy processes.

The organisation of the Tasmanian education system

Tasmania is an island state with a population of around 433 000 persons in an area of approximately 70 000 sq kilometres (*Tasmanian Yearbook*, 1985). Its education system is essentially centralised, with its head office in the capital, Hobart. The state is notionally divided into three regions; South, North and North-West, each with a regional office which deals with administrative matters for schools serving grades K-10 in that region. The years 11 and 12 are served by a system of secondary colleges and vocational training is provided in technical colleges. These are located in urban centres but are not part of the regional organisation.

Australia has a federal system of government, with both state and federal systems operating on a Westminster basis. Education is a constitutional responsibility of the states, although in recent years significant amounts of specifically targetted Commonwealth money has ensured particular federal education policies have been implemented.

In Tasmania, the political head of the education system is the Minister for Education. A Director-General, nominated by Cabinet, is the head of the Education Department. Up to the present time (1988), the Director-General has come from the ranks of the teaching profession.

The time period in which the present study of research and policy took place covered the years 1979-1987. This was a period of developing insight into the nature of policy and the policy process, and of the evolution of strategies and structures intended to facilitate policy support for senior administrators. These changes grew from and were shaped by earlier patterns and processes, and reflect an increasing input by a broader range of people and information into policymaking. They also reflect increasing recognition of the political nature of the policy process.

Policymaking in the Tasmanian Education Department

The late 1970's — informal policymaking
Work undertaken by Selby Smith (1980) highlighted the key role played by the Director-General at that time. The Department retained a traditional hierarchical structure, and Selby Smith concluded that "the main decisions, therefore, are made at a high level, and are decided at least at a regional, and often at a state level" (Selby Smith, 1980, p.10). Identification of policy issues emerged from various sources, but Selby Smith opined that

> the classic path, and still a common one, is that the Director-General, on his own initiative or as advised by members of his staff, may recognize an issue, and advise the Minister how it may be dealt with or make a decision in regard to it himself ... A perceptive Director-General will naturally be constantly on the alert to recognize emerging issues, to acquaint the Minister with them if they are sufficiently important and to give him the best available information and advice about them. (Selby Smith, 1980, p.16).

Selby Smith undertook case studies of policymaking in three different policy issues/arenas of Tasmanian education. He demonstrated that "decisions of considerable significance" (Selby Smith, 1980, p.85) were made in the three cases as a result of three different processes. Two were decisions by the Minister: in one case "acting on the advice of his senior professional staff, and in the light of the opinion of experienced persons", in the other "after receiving the recommendations of no less than four committees of inquiry" (Selby Smith, 1980, p.85). The third case was "decided ... by the Director-General of Education in the light of the advice of his senior colleagues." (Selby Smith, 1980, p.85).

While the Director-General and his senior officers played a key role in determining policies, Selby Smith, however, concluded that decisions may be made by the Government rather than the Minister or his professional advisers if political or local interests exert influence.

Early 1980's — change and development in policy processes
Selby Smith (1980, p.17,39) revealed that the information base for decisions was sometimes weak. The need to improve policy processes had also been recognised within the Department. Just prior to the publication of Selby Smith's paper, there had been a movement within the Education Department to gain a better understanding of policy and the policy process. This developed from a perceived need to clarify and strengthen planning services. The background to this was documented in a report *Planning services and research in the Education Department* (Research Branch, 1978). This discussion paper recorded that in mid 1978 "there is a general consensus that planning and information services to

support the work of senior officers in the Department need to be strengthened." (Research Branch, 1978, p.3). At the time, there was a Director of Planning, but no support staff, and a Research Branch which provided "information of one kind or another to support policy making or decision making" (Research Branch, 1978, p.8). The report offered alternatives to deal with these inconsistencies but a decision on them was deferred. There was no rationalisation of the functions of the Directorate of Planning and the Research Branch in terms of support to policymakers, but the issue of support for senior officers was dealt with by the creation of the Policy Support Group. Hughes subsequently recorded that:

> this group, comprising the Director of Planning and Co-ordination (Chairman), the Deputy Director-General, the Director of Services, the Senior Superintendent of Research and the Personal Assistant to the Director-General was formed in 1979 to prepare policy papers for the Directorate. It met regularly in 1979 and 1980 but has not produced major policy proposals or papers.

> ... (T)he Policy Support Group has not played an active role in major policy issues and it did not meet during 1981 (Hughes, 1982, pp. 156,157).

Meanwhile the nature of policy processes continued to be debated within the Research Branch and was again brought to the attention of the Directorate through a paper entitled *Policymaking in the Education Department* (Research Branch, 1979a). The paper was accepted by the Directorate, but no formal moves were made to integrate the proposals into policymaking activities in the Department.

The situation in the early 1980's was discussed in detail by Hughes who concluded that: "... the role of the Directorate as a whole in giving policy advice to the Director-General seems a limited one ..." (Hughes, 1982, p.157). On the other hand,

> ... it is clear that a very large number of individual officers and committees consider they have a responsibility to provide policy advice, initiate policy, determine policy and implement it.

> At the same time some officers at quite senior levels consider they have no way of influencing policy decisions. The role which the various officers and committees play is not clear and there seems an urgent need to set out the various elements in the policy process and to define responsibilities for each ... (Hughes, 1982, p.157).

Nevertheless, he also saw that the Director-General had a central role in the policy process and that divisional directors had a key policy role within their divisions (Hughes, 1982, p.155). Much of the subsequent discussion in this section of the Hughes Report centred around the notion that

> to exercise his role of principal policy advisor well, the Director-General must be able to turn to officers with the expertise to obtain information and to analyse policy alternatives critically (Hughes, 1982, p.155).

Hughes recommended the establishment of a Policy Support Unit to perform such a function with much of the expertise to staff it being drawn from the Research Branch. This recommendation was one of a series of wider recommendations to reorganise the Education Department on a functional basis. A period of some two years elapsed between the release of the Hughes report and the establishment, in late 1984, of the Support Unit. In the interim, the Research Branch had continued to be a source of information for decision-making within the Department. Following submissions by the Research

Branch, the Directorate had accepted the proposition that a direct research function should be added to the functions for the Unit outlined by Hughes (1982, p.323).

As the reorganisation of the Department on functional lines developed, the Executive Management Group (EMG) comprising the three Executive Directors, Director-General and Deputy Director-General was established in 1984 and met regularly from that time. The EMG was to be the main body within the Department concerned within policy development but much of its early operations were taken up with getting the Hughes structure in place and addressing issues raised in that report.

The mid 1980's - policy processes in times of economic constraint

In more recent times, the Executive Management Group was faced with policy issues emerging from economic restraints on the Department. Economic constraints had their effect too in the Support Unit (called Executive Support Services) which as a result of staff movements and government staffing policies was unable to sustain both a policy research group and a policy development group. By June 1986 it had three functions:

> an information service (providing) readily accessible information relating to policy, statistical and historical data, a Policy Support Section (assisting) with development of policy and planning emanating from policy decisions, and a Ministerial Support Section (managing) preparation of responses to ministerial correspondence and enquiries (*Edcetera* June 1986).

Parallel to the development of the Executive Support Services, a unit had been established within the Curriculum Development and Evaluation Section to undertake research and evaluation on matters relating to the curriculum and education programs. This unit was embedded within the divisional structure and had no direct line to the Director-General. This organisation was a reflection of the distinction made by Hughes between research and evaluation of educational programs and functions directly related to the policymaking process (Hughes, 1982, p.319).

Responsibility for policy development and implementation was being clarified. From 1987, the Deputy Director-General met regularly with regional Directors following Hughes' recommendations that regional offices take responsibility for management and some autonomy in decision-making at local level. This group formed a significant decision-making and policy implementation group for school level action, although schools themselves retained considerable autonomy. Within the Technical and Further Education division, policy on workforce training emerged pragmatically in response to industry and for the most part, the Education Department did not initiate policy development in the area of trade training. The Executive Management Group continued regular meetings with a policy focus on fiscal and economic issues. The Director-General remained in a key position as the link between the Minister and the Department. The role of Minister had become increasingly influential in determining the direction on key policy issues, notably in areas related to the party policy stance.

Summary of policy processes

In summary, the period between 1978-1986 was characterised by structural changes within the Department, changes in understanding of the nature of policy and efforts to improve the quality of the policymaking process. The context in which administrators were working also changed, and the administrators' priorities lay in the distribution of scarce resources within the system. Thus, although organisational plans had been laid out to improve the policy process and the flow of information which

might be utilised in policy development, it could be argued that policymaking on educational issues remained fragmented and the levels at which policies should be determined remained ill-defined.

In practice, policy might be determined in a variety of ways: by the presentation of policy by the minister, emerging from pre-election commitments or public pressure groups; by action taken at school or regional level resulting from devolution of responsibility in decision-making; by collected deliberations of officers of the Department in response to financial or other pressures; by the action of an individual in an area of responsibility; or by pressures exerted by unions. It was therefore evident that people at all levels within the Department's administration and organisation were policy actors, and could contribute to policymaking. There was no single, or major, or consistent approach to the policy process.

The role of research

It was clear that the research services had little formal input into the policy processes apart from the generation of statistical information. But because of the direct responsibility of the Superintendent of Research to the Director-General, physical proximity and available expertise, the potential for linking research with policy existed.

From the late 1970s, a strategy by the researchers was frequently adopted to try to enhance this linkage. Advisory or liaison committees were established for major projects in which key policymakers or interest groups were invited to participate. Conversely, the Department increasingly used research staff to support the work of committees or task forces.

Development of various strategies to involve policymakers in the research process reflected the views about research which were evolving within the Research Branch. The role of research as a political and educational process was recognised. Action research (Kemmis & McTaggart, 1982) was a growing interest as researchers worked with teachers and some of its tenets were applied in more policy oriented research. The evaluations undertaken by the Branch increasingly adopted an approach akin to that subsequently described as a stakeholder approach (Weiss, 1986).

Concurrently, the Research Branch had been considering the question of policymaking within the Department. Initially this took the form of rational models (Research Branch, 1979a), though over the years in the light of experience, these concepts were modified to 'recognise a range of models of policy in which the minister and community pressures played an increasing part. The complexity of policy processes and the influence of the external environment were increasingly understood. The efforts of the Research Branch suggested a more optimistic view of the link between research and policy than the prevailing belief that the relationship was weak and that research had little use or impact. Nevertheless, while linkages might have been forged and policymakers were cognisant of and convinced by findings, policy outcomes might be negative, diverse or much delayed in becoming evident. In addition, perceptions of policy outcomes varied between individuals and between groups. Further, some policy recommendations were never officially implemented but emerged later as practice.

Over the period of the present study, the Research Branch and subsequently after Departmental reorganisation, the Evaluation and Research Unit of the Curriculum Development and Evaluation Section, developed a more sophisticated understanding of policy and research processes, and strategies for linkage. Alongside this went an extension of documentation and articulation of the linkage processes. These developments in practice signified the importance of context in any analysis of

research and policy, indicated the necessary scope for a literature review on the topic and facilitated development of the conceptual framework for the research.

The research that is recorded in this study was undertaken when the author was a member of the Research Branch and later of the Evaluation and Research Unit of the Curriculum Development and Evaluation Section.

Overview of the methodology

The methodology for the research was a multiple case study of policymaking in the Education Department of Tasmania during the period of developments summarised above. The cases focussed on research, undertaken by in-house researchers, which was linked by some form of committee structure to policymakers in that Department. Each case encompassed the events, processes, perceptions and outcomes related to the particular research activity over a period of time. The search for data was focussed within, but not limited by, a conceptual framework derived from a review of the literature.

Data sources for the cases included documentation of the research and committee processes, other reports and official files. Interviews with committee members and other researchers provided multiple perspectives on the processes and perceptions of the impact of the research. The author was closely associated with all cases and participated directly in three of them.

Four case studies were undertaken as the basis for tentative generalisation. The research activities were not undertaken concurrently but covered a span of some six years. As a result, the iterative and reflective approach adopted by the researchers led to some modifications in operating style between the earliest and the latest research. These differences enhanced the multi-case analysis, from development of the conceptual framework to providing additional insights about the factors, variables and issues involved.

Following a detailed description, each of the four cases was subjected to analysis in relation to the variables identified in the conceptual framework. This provided the basis for a collective analysis of the data from all cases.

Organisation of the study

This section has presented the background to the problem, the purpose and the context of the study, the problem statement, the significance of the study and a definition of terms and an overview of the methodology.

Chapter 2 provides a review of related literature.

Chapter 3 describes the methodology for the study. The conceptual framework is outlined and the case study approach is set out. The delimitations and assumptions of the study are specified.

Chapters 4-7 describe the four case studies.

Chapter 8 analyses the evidence from the four case studies in terms of the conceptual framework.

Chapter 9 provides a synthesis of findings in terms of the research questions and draws some conclusions. A general model of research and policy linkage is proposed. The implications of the findings are discussed and the thesis concludes with some recommendations for practice and suggestions for further research.

Chapter 2: Review of related literature

Introduction

For many writers, the links between research and policymaking have been elusive, tenuous and ineffectual. In recent years, writers have analysed the possible use of research in policymaking with increasing insight into the nature of policymaking, the research endeavour and the notion of use or impact.

Several works have provided a broad overview of the "state of the art" at an international level or extensive review of the literature. These works provided a valuable overview of the prevailing situation (Nisbet & Broadfoot, 1980; Holdaway, 1982; Husen & Kogan [eds], 1984). The extensive literature on evaluation use was not included in this literature review for several reasons. The focus of the present research lay in the relationship between research and policymaking, whilst evaluation deals almost exclusively with the implementation phase of the policy process. Most of the literature in the evaluation use field relates to program evaluation studies, which tend to be limited in scope, specific in purpose and lie within a bounded system. It must be assumed that for all these reasons, evaluation use literature has been rarely referred to in the writings on research and policy linkage. However, the evaluation use research and the various models or frameworks emerging for description and analysis, will be visited briefly at a later stage in the report. Notably in this field the work of Huberman (1987), which was published at a late stage of the present study, creates a bridge through the field of dissemination and utilisation research.

A weak relationship between research and policymaking?

During the 1970s and 1980s in various western countries, a number of writers expressed concern about the relationship between research and policymaking. In reviewing several such writers, Selleck (1981, p.198) stated that:

> in Britain and the United States ... the value of educational research is being queried, research workers have grown edgy as the supply of money has begun to diminish, even famous institutions have seemed to be shaking, and educational research bodies have been busy with the task of self-justification.

In Australia, similar issues have also been raised. Start (1975), in an invited address to the national conference of the Australian Association for Research in Education, posed the question: "Why does educational research contribute so little to educational policy?"

In Canada too, a similar disillusionment was evident (Worth, 1978). The views were confirmed in the British context by Dockrell and Hamilton (1980), who claimed that in the last twenty-five years research had not made a very obvious contribution to policy and spoke of a considerable malaise and disillusionment, and of a lack of fit between research and practice. Cohen and Garet (1975, p.19) argue that "the impact of applied research seems negligible".

Hoyle (1985, p.203) summarised the situation as "the Rift Valley which has for so long existed in education between researchers and practitioners."

This "Rift Valley" has been explored in a number of ways in recent years. The evidence, at face value, supports these contentions. In reporting a study undertaken for the Social Science Research Council in 1978, Nisbet and Broadfoot (1980) wrote:

> the impact — or lack of impact — of research and development on policy and practice in education is a topic of current concern in both USA and Canada. Concern over the gap between research and practice in education, or between research and policy, has increased in the past ten years (Nisbet & Broadfoot, 1980, p.2,7).

An analysis of the contribution of research to practice by the National Academy of Education in the United States, provided little evidence of impact (Suppes, ed., 1978). Selleck (1981, p.198) commented on this work that "it is not very often ... that the writers grapple directly with the problem of assessing the impact of research on practice." Cooley and Bickel (1986, p.6) argue that this is because

> research which has had the objective of informing decisions has tended to take place in isolation from the policy or administrative processes. Too often, what is produced is knowledge that is little understood or used by those responsible for the direction of the various levels of the educational enterprise.

In Australia, Anderson (1984, p.111) reported on a survey undertaken to explore the question of "why there is so little apparent use of social science knowledge by policymakers." His survey revealed that

> a substantial majority, ... asserted that the formation of policy should be influenced by evidence from research studies; but only a minority asserted their belief that there was much use in practice (Anderson, 1984, p.119).

The perception of researchers in Australia is reinforced by that of policymakers. McKinnon (1983, p.49) writing at the time he was Chairman of the Commonwealth Schools Commission said "education research has little impact on policymaking and decisions in education in Australia."

Holdaway (1982, p.26) concluded after reviewing the literature that "individual research activities seldom produce major changes in policy." He also concluded that:

> research can assist the policymaking process in clarifying issues, sensitising administrators and politicians, providing conceptual analysis, and supporting the use of theoretical perspectives (Holdaway, 1982, p.26).

This view supports that of Cohen and Garet.

> If policy and research are assumed to be connected by gradual interactions between traditions of inquiry on the one hand and climates of knowledge and belief on the other, then it does not seem terribly important to explain the weak effects of individual decisions. It seems much more relevant to explore how research helps shape policy climates, to understand why the process works as it does, to ask if the results are on the whole desirable and to decide whether there are ways in which the process might be improved (Cohen & Garet, 1975, p.25).

This broader interpretation of links between research and policymaking gains support from the analysis by Nisbet and Broadfoot (1980). It foreshadowed the most recent major international study on this theme (Husen & Kogan [Eds.], 1984). Likewise, Nisbet, Megarry and Nisbet (1985) supported a more positive view of the relationship between research and policymaking. Just how and why the

interpretation of this inter-relationship has changed is discussed in subsequent sections of this literature review.

Explanations of the "non-use" of research

A number of explanations have been advanced to account for the "non-use" of research in policymaking. Worth (1978) advanced three widely held theories: the knowledge specific, the two communities and the policymaker constraint. To these a fourth theory may be added: hyperrationalisation (Wise, 1977).

1   *Knowledge specific theories* explain the non-use of research in terms of the narrowness or limitation of the research information and the research techniques employed (Worth, 1978, p.2). Anderson supports this theory in terms of inappropriate research models (1984, p.115). Dockrell and Hamilton (1980) clearly locate the blame in the conception and practice of research, and challenge researchers to adopt different models.

2   *Two cultures or two communities theories* are widely held interpretations of the non-use of research as a function of different cultures, values, reward systems and languages of researchers and policymakers (Worth, 1978, p.2; Anderson, 1984, p.115; Husen, 1984, pp.8-14). Husen (1984, p.9) states on the matter of language,

> policymakers are as a matter of course not familiar with educational research or social science in general, nor with the language that researchers use to present their methods and findings, a language at best is precise in communicating to the scholarly what the researchers want to say and at worst is empty jargon.

The questions addressed by researchers reflect their values and reward systems, and thus according to Husen (1984, p.9), Start (1975, p.326) and Anderson (1984, p.116) the issues may be irrelevant to policymakers. According to Mitchell (1985, p.36),

> scientists tend to study what they know how to study not necessarily what policy makers would like them to study. They also tend to reconceptualize policy problems to fit the conceptual paradigm with which they approach the explanation of social processes and thus fail to examine the problems identified by policy makers.

As Husen sees it (1984, p.12),

> researcher's needs are by nature different from those of the policymakers. They view problems differently, they have other time frames and they interpret findings differently.

3   *Policymaker constraint theories* to some extent overlap with two cultures theories, but focus more particularly on the conditions or constraints under which policy is formulated (Worth, 1978, p.2). It is a frequent complaint that research findings are unusable because of timing (Worth, 1978, p.2; Husen 1984, p.9; Start, 1975, p.326; Anderson, 1984, p.115). Policymakers require information for problems whose solution is relatively urgent. Further, they often want

access to findings immediately or least within a shorter time scale than that usually required by the researcher. In some cases the information simply does not get through to the policymaker (Start, 1975, p.328; Anderson, 1984, p.115; Husen, 1984, p.13). When research does reach the policymaker, other factors may mitigate against its use. Start (1975, pp.327, 328) argued it may be ineffective because of its equivocation or its solutions may be unusable or impractical. Husen (1984) claimed that inconclusive results are more the rule than the exception. He states that

> it is the nature of the process of making an issue "researchable" that the overall problem has to be broken down into part-problems that more readily lend themselves to systematic investigations (Husen, 1984, p.13).

Other factors which affect use of research include whether the findings support a policy the decision making body wants to pursue (Husen, 1984, p.14), the orientation to research of policymakers (Worth, 1978, p.4) and the time in office (Worth, 1978, p.3). Worth argued that new administrators are more likely to adopt research findings.

4   *Hyperrationalisation theory* highlights the limitation of a linear, rational approach to describing the use of research in policymaking. Wise (1977) claims that "the propensity of policymakers to view education rationally is reinforced whenever they turn to researchers for advice" (p.54). Wise suggested that "hyper rationalisation" was a response to the "loose coupling" (Weick, 1976) of educational organisations. The appropriateness of the concept of policymaking as a rational process in education is discussed later in this review.

Much of the earlier analysis of the relationship between research and policymaking was based on the assumption of a rational model. Weiss (1978a, p.29-30), offered two models based on academic research which could be used in policymaking (Figure 1).

Figure 1   *Possible models of research use*

Definition of Social Problem	Identification of Missing Knowledge	Acquisition of Social Research – Data, Relationships	Interpretation of Problem	Policy Choice

Decision-driven model of research

Basic Research	Applied Research	Development	Application

Knowledge-driven model of research
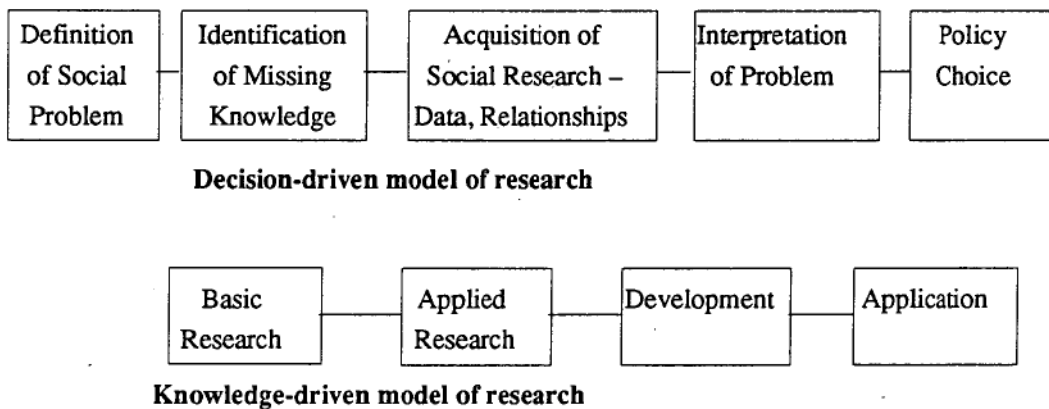
Source: Weiss, 1978c, pp.29,30.

In later writing, Weiss (1979) expanded to seven the possible models of research use, and in another paper concluded that "knowledge that derives from systematic research and analysis, is not often 'utilized' in direct and instrumental fashion in the formulation of policy" (Weiss, 1980, p.381).

This demonstrates the important shift supported by a number of authors (Husen, 1984; Nisbet & Broadfoot, 1980; Anderson, 1984; Vickery, 1986) towards a broader basis for analysis of "use".

The nature of "impact"

Any analysis of the use of or non-use of research must take into account the nature of the impact. Caplan (1977) defined utilisation of knowledge in the context of his study of policymakers as in the following way:

> when the respondent was familiar with at least one relevant research study and gave serious consideration to and attempted to apply that knowledge to some policy relevant issue (Caplan, 1977, p.69).

Weiss (1978a, p.34) indicated a number of important dimensions of research use which need definition. These were: what is used and by whom; by how many people is it used; how direct is the derivation from research; how much effect is needed before research is considered "used" and, how immediate was the use. A further dimension to the analysis of use or impact is a classification of types of social knowledge. Mitchell (1985, p.25) reminds us that "different types of social science products are utilized (if at all) in quite different ways."

This is relevant when considering the range of possible uses of research and in the interpretation of level of use of research. It also raises the question of what policymakers might include under the rubric "research". Nisbet (1981, p.512) discusses three levels of impact of research. These levels not only reflect kinds of decision-making but also intentionally or otherwise, reflect three distinct kinds of social science information. The levels are: an information base for policy or action (which Nisbet describes as the popular view of research); the intermediate level of exploration and development, and the long term indirect impact in which research influences climates of opinion (Nisbet, 1981, p.512). Nisbet commented that the first two levels are "acceptable to those who demand relevant research". The third level of influence he suggests is

> increasingly recognised in the literature as the most important role for research, but as yet it has failed to carry conviction among those who control our funds or among practitioners (Nesbit, 1981, p.512).

The nature of the impact has been addressed but is not often applied in discussions of the non-use of research. But as Cohen and Garet (1975, p.22) state,

> if ... research has an impact on policy thus conceived (as contribution of ideas in a variety of public acts), the answer is different than if we ask about the relationships between individual studies and individual decisions.

Finally, research does not impact on a static or inactive object. Nisbet and Broadfoot (1980) quote from a study by Marklund which included the conclusions that "impact is essentially cumulative and interactive with other forces" and that "readiness to change is a necessary pre-condition for the successful impact of research" (Nisbet & Broadfoot, 1980, p.28).

The nature of research and policymaking

Implicit in some of the interpretations of non-use of research is a traditional view of research operating in a rational decision driven model of policymaking processes. In recent years, this too has been challenged in conception of both research and policy.

The nature of research

Husen (1984, p.11) described the university-based academic as "brought up in the tradition of the imperial, authoritative and independent. Research with a capital R."

This view was in agreement with that of Carley (1981, p.102), who stated that

> academic research or discipline research is an endeavour pursued by an independent
> investigator who is free to choose the set of values which will be applicable in research
> and who is usually divorced from the decision-making process. The academic re-
> searcher is often concerned with research quality and the pursuit of knowledge for its
> own sake.

Academic freedom or independence is a point of honour for many researchers. The researcher undertakes all steps in the research process (identifying a problem, developing an hypothesis, designing an investigation, gathering data, analysing results and reporting) wholly independently of any potential users or audience for his or her findings. Husen (1984) listed three characteristics of researchers which are quite different from policymakers and help to create the "two cultures".

> Researchers are subject to peer review from which their intellectual status is derived,
> they operate at a level of specialization that addresses elements of a problem and thirdly
> have more freedom of action (Husen, 1984, p.10).

From such academic standpoints evolved the notion of a science of education, with a body of organised knowledge which can be explored by the canons of scientific research. Writers such as Kerlinger (1977) lament any questioning of so-called scientific behavioural research and reject outright styles of research directed at change in practice as "bizarre nonsense, bandwagon climbing and guruism" (Kerlinger, 1977, p.10). Views such as these inevitably lead to a positivist philosophy that attributes lack of impact of research to "poor dissemination, jargon, isolation of researchers in an ivory tower, blindness of administrators and resistance of teachers to innovation" (Nisbet, 1981, p.510).

Kerlinger's (1977) arguments are a concern on a number of grounds for those who would wish to foster a closer relationship between research and policymaking. Slavin (1978) in a response to Kerlinger's article, expressed the fear that

> by retreating into our comfortable non-controversial ivory towers, we leave the field
> open for the advocates and plain charlatans who simply say what they think without any
> direct foundation in research (Slavin, 1978, p.16).

Anderson (1984, p.130), amongst the respondents to his survey, found evidence of the notion of the linear view of the process of research in decision-making which embodied some delusions about the nature of social science knowledge (as well as the policymaking process). He referred to this as "simple positivism — the idea that research results should be immediately and directly applicable to policy problems" (Anderson, 1984, p.130). This unrealistic belief in the capacity of research to uncover deterministic laws must also be of concern for expectations of social science research. It is not surprising to find Degenhardt (1984) perceiving "scientific" research as a source of educational harm.

The decision driven models of research use (Weiss 1978a) outlined above, based on a traditional view of research and policymaking, have been progressively rejected as a generalisation for research/policy interrelationships (Husen, 1984, p.18). Hoyle (1985, p.204) stated that

these solutions (to the Rift Valley between researchers and policymakers) have been conceived in terms of a mechanistic one-way model: research publication, dissemination and utilization. It is this simplistic model which has been challenged in recent years, with quite fundamental consequences not only for dissemination but for the nature of research itself, its epistemological assumptions and its linkage to practice (Hoyle, 1985, p.204).

A number of writers have urged a move away from research based "scientific" models. Dockrell and Hamilton (1980) challenged the physical science model upon which much educational research has been based. Other contributors to the same work, including Stake and Walker, through their proposals for alternative research approaches, symbolise dissatisfaction with traditional research models. Nisbet and Broadfoot (1980) also saw research moving away from scientific to more humanistic and interpretive studies. Stake (1981) urges a greater subjectivity in research. He explained:

> the epistemology I want to use and encourage others to use is contained within the experience of people ... practitioners should be reluctant to give up their subjective, naturalistic constructs, not only for reasons of tradition ... but because there is an essential validity to the limits experience has taught them to place on generalizations about education (Stake, 1981, p.7).

Corson (1986, p.74) summarised these movements and addressed these concerns from a philosophical standpoint and urged "an approach to some of the tasks of education research that has rigour *and* sensitivity to human needs" (Emphasis added). He posited that incorporating the tentativeness which characterises Popper's epistemology would encourage research in a framework that would develop better fit between problems and the tentative theories proposed as solutions to them. Such an approach to research, he claims, is likely to have impact in policy contexts (Corson, 1986, p.86).

Just as theories and methods of research are being challenged, so too is the concept of academic research as outlined by Carley (1981). An alternative view accepts the potential for the interactive and political nature of the process of research. Cooley and Bickel (1986) describe such an interactive approach in a practical setting. The decision-oriented research they undertook from a university base was linked through continuous interaction with an education system. The themes and principles adopted by Cooley and Bickel (p.6) were similar to those adopted in the Research Branch of the Tasmanian Education Department, despite the different institutional settings. Cooley and Bickel elaborated on the practice of research in this interactive mode, while Hocking (1984) highlighted the importance of the research process itself.

> A process-oriented view of research acknowledges the involvement of a range of people with active and varied roles in social research. It also acknowledges the power dimensions associated with the generating of information. The data that are collected do not play the same focal role as in traditional research but rather are complementary to the engagement of the various individuals involved in the research. In fact, the process of research can teach as much as the data. The early stages (defining the problem) and dissemination stages of the research are of particular ... significance in a process view of research ... In its ultimate form, research can be a learning process for all those touched by it (Hocking, 1984a, p.10).

The political nature of the research process was reinforced from a theoretical perspective by Codd (1983).

Codd claimed that orthodox educational research has been modelled on empirical/analytical sciences. In the context of the research/policy link such positivistic views of research enquiry would therefore seek to provide administrators with "an information base upon which to decide the best means of achieving certain predetermined goals" (Codd, 1983, p.92). House (1986) would argue that the language of much current educational research and evaluation confirms the thesis that it is undertaken in a technical/economic sphere of interest. Codd demonstrated the weaknesses of educational research and the technical interest in contributing to policy. He went on to analyse the growing amount of research emanating from practical rather than technical problems. This research uses historical/ hermeneutic disciplines of enquiry, which, whilst recognising that research is embedded in a social context, acknowledge that there remains an element of personal knowledge which comes from participation in a culture.

Education research and the emancipatory interest led Codd to deduce that

> educational enquiry cannot be a neutral information collecting process, but it must always be a social practice in which dimensions of productive work, communicative action and moral commitment are all dynamically inter-related (p.96).

He concluded that

> educational research can be an inherently political activity in which the central aim is one of action rather than understanding — action, moreover, which opposes ideological forces rather than sustaining them (Codd, 1983, p.96).

These two perspectives (the experiential and the theoretical) offer some new interpretations on the nature of research and the possibility for developing greater understanding of how research might be drawn closer to policymaking.

The nature of policymaking

Just as understanding of the nature of research and the research process has developed, broadened and become more complex, so too has the conception of policy and policy processes.

Although it has been demonstrated that the notion of a rational model of policymaking pervaded earlier conceptualisation of research and policy links, the work of Harman (1980a) shows that a range of models of policymaking has been observed. Harman outlined the basic elements of the policy process and summarised twelve models or theories of policymaking in the context of education (Harman, 1980a, p.57). These emerge from political interest group theories or interaction of policy actors; bargaining and decision- making processes; organisational or systems models and various typologies of the policy process. At the extreme end of a continuum of policymaking models lies the rational or classical model while at the other lies the "garbage can" model which is described as "organisational choice in organised anarchies" (Harman, 1980a, p.67).

Lindblom's model of "disjointed incrementalism" perceived policymaking as a fragmented activity (Braybrooke & Lindblom, 1963). Such a view was extended by Cohen, March and Olsen (1972) as a "garbage can model". This view of policymaking acknowledges that

> decisions emerge from a complicated interplay among problems, the deployment of personnel, the production of solutions and the nature of alternative opportunity for choice (Harman, 1980a, p.67).

The term "policy process" has been used ambiguously in literature on policy (Heclo, 1972; Harman, 1980a). Jones (1977) described five main phases of the policy process: problem identification, program development (including formulation and legitimation), program implementation, program evaluation and program termination. This kind of approach helps to clarify the distinction of policymaking as one phase in the whole policy process. Policymaking is assumed to incorporate phases up to and including to the formulation and articulation of the policy stance and plans for implementation. As Rose (1976) rightly points out,

> a policy making framework is narrow; it concentrates attention upon the decision making stage of the policy process ... The choice of a particular program to realise a government's goal is the half-way point, rather than the end of the policy process (Rose, 1976, p.10).

Tymko (1979) highlights the significance of policy implementation as the outward expression of policy, yet implementation is an often neglected phase of the policy process. Discussion on the relationship between research and policymaking may use policy outcomes or changes as a measure of the relationship but often overlook the intervening implementation phases necessary to bring policy decisions into practice.

Policies may also vary in type and expression over time. Rose (1976) has highlighted the fact that little policy emerges *de novo*. His four models of public policy (see Figure 2) are relevant in exploring the issue of observing policymaking. If researchers are to seek impact on policymaking, then they need some understanding of the changes over time in that particular policy.

Figure 2   *Four models of public policy*
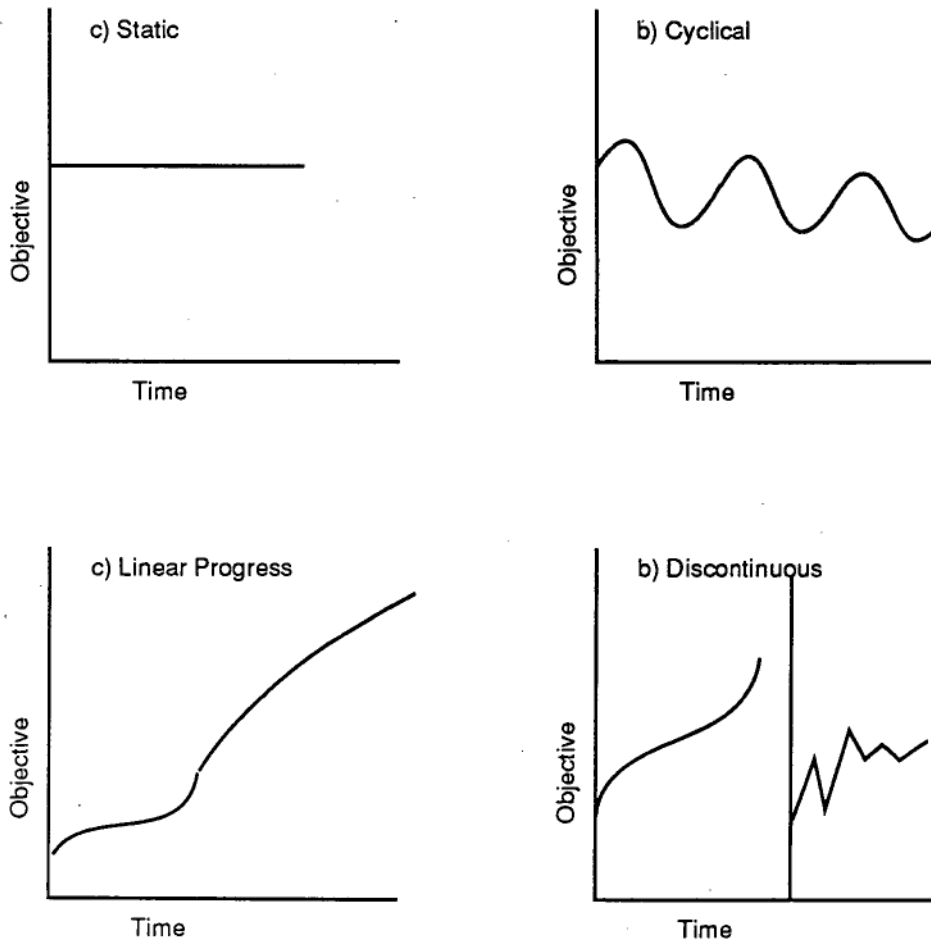
Source: Rose, 1976, p.17.

Political elements in policymaking are also recognised in many models, and are a focus of political interest group theories. Although political dimensions must be acknowledged, policymaking should not be seen entirely as the product of conflict and compromise. The political aspects of policymaking are seen to be the greatest weakness in the rational or classical model which cannot integrate political dimensions nor the fragmentation and disorder discussed above.

Iannaccone (1967) highlighted the distinction at government level between official actors in the policy process and education lobbyists. Truman (1951) saw society as a multiplicity of competing groups which ought be taken into account in the policy process. In practice, official policy actors can also represent interest groups or lobbies, for example, representatives of teacher unions or principals' associations. As Harman points out

> the policy process in education today is not the sole preserve of any one group or set of individuals; instead a range of different groups and individuals participate. These include high elected officials, legislators, cabinets, official boards and committees, interest groups, lay members ..., teachers, students, parents and administrators (Harman, 1980a, p.69).

Official policy actors are those who contribute formally to the policy process. They may participate only in policy formulation stages, or implementation stages, or they may be involved in other or all stages of the policy process. The policy actors include practitioners — teachers, principals, program managers — who implement and take policy actions. Finch acknowledges that "policy is implemented and therefore to an extent 'made' and remade in daily practice" (Finch, 1985, p.111).

Harman summarised the significant elements of policy theory in the following way.

> The policy process is complex and often characterised by diversity and apparent disorder ... Many policy issues are many-sided ... No single theory or model can fit or account adequately for the variety of contexts and policy problems and cover all the various stages in the policy process ... It is impossible to develop a single, standardised procedure whereby education administrators can deal with all kinds of policy problems (Harman, 1980b, pp.150,151).

Recognition of the nature of policymaking is important not only in describing the setting in which research might be applied but also in attempting to analyse ways in which interrelationships and links with research might be built up. A number of authors have commented on aspects of policy processes with reference to the place of research in arriving at policy decisions.

> Research is just one element in the complex mix of experience, conventional wisdom and political accommodation that enters into decision-making (Husen, 1984, p.31).

> Science is only one decision-making resource for policymakers (Mitchell, 1985, p.37).

> Educational policy therefore would seem to rest on the pros and cons of social and political argument, and the power to implement decisions rests with those who win political power (Start, 1975, p.325).

> Many of (the administrators) do not believe that they make anything so crisp and clean as a decision in their jobs ... it is not a concept that seems to describe aptly the flux of activities that engage officials even on the top rungs of complex organisations (Weiss, 1980, p.392).

Cooley and Bickel (1986) while writing about decision-oriented educational research, recognise that "the phrase 'decision maker' is a little troublesome in educational systems" (p.9). They use the term "decision maker" in the sense of the "policy shaping community" (Cronbach et al., 1980). The actors in the policy shaping community make their own small scale decisions which may or may not influence what happens at the system level (Cooley & Bickel, 1986, p.9).

The activities of these policy actors, decisionmakers or members of the policy shaping community extend beyond making decisions. The diversity of roles played by managers (or senior bureaucrats) has been described by Mintzberg (1973) and used in the educational setting by Webb and Lyons (1982). The ten roles identified (Figure 3) demonstrate different forms of expression of policy activities or actions.

Figure 3   *The Manager's Roles*
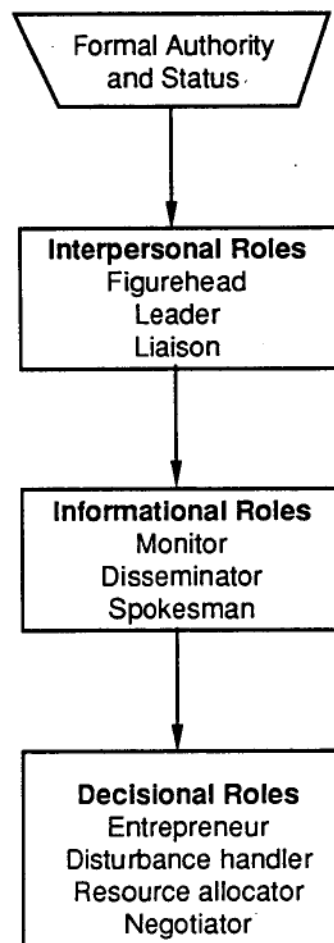
Source: Mintzberg, 1973, p.59

Decision-making is only one element of policymaking. For example, Cohen and Garet (1975, p.21) state "decisions are not the same thing as policy. Part of what is meant by social policy is a system of knowledge and beliefs". Thus these beliefs may be expressed through the leadership role of the bureaucrat. Further, while policy may be expressed in diverse ways, it may also develop indirectly.

> Policies are decided upon in a ... diffuse way ... in the complicated dynamic play between interest groups, arguments advanced and administrative considerations, including the inertia of the system, guidelines for action slowly begin to emerge (Husen, 1984, p.19).

Just as researchers recognise this process of "decision accretion" (Weiss, 1980), so too do the policymakers. Steinle (1981), then Director-General of Education in South Australia, recognised the "ad hocracy" of policymaking partly as a result of pressures of expediency, necessity and public opinion. Vickery (1986), then Director-General in Western Australia, referred to the plethora of government sponsored reports which have played a part in education policymaking in varying degress of significance.

Some important trends in current interpretations of policymaking in Australia with special reference to education policy were noted by Hocking (1984a). There was increased awareness of the notion of policy as a course of action and a trend towards a more positive, defined policy process. The role of administrators and the increasing political influence was also noted. Worth (1978) also emphasised the political dimensions of policymaking.

> As research begins to mix with policy the limitations of the rational model becomes apparent. Policies often stem from ill-defined goals, alternatives are frequently ignored, superior choices tend to give way to the acceptable, and careful data analyses are displaced by expedient interpretations. In other words, the neat logic of rationality may rarely surface in policymaking in the real world. Instead, policy is apt to emerge from the interaction of groups and interests in a power relationship — the give and take that is politics. Within this political model, policy formation is a process of conflict management and consensus building (Worth, 1978, p.5).

The authors of a major international review on research and policymaking perceived that

> two themes emerge as crucial to the impact of research on policymaking. One is the unavoidably disorganised and haphazard nature of decision- making ... the other is that values almost by definition are a major component of policy (Nisbet and Broadfoot, 1980, p.47).

Possible uses of research in policymaking

As a corollary to the developing ideas of research and policymaking, and the interpretations of the non-use of research findings, there is an emerging body of ideas of the possible ways in which research might be, or is currently used in policymaking. This is a more complex issue than it might at first appear (Cooley & Bickel, 1986).

Marklund (1984) for example, distinguished between *policymaking* and *policy execution* (implementation) and *commissioned* and *'free'* educational research. He illustrated the relationship between these forms in a two-by-two grid giving rise to four cells. His comments on the use of research were derived from experience of research generated in the cell formed by commissioned research and policy execution (Figure 4).

Figure 4   **Relationships between representatives of**
            educational research and educational policy

Educational policy

Policy-   Policy -
making   execution

	Policy-making	Policy-execution
"Free"	A	B
Commis-sioned	C	D

Educational research
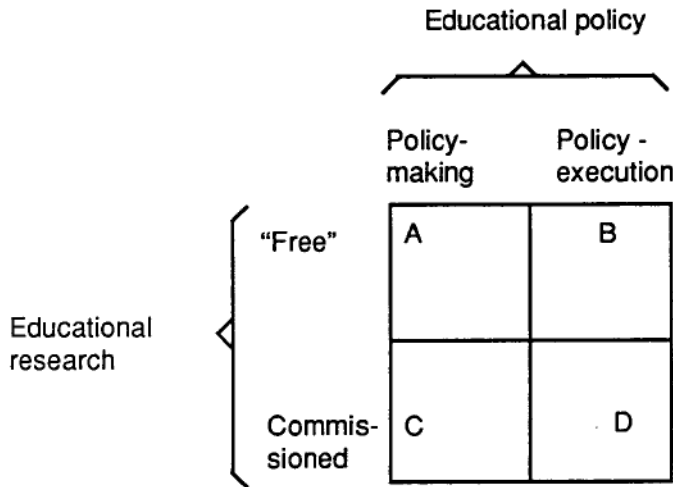
Source: Marklund, 1984, p.181

In Marklund's experience, it is more appropriate to talk of "effects" of research rather than "use", since there is no simple way to describe use, and he believes "many (would not) be prepared to admit they 'use' research" (Marklund, 1984, p.183).

Marklund believes research produces effects when it

arouses debate among policymakers and executors, influences their perceptions and attitudes,

gives rise to suggestions for new organisational structures,

influences the formulation of curricula or curriculum guidelines,

contributes to the introduction of new teaching and learning methods, and

produces new teaching aids (Marklund, 1984).

Other possible uses are offered by Start (1975), Weatherhead (1979), Husen (1984) and Nisbet (1981). Start (1979, p.329) indicated that research can be used by policymakers for optimising decisions, for use as a palliative (to pressure groups) and in clarification of policy. Weatherhead (1979, p.521) described examples of the use of research as a source of "weak signals" of emerging issues in education.

Husen (1984, p.10) saw differential needs of policymakers at three levels. The practitioner requires clear cut information to assist in decision-making; the 'middlemen' look to research to identify new problems (the weak signals notion), while those at the top may more often expect research to help to understand the context in which policies are shaped. These roughly parallel the three levels described by Nisbet (1981, p.512): the information base for action; the intermediate level of development (and also in Nisbet's typology, evaluation); and the long term impact on climates of opinion.

Weiss (1980), in reporting on a survey of officials of mental health agencies, provided examples of different uses of research from the experience of these policymakers. She recorded that 57% of the decision makers reported that they used research though only 7% gave concrete descriptions while the other 50% spoke in general terms only. Uses for research included: finding what works (evaluation

research); keeping up with the field; ammunition for political wars; legitimising a position; reducing uncertainties and generally as an aid in formulating policy and setting direction. Weiss concluded that

> people in official positions ... interpret research as they read it in light of their other knowledge and they merge it with all the information and generalisations of their stock (Weiss, 1980, p.391).

The range of uses ring familiar with those in the education policy field where a similar range of uses to those mental health agencies might be anticipated.

Another way of looking at models of research use is provided by Weiss (1979). Weiss extracted seven meanings of research use and thereby created a typology of research use in policymaking. The first two models, the *knowledge driven* and *problem-solving models* have been outlined already. Difficulties with applying these models derive from the simplistic view of research and policy discussed above. Yet, as Weiss explained, this imagery is still prevalent, and prescriptions for improving use of research are derived from these concepts (Weiss, 1979, p.428). Thus, for example, improved communication or increased government control may be suggested. In the *interactive model* research is part of a complex process of decision-making with a range of people involved. The *political model* acknowledges the political nature of policymaking. Weiss (1979, p.429) claimed that only if all parties have access to research information is this a worthy model of research use. If outside parties are excluded from information or research is used to stall decisions, the *tactical model* of use emerges. Research may also be seen as *intellectual enterprise* in society, a form of use which would be difficult to isolate in policymakers. Weiss suggests perhaps the most frequent way in which social science research enters policy processes is through the *enlightenment model*.

Husen (1984) reduced these models to two: the enlightenment or percolation model, and the political/ tactical model. He dismissed the linear and problem solving models as he believes they seldom apply.

Kennedy (1984) also categorised use of research in two ways. The *instrumental* model in which "use consists of making a decision, and social science evidence is assumed to be instructive to the decision" (Kennedy, 1984, p.207). Kennedy dismissed this as having become something of a "straw man" in discussions on social problem solving, a view which accords with that of Husen. The other model Kennedy called the *conceptual model* which although it does not account for decisions, does account for much research "use". Kennedy states that

> the most important difference between the conceptual model and the instrumental model is this: whereas the central feature of the instrumental model is the *decision*, the central feature of the conceptual model is the *human information processor* (Kennedy, 1984, p.207).

This notion is an important one as it adds new dimensions to the conceptualisation of use or impact beyond that of the enlightenment or percolation model. Human information processors (teachers or administrators in education) already have a body of knowledge before receiving the research. As Kennedy (1984, p.207) puts it "they approach the evidence with a well developed, internalised model of the substantial issues at hand."

It is this working knowledge which is influenced by research. This proposition leads to the next, which is that

human information processors *interact* with the evidence, interpret its meaning, decide its relevance and hence determine whether and how they will permit the evidence to influence them (Kennedy, 1984, p.208).

From the research reported in the article, Kennedy makes the following important conclusions about the conceptual use of evidence.

1. Conceptual use of evidence consists of something other than the accumulation of new information ... it is a formative process in which evidence is acted on by the user.

2. ...(T)he formative process is not timebound. Users may continue to form and reform their ideas as they confront new evidence, accumulate new experiences, encounter new interests or entertain new beliefs.

3. ...(O)nce users interpret evidence and draw inferences from it, it is these interpretations and inferences rather than the evidence per se that are incorporated into the user's store of knowledge and applied to working situations (Kennedy, 1984, p.225).

Kennedy's conceptualisation has significant explanatory power in analysis of the use or non-use of research, nature of impact and potential linkages. Taken together with Weiss' notion of decision accretion in policy processes, it accounts for much of the difficulty facing researchers in their attempts to be convincing about the use and role of research in policy processes.

Establishing relationships

The analysis of reasons for non-use of research and emerging understanding of the range of possible uses have led to some propositions about establishing relationships between researchers and policy makers.

The initial responses, based on the assumptions of the linear instrumental model of research use, were along the lines of improved ways of reporting results or more direct control of research by directing funding. Although Angus (1981) and Huiltin (1984) describe models which support such decision oriented models, most authors tend towards development of a greater degree of understanding and support for enlightenment or conceptual models. It should be noted however, that both Angus and Huiltin's approaches to improved use of decision-oriented models share some important operating principles with enlightenment or political models.

Nisbet and Broadfoot (1980), after their extensive review of literature and interviews with educational administrators, concluded that

we are coming to the end of that era of educational research which saw the rape of reason by rationality ... and we are beginning to recognize the interrelation of values and intellect (Nisbet & Broadfoot, 1980, p.56).

They reiterate the need to look at the range of models of use and encourage exploration of various interactive models.

A central theme in establishing closer links between researchers and policymakers is ongoing communication and dialogue. Start (1975, p.328) noted that a crucial element in dissemination was that

key people received the report. He goes on to suggest that "discussion of the draft report with a selection of the key persons can be a successful dissemination tactic sensitizing executive thinking."

This approach reflects a traditional view of research, but the notion of the involvement of key people is a valid one. The communication however should be more extensive than simply at the dissemination phase. Angus (1980, p.584) indicated the communication that can occur at the various stages of research in different research modes. He argued for what he describes as the action-oriented mode in which researcher and policymaker work closely through all stages of the research. Vickery (1986, p.29), who worked as Director-General in the same government department as Angus, said "I would argue for a reduction in the suppliers-users analogy and an increase in joint partnerships."

Cohen and Garet (1975) flagged a warning here, however. They drew a parallel between applied research and discourse and raise some principles of discourse which are cogent to the proposition of joint partnerships.

> Discourse is possible only when all participants accept certain norms of communication.
> All interested parties must be able to initiate discussion, to establish or influence the
> rules of conversation, to put forward statements, to request elaboration and clarification,
> and to call other statements into question (Cohen & Garet, 1975, p.42).

Hall and Loucks (1982) proposed a contour research strategy as a means of bridging the gap between practitioners and policy developers through continued and adaptive interaction. This brings research into a central role in policy development and implementation. Sim (1985) saw this approach as a way of overcoming the issue of control of research.

> When a symbiotic relationship can be fostered between researchers on the one hand and
> policymakers and practitioners on the other, it is envisaged that the researchers would
> not only be able to become better pipers but also would be able to play the tunes they
> like (Sim, 1985, p.186).

Such symbiotic relationships have characterised much educational research in Sweden, which is well described in the work of Husen (1978, 1984) and Marklund (1984). Husen (1978) described the organisation of the commissions in Sweden that leads to a close relationship between research workers and policymakers. He cited the case of an extensive three year survey of education to assess the outcomes of the introduction of the comprehensive school structure.

> The design of the survey as well as its progress was discussed regularly over a three year
> period with the full Commission, which was presided over by the Minister for Education
> ... policymakers on the Commission had ample opportunity to familiarize themselves
> with research strategies and methodologies employed by the educational research
> workers as well as their theoretical and interpretive frameworks.

> It seems to me to be of great importance to establish at least occasional contact between
> researchers and policy makers. The dialogue between them should help to create more
> articulate conceptions of the problems and their implications (Husen, 1978, p.575).

Hoyle (1985) took the notion of dialogue a step further. He perceived that governing the acquisition, dissemination and utilisation of educational knowledge are two important principles. The first is that of *participation*, by which he meant that the subjects and the consumers of research become involved actively in the research. The second is *negotiation*, by which the products of research become an

agenda for discussion and are capable of yielding differing interpretations. These are important themes to pursue in the framework of Kennedy's (1984) propositions of conceptual use of research.

Postlethwaite (1984) drew together some of these themes in promulgating some principles for practice of research in interactive mode. He lists these in the following way.

1. *Facilitating circumstances.* (I)t may be necessary for the researchers to forge the links with the policymakers (p.148).

2. *Which links with which level of policymaker?* One proposition ...is "the more links the better" (p.198).

3. *What forms should the links take?* (T)he junior policymakers can be involved in the practical work ...(and) every attempt should be made to involve the appropriate policymakers in the organisational structure of a project (p.201) .

4. *Forms of language to be used.* Researchers must learn to express their ideas in non-technical language and learn to use policymakers where they can help. ...(P)olicymakers ... should attempt to learn some of the critical concepts (of research) (p.202).

Cooley and Bickel (1986) demonstrate how these principles can operate in practice. They offer additional principles for research in an interactive mode, including the importance of knowledge of the educational context and policy processes.

Models of linkage

Several authors have endeavoured to map the inter-relationships between research and policy. Angus (1981) took the steps in research and analysed interfaces between researchers and policymakers in different modes of enquiry. This is shown in Figure 5.

Figure 5   *Interfaces between policymakers and researchers in*
                 different modes of enquiry

1.   P——> Q——> R——> C——> I——> A   The academic mode

2.   P——> Q——> R——> C——> I——> A   The embryonic policy research mode
                            ▲

3.   P——> Q——> R——> C——> I——> A   The commissioned research mode
           ▲   ▲

4.   P——> Q——> R——> C——> I——> A   The in-house mode
    ▲   ▲   ▲

5.   P——> Q——> R——> C——> I——> A   The action oriented mode
    ▲   ▲   ▲   ▲   ▲
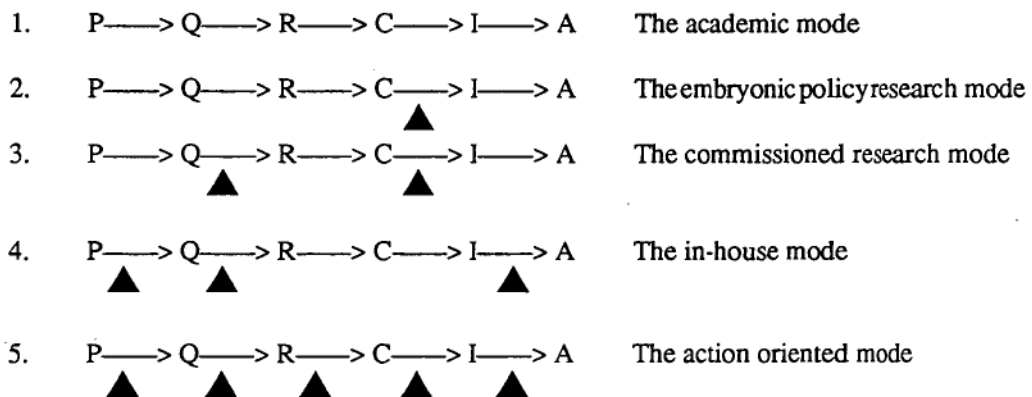
Source: Angus, 1981, p.584.

Where P = problem identification, Q = questions for study, R = information gathering and analysis, C = conclusions, I = implications, A = action. ▲ = denotes interface between researchers and policymakers.

The action-oriented mode reflects the beliefs exposed by Postlethwaite (1984), Husen (1978), Hall and Loucks (1982) and others. Angus commented on the use of the proposed action-oriented mode. "Such an approach may seem attractive on paper but turns out to be more difficult in practice." (Angus, 1981, p.585).

A different approach to interpreting the relationship between research and policymaking was provided by Huiltin (1984), seen in figure 6. It is a three dimensional matrix, with axes depicting political and decision making mode of responsibility, subjects and topics to be researched or developed and, types of actions to be undertaken in research and development process. The relationship may be analysed with respect to each item on the three axes. An example related to this approach in practice was provided by Davies (1982).

Figure 6   Relationship — Education research and policy-makers — programme executioners
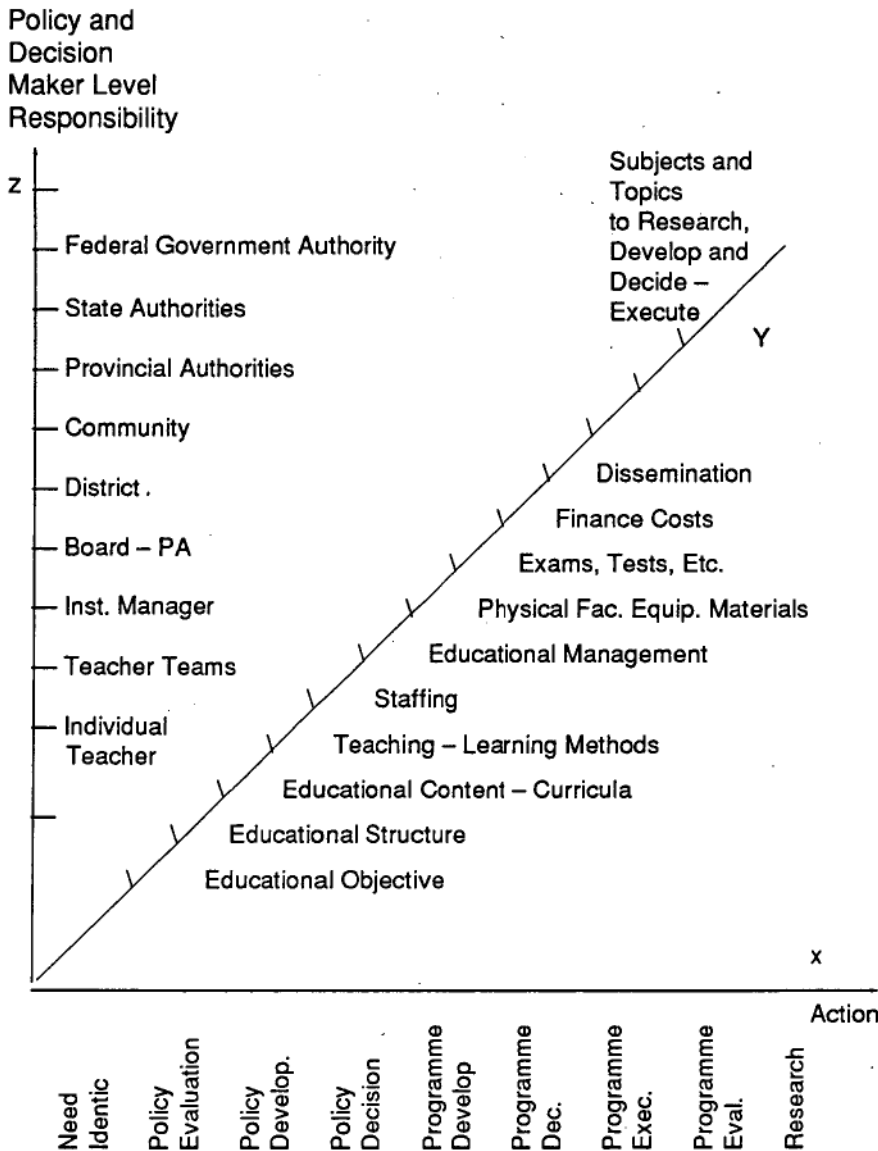
Source: Huiltin, 1984, p.75.

Huiltin's model may be useful in analysing elements which must be accounted for in use of research in policymaking, but it does not assist in interpreting the nature of the immediate interface between researcher and policymaker in specific research contexts.

Figure 7 **A tentative model of the research/policy relationship**
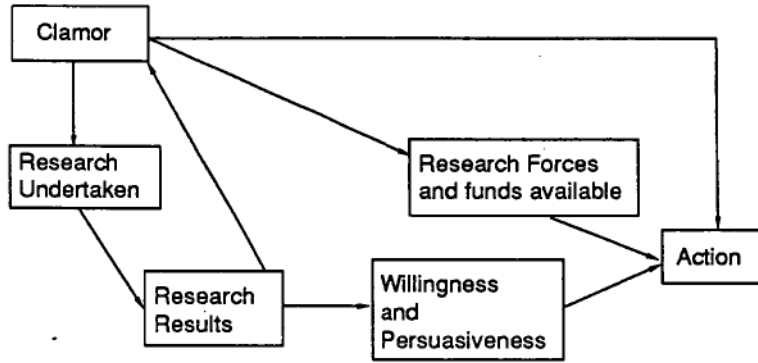
Source: Adapted from Postlethwaite, 1984, p.203.

Postlethwaite (1984) in the same symposium advanced a more elaborate approach to the linear model to account for political elements of the policy process and the attitudes and values of policymakers (Figure 7). Postlethwaite defined the constructs in terms of manifest variables and indicated a number of pathways through the model which then lead to policy action.

The model is still essentially an instrumental model, and as Kogan in his overview of the proceedings commented "it does not allow for Husen's percolation or Weiss' partisan, interaction or enlightenment applications" (Husen & Kogan, 1984, p.72). To this could be added Kennedy's (1984) human information processor model. Weiss (1978a) offered a model to describe the influences on key actors in the research-policy system (Figure 8). This model could incorporate such categories of research use, since it introduces the policymaker as an actor in the policy process and indicates the influence of personal interaction within the institutional setting.

Figure 8 **Influences on key actors in the research policy system:**
Researchers and policymakers
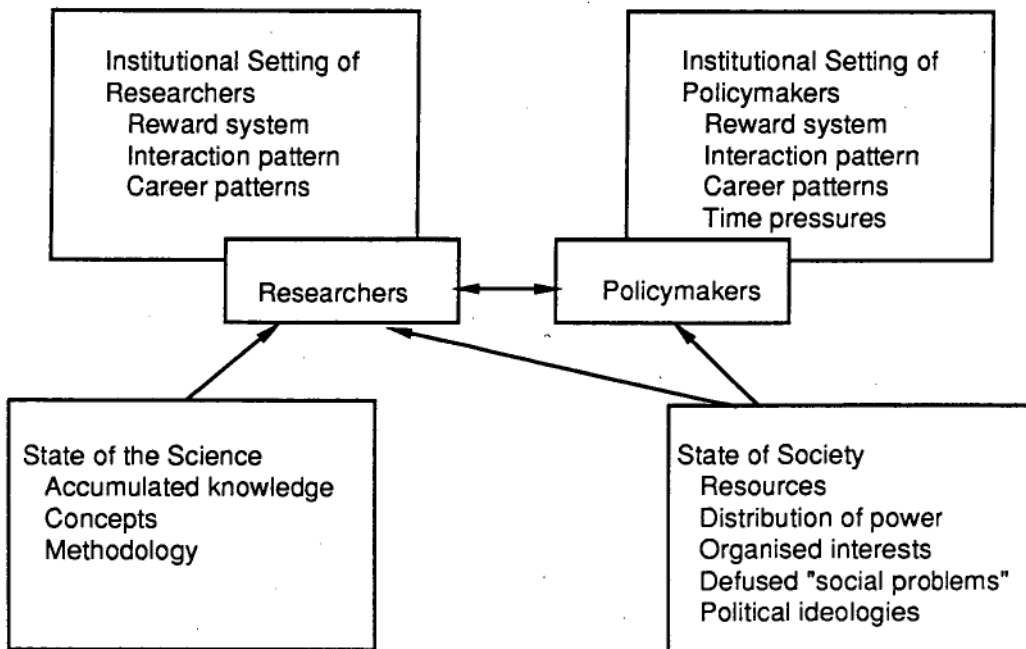
Source: Weiss, 1978a, p.36.

None of the models yet advanced account for all elements of the research and policy linkage.

Synthesis of related literature

This chapter began with the proposition that for many writers there exists a weakness in links between research and policymaking. The more recent literature indicates that a more positive view is emerging, despite gaps in understanding, riders to interpretation and limitations on conditions for effective linkage. Two themes underpin these more optimistic views: a reinterpretation of the notion of "use", and practical examples of attempts to forge links.

The notion of use (and hence explanations for "non-use") has expanded from a linear, instrumental relationship between research and policy outcomes, to include a range of effects variously expressed as enlightenment (Husen 1984), influencing climates of opinion (Nisbet, 1981), contribution of ideas (Cohen & Garet, 1975), or a conceptual model (Kennedy, 1984). Husen (1984) and Nisbet (1981) indicate a place for both forms of use by policymakers: in an instrumental sense as an information base for action by practitioners and in an enlightenment sense to provide the basis for development and in understanding context and climate.

The terms "use" and "impact" are used loosely and create some difficulty in interpreting underlying concepts. 'Use' has instrumental connotations which do not fit comfortably with enlightenment or conceptual models of research use. "Impact" is sometimes used as a synonym for use, while other authors use it as a measure for judging use. In part, this confusion may be attributable to lack of understanding and clarification of important issues in policy processes. In part it also reflects the changing interpretations and evolution of the concept of use. Marklund (1984) comments that the term "effects" may be more appropriate.

The second theme underpinning the more optimistic view of a research-policy relationship emerges in a more pragmatic way. Examples are provided from practice at both national (Marklund, 1984; Husen, 1978) and local (Angus, 1981; Hocking, 1984) level. Efforts to bring researchers and policymakers together through participation and dialogue have demonstrated a willingness to improve communication and have resulted in products of research being used (Marklund, 1984; Cooley & Bickel, 1986). Examples of such linkages are however not widespread. This may be partially explained by the lack of understanding of the nature of use or possible use, impact or effect of research on policymaking. But two other important elements also influence this relationship: the conception of research and the nature of the policy process.

Some attention was given in the literature review to the issue of research itself. Various authors (Carley, 1981; Husen, 1984; Nisbet, 1981; Stake, 1981) comment on the nature of academic research and the tension this creates with providing meaningful, accessible information for policymakers. The matter is of some debate within the academic community (Kerlinger, 1977; Slavin ,1978; Dockrell & Hamilton, 1980; Corson, 1986; Codd 1983) and remains a key issue for those who seek to encourage links between research and policy (Hoyle, 1985).

The debate leads to two different approaches to how the issue of "non-use" might be addressed. Researchers seeking to maintain independence yet encourage policymakers to use research emphasise the need to improve communication and dissemination strategies (Start, 1975; Hoyle, 1985).

In contrast, many researchers concerned to improve the link between research and policymaking urge greater participation and negotiation (Husen, 1984; Postlethwaite, 1984; Angus, 1981; Hocking, 1984a; Hall & Loucks, 1982; Hoyle, 1984; Cooley & Bickel, 1986). Improvement in communication is emphasised in this approach also but, unlike the view of academic researchers, is based on dialogue (Husen, 1978; Hoyle, 1985) between researchers and policymakers.

Another approach argued by some researchers is a modification to conceptions of research to provide more naturalistic data in relation to real problems (Nisbet & Broadfoot, 1980; Stake, 1981; Corson, 1986). Another dimension to the place of research in policymaking also emerged. If research is regarded as a political activity or social practice (Codd 1983) or learning process for those engaged in it (Hocking 1984), then involving policymakers in research processes is a powerful agent for change.

Much of the literature on research use or non-use reveals a naive or simplistic view of the policy process. Rarely is consideration given to the policy context or processes in which use or impact is analysed. Only occasionally (Suppes, 1978) are the types of policy arena specified.

The literature in policy studies is vast and has only been lightly touched upon in this review. Selection was made on the basis of work actually relating to educational policy and very basic elements of policy theory which are relevant to interpretation of research and policy links in the educational context. While governments and agencies tend towards improving their policy processes (Hocking, 1984) in ways which might encourage instrumental use of research, the main emphasis of the literature reflects the complex and diverse nature of policymaking (Harman, 1980a; Steinle, 1981). Key factors relevant to the role of research in policymaking include the nature of decision-making (Weiss, 1980; Mitchell, 1985; Husen, 1984; Cohen & Garet, 1975), the cyclical nature of policy (Rose, 1976), the range of policy actors and influential interest groups (Iannaccone, 1967; Harman, 1980a; Finch, 1986), the range of models of policymaking (Harman, 1980a) and the phases in the policy process (Harman, 1980a; Jones, 1977). Finally it is clear that values and beliefs are recognised as a major component of policy (Nisbet & Broadfoot, 1980; Cohen & Garet, 1975).

Only recently have authors started to incorporate these concepts within interpretations of use of research (Husen, 1984; Nisbet, 1981) and establishing relationships between research and policymaking (Angus, 1980; Huiltin, 1984; Husen, 1978; Cooley & Bickel, 1986). Some models have been proposed which reflect particular aspects of the relationships (Huiltin, 1984; Postlethwaite, 1984; Marklund, 1984), interfaces between researchers and policymakers in different modes of enquiry (Angus, 1981) or influences on key actors (Weiss, 1978a). None of these models adequately describe all the elements, or the dynamics, of possible research and policy relationships.

Summary

This chapter presented a review of literature on the relationship between educational research and policymaking. A range of interpretations, insights and models to describe the past, current and possible future links between research and policymaking was revealed.

The review started from the widely-held view that educational research has little impact on policy making. Explanation for non-use of research was considered and the possible nature of impact was analysed. Elements of the debate on the nature of academic research and the influence of its conception on research policy links were documented. Some concepts from the broad field of policy theory were introduced with particular reference to the need for understanding policy processes as a basis for interpretation and intervention. The possible uses of educational research in policymaking were discussed, followed by some propositions about establishing relationships. Some tentative models to express linkage between researchers and policymakers and interrelationships between research and policy decisions were described. The review concluded with a synthesis which drew together an overview of the literature.

It is clear that the relationship between research and policymaking is not well understood, though some educational researchers are emerging from the trap of scientific paradigms and elitist conceptions of the research endeavour to address other aspects of their activity. There is evidence of the influence of research which goes deeper and lives longer than simple instrumental use. The evidence is more than a search for self-justification by researchers, yet it lacks a sound conceptual base and documented evidence.

As such, the literature does not offer a clear framework for research. However for the purpose of the study, five themes emerge as critical elements to be addressed. These are: the nature of policymaking and aspects of policy processes; the nature of research and research processes; conceptions of use, impact or effects; elements of linkage; and timing.

The first four of these themes have been dealt with in detail in the literature review and the synthesis. The fifth, the issue of timing, emerges explicitly or implicitly in a number of forms: as a rationale for non-use of research; as a dimension for analysing impact; as an expedient in facilitating use for particular purposes and as a variable component in different policy processes.

These five themes help to shape the direction of the study and the development of a conceptual framework.

Chapter 3: Methodology

The problem statement

The central problem of the research was to investigate possible relationships between research and policymaking. The study was undertaken in a context of deliberate attempts within the Research Branch of the Education Department of Tasmania to create linkage, to facilitate the uptake of research and to encourage the use of information in policymaking. Whilst the attempts were deliberate by the researchers, no systematic investigation was made at the time of the processes used or of their outcomes in terms of impact on policymaking. While the ideas flowed within the Research Branch, the practices were not examined in light of theories of policymaking or research/policy linkages, and were not fully documented in a transferable form.

The study sought to address these issues through the series of questions and sub-questions outlined in Chapter 1.

Methodology

A case study approach was adopted to provide the basis for analysis and development of some theoretical propositions. Nisbet and Broadfoot (1980) indicate that a range of types of study is needed to illuminate issues of research and policy relationships. They argue that

> the most illuminating theoretical contributions require a body of supporting evidence at 'lower levels'. In particular, there is a case for trying to establish 'intermediate level' principles, which may be a stepping stone from the specific to the theoretical (Nisbet & Broadfoot, 1980, p.62).

They highlight the tendency to undertake specific studies of impact based on a linear model of research and policy relationships, and suggest that analytical studies which seek to establish factors influencing impact "are more likely to produce insights if they are based on an interactive model" (Nisbet & Broadfoot, 1980, p.62). The difficulty here lies in the absence of such a model, except in the most general terms.

It was therefore concluded that the most appropriate approach for the study was to undertake case studies of research which could have policy implications and which was undertaken with some strategies to attempt to integrate the research into policy processes. The evidence from the cases could then be examined within a postulated conceptual framework for an interactive model of the research and policy relationship.

Adelman et al. (1982) claim a number of possible advantages for case study as a research technique.

1. (Case studies are) 'strong in reality'..., down-to-earth and attention holding, in harmony with the reader's own experience and thus provide a 'natural' basis for generalisation.

2. Case studies allow generalisations... . Their particular strength lies in their attention to the subtlety and complexity of the case.

3. Case studies recognise the complexity and embeddedness of social truths.

4. Case studies ... may form an archive of descriptive material sufficiently rich to admit subsequent reinterpretation.

5. Case studies are a 'step to action'. They begin in a world of action and contribute to it.

6. Case studies present ... data in a more publicly accessible form.

(Adelman et al, 1982, pp.12,13)

There is little development of theories and concepts to analyse research and policy linkages. It was therefore considered that case study was a most appropriate strategy to describe the possible elements which might be considered in developing such theoretical frameworks.

Conceptual framework

The nature and purpose of a conceptual framework

A conceptual framework lays out, in graphic and/or narrative form, the main dimensions for investigation. A researcher approaches a study with some orienting ideas or foci which can be allocated into constructs or "bins". Into these bins, the various detailed elements may be allocated.

> Bins come from theory and experience, and (often) from the general objectives of the study envisioned. Laying out these bins, giving each a descriptive or inferential name ... is what a conceptual framework is all about (Miles & Huberman, 1984, p.28).

The conceptual framework has several purposes. It provides a means of focussing and, to some degree, bounding the collection of data. It facilitates clarification of research questions and sources of data. The framework ensures comparability in multi-site case studies and forms the basis for subsequent data reduction. Finally, the conceptual framework provides the logic for organising the analysis of the data. It should be noted, however, that the conceptual framework should not limit the introduction of new elements which may emerge in the course of data collection, nor constrain interpretation of the significance of, or relationships between, the various elements.

Weiss' model and some modifications

Weiss (1978a) outlined a model displaying the influences on the key actors in the link between research and policy. This model is illustrated in Figure 8, p. 29. Of the four attempts to develop a model of the research/ policy relationship cited in Chapter 2 (Angus, 1981; Huiltin, 1984; Postlethwaite, 1984; Weiss, 1978a), Weiss best portrays the range of inputs and variables postulated in the literature review. It also reflects the general organisation of commissioned or in-house research.

Weiss' model provided a starting point from which to build a conceptual framework as it displays the notion of interaction between researchers and policymakers. However, to develop an adequate conceptual framework, elements were added from all three sources outlined by Miles and Huberman (1984, p.28, quoted above). Further ideas were drawn out from the literature review, emerged from practical experience and emanated from the objectives of the study. The major components to be added to the model were policy processes, linkage, and outcomes. Some modification was also necessary to

Figure 9 **A conceptual framework of the research/policy linkage**
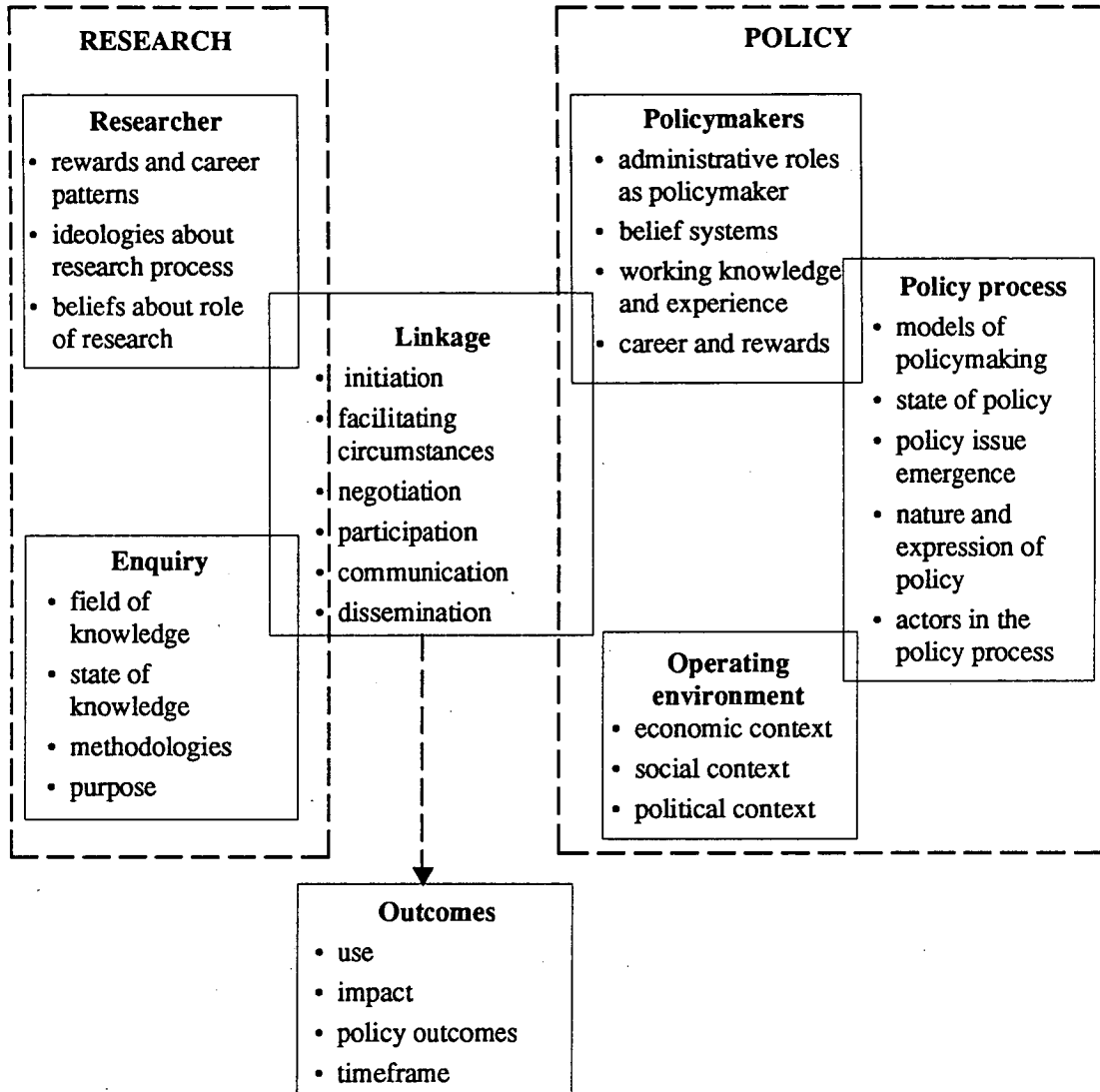
existing components of the Weiss model in order to accommodate the new components and to clarify the concepts in such a way as to lead to variables for data collection.

The modification to the Weiss model is shown in Figure 9, above. It should be noted that at this stage it provides only a conceptual framework and is not intended to display all the inter-relationships between the elements or components.

Component 1 : Policy

This component is derived from policy theories, organisation and management theory, and studies of links between educational research and policymaking. It is argued that the organisational and social context is a critical element in both emergence of policy issues and in their manifestation in policy development. Research does not impinge on policy in a vacuum but in complex social settings which generate other forces influencing ultimate policy decisions. The policy process itself is another critical

factor, particularly as it involves individuals with varying positions within the organisation, levels of knowledge and experience, policymaking capacities and capabilities, and personal as well as corporate agendas.

These factors are significant variables in the research and policy link. In the conceptual framework, the component is divided into three inter-related subcomponents: operating environment; policy process; and policymakers.

Subcomponent A — Operating environment

Hall (1977) lists seven conditions of the general environment which contribute to what goes on within an organisation and the consequences of its actions. These conditions are technological, legal, political, economic, demographic, ecological and cultural. Policymakers respond to these forces in society in developing policy decisions (Cohen & Garet, 1975; Harman, 1980a). Weiss (1978a) acknowledges the influence of the state of society on both policymakers and researchers and focusses on the following elements: resources; distribution of power; organised interest groups, defined social issues, and ideologies.

The political conditions reflected in distribution of power and organised interest groups are clearly identified in political theories of policymaking (Harman, 1980a) and are included as important elements of Postlethwaite's (1984) model of research/policy relationships. As well as forming part of the external environment and elements of policy processes, political forces can influence use of research (Worth, 1978). Economic conditions or resources clearly influence the scope of policy alternatives as well as underpinning social issues. Resources in society are a key factor in policy development (Steinle, 1981). Ideologies or cultural conditions shape attitudes on social issues and create the values which form a major component of policy (Nisbet & Broadfoot, 1980). The social context also incorporates the interaction of technological, demographic, legal and ecological conditions. Defined social issues emerge from all the environmental conditions (Hall, 1977) and clearly "a great deal (of education policy) is related to broad philosophical issues or to questions about political and social values and goals" (Harman, 1980b, p.153). Cooley and Bickel (1986, p.8) emphasise the need to know and understand the context of educational issues.

Subcomponent B — The policy process

Many studies focussing on the use or non-use of education research in policymaking pay little attention to the particular context of policy processes in which the research may have been expected to be applied. On the other hand, general reference is made to the significance of features of policymaking believed to influence use, such as timing of research (Worth, 1978; Husen, 1985; Start, 1975; Anderson, 1984), and interest groups or individuals who use research for political purposes within the policy process (Harman, 1980a; Start, 1975; Worth, 1978). It can be argued however, that

> the role of the administrator, or any other participant, will be comprehended best in the
> context of an understanding of the policy process as a whole (Harman, 1980a, p.70).

Five elements are identified as significant within this subcomponent. They are derived from the field of policy, and analysis of the research and policy linkage. The particular policymaking context for this study has been described in Chapter 1. It was evident that a number of different people were involved in policymaking and that different processes were involved (Selby Smith, 1980; Hughes, 1982). An analysis of policy changes, whether or not research is involved, must consider the conception and expression of policy, existing policies and the processes by which policy development occurs.

Models of policymaking. Some different ways of viewing models of policymaking have been described by Harman (1980a). Although from a theoretical perspective these overlap or may be conflicting, they provide a basis for analysis of the kinds of activities from which policy emerges. For the purposes of analysis, elements of policy models are considered rather than the range of theoretical models postulated. These elements include: the degree of formality of policy processes; levels at which decisions are made; corporate or singular decision-making; rationality of policymaking; processes of decision-making.

State of the policy. Policy rarely emerges *de novo* (Rose, 1976). In an organisation of the scale, scope and longevity of an Education Department, explicit or implicit policy exists, at least at a general level. Over the years, policy related to a particular issue may remain static, be clarified or change direction (Rose, 1976). Thus, policy changes which research has potential to facilitate at the policymaking phase are likely to be marginal rather than major and must be seen in the context of the prior policy state. The prior policy state is noted as the policy context.

Nature and expression of policy. A central concept is that of "policy", but it is evident that the term is used in a variety of ways to describe a diverse range of activities (Heclo, 1972; Harman, 1980a). It is used, both in everyday language and in policy studies, as a synonym for goals, plans, programs, decisions and legislation. Harman (1980a, p.56) resorts to a definition of policy as "a course of action towards the accomplishment of some intended or desired end". Just what constitutes a course of action is debatable. Harman excludes goals which do not usually include direction for their achievement. This could, for example, be considered to exclude some political parties' pre-election policies on education when clear courses of action are not specified. Again, how formal must a "course of action" be to constitute policy? The formality of the course of action is likely to be linked with the styles of policymaking which leads to its formulation, and to the constraints, influences and interests beyond education.

Within a given education policy issue, the expression of that policy through courses of action may be diverse, inter-related and multi-level. A broad policy of positive discrimination for students in lower socio-economic settings for example, could be expressed through a formal process of monetary support to low income families, to differential staffing of schools, selective teachers' appointments, additional opportunities for extra-curricular activities for students, and so on. Expression of policy in action is dependent not only on the policy stance but on the policy implementation processes: "the two are functionally integral and analytically almost inseparable" (Tymko, 1979, p.230).

Policy issue emergence. The emergence of a specific policy issue from the general socio-economic environment or from within the educational field is described by Postlethwaite (1984) as "clamour". He defines this as the "frequency and amount of noise from parliament, teachers' unions, pressure groups other than teachers' unions, and the media" (Postlethwaite, 1984, p.204). This view is based on the rational model of policymaking in which the process has its starting point in the recognition of the existence of a problem. However, if policy changes are of a cyclical or incremental nature, clamour may be negligible or confined within the Departmental sphere rather than the operating environment at large.

Actors in the policy process. All models of policymaking incorporate the notion of policy actors, that is those individuals and representatives of interest groups who participate in the policy process in education. These include elected officials, administrators at system and school level, official committees and boards, interest groups (including teacher unions), teachers, students and parents. Some of these participate in the whole policy process, others mainly at implementation or at policymaking

stages. Extent of influence of any given policy actor may differ according to the different policy issue/ arena. And with the intermingling of policy and its implementation, those perceived as essentially policy implementors, for example teachers, may become policymakers as policy is remade in practice (Finch, 1985).

The focus of the present study lies with the policymaking phase of the policy process. The elements within the following subcomponent, "policymakers" comprise constructs surrounding policy actors who have some official place in the policy process. They are administrators and leaders within the organisation or interest group. Specifically, data were gathered from those policymakers involved in linkage processes in the various cases. As the understanding of policy processes within education became more sophisticated, policymakers involved in the activities of the Research Branch of the Education Department of Tasmania more generally represented the scope of policy actors.

Subcomponent C — Policymakers

This subcomponent is derived from the work of Weiss (1978) who recognised the significance of the policymakers' interaction with their institutional setting through careers and reward systems as a variable influencing use of research. The concepts of working knowledge and belief systems (Kennedy, 1984; Weiss, 1980; Husen, 1984) and administrative roles (Mintzberg, 1973) bring other insights into the operational world of the education policymaker which may influence his or her use of research.

There are four elements to this subcomponent. The constituents of this subcomponent are those policymakers actually involved with the research.

Administrative roles as policy actors. It is clear that policymaking is not simply a question of decision-making (Weiss, 1980; Husen, 1984; Nisbet & Broadfoot, 1980). What other activities do administrators do which contribute to the policy process? Mintzberg (1973) provides a framework for analysing the manager's role, which although based on evidence from business has been applied to managers or administrators within government agencies. Webb and Lyons (1982) applied Mintzberg's system into the sphere of educational organisations and developed some illustrative definitions (Figure 10).

Figure 10   **Administrative roles in an educational setting**

Interpersonal roles
- Figurehead (ceremonial)
- Leadership roles (formal)
- Motivator roles
- Control (discipline)
- Liaison and contacts
- Personal problem resolution

Informational roles (communication roles)
- Spokesman
- Consultation
- 'Focus and filter' — exchange of information
- Monitoring
- Dissemination

Decisional roles
- Disturbance — organisation problem solving
- System maintenance
- Negotiation — arbitration
- Resource allocation
- Organising major tasks/events
- Development projects — initiate and foster
- Long term planning

Source: Webb & Lyons, 1982, p.99

The illustrative definitions of each of the three categories of role clearly indicate how many kinds of administrative activities constitute policymaking. A narrow focus on decisional aspects of policymaking overlooks important elements such as leadership, motivation, exchange of information and dissemination in all phases of the policy process. Exploring the possible uses of research by policymakers demands examination of input to aspects of the administrator's role other than simply decision-making, particularly in terms of interpreting non-linear uses of research.

Careers and rewards. According to Weiss (1978a) and Worth (1978), policymakers may be influenced in their attitudes to and use of research by the rewards and career patterns within their institutional setting. This is a corollary of the concept of administrative roles for it is through reinforcement of aspects of these roles that personal rewards and future career patterns are determined.

Working knowledge and experience. Kennedy's (1984) human information processor model introduces the concept of the policymakers' working knowledge and experience as the basis from which they interpret research. As a substantive theory of learning, the notion of the human information processor postulates that evidence is integrated into an individual's existing knowledge through a process of interaction and interpretation which results in a personal understanding of the new evidence in the context of prior knowledge. Translating this concept to the administrative setting, these human information processors "approach the evidence with a well developed, internalised model of the substantive issues at hand" (Kennedy, 1984, p.207) and "interact with the evidence, interpret its meaning, decide its relevance and hence determine whether and how they will permit the evidence to influence them" (Kennedy, 1984, p.208). She goes on to demonstrate that where several people were involved

> in principle each participant could derive a unique interpretation of the evidence, and
> each interpretation could be valid within the context of its creator's working knowledge
> (Kennedy, 1984, p.208).

Cooley and Bickel (1986, p.137) suggest it is important to encourage integration of the information produced by researchers into the working knowledge of key system actors.

Working knowledge derived from experience is clearly a significant element in accounting for the way in which policymakers may use research in both conceptual and instrumental modes, but especially in the former.

Belief systems. It is evident that values form a significant element of policymaking (Cohen & Garet, 1975; Nisbet & Broadfoot, 1980). One element of these values is the belief system of particular policymakers, in terms of both educational philosophies and attitudes to ways in which their ideas develop. Values have shaped the knowledge base on which new evidence interacts in the integration of new knowledge into the existing knowledge.

Component 2: Research

This component includes the institutional setting of researchers and state of science indicated by Weiss. It also includes the concepts concerning the nature of research raised by Carley (1981), Husen (1984), Kerlinger (1977) and others, and the methodological, philosophical and epistemological issues raised by authors such as Stake (1981), Dockrell and Hamilton (1980) and Corson (1985). A definition of research as a systematic form of enquiry is adopted.

Subcomponent A — Enquiry

This subcomponent describes the research activities in terms of knowledge and method. Weiss (1978) perceives the maturity of a field of enquiry as a limiting factor on the authoritativeness of the research. On the other hand, certain characteristics of research may be seen as themselves limiting accessibility to those outside the scientific or academic community and capacity to enlighten policy issues. As a result it is claimed that there is a

> deep seated ... disjunction between the commonsense knowledge held by the educational community and the operational framework currently used by educational research (Hamilton, 1980, p.154).

Field of knowledge. Enquiry into education must rely on constructs, theories, assumptions and methodologies from a range of disciplines, since it has no unique core of a science of education (Hocking, 1984). Thus insights into human learning in institutional settings (which is broadly what educational research is about) can be derived from psychology, sociology, political science, economics, philosophy, history, anthropology, even law and medicine (Hocking, 1984; Scriven, 1983; Anderson, 1984; Nisbet, 1980). Scriven (1983, p.8) argues that

> educational research is not ... to be defined as "all research that in any way involves concepts related to education" ... but as "research that contributes to the facilitation of education".

This definition would be difficult to apply and is inconsistent with that adopted by funding agencies such as the federal government through the Australian Research Grants Scheme. In practice, "researchers operate at a high level of specialisation, which means that they tend to isolate a slice of a problem" (Husen, 1984, p.10). Nisbet (1980, p.2) describes this as "the fissiparous trend in current educational research". The consequence of this trend is that

> scientists tend to study what they know how to study — not necessarily what policymakers would like them to study. They also tend to reconceptualise policy problems to fit the conceptual paradigm with which they approach the exploration of social processes (Mitchell, 1984, p.36).

The result of this approach is that "each profession has its own aims and seeks to emerge with a technical solution" (Bruner, 1980, p.28).

In contrast to the policymakers' perspective,

> a researcher places particular aspects of the learner, the learning process, the learning situation or the organisation of learning under a microscope and examines the part in detail ... Typically, because it takes place in a theoretical framework, research provides a unilateral view of educational problems (Hocking, 1984, p.16-17).

Each discipline area which can contribute insights into education has its own assumptions, concepts, theories and research methodologies. The extent to which these are congruent with the beliefs, knowledge base and experience of policymakers and are appropriate to addressing the policy issue may influence the way in which the research may be used.

State of knowledge. Weiss (1978a, p.37) contends that "researchers are affected by the state of their science; its maturity in theory, knowledge and method sets limits on the authoritativeness of their research". Until relatively recent times, educational research has been dominated by educational

psychology (Nisbet, 1980; Hamilton, 1980). This has had consequences not only for methodology, but also in other disciplines in relation to education. Dockrell (1980, p.12) argues that "the appropriate puzzles to be solved are apparently those defined in the early years of this century". This suggests a low level of sophistication of social science research which deprives it of the capacity to produce predictable results. This lack of sophistication also reflects the great complexity in human behaviour and learning. A consequence of the state of social science knowledge is that all too often it is equivocal (Start, 1975).

Within the different fields of knowledge which contribute to educational research, the state of the science varies in its information base and conceptual development, as well as with its internal consistency and consensus.

Methodologies. Hamilton (1980) and Nisbet (1980) postulate that educational research has been dominated by mainstream psychology. As a consequence, research methodologies have pursued an aspiration to scientific precision in research design, hypothesis construction, and data collection and analysis. Over the years, "definition of legitimate techniques of investigation" (Dockrell, 1980, p.12) have been constrained by the dominant "scientific" paradigm. Recently, there has been a swing away from this style of research (Nisbet, 1980; Kogan, 1984; Finch, 1986), which may be explained by a swing away from absolutist consequences of "scientific" measurement, scepticism about precision in behavioural science which may overlook significant elements because they are non-quantifiable, and reaction against "dishonesty" of hypothetico-deductive methods which both hide and reinforce the researchers' assumptions. Newer approaches seek to explore the reality from the inside and in its totality. The last twenty years or so has seen the emergence of a range of styles of research (Figure 11).

Figure 11   **Spectrum of research methods**

1 *Experimental method* Empirical Educational science	2 *Exploratory survey* Fact-finding as a basis for decision-making	3 *Curriculum development* New syllabus content and method. Field trials and evaluation	4 *Action research* Interventionist	5 *Open-ended inquiry* Grounded theory Participant observation Illuminative evaluation.
The agricultural model Experiments to improve your products by manipulating treatments			*The anthropological model* Go and live there and see what it is like	

Source: Nisbet, 1980, p.3.

Caplan (1977) uses a classification of research methodologies in analysis of use and demonstrates that social statistics and program evaluation were most used by policymakers. His notion of use is limited to an instrumental, linear model but clearly the element of methodology must be considered in the research and policy linkage (Mitchell, 1984).

Purpose. Much of the debate surrounding the contribution of research to policymaking has an underlying theme of the implicit or explicit purpose for which the research was undertaken (Husen & Kogan, 1984; Cooley & Bickel, 1986). The distinction is made between the "quest for knowledge" model and the "improvement of practice" model (Scriven, 1983, p.8). This distinction is also referred to as "basic" and "applied" research (Kogan, 1984), or "conclusion oriented" and "decision oriented" enquiry (Cronbach et al., 1969). While this distinction is germane to discussions about the use of

research and becomes intertwined with arguments on credibility, integrity and validity of research endeavour, it has its drawbacks.

> The distinction drawn between decision oriented and conclusion oriented research is unhelpful precisely because it focusses on the writer's intention. What the reader needs are criteria that will help him to see the relevance of a report to his own concerns, practical or theoretical (Dockrell, 1980, p.12).

Scriven (1983) believes that equating "applied" science with "practical" science reveals an implicit value system and a hierarchical view of "basic" over "applied" science.

In practice, it is evident that research falls along a continuum of purpose, partly for the reason suggested by Dockrell above, and partly because of the range of possibilities of decision-making from broad generalisation of principles to specific narrow decisions. Further, purpose may be perceived differently by different individuals.

Subcomponent B — Researchers

Weiss (1978a) recognised that researchers, who by definition in her model are social scientists whose government funded research is expected to contribute to the mission of a federal agency, are strongly influenced by the institutional settings in which they work. The influences are manifested in rewards and careers of researchers, beliefs about the role of research and credos surrounding the research endeavour.

Rewards and career patterns

> Researchers are usually performing their tasks at universities, but in recent years to a growing extent, also at institutions which are part of public agencies. They tend to conduct their research according to the paradigms to which they have become socialised by their graduate studies. Their achievements are subject to peer review which they regard as more important than assessments made by their customers in public agencies. Status among researchers is determined not primarily by seniority or by position in an organisational hierarchy, but by the assessment of the quality of their research by the scholarly community in their field of specialisation (Husen, 1984, p.10).

Weiss (1978a) adds that this reward system is expressed through publication in books and journals which tend towards the mainline interests of the discipline and reinforce the knowledge building functions of the university. Thus a fundamental element of the reward system and career opportunities is built around publication of a certain type: a type often seen as critical in the dysfunction and lack of use of research by policymakers (Start, 1975; Worth, 1978; Husen, 1984).

Ideologies about the research process. The value system underpinning the research process can create tension between researchers and users of research (Husen & Kogan, 1984; Kerlinger, 1977; Start, 1975). Research is taken to mean disciplined enquiry which demands rigour, integrity, quality standards and a degree of independence from external influences in its undertaking. Whilst advocating greater flexibility, especially in methodology, writers agree that the standards of disciplined enquiry must not be compromised (Nisbet & Broadfoot, 1980; Dockrell & Hamilton, 1980; Hocking, 1984). Nevertheless, finding a balance between maintaining researcher integrity and exploring interaction through research (Marklund, 1984; Angus, 1981; Hocking, 1984) is a key influence on researchers' activities in the research and policy relationship.

Beliefs about the role of research. Beliefs about the role of research are revealed by attitudes of researchers to the place of research in society, to their approaches to methodology and interpretation (Dockrell & Hamilton, 1980; Husen & Kogan 1984;Scriven, 1983; Corson, 1986; Degenhardt, 1984). Other authors (Codd, 1983; Hocking, 1984; Allender, 1986) emphasise the personal and political aspects of research as a process. The stand taken by researchers with respect to the role of research in society is argued to be shifting, perhaps in some cases for pragmatic reasons consequent upon reduced available funding. Others may seek to contribute in a more proactive way to the betterment of society and recognise research (both in process and in product) to be a powerful tool for change.

Component 3: Linkage

The links between researchers and policymakers are postulated as key factors in whether or not research is used in policymaking. Aspects of linkage are addressed in emerging models of research and policy relationships (Angus, 1981; Husen & Kogan, 1984; Kennedy, 1984). Weakness in linkage which contributes to non-use are indicated by Worth (1978), Anderson (1984), Start (1975) and others. For the purpose of construction of a conceptual framework, these weaknesses are translated into constructs, the application of which can facilitate or impede linkage.

Initiation. Marklund (1984) and Husen (1978) demonstrate that commissioned research can have a positive input into policy processes. Sim (1984) reports similarly in a rather different social and political context. Angus (1981) in his sequence of models of research and policy links (see Figure 5) perceives that commissioned research frequently has two key interfaces: at the delineation of problem area and the questions of interest (commissioning or initiation phase) and at the draft report phase when the commissioning agents may wish also to be involved in developing implications from the conclusion of the study. This second step is not integral to the commissioned research model: some agencies, once research is commissioned, have no further input until the final report is presented.

It is generally assumed that since the research has been commissioned and presumably is an issue of concern, its findings will be acted upon. There are many reasons why this may or may not be true (Kogan, 1984, p.82). As a corollary, it may be assumed that non-commissioned or "free" research is less likely to be used by policymakers. Whether or not this is true, some would argue that since the wider social issues impinge on both policymakers and researchers, they would share many concerns in common. Many researchers are ambivalent on what they perceive as a compromise between their independence and freedom on the one hand and a desire for financial support and public acknowledgement for their enterprise.

Initiation of research was used as one criterion in selection of cases for investigation.

Facilitating circumstances. Marklund (1984) and Husen (1978) describe well-established processes for linking research to policy processes in Sweden, through interaction between Boards of Education and researchers. Other types of "facilitating circumstances" (Postlethwaite, 1984, p.198) are described by Angus (1981) and Hocking (1984) in operating in the in-house mode. Contact is maintained with policymakers either through serving a committee of enquiry or by establishment of an advisory committee to liaise with researchers. In both cases, a group of policymakers has ongoing contact with the research.

Other forms of facilitating circumstances are the research broker (Hill, 1984; Shellard, 1979) and the policy analyst (Trow, 1984). The distinction is one of focus: the policy analyst acts as another order of researcher making an interdisciplinary analysis of research on particular policy issues. The research

broker, on the other hand, acts as a mediator between researchers and policymakers. Typically, according to Hill (1984), the research broker is the administrative head of an in-house research unit whose sensitivity to context and policy processes enables him or her to play the delicate role of go-between.Another type of linking strategy is an active involvement in the research process either in a form of action research (Angus 1981) or contour research (Hall & Loucks, 1982).

While policymakers such as Vickery (1986) promote the notion of "joint partnerships" of unspecified kind, it is not clear where responsibility for the establishment of the various forms of facilitating circumstances lies. Postlethwaite (1984, p.198) believes that "it may be necessary for the researchers to make the effort to forge links with the policymakers". In contrast, Hoyle (1985) sees the responsibility with the policymaker.

> The major characteristics of a linkage structure are as follows:
>
> 1.   the initiative comes from the practitioner;
>
> 2.   the impetus is stimulated by the presence of external expertise;
>
> 3.   the linking agent makes available relevant knowledge;
>
> 4.   this knowledge is interpreted in the light of the particular problem or state of the institution;
>
> 5.   the knowledge is one component only in a process of innovation which must take into account a wide range of other contingent factors (Hoyle, 1985, p.210).

It appears that this approach is derived from a particular setting and process. For example, allowing the impetus to be stimulated solely by the presence of external expertise would not be appropriate in other forms of facilitating circumstance outlined above.

It is clear that many writers believe that linking research to policy should not be left to chance, even though the more usual channels of dissemination should continue to exist.

Participation. Those authors recommending certain forms of facilitating circumstances base much of the argument on the desirability of participation of policymakers in the research process (Hoyle, 1985; Hocking, 1984; Angus, 1981; Hall & Loucks, 1982; Marklund, 1984).

> This impetus to greater participation stems ... from changing views of knowledge and
> its effective utilisation but perhaps, even more fundamentally, from the change in the
> socio-political climate in the 1960s with its emphasis on the participation of those
> affected by decisions in the decision making process itself (Hoyle, 1985, p.212).

Participation can take varying forms and degrees. Postlethwaite (1984) believes that junior policymakers should be involved in the project in practical ways such as writing test items, deciding on indicators for variables or curriculum content analysis. He also argues that appropriate policymakers should be involved in the organisational structure of the project and have regular meetings and be involved in discussions on consequences of results. Still greater participation is proposed in the action research mode (Angus, 1981) or in contour research (Hall & Loucks, 1982) where policymakers assume a collaborative role.

Negotiation. Negotiation is an important element in discourse which enables participants to develop shared perception and ownership of the issue at hand. It is also the process by which the role of

researcher is clarified, the boundaries of research are established and the integrity of the research process is protected. If communication is established between researchers and policymakers, regardless of where the research was initiated, the focus, purpose, limitations, ownership of data and other aspects of the research should ideally be agreed by negotiation between researchers and policymakers rather than prescription by either party.

The term has also been used in a more specific sense to refer to

> the various ways the "knowledge" which is the product of research becomes an agenda item for discussion, hence yielding potentially different interpretations (Hoyle, 1985, p.213).

At one level, this occurs in phenomenological approaches to knowledge in which researchers and participants negotiate an agreed outcome. At another level, data is interpreted differently by the various participants on steering committees. The most significant aspect of negotiation in this sense is the capacity of the researchers to ensure integrity of the data and the right to publish research findings not compromised by personal predilections or institutional pressures emerging from a joint enterprise.

Communication and dissemination. Deficiencies in communicating research findings have figured strongly in theories of non-use of research, particularly based in the instrumental model of research use (Worth, 1978a; Start, 1975; Anderson, 1984; Husen, 1984). The two ideas — communication and dissemination — are functionally and conceptually interrelated. Several facets of this notion are significant in the linkage between research and policy. Information from the research must be available to policymakers in appropriate, readily understandable language (Start,1975; Husen, 1984). There should be a continuous flow of information to policymakers (Marklund, 1984; Kennedy, 1984, Cooley & Bickel, 1986) throughout the course of the research, and key policy actors should be identified in planning dissemination strategies (Start, 1975; Postlethwaite, 1984). Dissemination should not be limited to a final report: interim reporting, executive summaries and discussions of findings between researchers and policymakers are all valuable strategies. In addition, participatory forms of research organisation establish the most powerful form of communication of all and the process of research becomes the form of communication.

Component 4: Outcomes

This component provides concepts through which the outcomes of the research and policy linkage can be described and analysed. Reference has already been made in the synthesis of related literature to the range of interpretations of the term "use" of research. For the purposes of analysis, "use" in an instrumental sense is distinguished from "impact" in an enlightenment sense, both at individual and corporate level. The term "impact" is also used ambiguously in the literature both in the sense of the way in which research can affect policy outcomes, and for the policy outcomes themselves. Policy outcomes are identified as a separate element in this conceptual framework.

The element of time is included in this component since it is both a significant variable in the research and policy linkage and a descriptor for outcomes of it. It is integral to all components of the model.

Forms of use. Weiss (1979) provided a typology of research use which has formed the basis of most of the recent debates on the issue. Of her seven forms of use,one, intellectual enterprise, bears little relationship to policy processes and is ignored by subsequent analysts (Husen, 1984; Anderson, 1984). Of the remaining six, the interaction and the enlightenment models are considered under the category

"impact". Four forms of instrumental use are described in this typology: linear, problem solving, political and tactical. The linear and problem solving models illustrated in Figure 1, have been dismissed by Husen (1984) as they seldom apply. Nevertheless, the potential remains for this form of use to be observed and it appears to underpin, for example, use as defined by Caplan (1977), and the notion of this "simple positivism" was alive and well amongst policymakers and researchers in Australia (Anderson, 1984). Start (1975) believes research can be used to optimise decisions.

There is general agreement that research can be used instrumentally in the political and tactical meanings of use described by Weiss (1979) and Husen (1984). In the political model, research is used as ammunition or as reinforcement for a decision already made. Tactical use identifies the use of research as a delaying tactic. Start (1975) refers to this as the use of research as a palliative.

Impact. This concept is used to describe the non-instrumental forms of research "use", described by Weiss (1979) as interactive and enlightenment modes, by Husen (1984) as percolation, by Kennedy (1984) as the conceptual model and by Anderson (1984) as cultural diffusion. Individuals or groups of policymakers acknowledge impact as a general effect of research on their attitudes and knowledge base rather than in relation to specific policy actions.

Policy outcomes. These form the external and visible expression of change or decisions in related policies. Mitchell (1985) highlights the definitional problems, governed largely by contrasting theories of governmental action, of the concept policy. For the purposes of analysis, evidence of policy outcomes are those consistent with the definition adopted of policy as a course of action or inaction towards some desired or intended end. It thus includes actions in support of espoused system of beliefs, provision of resources, changes in legislation, position statements on actions to be pursued in schools and similar policy actions. Outcomes consequent upon research and outcomes in relevant policy areas apparently unrelated to the research process are noted.

Time. The element of time is required to identify timeframe for use, impact and policy outcomes. It also incorporates the notion of timing of policy decisions within the context of the policy process and in relation to the conditions of the general environment. Many commentators on the non-use of research suggest that timing may be inappropriate or the timescale of researchers is too long for policy decisions (Start, 1975; Anderson, 1984; Worth, 1978; Nisbet & Broadfoot, 1980). Nisbet and Broadfoot (1980) identify three levels of impact related to timing. Immediate or direct impact is thought to occur rarely, while intermediate impact is ascribed to ongoing evaluation and development. Nisbet and Broadfoot regard the third category, of long term indirect impact, of most significance. This classification raises the question whether immediate or direct outcomes occur rarely because researchers and/or policymakers fail to get their timing right or whether research was of negligible significance in the total policymaking process.

Summary

The elements outlined provide a conceptual framework for data collection, for description of the case studies and for analysis in terms of the research problem. The elements were derived from the literature and integrated into Weiss' model of influences on research and policy. Key components of the proposed framework are policy, research, linkage and outcomes. These are organised into sub-components and elements. Variables for data collection in each element are noted in the following section.

The case study of methodology

The selection of the cases

The case studies were selected from the research activities undertaken within the Education Department of Tasmania between 1979 and 1986. They are considered to be typical of the range of problems addressed during this time, and also to reflect the kinds of processes adopted within the broad policymaking framework outlined in Chapter 1. They also demonstrate the various elements of the research and policy linkage which the researchers endeavoured to recognise, explore and foster.

During this period, a style of project management was adopted which, it was hoped, would encourage administrators to be cognisant of research information and use it as a basis for action. Thus deliberate links were forged in an attempt to enhance the probability of adoption of research findings. The assumptions underlying the strategy were that proximity, ownership, participation and better understanding of research might encourage use of research. At this stage the implicit model of use was an instrumental one.

A number of projects in this period adopted this approach to linkage though manifested in slightly different ways. Concurrently, the senior officers of the Department made increasing use of research officers and research processes to support the work of task forces and working parties. The cases are broadly representative of these styles of operation.

The four case studies

Four case studies were selected on the basis of two elements of the conceptual framework: initiation and related policy outcomes. These can be expressed in the form of the following questions.

> Who established the research problem?
> Was there a perceived policy outcome from the research?

This selection provided a two-by-two grid in which each case study occupied one cell. The configuration of the selected case studies is shown in Figure 12.

Figure 12   ***Grid for selection of cases***

Was there perceived policy outcome?	Who determined the research problem?	
	Policymaker	Researcher
YES	**Case Study 1** Alienated, disturbed and disruptive students	**Case Study 3** Unitisation
NO	**Case Study 2** Incentives for teachers in isolated areas	**Case Study 4** Apprentice training

These two questions were used as selection criteria for the study because they were considered to be significant variables in the context of the research problem. It is asserted (Husen, 1984; Marklund, 1984) that policymaker initiated research is more likely to be used than if the research is initiated by

researchers. The cells established by the two-by-two grid enable examination of the processes that occurred in alternative situations of researcher and policymaker initiated research, which did or did not lead to perceived policy outcomes.

The first selection criterion, initiation of the research, was relatively straightforward to determine. The second selection criterion, perceived policy outcomes, was more problematic. "Use" of research was considered to be an important variable, but it has been demonstrated to have many meanings. Perceived policy outcome was adopted as an indicator of "use" of research in policymaking, although this necessitated that some assumptions be made. It was assumed that if policy is considered a course of action, then observable actions indicate policy exists or has been changed. It was further assumed that if policy outcomes occurred which were related to and consistent with research findings, then the research can be considered to have been used.

While these questions were used to select the case studies in a way which would provide different perspectives on the research problem, the definition of the variable for selection purposes did not limit the data collection about these variables.

Selection of specific cases for inclusion was based on the researcher's knowledge of the origins of the research activities and of the widely accepted views held within the Department (other researchers, administrators, teachers and so on) about effects on policy. The latter was verified in the course of interviews.

In two of the cases outlined, the author was directly involved. In one she was indirectly involved and in the fourth, uninvolved.

The boundaries of the case studies

Each of the policymaker initiated studies was undertaken as the major focus of activity of a Departmental committee or task force. Each of the researcher initiated studies had an advisory committee (also researcher initiated) which provided support, advice and liaison for the research. The boundary of each study was delimited by the interaction between research activities and the established group over time and its consequences on related policy areas. In two cases (Cases 1 and 2) the research was established by policymakers as a response to a particular policy issue, though, in one case (Case 1, Alienated, Disturbed and Disruptive Students), the issue was very broad.

The two researcher initiated studies emerged in different ways. The unitisation study, Case 3, sought to monitor, research and provide information for evaluative judgements at a school level. Broad and generalisable policy implications emerged later in the study. The study of apprentice training (Case 4) originated from this researcher's interest in a range of issues about apprentice training.

The dimension of time was not limited to that period in which the research was undertaken. The prior policy context was also established and relevant policy actions up to late 1987 were noted. In each of the cases for which negligible direct impact on policy was perceived, a period of a few years has elapsed. In contrast, in each of the cases with observable policy outcomes, actions based on oral and written interim reporting had been taken prior to the completion of the report. Action continued to flow after the formal reporting stage up until the present time.

Data sources

The cases were constructed from several primary sources. The focus of the cases was the process of research which was undertaken. Key sources of data were interviews conducted with members of the various committees and with the researchers. These are described in greater detail below. Sources of information on the research process also included official Departmental files, meeting notes and agendas, correspondence and interim reports. The researchers also maintained field notes and file notes of meetings. The final reports of the research recorded the procedures for linkage between researchers and policymakers as well as research methodologies.

Data on the operating environment and policy context were accessed from a variety of sources. In all cases there was commentary on the conditions of the operating environment in related literature such as Departmental reports, government reviews and official publications. These are cited in the text of the case description and included in the bibliography. Data sources on the policy context varied. Written policy statements used were various acts and regulations, circular memoranda, *Tasmanian Education Gazette*, and the White Paper (Education Department, 1981). In addition, a number of Departmental reports had recommendations which to varying degrees were enacted as policy. Other policies were established in practice and were either not in written form or the source of the original documentation was obscure. Data on such policy actions were provided by the interviews and checked with several administrators.

The description of the organisational context (outlined in Chapter 1) and the bureaucratic structures of the Education Department provided some of the information on the roles and responsibilities of the various policy actors. These were verified and amplified through the interview process. The Departmental organisation also revealed some elements of the structures intended to reflect policy processes: file records and interviews amplified understanding of how these operated in practice in each case.

The author was personally involved with three of the cases: in two as the researcher (or co-researcher) and in the third as co-ordinator of a research team. The research in the fourth case was undertaken by a colleague in the same Branch. The personal recollections and records were verified with the other researchers involved.

Unlike Cooley and Bickel (1986, p.20) working with the public schools in Pittsburgh, the Research Branch of the Education Department of Tasmania did not have "the goal of writing case histories from the outset". Those involved in the Pittsburgh experience had the advantage of anticipating the building of case histories and established an archival record as the research proceeded, including papers summarising what had been learnt about evaluation research as they progressed. Documentation of the discussions and practices in the Education Department of Tasmania grew over the years covered by the study and became increasingly integral to both the research activities themselves and to the reflective processes.

Interview and personal reflection formed a significant source of data. The written accounts of each case were returned to each of those interviewed for verification.

The interviews

The interview schedule (Appendix 1) provided a framework in which to explore policymakers' perceptions of the research process and its impact on policy decisions. A core set of questions was

devised to form the basis of a responsive style of interview. The aim was to interview all those involved through the committee structures. Four were not interviewed: two of the Unitisation liaison committee and one of the Apprentice Training advisory committee who attended only one meeting and one of the Incentives Committee not readily accessible for interview. A list of interviewees is given in Appendix 2.

Interviewees were asked about their particular roles and responsibilities for policy development and implementation in the particular policy area which was the subject of the research, and their related background and experience. They were asked about their expectations for the research or work of the committee and about their perceptions of policy outcomes from the activities. The research process was discussed through elements of research activity in terms of extent of negotiation, participation and access to the information generated. Their part in dissemination was also discussed. The final major area was the policymakers' views on the use of the research and any effects it had had on them as individuals, the group that worked together or the Department as a whole. The interview situation was also used to verify information about policy state at the time of the research and other contextual matters.

Interviews with researchers and expert committee members focussed more on the research process and researcher issues. The interviews also included discussion of their perceptions of the impact of the research and policy- maker participation.

Interviews were tape-recorded, then transcribed and used as a basis for verification of the contextual matters and for policymaker views on the use and influence of the research.

Variables for investigation

The various data sources were used to provide information in relation to the research questions through the conceptual framework shown in Figure 9. For each case study, the elements of the conceptual framework were addressed through documentation of events, practices, behaviours and opinions. The subcomponent *Operating Environment* was dealt with by a descriptive statement on the political, economic and social context, with specific reference to aspects relevant to the particular policy issue.

Variables for investigation of the other components of the conceptual framework are summarised in tabular form (Tables 1-6).

Table 1   *Variables for data collection*   *Component 1: Policy — The policy process*

Element	Variables
Models of policymaking	Processes by which policy changes were made
State of policy	Existing policies in implementation
Nature of policy	Forms of policy expression
Policy issue	Source and form of policy issue emergence
Actors in the policy process	Identification of policy actors and involvement in research

Table 2   Variables for data collection   Component 1: Policy — Policymakers

Element	Variables
Administrative roles of policymakers	Identification of managerial roles of individual policymakers in respect to policy area
Rewards and career patterns	Reinforcement of administrative roles and career patterns
Working knowledge and experience	Background and day-to-day experience
Belief systems	Expressions of belief in relation to policy role; attitude to policy outcomes; expectations for research.

Table 3   Variables for data collection   Component 2: Research — Enquiry

Element	Variables
Field of knowledge	Discipline area of research
State of knowledge	Conceptual development and information base in the discipline
Methodologies	Modes of enquiry
Purpose	Purpose in relation to decisions

Table 4   Variables for data collection   Component 2: Research — Researchers

Element	Variables
Rewards and career patterns	Reinforcement of expertise Career movements
Ideologies about the research process	Ownership of data Right of publication Confidentiality
Beliefs about the role of research	Stance towards researcher's role

Table 5   Variables for data collection   Component 3: Linkage

Element	Variables
Initiation	Who initiated research
Facilitating circumstances	Structure of linkage
Participation	How policymakers participated in research and at what stage of the research process
Negotiation	What elements of research were negotiated and with whom
Communication and dissemination	Forms of communication Access to information Strategies for widespread distribution of research findings

Table 6   Variables for data collection   Component 4: Outcomes

Element	Variables
Forms of use	Forms of direct, instrumental research utilisation
Impact	Forms of indirect, enlightenment research utilisation
Policy outcomes	Policy outcomes linked to research process Other policy actions over time period, unlinked to research
Time	Timing of research utilisation Timing of research in whole context of policy development Timing of research and policy linkage

The case study description

The case studies were constructed within the conceptual framework outlined, but described in logical time sequence of events. Such an approach was facilitated by the direct involvement of the researcher in three of the four studies, and in the fourth case by full documentation in departmental records, verified by the researcher concerned. File records of meetings and official correspondence provided a record of meeting dates and processes related to the research activity.

The case studies commence with an outline of the social and economic context and current policy context. This information was derived from current documents, the research reports generated in each case study which made reference to such contextual information, and from the interviews with others involved. The initiation of the research and the relationship with an emerging policy issue is outlined. The establishment of a government committee, task force or advisory committee is described with reference to its initiation and to the selection of its membership. Roles and responsibilities of committee members are identified both by their position in the Departmental structure and by interview. The research activity which formed the main core of the enquiries in the policy area is documented. Details of the steps in the research are significant because the research process was the central facilitating activity linking information to policymakers and constituted the expression of the concepts in the framework component of linkage. Researcher and policymaker issues are highlighted as they emerged in the course of the research.

The description of the research is based on the stages of research: identifying the problem, defining the research questions, planning the methodology, collecting the data, analysing the data, drawing conclusions, reporting the research.

Outcomes from this process and other sources of information are described and policy outcomes subsequent to the research are documented. Other incidents, occurring during the time of the research and subsequent policy linkage, were recalled by interviewees as impinging on their thinking and actions. Such incidents are noted.

Policymaker perceptions of the research activities, policy outcomes and influence of other factors on these outcomes close each case study.

Analysis of the case studies

Evidence from each case study was analysed using techniques for multi-case analysis described by Miles and Huberman (1984). Interview data were collated in checklists derived from the conceptual framework, and chronologies developed from all data sources. Techniques such as clustering, noting patterns and subsuming particulars into the general enabled the process of data reduction. Once summarised according to the variables of the conceptual framework, the data from all cases were tabulated in working documents. These documents formed the basis of the analysis of the four cases presented in Chapter 8.

Methodological issues

Case study has, like other forms of research, its own inherent methodological problems. Guba and Lincoln (1983) have developed an approach for assessing the trustworthiness of naturalistic forms of enquiry. They identified four criteria which parallel the criteria of internal validity, external validity, reliability and objectivity generally applied in what Guba and Lincoln call the "rationalistic" paradigm.

They "propose four analogous terms within the naturalistic paradigm to supplant these rationalistic terms: credibility, transferability, dependability and confirmability, respectively" (Guba & Lincoln, 1983, p.326). This translation of terminology is justified on the grounds that naturalistic enquiry and qualitative data have their own characteristic strengths and limitations in respect of judgement of methodological rigour.

Credibility

Internal validity of case study can be demonstrated through agreement from several data sources. In this research, extensive use was made of a variety of primary data sources. This enabled verification of information by checking across the data sources. Much of the written material was readily accessible or had already been in circulation amongst many of the parties involved. In the case descriptions, references are given to primary data sources. Quotations without sources are direct quotations from interview records. Lists of interviewees appear in Appendix 2: generally individuals are not identified within the case description.

The account of each case study was verified for fairness and accuracy by all those who had contributed through participation in the research or by interview.

The researchers were participants in the research activities which formed the focus of the case studies, and members of the organisation in which the research took place. They therefore were continuously engaged in the site enabling the development of a deep and sustained understanding of the context and the issues. Participation of the researcher became a phenomenon of the case.

Transferability

Generalisability is, by definition, questionable in case study. Nevertheless, case study methods seek to provide some tentative hypotheses which may be applicable in other settings. While in the rationalistic paradigm external validity is based on representativeness of samples, Guba and Lincoln (1983, p.328) offer other alternatives for naturalistic enquiry.

Firstly, it is suggested that sampling should be purposive to maximise the range of information which is collected. For this reason, four cases were undertaken for this study using selection criteria to provide a range of evidence in similar contexts.

Secondly, Guba and Lincoln advocate "thick description",

> by which is meant providing enough information about a context, first, to impart a vicarious experience of it and second, to facilitate judgements about the extent to which working hypotheses from that context might be transferable to a second and similar context (Guba & Lincoln, 1983, p.328).

A detailed description of the general organisational and policymaking context for the study was provided in Chapter 1. Further details, relevant to the particular case, are provided in subsequent chapters.

Dependability

Case study method cannot be subjected to the reliability test of replicability. In its place, dependability is based on the stability of data after changes at the sites or in design have been accounted for. As such,

procedures indicated under credibility and transferability also provide measures of the reliability of the data.

Confirmability

Several techniques must be adopted to minimise the potential bias of the investigator and strive to neutrality in interpretation of findings. The nature of evidence must be made explicit.

> Primary evidence (should be distinguished) from secondary, description from interpretation, verbatim accounts from summaries ... the 'raw' data needs to be accessible as well as the 'cooked' account; the accuracy of transcripts should be open to independent check... (Adelman et al., 1982, p.10).

Selection of the cases sought to reduce potential investigator bias in observing and assessing effects and linkages. Although the research was conducted in the context of deliberate efforts to involve policymakers in research processes, some apparently influenced policy while others did not, just as some were initiated by researchers while others were not.

The bias introduced by retrospectivity of the studies was partially overcome by the use of data sources current at the time of the study to check interview comments. Each case study description was confirmed by those interviewed.

Throughout the conduct of the case studies, a reflexive approach was practised (Guba & Lincoln, 1983, p.329), with the formulation and conception of the study under regular review.

Summary

Case studies should draw on a variety of data sources, but remain an in-depth portrayal by the researcher of the events described within the study. In summary, the potential of inaccuracy due to retrospectivity and investigator bias is considered to have been reduced to an acceptable level. In the final analysis, the accuracy of the cases will be reflected in the extent to which the research speaks with justification and conviction to those involved in it, and to those who may wish to adopt some of the strategies (Guba & Lincoln, 1983; Cooley & Bickel, 1986).

Delimitations, limitations and assumptions

Delimitations

The study was delimited within the field of government research. That is, it was undertaken within a government bureaucracy, although not necessarily initiated by that bureaucracy. Nevertheless, the particular unit engaged in the research enjoyed considerable autonomy in initiation, design and execution of its research. Marklund (1984, p.182) argues that commissioned research in the field of what he terms policy execution (the translation of political policy stances into organisational measures and courses of action) has the "liveliest contacts" between researchers and policy actors.

The nature of the research enterprise delimited the study to a favourable situation for research and policy linkages to develop. The study was also delimited by the evidence from a single government bureaucracy. This was considered an appropriate level of analysis for such a descriptive study.

Nevertheless, contact with research units in other Australian states (unpublished reports of meetings of state research officers, 1979- 82), and evidence from the literature (Husen, 1984; Marklund, 1984) suggested elements in common with other bureaucracies.

The time period for the case studies was between 1979 and 1987. During this period a number of changes were taking place: in organisational terms, in terms of policy processes and in terms of the role of research services. These changes were summarised in Chapter 1. Whilst a neater analysis might have emerged from a more static or stable organisation, change was a reality of many social organisations at this time. Despite this, the roles of policy actors, policy issues and constraints remained relatively constant. It was considered that within this delimitation of time period some typical, consistent elements would emerge.

Program evaluation studies were excluded from consideration within the research dimension of the study. Within the Research Branch, evaluations were undertaken within a "stakeholder" approach (Weiss, 1986). This approach, originally articulated by Guba and Lincoln (1981), indicates a more democratic evaluation enterprise by the involvement of actual and potential parties interested in the object of evaluation. This inevitably leads to close associations with policymakers. Scriven (1983) argues that this should form a paradigm for research, and to a degree, was the approach adopted within the Research Branch.

Finally, the study was delimited within the area of policymaking or policy formulation rather than the whole cycle of the policy process or policy implementation. The case studies examined only the links between research and policy to the point of achievement of a policy stance or production of a policy statement or arriving at a policy decision. The phases of putting these decisions or commitments into practice were not included.

Limitations

The limitations of the study are typical of those inherent in case studies undertaken over a period of time. Specifically these limitations are described below.

Some inconsistency may exist between recalled memory of individuals and documented records. Over the elapsed time or with the benefit of hindsight, a position or action might be modified or rationalised by particular individuals. Where possible, information was cross-checked with several sources.

Information about the policy context, and perceptions of the policy process and the role of research were only sought from those actually involved in the linkage process. Since the research focussed on the linkage, this approach was justified firstly on the grounds that those involved had been identified as key actors, and secondly, if research had been taken up by anyone within the Department then those involved would be those most likely to be aware of the fact. It is possible that additional or alternative insights might have been gained from other policymakers in the Department. A further step of interviewing other policymakers would have taken the research into a broader field of policymaking, inappropriate to the focus of the present study.

The policy process and social context during the course of the case studies and the research which was subject of each case study, occurred at different points in time over the period. Therefore the case studies are not strictly comparable in time frame. Limitations with respect to the generalisability of the study are evident from the delimitations. These are:

1.   Only in-house government research was considered.

2.   A limited range of fields of educational research and methodologies was investigated.

3.   A limited number of education policy issues was considered.

4.   Limited types of policymaking processes were involved.

5.   A limited range of possible forms of linkage was investigated.

Assumptions

A number of factors other than research evidence influence policymaking and decision-making. It was assumed that by tracing the research process and documenting the context and the policy process, that elements or factors which were significant in policymaking did in fact emerge. Each case study took account of organisational and management context, political and economic climate, and other incidents were noted. It was assumed that anything of major consequence to the policy outcomes eventuating from the research would become obvious in the construction of the case studies.

A second assumption was that the research and policy activities existed in typical policy contexts and processes. As indicated, the Department had diffuse and variable policymaking models which varied according to the issue, the policy actors, context, etc. It was assumed that this interpretation was typical of the period, yet that there were sufficient common approaches to create a valid picture of policy processes and potential links with research.

It was assumed that the conduct of the case studies through use of primary and multiple data sources brought an acceptable level of objectivity and dependability to the information. It was further assumed that the role of an investigator as participant observer brought insight to enhance the study.

Finally, four case studies were undertaken, on the assumption that they might provide some common themes and elements as the basis for some tentative generalisations.

Summary

A conceptual framework was developed from an extension of Weiss' model and is shown in Figure 9. This formed the basis for data collection within its seven components or subcomponents: the policy process,operating environment, policymakers, researchers,enquiry, linkage and outcomes. Variables for investigation in each of the elements were outlined and the methods of construction of the case studies and their analysis have been described. Some methodological issues have been noted. Delimitations, limitations and assumptions were acknowledged.

The case studies were selected on the basis of a two-by-two grid. The axes of the grid which formed the selection criteria were firstly whether the research was researcher- or policymaker- initiated and secondly,whether or not there were perceived policy outcomes.The following chapters describe each of the four cases.

Chapter 4:   Case 1 Alienated, disturbed and disruptive students

Introduction

Research on this topic was undertaken as a result of concern expressed by the Tasmanian High School Principals Association (referred to as the Principals Association) to the Director-General of Education. The initial request centred around "a task force ... to examine the problem of alienated, disturbed and disruptive students" (letter from Principals Association, 11/5/83). The immediate response to hand over the problem to researchers was modified and a collaborative approach between policy makers and researchers was negotiated. The process and outcomes of this approach are documented in this case study.

This first case study was selected to illustrate policymaker-initiated research which resulted in some perceived policy outcomes.

The operating environment

Alienated and disruptive behaviour in schools is not a new phenomenon. It has been manifested since learning became institutionalised and particularly since attendance became compulsory. Over the years, standards of what constitutes disruptive behaviour have changed, partly as a reflection of changes in acceptable behaviour patterns in the wider community. Within schools, expected and acceptable behaviour has changed with changes in teaching methods, in school organisation and in teacher-pupil relationships. At a given time, there are variations between schools in what is acceptable behaviour according to how the philosophy and organisational style of the principal and the staff interact with the school's clients and community.

Social changes in the 1970s and early 1980s contributed to the re-emergence of the issue of alienated and disruptive behaviour in schools. Economic conditions led to an employment situation where school leavers, especially those with minimal educational qualifications, found it much harder to obtain work. As a consequence, Education Department officers could no longer readily facilitate or encourage a disaffected 15 or 16 year old to quit school and find work. Indeed, such students were likely to be in dire need of completing their schooling if they were to have any opportunity to gain employment. Thus schools were retaining a higher proportion of students to the completion of year 10 and were including more lower ability students, many of whom found school difficult, irksome and irrelevant.

It is well established that the incidence of alienated, disturbed or disruptive children is higher in areas where there is social stress. Factors such as poverty, unemployment and non-nuclear family structures can contribute to such social stress. Thus disruptive behaviour is more apparent in schools serving housing commission areas. The Education Department is conscious of its responsibility to educate all children and does not have the option of the private sector of excluding students whose behaviour in school might be considered unacceptable. Nevertheless, educators also acknowledge that social and organisational factors in the school environment can exacerbate problems arising from social stress.

Some schools have a public reputation for poor student behaviour. At times, the problems which emerge during school time are highlighted by parents, community or the media, and blame is laid on

the school. Student behaviour is one aspect of public education often visible to the community and stories of extreme cases spread quickly. It is therefore an aspect which is a constant concern for administrators at school and system level.

The policy context

The Education Department had several staffing policies in effect which related to this area. These covered areas such as staffing levels, support for slow learners in normal schools, provision of social workers and guidance officers, and differential staffing for schools in socially disadvantaged (i.e. housing commission) areas. As a formal framework of sanctions on student misbehaviour, the Department also had regulations with respect to the administration of corporal punishment, student suspensions, attendance, formal responsibilities of teachers, and nature of detentions. More general policy support emerged through beliefs espoused about the role of teachers, the importance of classroom management, and the responsibility at school level for the creation of an appropriate school ethos. Responsibility for any provisions of withdrawal units lay with each regional office.

Thus there were substantial policies in existence which had been developed over many years through regulatory processes, individual decisions and leadership practices. There did not, however, exist a formally written statement by the Education Department which drew these forms of policy together into a statement of policy on management of disruptive students. In effect, much policy emerged at school level, and the school principal carried responsibility for leadership, development of management style, classroom practices and allocation of staff, and enforcement of permitted sanctions. Each school principal is a key policymaker in the matter of student behaviour management and has considerable autonomy in developing policies and practices.

Actors in the policy process and their responsibilities

Policymakers at a senior administrative level of the Department are aware of the social concern for student behaviour in a general and ongoing sense rather than dealing with specific strategies at school level. Occasionally, senior administrators may become involved in extreme cases of misbehaviour, for example where physical violence is concerned. Dealing with such matters then is covered by various regulations. Involving senior personnel in this way reassures the public of the concern and responsibility of the Education Department and, as a consequence, reinforces the image of the particular administrator. The situation is defused, public confidence in the system is restored, and the role of the administrator is confirmed.

The many management tasks of a senior policymaker result in little opportunity for building more positive approaches to student management. In addition, such approaches may be perceived as largely a task for schools themselves. In the matter of student behaviour, the senior administration of the Department was prompted to look at policy issues at this time because of a request from high school principals. This group is perceived by the administration as a powerful and influential lobby group within the education arena, the Department context and with their local communities. In addition, they form a significant part of the peer and hierarchical network which forms the administrators' reward setting.

The policymakers were therefore aware of the need to respond to this pressure, yet had to find time in which to consider the matters raised, given that it was not a crisis situation and that there was a basic policy framework for dealing with these matters.

Policy issue emergence and setting up the research

Student behaviour is a continuing management concern of senior staff of schools. As a consequence of the factors leading to increased retention into year 10, some principals perceived an increase in the incidence of disruption in schools. Through their association, the principals drew this matter to the attention of the Director-General.

The Director-General received a letter (11/5/83) from the High School Principals Association (THSPA) saying, in part,

> It is requested that a task force be established to research the nature and extent of this problem and to develop a series of recommendations for subsequent implementation. The task force should also carry out an evaluation of existing provisions. It is emphasised that this matter concerns not only the Education Department and its schools but also the many other agencies involved with these students.

> Members of this Association consider that this is one of the most serious problems facing schools today and your support for this proposal is requested as a matter of urgency.

The Director-General discussed with the Senior Superintendent of Research the possibility of undertaking research into the matter. The outcome of that discussion was that a research officer was "made available to support the work of a task force" (letter to Director-General from the Director of Secondary Education, 6.7.83).

Verbal discussions between the three people concerned had modified the original request by the Director-General for research to be undertaken, to the use of a research officer to support the work of a task force.

The membership of the task force had also been discussed to ensure that the senior administrators with an interest in and responsibility for student behaviour were represented, as was the Principals Association.

The letter of 6 July recommended to the Director-General the people who would constitute the Task Force on Alienated, Disturbed and/or Disruptive Students. They held the following positions:

> Director of Secondary Education
> Superintendent, Special Education
> Regional Superintendent, Secondary
> Senior Guidance Officer
> Senior Superintendent, Research; and
> Principal nominated by the High School Principals Association.

Although the letter from the principals suggested that other agencies were involved, only Education Department officers were members of the Task Force.

The terms of reference for the Task Force were outlined in the letter from the Director of Secondary Education (6 July 1983).

> I recommend that the terms of reference be based on the letter of request from the THSPA but that the first responsibility of the Task Force should be to bring these into sharper focus to enable the group to work towards attainable objectives. The terms of reference should include:

(i)   To examine the nature and extent of the problem in Tasmania.

(ii)   To examine the strategies used in Tasmania to maintain these "alienated, disturbed and   disruptive students" in full-time education.

(iii)   To evaluate the effectiveness of the above strategies.

(iv)   To conduct a literature search to find how similar situations are managed interstate   and overseas.

(v)   To make recommendations to the Director-General for future management of this problem area.

It was clear that the Task Force itself would not undertake the information collection phases of these tasks and therefore a research officer was attached to the group.

Roles, responsibilities and experience of Task Force members

Various policy areas relating to student behaviour were covered by the individuals on the Task Force. The Director of Secondary Education had an overall responsibility at system level. He had to provide advice to the Director-General on problem students and draw up budgets in this area. Whilst it was the responsibility of regional offices to recommend on needs for withdrawal units, the Director provided funds for them from the Secondary Recurrent Program. Staffing for the units was provided from the regional discretionary quota and the distribution of these teachers was negotiated with the principals in that region. The Director was aware of the issues relating to student behaviour through regional meetings and meetings with guidance officers and principals, and tried to get more staff and resources. He was particularly concerned about the North West region where there was no out-of-school provision and establishment of a unit was hindered by the ribbon development and dispersion of settlement in the region.Another role of the office of the Director of Secondary Education was to keep a record of student suspensions. Where this led to recommendation for expulsion, he had to seek the approval of the Director-General. The Director of Secondary Education was frequently under pressure to respond to the question, "What is the Department going to do about difficult students?" The Director was familiar with this problem, having been a teacher, a principal and a regional superintendent prior to becoming Director.

The Superintendent, Special Education had the task of chairing a committee which recommended placement of students in the various special units, as well as a range of responsibilities in relation to special schools. She had a background of general interest and involvement having originally worked as a guidance officer. Later in the life of the Task Force, she became Deputy Director (Student Services) with wide responsibilities for children with special needs. The Regional Superintendent had, amongst his tasks, to handle local crises, authorise suspensions and inter-school transfers and advise schools generally on aspects of their organisation. He was also involved in the activities of the Director of Secondary Education described above. This Regional Superintendent had formerly been principal of a school in a Housing Commission area. After several months with the Task Force, he spent a year in the UK on a study tour. He was replaced by another Regional Superintendent (Secondary), who subsequently became Deputy Director (Curriculum Services). On the return of the original Task Force member, both retained membership in the interest of continuity and the importance of both regional

involvement and curriculum implications in the work of the Task Force. In addition, the overseas experience of the Regional Superintendent brought another perspective to the deliberations of the group.

The Senior Guidance Officer headed a team available for referral, assessment and counselling of particular behaviour problem students. Guidance officers also advised and supported teachers and principals on management of particular students. The Senior Guidance Officer provided support, and further advice to school guidance officers on matters of serious disciplinary problems with individual students and, where required, provided advice to the Director-General on discipline questions and expulsion procedures. He also played a key role in development of various disciplinary units in the Southern region. The Principal not only represented the interests of the association which had prompted the formation of the Task Force but also represented a critical group of policymakers on student behaviour. The Senior Superintendent (Research) had been involved with the establishment of alternative forms of schooling through the Commonwealth's Innovations Program and retained an interest in such strategies, including the use of outdoor education activities.

Each of the administrators had particular responsibilities or interests with respect to student behaviour. Elements of each of the manager's roles (see Figure 3, p. 21) were evident in the responsibilities of members of the Task Force for, in addition to the specific responsibilities outlined, they also had interpersonal and informational roles. Individual responsibilities interacted with those of other members of the Task Force and other administrators within the Department at system, regional and school level.

The role of the researcher

The Task Force on Alienated, Disturbed and/or Disruptive Students was thus established with a researcher attached to the group to provide evidence for its deliberations.

In this situation, the researcher had to play a dual role. In the role of researcher, the data collection had to be undertaken with proper rigour and concern for quality and in an appropriate theoretical framework. This was necessary to ensure that the data on which the deliberations of the Task Force were based had credibility with a variety of audiences.

The researcher also had to adopt the role of facilitator in the operation of the Task Force. This involved initiating and providing a focus for the meetings of the group and ensuring that materials and processes to encourage debate were in place. The researcher, through this role of *de facto* executive officer to the Task Force, became a focus and a clearinghouse for all manner of related information from all kinds of sources.

Conducting research for the Task Force

In operating in the dual role of researcher and facilitator to the Task Force, the researcher adopted a deliberate strategy of involvement and consultation with the group at all stages in the research process. This was done in the belief that through such a collaborative process, the research would be more likely to have impact on policy through the empowering effects of greater insight and ownership of data.

The initiation of the research by the Department could be assumed to indicate a first step in linking with policy processes. A situation to facilitate this association was established through a Task Force with

research officer support. The style of operation allowed for the policymakers to be involved in the research process through negotiation of methodologies, participation in design, analysis and deduction, and communication of processes and findings. It also facilitated the entry of policymakers' working knowledge and beliefs into the policymaking process. Their experience and expectations for the work of the group and the contributing research information allowed each in a sense to have their own agendas and purposes addressed through the information gathering process.

Identifying the research problem

The problems for research were implicit in the terms of reference for the Task Force. The early meetings of the Task Force explored the scope of the area of concern, priorities for activities, ways of viewing the nature of the problem and where to start in the literature. At these early meetings, the members of the Task Force addressed the problem from their particular perspectives, unburdened their particular concerns and incidentally were able to share up to date information about particular cases. The discussions ranged over issues such as the meaning and value of the term alienated, the role of special units, whether numbers of disruptive students were increasing, the appropriateness of the legal framework, the role of curriculum, the characteristics of the disruptive "syndrome", and schools' differing interpretation of "disruptive behaviour".

The interviews conducted subsequently for the present research revealed that the expectations of Task Force members were that the group would "come up with some practical suggestions to help schools better manage these students". The Senior Superintendent (Research) had a more specific sequence of events in mind: to document the extent of the problem, review the literature and evaluate practice as a basis for recommendations for action. The Task Force chairman, like the rest of the group, had developed ideas through everyday experience, reading, conferences and personal contacts in other parts of the world. He wanted "a literature search on what was going on elsewhere and how it was working".

The literature search commenced immediately and continued through the life of the Task Force. Items of specific interest were shared with Task Force members or tabled at meetings. Members of the Task Force as well as the researcher contributed to this process. The literature review formed part of the context of a day of discussion held to develop policy action, discussed later in this section.

The group believed that a survey of all high and district high schools was also needed. This would provide information on how the principals perceived the problem and what strategies they were currently using to address it. It also would reassure schools that the Task Force had begun to collect information for its deliberations and provide an immediate feedback of strategies adopted in other schools. The research elements of the Task Force operation thus initially had two strands; firstly a review of literature and secondly, a survey of schools. The survey of schools was undertaken to provide an information base on the local situation and some evaluation by schools of the effectiveness of the strategies they were adopting. It formed the major focus of the research activity.

Conducting the school survey

Specifying the research questions

The focus of the research was to establish the incidence and nature of disruption and to document

strategies adopted by schools. The aims of the survey were discussed in a Task Force meeting and the researcher produced a draft statement of aims. After minor modification, this was approved by the Task Force.

The aims were articulated to school principals in the following way:

. To provide an estimate of the number of pupils considered by the schools as consistently disruptive and/or disturbed.

. To provide an estimate of the number of problem students by grade and sex, the nature of the problems and the grade at which problems emerged.

. To document strategies adopted by schools in handling these students, both in general and in any specific innovative approaches.

. To provide some assessment by the schools of the effectiveness of the strategies available to them.

The survey is the first stage of the investigations of the Task Force and it will be followed by more in-depth work in a sample of schools (Letter to principals from Task Force chairman accompanying survey document).

Negotiating an acceptable research strategy

It would have been possible at this point for the researcher to move on to undertake the proposed survey. However the researcher chose to involve the Task Force in this process. The researcher engaged in discussions with a few schools on the definition of disruptive behaviour and the notion of being able to identify a core group of problem students. These were reported to the Task Force and formed the basis of discussion about details of the survey instrument. This process enabled Task Force members to gain some insights into ways of viewing alienated, disturbed and disruptive behaviour, the pitfalls of trying to document factors implying causal relationships, contextual significance of identifying a "core group", some concept of the schools' notions of strategies and a feel for responsiveness of schools to undertake this survey.

The early discussions opened up some possible fields of knowledge through which the problem could be explored. The various members knew from their contacts with each school and principal that administrative context had a significant bearing on interpretations of misbehaviour. These views were reflected in the statistical records of suspensions which showed considerable variation in numbers and types of misbehaviour leading to suspension. Members of the Task Force expressed some concerns at the interpretations of alienation emerging from American sociological literature. The same term was used differently in British literature (on disaffection from school) where it was used in behavioural psychological tradition. Use of the term in the small amount of Australian literature then available in this field emerged, confusingly, from both fields of knowledge.

The members of the Task Force demurred from an extreme sociological approach to definition and to data collection but favoured what might be loosely categorised as a descriptive approach with elements of sociological, psychological and administrative theory.

As the exploratory stage also involved feeder primary schools, the Task Force also gained its first insights into the problem at primary level. Its members were also alerted to the sensitivities of research which can unearth tensions between philosophies and strategies at primary and secondary level. One

way of dealing with this was to focus only on one level, which is precisely what the Task Force did. This was not the only reason for undertaking research only at secondary level: the magnitude of the task demanded some focus, and the immediate pressure for policy action had come from the secondary principals.

The time spent in setting up the research methodology satisfied important issues of process for both researcher and policymakers, and allowed for both researcher and policymakers' concerns to be addressed.

The researcher was able to come to terms with the various interacting theoretical frameworks through which the problem could be analysed. The researcher came to the problem area without preconceptions about approaches to it, but it became evident early in the exploration of the literature, that different theoretical frameworks could lead to quite different interpretations, diagnoses and intervention strategies (Hocking, 1984b). It was therefore determined to keep the information as open as possible, whilst being explicit about assumptions and definitions within the data collection. In this sense, whilst the policymakers sought information on which to base action, it could not be conceived as being oriented to specific decisions. Therefore, for the researcher, the purpose of the research was to keep the question of solutions as open as possible, not following any particular interests in pedagogical, psychological or sociological intervention. This was perceived by the researcher as an appropriate approach, given the unsophisticated and sometimes conflicting state of some of the fields of knowledge impinging on the problem and the complexity of the issue.

During the planning phase, the researcher also developed a survey strategy and an instrument which was appropriate, manageable and reliable within specified criteria. Rigour and accuracy of the survey instrument was established through expert advice on definitional issues, clarifying limitations on the questionnaire data and trialling of the instrument.

The policymakers became better informed about the school level policy context as a framework in which their later deliberations must be put. They also were alerted at this early stage of the potential criticisms of the work on philosophical or practical grounds. This prepared the policymakers for any possible undermining of their credibility as policymakers by their colleagues or subordinates, since they had participated in discussions on matters such as the relationship between social class and disruptive behaviour, and the validity of IQ measures. They contributed to the clarification of definition of terms used in the questionnaire such as the identification of a core group whose behaviour consistently caused concern (See Hocking, 1984c, p.3) and in the interpretation of different forms of IQ scores.

A trial questionnaire was prepared and the Task Force members commented on the draft. This enabled them to ensure that the data generated would satisfy their first need for basic information. The questionnaire was trialled, the instrument was accepted and was sent to all high and district high schools. A covering letter from the chairman of the Task Force explained its origins, indicted its aims and established its relationship to the work of the Task Force. The questionnaires were returned to the researcher, who undertook preliminary tabulation of data.

Participating in the data analysis

The Task Force was asked to set the priorities for data analysis from the survey questionnaire. Their first priority was for schools to receive information about strategies for dealing with disruptive students. This was part of the terms of reference set for the Task Force by the Director-General. The

speedy production of an interim report on strategies recommended by schools made the concern of the policymakers visible to schools. Material analysing strategies was therefore extracted first, without reference to information on numbers of disruptive students or the syndrome of disruption. The draft report was reviewed by the committee before release. The administrators asked for two deletions — references to practices which "bent the rules". As one member of the Task Force put it, "it was too early for the Task Force to pursue illegal things". Although Task Force members may have been supportive in spirit of such moves (allowing a student to undertake part-time work and attend school on a part-time basis) and saw it as appropriate for the particular student, it was seen as inappropriate to report it. The policymakers felt they could not be perceived as being supportive of abuses of Education Department Regulations by such a reference in a publicly available document. Such caution was justified: selected information relating to incidence of disruptive behaviour from the summary of strategies adopted by schools was released to the press by an unknown source. The Education Department had to be defended publicly by the Minister (*Mercury*, 29/3/84).

The document was distributed to schools with a covering letter from the chairman saying:

> When I wrote to you in September I promised that the Task Force would provide schools
> with an interim report documenting successful strategies that were being used to combat
> problems in this area. This interim report has been prepared and a copy is enclosed for
> your information (Letter from Task Force chairman to schools, December 1983).

Members of the Task Force saw this as an important strategy in communicating results of the research, in providing immediate strategies which schools might adopt, and in demonstrating recognition and response to the school concerns and pressures.

Other types of data from the survey were presented to the Task Force and comments were invited on their interpretation. At the meeting on 6 December 1984, the researcher provided examples of information from the survey and invited comment on procedures for coding, for example in categorisation of IQ scores. The Task Force members were also asked to indicate what kinds of cross-tabulation of student data would be useful to the committee. This approach encouraged members to begin addressing issues of valid and useful interpretation, implications of the data and sifting and focussing the amount of data which should be reported. In effect, the data and cross-tabulations nominated by the Task Force were just those which the researcher also nominated from the basic conceptual tenets of the sociological, psychological and administrative frameworks in which the issue was addressed.

Three months later (29/3/84) the Task Force met to discuss further analysis of the survey data. Data were supplied at the meeting and the members of the group asked to provide further comment to the researcher when they had had time to peruse the information.

At the March meeting of the Task Force, the suggestion of undertaking school case studies was again floated. This had been suggested at the first meeting of the Task Force by the researcher, but without any particular focus. The idea was suggested to Regional Directors (23.2.84) and received some support. The school survey had produced interesting data, but did not give an holistic view of student management and discipline in a school. Also it had drawn out information largely related to punitive measures and pastoral care while schools made little reference to school and classroom management and only hinted at curriculum strategies. The Task Force supported the idea of a case study and accepted the school nominated by the chairman as an appropriate location. The school case study was to be undertaken in term II.

The Task Force continued its deliberations on the survey data at its meeting on 21 May. Members of the group were reminded by the researcher in the agenda for the meeting "that the summaries of the data from the survey are for discussion within the Task Force only and not for distribution." This step not only protected individual schools which, at this stage of analysis, might still be identifiable. It also protected the researcher from potential misuse or misinterpretation of the data. This was an important protection for researcher concerns of quality, confidentiality and long term credibility amongst colleagues and with the administration. The data also remained within the ownership of the group as a whole rather than any one member of it. The reminder was duly respected.

The task of compiling the report on the research was left with the researcher. The Task Force had now to turn to looking at making judgements and recommendations from the information at hand.

Making judgements

Given that the group of policymakers had been working in close consultation with the researcher for a year, it might be concluded that they had necessary facts at their disposal to commence deliberations on the policy implications of the research. However it was the opinion of the Senior Superintendent of Research (a Task Force member) that the Task Force would be assisted in this process by guidance from the researcher. This conclusion was based on the view that time and pressures of day-to-day administrative work would intervene in the analysis of the long term issues by these policymakers. To overcome these constraints the researcher provided two documents: a literature search and a list of some issues which might be addressed. Both these documents were brief and couched in terms of everyday concerns. The literature search was not exhaustive, but focussed on recent writing on particular issues. The list of issues encouraged the Task Force members to apply the literature summary to the local situation.

The research study commissioned, observed and analysed by the Task Force could not provide clear indications for policy direction. Although the research had provided information about disruptive students in the local setting, it had also generated many questions in the minds of both the researcher and policymakers. These were of the kind laid out in the second paper distributed at the meeting of 12 July. The list of issues highlighted the range of policy actions which could be pursued by the Task Force.

The meeting of 12 July did little to resolve the process which might follow and another meeting was set up for 21 August to try to establish tasks and a time-scale for the operation of the working party. By this time, too, the survey report had reached draft stage and was presented to the Task Force for approval. Once released, the report was likely to rekindle interest (particularly by the Principals Association) in the work of the Task Force and any policy implications and actions which might flow. It was therefore important for the Task Force to draw together its collective thinking and reach some consensus on philosophy, recommended practices, special support and future plans.

The report "Alienated, Disturbed and/or Disruptive Students in Tasmanian High and District High Schools" (Hocking, 1984c) did not see the end of the work of the research officer attached to the Task Force. The group decided to utilise the resources brought together in support of the research in clarifying the thinking of the Task Force.

Other sources of information brought to the Task Force operation

The researcher was engaged in other research activities which related to the issue of alienated, disturbed and/or disruptive students. The first of these was her involvement in another project being conducted in the Northern region of the state on the subject of early school leavers. These students were mainly a sub-set of the disruptive students of concern to the Task Force: the personal contact enabled different studies in different parts of the state by a different group of administrators to share information and perceive common approaches. Members of the Task Force recognised not only the value of additional information this provided, but also the involvement of another region in addressing this policy issue.

The researcher also undertook a small scale evaluation of the school unit at Wybra Hall, a Department of Community Welfare institution. This report was available to members of the Task Force (in their other capacities). It highlighted the special problems of children so disruptive or disturbed that they were in semi-permanent or temporary institutional residential care.

The school case study also had a significant impact on members of the Task Force. It was undertaken by the researcher in term II 1984. Extensive periods were spent in the school observing, interviewing senior staff, grade supervisors, guidance and welfare officers and teaching staff, attending pastoral care meetings and parent meetings and conducting group interviews with students. A report of the case study was prepared and verified by the principal and vice-principal as an accurate representation of the school. It was submitted to the Task Force members, although not subsequently published. The value to Task Force was expressed by one member in terms of "you read in the literature that the catalyst for change in school is the principal — that case study really expounded that notion." The role of the principal was seen by the Task Force as a key to developing school strategies and the integrated whole school approach underpinned later attempts at policy development. The report of the case study was not released publicly because, in the opinion of the Task Force, the individual school could be readily identified in the small Tasmanian educational community.

Another document prepared by the researcher contributed from a more theoretical perspective. The paper (Hocking, 1984b) translated some of the evidence and the thinking of the Task Force for the academic audience, but was read and approved for release (without amendment) by members of the Task Force.

Research activities were not the only input into the deliberations of the Task Force. The day-to-day work of group members brought its own incidents involving particular students which were often shared at Task Force meetings. Some changes in the local situation were perceived, for example an increase in the number of requests for transfer from students in grades 7 and 8.

Two people involved in the Task Force had experience of education in the UK during the period. The researcher, on brief personal leave in England, was granted transfer of duty for one week and visited institutions, in-school units and administrators to observe and discuss provisions for disruptive students in Leeds and London. The report on processes for dealing with disruptive students, and the operation of an in-school "education advice unit" were of particular interest. This information was referred to extensively in subsequent Task Force discussions, although one member commented much later, "What [the researcher] did in England was really good, really important — but I am not sure how accessible it is to the system."

The Regional Superintendent (Secondary) had a year in England on a Departmental scholarship during the life of the Task Force. During this time he studied at the University of London and visited schools. His experience of current philosophy and practice in England was shared with the Task Force. Other individuals also contributed to the information base of the Task Force. Professor Maurice Balsan visited the state and meetings were held for teachers on his approach to discipline. The primary consultant (southern region) on behaviour management problems in primary schools addressed the Task Force, outlining the occurrence of these problems at primary level and his approach in assisting teachers to find ways of dealing with them. In the southern region, the Regional Office initiated an evening seminar series for teachers, the first of which was devoted to student behaviour. Speakers included a teacher who operated a withdrawal unit in South Australia on somewhat different lines from those in Tasmania.

It was evident that much of this data contributed to the thinking of the members of the group. Some of the information such as the case study, and minor evaluative studies emerged as a result of the Task Force operation. Other events were incidental or accidental, or emerged from unrelated events. For example, experiences and practices in the UK were only brought first hand by two Task Force members because personal reasons had taken them there. Interstate speakers had been invited to the state for activities unrelated to (though perhaps stimulated by) the Task Force operation.

These types of events were labelled as "critical incidents" since they were unplanned as part of the policy development process, yet referred to by Task Force members as contributing to their knowledge and understanding, and in some instances, were recognised as significant focal points.

Further deliberations on the evidence

The Task Force set aside a full day on which to deliberate on the evidence and decide on a subsequent course of action. The expectations were laid out in the notice of the meeting:

> The information collection tasks laid down for the Task Force in the letter of the Director-General of July 6th 1983 are now largely complete. The remaining task is to make recommendations for policy on 'alienated, distributed and/or disruptive students'.

> It is suggested that as the Task Force is charged with making such recommendations, the one day meeting should aim to produce a draft of a policy statement. This should cover the following matters:

> 1. Principles and beliefs
>
> 2. Recommended policy action
>
> 3. Specific courses of action
>
> 4. Resources, organisation and time-scale
>
> 5. Feedback and evaluation.

> Background information, discussion papers and school survey data have been provided by Mrs Hocking and will form the basis of our deliberations.

> I believe that the Task Force has an important role in providing guidelines for schools and the system in the management of problem students. I look forward to a stimulating and productive day together (notice of meeting 30.10.84).

The research officer provided a substantial folio of documentation for the group to consider.

Even at this stage after operating sixteen months as a group, the meeting revealed some very different conceptions of the problem and ways of dealing with it. As a result at the following meeting on 5 December, various members of the Task Force produced position papers on different aspects of disruptive behaviour —

.   school climate and the role of the Principal (Principals' representative)

.   classroom management (Regional Superintendent)

.   curriculum (Superintendent of Research)

.   special units (Superintendent of Special Education, Senior Guidance Officer, Regional Superintendent).

The research officer's task was to produce an outline of a policy statement, based on the deliberations of the October 30th meeting. When collated, the papers fell somewhere between a report of the activities and beliefs of the Task Force, some elements of a "policy statement" and some general musings about the complexities of the problem. It was put to the Task Force that there might be a need for different sorts of documents — one to summarise the beliefs of the Task Force and some recommendations for schools, the other a more concise statement about the Department's responsibilities, rights and practices with regard to student discipline.

The December meeting of the Task Force had other agenda items which deferred addressing this question until a meeting in February 1985.

As a result of the February meeting, the research officer was asked to produce a document for schools summarising the beliefs of the Task Force and recommendations for schools, based on the position papers produced by Task Force members and discussed within the group. Preparation of the more formal and wide ranging "policy" document was shelved at that time.

Interviews with Task Force members suggest that the "booklet" as they referred to it (Education Department 1986), represented a summary of the deliberations and beliefs of the Task Force, and set a framework and a philosophy for schools to develop their own actions and practices. As such, it served two purposes in system-level policy development. Firstly, it reinforced policy in practice, confirming types of approaches acceptable at system level. Secondly, it served to create a climate in which a subsequent more formal statement of policy would be implemented. It has served other purposes too. The principals could see that "the problem is acknowledged [by the Department]" but also "there is greater acceptance that they [the principals] have to face the problems". The booklet was reported to be well-received and generated debate and ideas. Although it may or may not be regarded as a formal policy document, the booklet played a role in developing the context for policy development.

From a policy development perspective the most interesting thing about the production of the booklet summarising the position of the Task Force was the differences expressed on the "basic beliefs". The draft of this section produced by the researcher was not acceptable and a variety of viewpoints emerged from members of the Task Force. One felt the phrasing indicated an unacceptable deterministic view of behaviour, whilst another felt a more realistic view was needed: one which accepted that social and educational disadvantage would lead to behaviour problems and that intervention must be based on that premise. The policymakers were confronted with fundamentally different views within their ranks. It was important to reach some shared understanding and to this end each Task Force member

was asked to prepare their own version of this short section. The researcher used this material to prepare a statement on which agreement was eventually reached, and the material could be prepared for publication.

Several of the Task Force members commented on this process.

> It was a really good thing, sharing beliefs. It was a problem we all had so much to do. If we could have shaped up these and put it out as the beliefs of the group that would have been really helpful.

Another reflected that

> we had different points of view. It is not surprising in something as complex as this. What was surprising was that we didn't clarify our fundamental beliefs at the beginning. In some cases, when you think about it, it's not until you have delved into it, got some material, that you are in a position to have the information to make decisions about it. The important thing was that it (sharing beliefs) was done.

The summary booklet (subsequently published by the Education Department, *Let's look at disruptive behaviour*) was presented in draft form in May 1985.

Time line on the Task Force operation

The schedule for development of the booklet for schools highlights the problem of the time line for the Task Force's operation. It was established in July 1983, and the information from the survey of schools was available to the Task Force in December of that year. By October the following year, the Task Force had a range of information available including an extensive literature review, complete survey document, case study, input from personal overseas experience and other related matters.

Nine months elapsed before agreement on the contents of the booklet was reached (June 1985). Final publication came in 1986. Preparation of a policy document was in hand in March 1987, but was not available by late 1987.

Another matter which the Task Force was asked to address was recommendation 23 of the report on Special Education (Education Department, 1983). The Deputy Director- General wrote referring the recommendation, which dealt with measures to be taken to deal with emotional and behaviour problems, for the consideration of the Task Force. He requested them to report, at an appropriate time, on their findings. Two years elapsed before the Task Force responded to Acting Deputy Director-General (letter from Task Force chairman, 4 July 1986).

A number of factors contributed to these delays. A major reorganisation of the Department was implemented from January 1984. The Director of Secondary Education (Chairman of the Task Force) became Executive Director (Educational Programs). His brief was considerably widened but support staff were not put in place for several months. His workload increased considerably. As part of the same reorganisation, the researcher was redeployed to another area (Curriculum Development and Evaluation) with new responsibilities and tasks. During the life of the Task Force, membership changed with the temporary absence overseas of a Regional Superintendent, retirement of the principals' representative and of the Chairman himself in mid-1985.

Pressure in other significant policy areas affected the priorities of Task Force members as they

continued to operate in some cases in new roles in the new organisation (one Regional Superintendent had become Deputy Director, Curriculum Services, the Superintendent of Special Education became Deputy Director, Student Services and the Senior Superintendent, Research, became a member of the Executive Support Services). The new Executive Director of Education Programs became the new Chairman, amongst many other new roles.

Apart from these contributory factors, one member of the Task Force felt this drift in its work to be symptomatic of a reluctance to address the expectation of schools for action with respect to really difficult children.

Policy outcomes and implementation of decisions

A letter from the Deputy Director-General, prompted by an invitation to address a meeting of principals on the matter, requested information on the progress of the Task Force in mid 1985. A progress report was prepared and discussed at the 26 June meeting of the Task Force, and a further commitment was made to complete the work indicated in that report.

Two specific policy outcomes were noted at that stage. These were: the appointment of a consultant to the Student Services section to work with schools in developing strategies to manage students with behaviour problems; and the change in operation of a special unit in the Southern region from a girls only "school refusers" provision to a co-educational unit providing early intervention.

Both these decisions had been recommended and implemented by members of the Task Force. They were not corporate decisions by the group and later the perceptions of the linkage with the Task Force operation differed. Whilst one saw the appointment of the consultant as a "direct result" of the Task Force, another thought "it may have contributed, I'm not sure". Wherever it was seen to originate, it was perceived to be consistent with and appropriate to the desired outcomes of the Task Force. The initiative to appoint an officer was certainly strongly facilitated by one member of the group, who had felt that "nothing could be done without someone working in the area".

A similar situation surrounded the other noted policy outcome. Task Force members attached to the Southern Region Office (Senior Guidance Officer and Superintendent) had initiated a change to the role of the girls' unit (Nangaree) to cater for year 7 and 8 students, with an increased emphasis on effort to rehabilitate these students into mainstream schooling. Whilst perceived at the time to have links with the Task Force operation, subsequently one officer rejected the notion whilst another was positive the decision was influenced by the Task Force. Others felt "there could have been an influence — it was a complex issue over a long time span". Another Task Force member felt at least the "function of units has become more clearly defined".

All the members of the Task Force indicated that the booklet *Let's look at disruptive behaviour* had established the policy with respect to prevention of disruptive behaviour. As a result, in the opinion of several Task Force members, schools were more prepared to look at the problems themselves. The principals (and schools) discussed the document and were now "ready to admit openly there were problems and were admitting they didn't know how to deal with them. This is a big step forward". There was also the perception that, "early on, the Department didn't understand — but now it is admitted in the hierarchy and there is willingness to give assistance".

> They (the principals) look at things more constructively now rather than grumbling. I believe a different attitude exists in schools.

Several Task Force members indicated satisfaction with the policy stance on preventive measures, and felt it encouraged greater flexibility in curriculum response and an emphasis on teaching teachers how to avoid confrontation.

Other Task Force members saw the deliberations and publications of the group having contributed to the development of other policy actions in the Department. One identified the thrusts of the senior staff development program which, if not a direct result of the Task Force "was at least related to what we were talking about, and the terminology used was so similar to what we used". Similarly a link was made by other Task Force members to the important policy document *Secondary Education: The Future* (Education Department, 1987) where although "the connection may appear tenuous, statements about students, about school organisation and about curriculum clarity" reflected the thinking of the Task Force. "Sure, there would be other sources of influence, things creep in from other sources and get homogenised," was one comment.

One policy area all Task Force members interviewed acknowledged was not addressed. This was what schools could do about the small proportion of really difficult children. There was a divergence of views of what might be possible. One indicated that

> some teachers believe the Department ought to be able to provide answers — I don't
> think any Department can do that. All we can do is supply a series of things which can
> be looked at in their own context.

The school principal felt the Task Force "didn't get down to the 1% real problem students — but they'll beat us every time!" However, it was apparent the Task Force would support the members who felt "we must make principals happy about what we can do about the 2% of really difficult children".

Early discussions of the Task Force also led to considering the possibility of reviewing regulations to facilitate forms of deschooling and part-time study. This was not followed through, partly in expectation of some Commonwealth action with respect to a youth policy. Task Force members were aware of instances where schools bent the rules. One was of the opinion that "once the rules are bent, we could move more broadly into the community" but as yet it was "too early for the Task Force to pursue illegal things".

The Task Force made some attempt towards a comprehensive policy statement, including disciplinary powers in cases of extreme disruption. In June 1985, the Task Force members "suggested that schools should be supplied with extracts from the Act and Regulations relevant to the matters being dealt with by the Task Force" (Letter from Chairman of Task Force to Director, Executive Support Services, 27.6.85). It was suggested that the collection of this data could be undertaken by the Support Services. This yielded only extracted photo-copies which did not provide the overall procedural picture envisaged by the Task Force. Nor did it provide the basis for the policy document foreshadowed in the response to the Director-General's request for a progress report. This was described as

> a concise policy statement about the Department's responsibilities, rights and practices
> with regard to student discipline. Information about this is currently held in the various
> parts of the Act and Regulations, and not readily available to the public (Progress report
> to Director-General, June 1985.

Development of such a policy statement lapsed.

The publication of the booklet *Let's look at disruptive behaviour* in July 1986 prompted the Chairman to consider any uncompleted work of the Task Force. He replied (4 July 1986) to the request for

information from the Deputy Director-General (8.3.1984) in relation to the Review of Special Education. The Task Force Chairman's response drew attention to the publication of the booklet, reaffirmed the belief of Task Force in the value of units and the need for continued provision for regional discretionary staffing for this purpose. The Chairman highlighted two other current actions: the focus on disruptive students through the staff development program and the preparation of a short policy statement. (The latter was still in process of development in late 1987.) The Chairman also indicated the belief of Task Force members in the need to establish a Task Force to address the problem at primary level. This suggestion was not taken up.

A brief chronology of the work of the Task Force and policy outcomes is shown in Figure 13, below. A detailed time line is given in Appendix 3.

Figure 13   ***Brief chronology***   ***Case 1: Alienated, disturbed and/or disruptive students***

1983 Task Force established by Director-General on request of principals.

Research commences including literature review and survey of schools.

Interim report on recommended strategies distributed to schools.

1984 Research on early school leavers in Northern Region.

Researcher visits sites in UK and reports to Task Force.

School case study undertaken.

Survey report released.

All day Task Force meeting to debate issues.

Nangaree Unit for girls changed to become Trinity Unit for boys and girls in grades 7 and 8.

Teachers' Federation sponsors seminars on whole school discipline policy.

1985 Officer appointed with Student Services section to work with teachers on student behaviour.

Draft statement on beliefs and practices prepared. Basic beliefs section rejected.

Case study completed and read by Task Force but not published.

Centenary Conference of all high and district high schools on Secondary Education: the Future.

1986 Booklet, *Let's look at disruptive behavior* published.

Dissemination of booklet planned by Task Force.

Drafts of policy document, *Secondary Education: the Future*, prepared.

1987 Policy statement on Student Welfare and Discipline in preparation.

Reflections of the policymakers on the Task Force process

In the course of the interviews, members of the Task Force offered comments that illuminate the propositions underpinning the strategy adopted. The sense of participation in the research was reflected in the lack of distinction between the research activity and the operation of the Task Force. One member recognised the outcome of the adoption of an interactive model of research.

> People have to immerse themselves in the process or it can be just another set of meetings with no involvement. You have no sense of ownership if just given a report.

The administrators also had adopted a role in dissemination of the research and the ideas. The principal, since he was a representative of the Principals Association, reported back regularly to that group. The Task Force Chairman reported that he

> communicated research to my peers, in the Executive Management Group, Superintendents' meetings, etc ... based on the information we were getting. In the interim period before publishing the Task Force played an active role.

Another member of the group had some concerns at this aspect of the process because "everybody reports back according to their own perspectives".

When the published reports (the research report and the booklet) were available, members of the Task Force were involved in their distribution and dissemination to various groups for which they were responsible.

The Senior Superintendent (Research) commented on the research process as a whole and the relationship with policy development. He reflected on his own original "mechanistic" expectations of the research and a decision driven model of policy development (see Figure 1, p.14). "I thought the Task Force was going to decide what was good and impose it on the system." In retrospect, he was of the opinion that the researcher's approach of sharing ideas and practices gave administrators and schools a better basis for tackling the issues themselves. As a researcher rather than policymaker, he, like other Task Force members, perceived that there had not been recommendations leading to particular actions, though the impact of the Task Force's work had appeared in other arenas. The Senior Superintendent (Research) regarded the research process and the role adopted by the researcher as the key facilitating factor.

The Task Force members also commented on aspects of policy processes. Those whose responsibilities were everyday contact with students acknowledged the creation of policy through practice — for example in the establishment of off-site units, and in the trialling of procedures outside the regulations. Once in place and validated, these often came to be adopted as policy. This process had problems however where regional office had responsibility for determining whether there would be units, for example. The original Task Force Chairman believed some of the clamour amongst principals that led to the original request to the Director-General, derived from the particular concern of the principals in the North West Region where there was no out-of-school provision for disruptive students. The policymaking and implementation processes in the Education Department lack clarity in identifying system and regional level responsibilities.

Those interviewed revealed a range of interpretation of the notion of policy but all included what might be termed "soft" policy development — the clarification of ideas and beliefs, support for a particular

philosophical line in preventing disruption (the booklet *Let's look at disruptive behaviour* was perceived along this line), the shift in attitude by principals and mutual acceptance of problems which indicated more unified views about disruptive behaviour, and the emergence of policy from practice.

Several of those interviewed mentioned the importance of timing in policy development. Mention has been made that the Task Force felt it was too early to pursue things that breached regulations. (The problem was compounded by implications for federal policies). The Task Force operation was seen as "timely as a catalyst". One Task Force member perceived that "timing is crucial — you have to choose the right time to start something."

The same administrator felt that although by the end of 1986, the summary policy statement had not been produced, this was not a bad thing since "a better process now exists for the policy statement (and its dissemination)". This referred to a further restructuring of the Department in 1987, one consequence of which was to bring Regional Directors closer to the most senior management levels.

All these administrators interviewed commented on their personal experiences of research use both within the committee and in general. Comments such as "I appreciated the research" and "I valued the discussion, found it enjoyable and interesting and gained personally in knowledge and understanding" might be regarded as a predictable response to a researcher inquiring about her work. But both these comments were amplified "any one who makes decisions should read as widely as they can" and "you've got to look at what the research says".

Some of the comments revealed how administrators use research. "I have a certain feeling on (some issues) but no evidence — so it was really necessary that I looked at the evidence", said one. Another was of the opinion that "research fertilises people's brains." Yet another summarised his views in the following way.

> All in its own way helps shape your thinking. I find it difficult to say what had influence
> on what. More often than not a number of what seem to be discrete events stir away in
> your brain for a while and come out linked.

Similarly, the emergence of policy outcomes could not be tracked in linear fashion. Comments recorded earlier demonstrate how entangled the threads of the Task Force became with other initiatives, changing pressures, critical incidents, changing organisational structures and personalities. This process was summarised by one administrator

> Cause and effect become intertwined. Things creep in from other sources. I can't say
> what influenced what. A number of events become homogenised into a decision.

Summary

Systematic research in the form of a survey of schools, a case study and literature review constituted the principal basis for the deliberations of the Task Force on Alienated, Disturbed and/or Disruptive Students. Several policy outcomes emerged from this process including the production of a statement on positive strategies to address student behaviour, appointment of an officer to undertake teacher development and change in the use of a withdrawal unit. Although the research may have contributed in an instrumental way to the latter decision, the policymakers generally agreed that the research had a broader impact in helping to shape their thinking and in developing shared views and beliefs.

The research was not the only element in this process: the policymakers' working knowledge and beliefs formed the basis for their interpretation of the data, and other sources of information or events also made a contribution. These other data often entered fortuitously and were termed critical incidents.

The Task Force consisted of administrators (and a representative of an interest group, the Principals Association) who had responsibilities in the area of disruptive students but did not normally have a corporate role in policymaking. They had no direct mandate to do so as the Task Force, except through reporting to the Director-General. The policy processes were therefore somewhat vague, especially with regard to policy implementation. Some of the policy outcomes were largely attributable to one or two individuals on the Task Force, though all supported the beliefs and strategies in the booklet on disruptive behaviour.

A number of factors appear to have contributed to the apparent link between research and policy outcomes. In addition to the establishment of facilitating circumstances through the Task Force, a *modus operandi* was adopted which encouraged participation, ownership and progressive learning about the issue. The social climate, and attitude to management practices within schools changed over the period of the study and positive strategies to address discipline questions were more acceptable. Such strategies were also compatible with the shrinking financial resources of the Department which had been recognised from the outset by the Task Force. It was therefore feasible for the Department to implement policy actions consistent with beliefs and with research findings. And finally, although the policy process was not explicit, the Task Force arrived at a common view of general policy directions through data generated by research, coincidence with other sources of information, and arriving at shared beliefs.

Thus the demonstrated range of policy outcomes confirmed the influence of the research through the Task Force operation. A more detailed analysis, in terms of the conceptual framework, of the conditions and factors contributing to this relationship is provided in Chapter 8.

Chapter 5: Case 2 — Incentives for teachers working in isolated or country areas

Introduction

A committee on incentives for teachers working in isolated and country areas sought information which would form the basis of recommendations for strategies to attract and retain teachers in these areas. The committee sought information and opinion through a number of avenues but a research program formed the core of their enquiry.

In the years following the release of the report, the general perception abroad amongst teachers and in the Department was that despite acceptance of the report and the commitment of the committee, little impact had been made on Department staffing policies and policy incentives within isolated and country schools.

The research in this second case study, like Case 1, was initiated by policymakers. However, in contrast to Case 1, there was widespread belief within the Education Department that no policy outcomes had resulted from the research or the operation of the committee.

The operating environment

The population of Tasmania is the most dispersed of any Australian state (Tasmanian Yearbook, 1985). The percentage of its population living in centres of less than 10 000 is much higher than other states which are dominated by major capital cities and large urban centres. The economic base of these non-urban centres in Tasmania is agriculture, mining or hydro-electric development. The population may be small or transient. Although in terms of distance only the Bass Strait Islands could be considered isolated by standards of mainland Australia, some more remote areas in Tasmania are also subject to adverse climatic conditions and poor and dangerous access roads. Until 1976, many isolated and country regions were served by district schools which accepted pupils up to grade 9 only and which emphasised the rural basis in the curriculum. From 1978 onwards, all but one such school became district high schools going through to grade 10 (Education Department, 1978a).

Educational disadvantages of students in country areas have been widely documented, including detailed studies in Tasmania (Behrens, 1978; Behrens et al., 1978). The need for some forms of discrimination was recognised at national level through the funding of the Disadvantaged Country Areas Program commenced in 1977, and from 1982 through the Country Areas Program. The Tasmanian Education Department had commissioned an investigation into education in rural areas (Education Department, 1971) which made recommendations urging some positive discrimination to overcome perceived disadvantages for country children whilst recognising that basic provisions should be similar for all students.

The geographic conditions and social situation in the various areas of Tasmania are well known to teachers. In addition, beliefs exist about schools, educational conditions and student outcomes, which may or may not be accurate. The consequence of teachers' knowledge about the situation is that many

teachers are reluctant to go to isolated and country areas or seek to leave these schools as soon as possible. The Tasmanian Teachers Federation (teacher union) recognises this and adopts an industrial stance of support for teachers in such areas.

The policy context

The policy context at that time (1978) had a number of elements which impinged on staffing of schools. Trainee teachers were subsidised during their tertiary studies and bonded to work for the Department on completion. This form of contractual arrangement enabled the Department to recruit teachers, to staff schools in non-preferred areas and to exert some control on the specialism of teachers entering the service. The exit students and those with other bonds had to accept appointments wherever they were offered. Teachers within the system seeking transfer could indicate to their Regional Office their desire to move and nominate areas for relocation should a vacancy arise. Many teachers in isolated schools met a sympathetic response to such requests and received favourable treatment in relocation after a basic minimum period of two years. These were not formal arrangements but dependent on Regional Office practice and opportunities within each region, in consultation with the Personnel Branch. Promotion positions were advertised throughout the state and selection made on the basis of application.

The Department therefore had limited options for staffing schools in non-preferred areas. Many vacancies at teacher level were filled by appointment of exit students and promotion positions could only be filled from amongst those who chose to apply.

The policy context and unfavourable environment led to a situation where staff of isolated and country schools were relatively inexperienced and schools were subject to high levels of turnover. It was also perceived that the best qualified teachers did not always apply for promotion positions in more remote areas. The difficulties in staffing schools in isolated areas was commented on in various Departmental reports in the late 1970s: *The Future of District Schools in Tasmania* (Education Department, 1978a), *Secondary Education in Tasmania* (Education Department, 1977) and *Tasmanian Education: Next Decade* (Education Department, 1978b). Recommendations urged the need to provide incentives to work in these areas, but these were not translated into policy or practice.

The establishment of the joint committee

A joint Education Department/Teachers Federation committee presented to the Department in 1976 a report on incentives for teachers working in isolated areas. According to correspondence between the Teachers Federation and the Director-General in January 1977, it was agreed that the report was accepted in principle by both the Department and the government. Both parties agreed to the committee reconvening to recommend priorities in implementation of the report. There is no record of reconstitution for such a purpose.

In mid 1978, the Chairman of the District High Schools Policy and Planning Committee wrote to the Director-General seeking authority to reconstitute the committee with wider membership and extended terms of reference (letter to DG 2.8.78). The reports previously cited demonstrated the widespread concern for the education of children in country and isolated areas. Although the formal request for reconstitution of the joint committee came from a Departmental committee, the belief was expressed by some of those interviewed in relation to the subsequent research that continuing pressure

on the Director-General from the Teachers Federation led to the joint committee's reconstitution. Wherever its origins, the Director-General responded positively to the suggestion and the joint Departmental/Federation Incentives Committee (henceforth referred to as the Incentives Committee) was established under the chairmanship of Mr Geoff Hinds, Senior Superintendent (Personnel). The committee was made up as follows:

> Education Department nominee: Mr E Moore, Assistant to Director of Secondary Education

> Tasmanian Teachers Federation representatives: Mr J Spinks, Principal, Rosebery District High School; Mr B Streets, Principal, Havenview Primary School

> District High Schools Policy and Planning Committee nominee: Mr A Wilson, Vice Principal, New Town High School

Of this group, only one, the chairman, had a clear management and decisional role in the area of staffing. The others had, or had potential for, influence through pressure groups in the articulation and expression of policy matters. In his role of Superintendent (Personnel), the chairman was responsible for the implementation of policy and regulations with respect to staffing matters, including control on staffing numbers and criteria for recruitment of bonded students, counselling and selection of staff. He did not engage in industrial negotiations which were handled by the Director of Personnel. His responsibilities related to the implementation of established policies on staffing.

Three members of the committee had had substantial teaching experience away from major urban centres and two were active members of the Teachers Federation. The Senior Superintendent had risen through the ranks of the teaching service and in addition to his responsibilities in personnel was also chairman of the Priority Projects Committee. This committee disbursed funds from the Commonwealth Disadvantaged Schools Program and had considerable autonomy in developing philosophy, policy and implementation of programs in support of Tasmanian schools. The Superintendent played an influential leadership role through his involvement and high visibility, his determination of guidelines through the Priority Projects Committee and firm enforcement towards the program goals. His commitment was observed through his personal contact with schools and active involvement in meetings and seminars.

In interviews some years later, the chairman of the Incentives Committee described two major concerns underpinning the committee's work: the provision of incentives for teachers and the consequential influence this would have on the quality of education for country children. He saw that "what started as an industrial question concerning incentives to provide staffing in my mind became enlarged to take into account the benefits to children." His role as chairman of the Priority Projects Committee undoubtedly influenced this view of the work of the Incentives Committee. Any outcomes from its work would flow over into his leadership responsibilities in the area of the Disadvantaged Schools Program.

The Incentive Committee's operations

The terms of reference were clarified in the following way:

- to increase the focus on the needs of isolated and country schools by recommending means of attracting and retaining well-qualified, experienced staff in these schools.

- by widening the terms of reference of the initial report of the Joint Teachers Federation/Education Department Committee on Incentives for Teachers Working in Isolated Schools to include country schools generally (*Tasmanian Education Gazette*, Vol 13, No 2, April 26 1979, p.29).

Whilst some committee members clearly expressed commitment to developing incentives, one member perhaps with the advantage of hindsight, felt that the main task of the committee was to establish a data base. The committee certainly saw the gathering of local information as central to the development of recommendations. An early move was to seek information from other states on the matter. One state (Queensland) indicated that a joint Departmental/Union committee report had been rejected by Cabinet because of implications for the rest of the Public Service but the Tasmanian committee decided not to let this influence its deliberations.

The committee began its meetings early in 1979. It operated in a spirit of openness and responsiveness. A statement about its operation involving a list of schools nominated as "isolated" and "country" was published in the *Tasmanian Education Gazette* (Volume 13 (1), February 21 1979, p.8). Comments were invited on the list of schools and individual or school submissions were solicited. This generated information and a flow of correspondence through the life of the committee.

The committee from the outset recognised a need for information from teachers. It is recorded in the report of the committee (*Incentives for teachers working in isolated and country areas:* Report of the Joint Education Department and Teachers' Federation Committee, Education Department, Hobart, 1979, henceforth referred to as the Incentives Report) that

> in the early stages ... the committee decided ... to send a questionnaire to teachers in all country and isolated schools asking them to comment specifically on various incentives proposed by the committee and to comment, in general terms, on the types of incentives needed (Education Department, 1979, p.5).

Following the second meeting of the committee, the members produced some draft questionnaires and sought the opinions of the Senior Superintendent (Research) on the proposed strategy (*Tasmanian Education Gazette*, 13(3), 26 April 1979). Up until this time, no one with research expertise had been involved with the committee.

The research process

The involvement of a researcher

The response from the Research Branch to the draft survey indicated that it appeared to be based on the notion of compensation. A more open and positive approach was suggested which might extend the notion beyond compensation and provide an information base for a public relations campaign to attract teachers to country schools. These issues were discussed between the chairman of the committee and members of the Research Branch. The outcome of this discussion was that a researcher (Mrs J O'Grady) attended the next and all subsequent meetings of the committee and provided advice on the research undertaken by the committee. The researcher had previously been involved in research in country areas (Behrens et al., 1978) and had developed an understanding of the educational situation in these areas.

Specifying the research questions and negotiating a strategy

The Incentives Report documents (pages 5 to 11) at length the changing perspective on the research questions. The committee working in collaboration with the researcher moved towards an approach that addressed the need to emphasise positive ways of attracting teachers as well as compensating for disadvantages.

Initially a survey of teachers was proposed and this was intimated in a statement in the *Tasmanian Education Gazette,* 13(3), April 26 1979, pp29-30. This statement indicated that

> once Research Branch has processed the questionnaires, the Committee will nominate
> special interest groups to be sub-sampled. At present it is planned to interview some
> groups and administer a questionnaire to others.

Further discussion with the researcher led to broader understanding of what might be achieved by research enquiry. As the Incentives Report records, it was decided that questionnaires were limited in providing the type of information required by the committee. They therefore moved to undertake a major interviewing program. This was described in the Incentives Report (p.5) as "an important change of approach". Justification for this decision was made on the grounds of the need to appraise the particular conditions applying to isolated areas in Tasmania, the need to collect information from a wide variety of sources, the need to improve the image of some schools and the need to look at long-term resources to improve life chances of children in non-urban areas. Reflection on the information provided to the committee from other states and some preliminary interviews conducted by the chairman and the researcher with groups of exit students were among the factors which convinced the committee to change their strategy.

Every member of the committee was to participate actively in the interview program. Thus, although members brought differing experiences and expectations to the work of the committee, the research activity brought them together with a shared first-hand knowledge base.

Undertaking data collection and analysis

Undertaking the research was a collaborative effort. The chairman of the committee described it in the following way:

> (we were) brainstorming ideas about issues to be raised in interviews and the researcher
> put it into some order for us. We determined the kind of thing we wanted to know and
> then the research people helped us devise an interview schedule to elicit responses.

> All the committee participated in the interviewing. Our agreed approaches laid empha-
> sis on warmth of relationships, personal interest and sincere commitment and brought
> a naturalness to the situation. I certainly found the face to face contact enlightening.

The participation of all members of the committee in the interviewing, while justified on the grounds of necessity to complete the task, was fostered as a strategy by the researcher to develop close involvement with the data collection. This reflected the beliefs of the Research Branch officers about the research process. Quality standards were maintained through the development of a carefully constructed interview schedule and training the committee members in interview techniques. Interviewing was generally undertaken in pairs to facilitate recording and interviewing. The interviews were written up as soon as possible after the interview, and findings were shared formally at committee meetings.

The focus for the interviewing phase was on isolated schools, following the findings of a survey carried out at the request of the committee on staff stability and experience (Research Branch, 1979b). This clearly illustrated that country schools did not differ markedly from the average of all schools in teacher characteristics of experience and stability, whereas teachers in isolated schools had had less years of continuous service and a lower average time in the present school. This finding led the committee to believe that problems of teacher retention and numbers of inexperienced teachers were likely to be most acute in isolated schools and therefore the committee decided to focus its enquiries on isolated areas.

Various groups were selected for interviewing, including beginning teachers, experienced teachers, teachers in promotion positions, non-teaching spouses, final year trainee teachers and teachers who had never taught in isolated or country schools. Interviews were undertaken in groups of about eight people from the same target group. A core of interview questions was used by all interviewers and participants were asked to complete a brief questionnaire. In all, 369 people were interviewed in 30 locations.

Each interviewer summarised the data gathered and was asked to present it to the committee's meeting on July 27 1979 under guidelines as to style and format. This was to form the basis of the draft report, prepared jointly by the chairman of the committee and the researcher.

Making recommendations and reporting

Each member of the committee had been asked to note recommendations emerging from the interviews which they had undertaken. These recommendations were discussed and decisions were made in the group. They were then prepared in draft form and returned to the committee. The chairman reported that immediate agreement was not always forthcoming despite this process and on one issue agreement was never reached.

In presenting the recommendations, the committee was aware that some of these would be subject to serious question because they impinged on agencies outside the Education Department. Nevertheless these matters were raised as the committee pressed to a speedy conclusion to its work to present the report to the then Director-General on November 16 1979. The report was received warmly by the Director-General, and was presented within the next month to both the Policy Support Group and the Directorate by the committee chairman. From setting up the committee to final reporting had taken just a year.

Dissemination

The report was received by the Director-General and also transmitted to key senior officers: the Director of Secondary Education and the chairman of the District High Schools Policy and Planning Committee (later to become Director-General). Both these officers had had nominees participating as members of the Incentives Committee and would have had previous feedback on its activities.

The participation of the committee members in the research process ensured that there was ongoing communication about the information that the enquiry generated. This formed a first level of dissemination which subsequently went beyond the committee to their peers and colleagues. As far as the report itself went, there was some debate within the committee about distribution and dissemination which resulted eventually in a print run covering little more than the target groups identified earlier,

and every school in the state. In subsequent years, demand for the report exceeded available copies, including regular requests from the Minister of the day as the Teachers Federation persisted in its pursuit of incentives for teachers in isolated areas.

Policy outcomes and implementation

The final recommendation of the Incentives Report (p.62) was the establishment of an implementation working party. This was set up early in 1980 under the chairmanship of the Coordinator of Planning and immediately the working party began to collect information about costs and feasibility of implementing recommendations.

By February 1981 however, in response to a query by the Teachers Federation about progress, the Director-General indicated he had yet to receive the formal report of the implementation working party, and that the complicated nature of the exercise and the state's financial position had prevented inclusion in the budget framework for 1980/81.

Thus despite the speedy and purposeful work undertaken by the Incentives Committee, and the commitment to the evidence of its own research, there seemed to be no tangible policy outcomes from the report. By this time too, the difficulty associated with policy recommendations which impinged on other elements of the Public Service had become fully apparent. Major recommendations appeared impossible to implement and particular impact on policy seemed negligible. Over subsequent years, the belief that little change had resulted from the recommendations of the Incentives Report was widely held in the Department.

Analysis of file records and interviews with some of the members of the Incentives Committee some years later revealed some perceived impact. In 1982, a Teachers Federation representative on the committee prepared a summary of progress to date on behalf of the Federation. This was submitted to the Director-General in July 1982 and this assessment of the situation was confirmed by Departmental officers. Action on the recommendations broadly fell into five categories.

Financial incentives to teachers. An increase in allowances was made for teachers on Bass Strait Islands, and for compensation on the basis of adverse environment and cost of living. Rental subsidies for teachers on the Islands and in isolated areas were fixed. No incentives were offered for country areas.

Principle of support for teachers. Some recommendations were accepted in principle though not all teachers would necessarily exercise these benefits. These included, for example, the cost of an additional flight per year for emergencies from the Bass Strait Islands, and the principle of preference in applications for long service leave or leave without pay.

Improvement in hostels, residences and schools. Though not all recommendations were accepted, many were put into action to varying degrees. This led to improvement in provisions, conditions and maintenance. This was particularly welcomed on the West Coast and on King Island, where poor conditions had stimulated the work of the original committee in 1975.

Transfer and promotion policy. Preference in requests for transfer is now given to teachers who have served a period of three years in isolated schools or six years in country schools. There was also for a time, a clause in the Promotions and Certificate Committee guidelines for the selection, all other things being equal, of candidates who had served in country or isolated areas. (This was revoked in December 1985 by the State Services legislation).

Limited action on public relations. The Department initiated a directory of schools and colleges, giving isolated and country schools the opportunity to publish information about their philosophy and organisation.

The policy actions which occurred represented marginal changes (for example increase in allowances) or formalising agreement to an existing understanding (in the case of transfer policy). Changes were incremental and affected few individuals. Not surprisingly, there was little acknowledgement of policy outcomes.

Action on some significant areas of recommendation had not occurred. These fell into two major areas.

Teaching conditions. There had been no action to increase specialist staff within isolated and country schools, to increase support staff and services to these schools or to provide extra funds to compensate for lack of community resources.

Conditions of service. Recommendations on proposals to offer inducements to teachers such as concessions in retirement benefits and qualifications and a weighting of 1.5 for every year's service after the first three years in determining long service leave entitlement were not implemented. The matters had been investigated but could not be pursued because of the implications for the whole state service.

Two kinds of contextual factors mitigated against policy action in these areas. Firstly, the policy area was not limited to the Education Department but involved the whole Public Service. Secondly, social and economic conditions changed. The government could not respond in ways which had implications for its recurrent budget. In any case, the teaching service stabilised as the labour market contracted and student enrolment declined. As one committee member put it, "the incentive became the job". The chairman of the Incentives Committee reflected that "social conditions overtook the recommendations and the impact of the report was lessened as a result".

Other outcomes of the Incentives Committee

One outcome of the information generated by the research was perceived as the possible prevention of unfavourable change in government policy. As a result of the "leaking" of the report, the data were used in support of an ambit claim submitted by the Police Association which sought substantial changes to conditions of service, particularly in isolated areas. It was suggested by a committee member that the evidence had perhaps put a brake on possible government moves to increase hostel and rental charges. On the other hand, with the police claim in the Industrial Commission, no action was taken by the government on the teachers' claim, effectively blocking access to this avenue of negotiation for improved conditions.

The interview program and the quality and nature of the Incentives Report brought about a mutual understanding of the situation of teachers in non-urban areas. Several members of the committee commented on the importance of the interviews in providing an opportunity for teachers and their families in isolated and country areas to be recognised, to be listened to and to be appreciated.

All those involved in the work of the committee felt that it had brought about significant change in attitude towards teaching in isolated and country areas. "The best thing that came out of it was a recognition that country and isolated service required special consideration." This was reflected in the response and support by central administration in pursuing implementation as far as possible. It was

also suggested that regional offices responded to the practical difficulties highlighted in the report, and have sympathy towards country and isolated schools. The greater devolution of responsibility for staffing to regions was perceived by some of those interviewed to facilitate understanding of both strengths and needs of country and isolated schools.

The report has been a continual reference point on the issue, and provided an information base for subsequent deliberations. This has had some repercussions however as the most recent (1985-87) proposals have introduced a notion of compulsory service in isolated or country schools which to many teachers is inconsistent with incentives.

Paradoxically, the Incentives Report had also demonstrated a "weak signal" of this emerging problem. Comparison of length of service in country schools indicated stability was not a problem (Education Department, 1979, pp.8-9). Under the social and economic conditions which quickly emerged, this feature was intensified and the current problem is ossification of the teaching service in country and many city schools. The policy issue had changed to the need to promote more mobility and flexibility.

A brief chronology of the work of the Incentives Committee and policy changes is shown in Figure 14, below. A detailed timeline is given in Appendix 4.

Figure 14   *Brief Chronology*   *Case 2 : Incentives for teachers in isolated areas*

1978   Joint committee reconstituted to consider incentives.
1979   Joint committee commences information collection and seeks help of Research Branch officers.
1980   Report of committee ("Incentives Report", 1979) presented. Implementation committee established. Work commences on costing recommendations. Some improvements in housing conditions implemented, and minor changes to conditions of service for teachers in isolated areas. Negotiations with Public Service Board in relation to conditions of service.
1981   Increase in allowances in isolated areas approved by Public Service Board. Regulations relating to Promotions and Certificate committee guidelines to favour teachers from isolated areas, all other factors being equal.
1982   General teacher trainee studentships end.
1985   Staffing Procedures Working Party established. Education Department officers only members. State Services Legislation implemented, bringing state employees under common legislation. Discrimination in promotions abolished.
1986   Discussion paper distributed to schools based on concept of some compulsory service in isolated areas by all teachers.
1987   Revised policy statement produced, exploring a points system as a basis for transfer to be implemented in Term 3. TTF bans response to requirements for information. Department officers reappraise staffing needs of system. Decision made to apply compulsory service in isolated areas only to teachers newly achieving permanency from 1/1/88.

Reflections of the Incentives Committee members on the research process

All those interviewed felt they were influenced by the research process, both individually and as a group. Two members commented, separately:

> Everybody's thinking expanded as a result of the research — particularly meeting teachers who were in those situations.

> The whole committee as it assembled evidence gained ... deeper understanding. (Those) who were living there knew about it but their insights were deepened. The contrasts between urban teachers and their counterparts in isolated areas was dramatic. (Committee members from urban schools) could not have failed to have been affected by the evidence.

As individuals each found the experience of interviewing valuable:

> I got a better feel for the information by doing the interviewing and gaining first-hand information.

> I had a deeper understanding of the problems people were facing. I could not have supported recommendations that were made, unless I had personally and first-hand had the experience of very frank, open and warm discussion. I was affected. I was personally committed to bringing about whatever change was within my power to bring about.

The chairman of the Incentives Committee also recognised the significance of the interview process from another perspective:

> The exercise itself was a valuable one, even if results didn't flow. It was important from a public relations point of view. It was first rate to be out there and meet people who had genuine problems.

He further felt the process had demonstrated the validity and accuracy of the information in a way which would be convincing to others.

> Undoubtedly the spirit of the report and the recommendations, reflects the valid, provable evidence that was given to us.

The research providing the data base for the Incentives Report was seen by all those involved as a significant contribution to a long term, continuous but changing policy issue. Just how the Federation and the Department have continued to pursue the issue of staffing of isolated and country schools is reflected in the timeline given in Appendix 4. What the timeline does not show is the change in economic, demographic and other social conditions, the change in government (and six changes of Minister), change in State Services legislation, change in structure and personnel in the Department and retirement or movement of members of the Incentives Committee. The current issue of compulsory service in non-preferred areas is based on different assumptions and beliefs from those underpinning the Incentives Report.

Summary

The research that was undertaken by the Incentives Committee led to expectations for policy outcomes by those who had been involved and, through the publicity which had surrounded it, by other members of the Education Department. It was commissioned by policymakers and the interviewing done by committee members convinced them of the veracity of the information. Through this process they developed corporate commitment to bringing about change. Yet the policy outcomes that occurred were so marginal that they were virtually ignored.

Several factors mitigated against adopting the research findings and translating them into policy actions. Two significant elements in the operating environment had been overlooked: the economic context and the legislative context. Contraction in available finance prevented significant resource increases and also changed the policy issue, since teachers were becoming eager to obtain and retain a job. The legislative context was changing because of the development of a State Services framework for government employees. Early signs of these issues were apparent at the time of the Incentives Committee's activities. The chairman claimed that these signs were not ignored, for the committee believed its recommendations were financially responsible even though they would create difficulty for the Government. And although government administration was under review, there was no indication at the time of the Incentives Report's release, of the State Services framework which subsequently emerged.

Another factor may have intervened in developing policy action. It was suggested that a particular critical incident, facilitated by personal contact of one committee member, had possibly come at a crucial time in the negotiations. This was the submission of the Police Association of an ambit claim with a similar basis, which alerted State Services legislators to the scope of the issue involved.

The constitution of the Incentives Committee perhaps also weakened its position, for its principal constituents were interest group representatives rather than system level policymakers. The reporting from the committee arrived at a time when the Department was exploring more formal strategies and structures for policy processes, but these were as yet untried and not integral to the management processes of the Department. Even where recommendations were made by the implementation committee, these were subject to local interpretation by each region.

Despite these factors, it was the belief of those involved in the preparation of the Incentives Report that the deeper insights into the situation in isolated areas, and the commitment to positive support for those schools and their teachers which developed through the research process, has had a sustained impact within the Education Department in its efforts to make the same basic provision in all state schools.

The evidence of the case demonstrates that overriding factors detracted from anticipated policy outcomes. Nevertheless, the committee believed their work and the research which formed an integral part of that work had had an influence on policymaking on the particular issue. A fuller analysis of the case in relation to the conceptual framework is given in chapter 8.

Chapter 6:   Case 3 —
A study of curriculum reorganisation in four Tasmanian secondary schools

Introduction

The compulsory years of secondary education in Tasmania are provided in the neighbourhood high (years 7-10) or district high (K-10) schools. The final two years (years 11 and 12) are provided almost entirely through a limited number of secondary colleges located in urban centres.

In 1985, four Tasmanian secondary schools introduced unitised courses for their year 9, or 9 and 10 students. Although this idea was not entirely new to Tasmania, this particular approach created considerable interest. The report of the subsequent research *Introducing Units: a study of curriculum reorganisation in four Tasmanian secondary schools* (Scharaschkin & Stoessiger, 1987) — henceforward referred to as the Unitisation Report — indicated a range of interests in this form of organisation. These included other schools which were considering unitisation, and senior management and regions who were questioning the implication for staffing policies and for curriculum redevelopment. Furthermore, unitisation had implications for the Schools Board as the accrediting and certifying body for year 9 to 12 courses.

The investigation was initiated by researchers who worked in close collaboration with schools and representatives of potential interest groups. Data emerged from the research indicating at that stage of operation a generally positive response from teachers and students involved. This was eagerly used by some senior administrators in various forums with teachers and senior staff of schools . This developed a widespread perception of commitment to or even direction towards this form of curriculum organisation as the curriculum policy for years 9 and 10 by the Education Department.

This case examines the way in which the research initiated by researchers contributed to policymaking in an emerging policy area.

The operating environment and policy context

The school curriculum should embody the values and goals of the society which it reflects. It is both a conserving and a developing force. The close link between social change and beliefs about curriculum change is demonstrated in the way in which major reports in Tasmanian education commence with extensive comment on the current state of society. The Scott Report (Education Department, 1977) established the social and educational setting and identified significant changing social situations including the growth of information and communications technology, changing roles of women and the family, changes in the world of work and leisure and the growth of a youth culture. Implications were drawn for education. Similarly the report, *Tasmanian Education: Next Decade* (Education Department, 1978b), commenced with basic assumptions about education and society, whilst the most recent report (Education Department, 1987) also addressed social trends at length as a justification for the proposed curriculum changes. These changes influence curriculum not only through necessary changes in content to match the changing environment but also to meet the needs of a wider range of students for increasing years of schooling.

Organisation and content of the curriculum is a system-level concern yet one in which responsiveness to the local community plays an important part. The White Paper (Education Department, 1981) indicated that guidelines for the curriculum would be centrally developed, and within those guidelines, schools had responsibility to develop their programs. The White Paper had been initiated by a Labour Minister but following a change in government was completed and endorsed by a Liberal government. The policy of devolution to schools of much decision-making, including curriculum decision-making, was further endorsed by Hughes (1982). This reinforced and articulated what had been espoused in the

earlier reports. However the distinction between central guidelines and school level curriculum development was not clearly described. To some degree the curriculum at years 9 and 10 was constrained within the syllabi laid down by the accrediting authority, the Schools Board of Tasmania. The Curriculum Branch also produced a document *Requirements for a curriculum* (Education Department, 1980) which offered a broad philosophical framework. Senior administrators within the Curriculum Branch and subsequently the Division of Education Programs therefore took on a leadership role in curriculum development and change at a general level. On the other hand, schools had a considerable degree of autonomy and flexibility in interpretation of the School Boards syllabi, in developing short courses which could receive direct approval from the Board, and in organisation and teaching methods within their school.

The precipitating situation

The school curriculum, especially at secondary level, had been under increasing pressure to become more relevant, to include more subjects, to stimulate more motivation and meet individual students' needs, and to develop more frequent assessment. This pressure for choice and diversity within education had elicited a range of responses, one of which was repackaging the curriculum in the form of units. The particular form of units adopted in the four schools in 1985 was developed by two curriculum officers working in the schools on curriculum redevelopment in 1984. The work of these officers and the description of this approach to curriculum packaging was provided in a curriculum package entitled *Changing the Secondary Curriculum* (Education Department, 1984).

At the same time as schools were seeking to respond to community pressure for relevance, flexibility and choice in the curriculum, there remained the need to provide for certification at the end of years 9 and 10. One attempt at unitisation in another school some years earlier had been abandoned because the issue of certification was not resolved, students were disadvantaged and local community reaction denounced unitisation.

The Schools Board of Tasmania, the certifying authority, had had in place since 1983, an agreement to certify short courses at years 9 and 10 from 1985. This had occurred almost fortuitously to meet a request from one particular subject committee, although short courses had been certificated at Higher School Certificate (years 11 and 12) since 1981. Thus a technical element of policy on short courses was already in place with the Schools Board. This provided the enabling policy framework for unitised courses to be certificated. As the Secretary of the Schools Board pointed out when interviewed for the present study:

> unitisation and the certification of short courses were occurring exactly parallel ... probably there was a feeling the two would match with each other. But there was virtually no liaison between the people who were developing thinking about unitisation and the Board.

While schools were interested in what was happening at the four schools with unitised curricula, there were also elements of hostility and of disinterest or apathy in the teaching force. It was therefore in a mixed climate and a tentative stage of development that the research took place.

Establishing the research process

The initiation for the investigation came from researchers within the Curriculum Development and Evaluation Section who had seen the developmental work and recognised the potential system-wide interest in unitisation. There was no particular precipitating policy issue which led to the research. The curriculum officers who had been engaged in the development process with the schools were also eager to evaluate the product. Three of the schools were funded in the development work through the Commonwealth Participation and Equity Program, and in accordance with that funding were required to provide evaluative feedback. To meet this requirement, the initial application for funding to support the project from the Participation and Equity Program (PEP) Management Group was couched in terms of an evaluative study. Funding was approved but through the influence of representatives of the

schools involved the study was redirected from evaluation to a research framework to monitor progress, provide information to other schools and indicate criteria by which unitisation could later be evaluated. Only minor modification was required to the original submission to satisfy both the schools and the PEP Management Group: it was really more a refocussing of emphasis than a new proposal.

The researchers set up the research based on the assumption that major stakeholders and those with a potential interest should be involved in the process. Thus one of the earliest activities was a meeting between representatives of the four schools and the researchers. This gave the school representatives opportunity to respond to the proposal and to assist the researchers in identifying key issues for investigation. The participants at the meeting (25 May 1985) agreed on three primary audiences: the administrators of the Education Department, other interested schools, and the four schools themselves. It was agreed that information collected should be returned to the school for approval and only after approval was received would this information be made public. A broad outline for a research strategy was accepted. The group also agreed that a Liaison Committee for the project should be established.

Linking the research to policymakers

The researchers invited the Director of Education Programs, Mr M Cove, to chair the Liaison Committee. His interest in unitisation was well known and he had responsibility for curriculum leadership and resource allocation through his management role in the Department. Other members of the committee were suggested by the researchers and curriculum officers on the basis of potential interest or influence. Thus a district high school and a high school principal and a regional Superintendent from different parts of the state were invited to participate. Each of these was known to be un-committed towards unitisation. The principal of a secondary college was invited also: it was felt important to keep those responsible for the year 11 and 12 provisions informed of developments at year 9 and 10. Secondary colleges had some autonomy in development of short courses or units and already had a number in place for year 11 and 12 students. The Secretary of the Schools Board agreed to participate, for certification of unitised courses was a significant issue. The Secretary performed an executive role for the Board which provided him the opportunity to act as a facilitator and filter for Board deliberations. A member of the Executive Support Services section was included for her interest and research expertise and because of the responsibility accorded to this group in policy support. At the first meeting of the Liaison Committee it was agreed to also invite the Professor of Education at the University (Professor P Hughes) to join the group because of his expertise and his interest in unitisation. The Tasmanian Council of State School Parents and Friends Associations was invited to nominate a delegate, and later a parent from Oatlands District High School joined the group.

The Unitisation Report outlined the roles of the Liaison Committee as:

- sharing information about the study from the researchers to a wider audience;

- disseminating the results of the study;

- representing various groups with an interest in unitisation;

- providing help with the planning and implementation of the study; and

- considering the implications of unitisation for their own sections of the education system.

(Scharaschkin & Stoessiger, 1987, p.10)

Thus the agreed role of the group was to provide a link to facilitate communication to the system rather than to take a directional role over the project.

The Liaison Committee met five times during the project.

Conducting the research

Defining the research issues

The original proposal for the investigation originated with researchers. As outlined previously, however, input about key issues was gained from those in schools involved in the innovation and reaction was also sought from the Liaison Committee. Various members of the Liaison Committee brought broader perspectives to the study. This process ensured all relevant issues were addressed and developed a sense of participation among the committee.

Developing the research strategy and collecting data

The basic research strategy was outlined by the researchers in the original submission and to the meeting of school personnel in May 1985. Further refinement was made, notably the suggestion from the researchers that two senior staff from non-unitised schools should be involved in data collection, so that the questions and issues of interest to non-unitised schools might be undertaken in a neutral and yet perceptive and real way. This approach was endorsed by the four schools' representatives and by the Liaison Committee.

The extensive literature of school level change provided the context for the research design. The data collection on the history and development of unitisation in each school drew from aspects of administrative theory related to organisational change. The data collection methodology adopted was a naturalistic case study created by analysis of documentation and interviews in each school within a general framework. The investigation of unitisation in practice emerged from the general field of sociology of the school and from principles of learning theory particularly those related to motivation. The data collection on the operation of unitisation used a common survey questionnaire format and interview. In addition, information on management aspects of the new form of organisation was gathered by interview with key participants.

The work undertaken by the two vice-principals focussed on the history and development of unitisation in the four schools. To ensure a rigorous and consistent information collection process, the two vice-principals worked with the researchers devising a framework and process for their data collection. One researcher also visited all four school sites whilst the vice-principals each worked in two schools.

Members of the Liaison Committee felt this was a good approach. One commented:

> I was pleased that vice-principals were involved to go and look at the issues — we got
> an unbiased view from two people with no stake in it.

Similarly, one of the vice-principals who was interviewed had welcomed the opportunity to find out about unitisation in practice, as he recognised that it had implications for the whole system.

Documenting the development and implementation of unitisation was one important aspect of the research. The other major thrust was to survey those involved — teachers, students and parents — to discover their opinions on unitisation in practice. Staff and student questionnaires were developed and submitted to the Liaison Committee for comment. In-depth information from students and parents was obtained by interview. Again comment was sought from the Liaison Committee. Thus the Liaison Committee was kept informed of progress and also were alerted to the kinds of information which would be generated by the research. At the same time, quality standards of the research were subject to additional checks at the design stage.

Presenting findings and reporting

As the data from the various elements of the research were collected in draft form (and approved by the originating school if appropriate), they were passed on to the Liaison Committee. This process was given added validity and realism by asking the particular staff engaged to assist the researchers to

present their findings. The interviewer who worked with parents and students gave a verbal overview of her work, as did the two vice-principals who reported on the themes emerging from the school studies of the development of unitisation. At this stage, only major themes were reported, since the text of each school case study was still going through a process of verification and acceptance with the school staff.

In dealing with the vast amount of data the surveys generated, the researchers chose to deal with it on a thematic approach. The material was discussed under the major issues which had been highlighted at the outset in consultations with the schools and with the Liaison Committee. This approach conveyed the major findings in terms readily recognised by both the Liaison Committee and by the schools involved who wanted the information to assist in any modification needed for their curriculum organisation in the following year.

The presentation of such summary data to the last meeting of the Liaison Committee in July 1986 led the chairman to suggest that the researchers distribute it at forthcoming vice-principals' and principals' conferences, for by this stage, many more schools were moving, or being encouraged to move, towards unitisation. Thus schools received the essence of the information almost nine months before the final report was available in 1987. Drafts of the final report were scrutinised by members of the Liaison Committee before printing and provided general editorial comment. It had been agreed with the Liaison Committee early in planning that the report would summarise major findings and issues rather than document detailed data. However, since there had been widespread interest in the details of the study, it was decided to produce a second volume, a technical report which collated the documented case studies of unitisation in each school, presented tabulations of data, survey instruments and other methodological matters. This satisfied the need for information by other parties and the need for the researchers to expose their methodologies to general scrutiny.

Reflections of the Liaison Committee on the research process

Impact on individuals

Members of the Liaison Committee were invited to participate on the basis of their differing interests in and attitudes towards unitisation. Their views on the influence of the research on them personally therefore varied considerably. Two school personnel, for example, both found value in having been able to obtain information about unitisation first-hand. Nevertheless, both still had reservations.

> Unitisation is not a panacea to all our problems; it won't work without a tremendous amount of spade work both within the school and within the community.

> My views before were that I couldn't see sufficient value in what I understood about what was happening at Queechy and Bridgewater. I came to the conclusion that unitisation did have a place but I was not convinced by anything I saw or heard that organisational problems had been satisfactorily overcome.

The chairman of the Liaison Committee was, however, enthusiastic about the evidence emerging from the research which convinced him of the potential of this form of organisation, despite concerns he had earlier voiced to other committee members on the dangers of the "smorgasbord curriculum". He had encouraged and facilitated distribution of interim results from the study to encourage schools to pursue a unitised approach.

The Secretary of the Schools Board considered his participation in the committee had been of value.

> Being involved in it, the points I needed to pick up were being highlighted as I went along. From our point of view it was very valuable being involved. It made me much more clearly aware of the overall picture ... of unitisation in those schools, and therefore made me more aware of decisions the Board needed to make in order to accommodate what they were doing and still be fair to everyone else in the whole system. Hence our current work on moderation and unitisation.

He went on to contrast acquiring information through involvement compared with what would have happened if the Unitisation Report had "just arrived on my desk and been put in the 'to be read' pile". The university researcher on the committee acknowledged that the committee structure provided an effective communication link to key individuals, who otherwise, had they only had the report, might have attributed quite different meaning to the research.

It was evident that some committee members felt that the research fell short of their expectation that pitfalls and difficulties would have emerged or been addressed. One principal, who had taken up the position in a school in the year following an experimental unitisation scheme, felt by looking closely at unitisation in action, some potential pitfalls might emerge. He felt from that school's experience, positive responses would have been made during the unitisation scheme but that the negative aspects emerged only later.

The secondary college principal (by then a Superintendent with statewide responsibilities for secondary colleges) felt disappointed and frustrated that the prior experiences of unitisation in colleges had not been explored by the developers, as through such analysis, discontinuity of learning between high school and secondary colleges might have been addressed. Similarly, other committee members felt that long term issues such as continuity in student learning at years 9 and 10 had been overlooked in the enthusiasm over increased motivation generated by short term goals. It was further pointed out that positive responses might have been due to process of renewal rather than be inherent in unitisation itself.

The report raised some of these issues and the research set out to be the basis for monitoring unitisation and to generate some criteria for subseqent evaluation. However as one of those interviewed pointed out

> the whole thing has been taken over by events. A number of schools have gone ahead
> with unitisation without waiting for all the outcomes of the project.

The role of the committee

The roles of the committee as originally articulated by the researchers have been outlined on p.90. As well as fulfilling these roles to a greater or lesser degree, a number of other roles emerged and were noted by those interviewed. Some of these roles sprang from the nature of the research in an emergent policy area with origins within schools: other roles were a function of the adoption of the committee process as a linking strategy. The outcomes of the committee process, referred to in interviews with committee members, are summarised in the following paragraphs.

For the schools involved in those first attempts at unitisation as a mode of curriculum organisation, the presence of a representative committee of influential people was perceived as "legitimating the risks being taken by those schools". The research was seen to provide an objective view, being undertaken independently by the curriculum developers, yet overseen by a group with a broad range of interest in, knowledge about and attitudes towards unitisation. The committee was seen by some members as being a critical factor in support of the schools, at a time when senior officers of the Department (particularly at Superintendent level), held quite differing views on unitisation.

As the key element or circumstance through which research was linked with administrators, a number of other outcomes of the committee strategy were perceived by those interviewed. The committee acted as a buffer between the research and any personal predilections of administrators either on or off the committee. If less positive data had emerged from the study these would have been "owned" by the advisory committee rather than placing the researchers in direct confrontation with, for example, a senior administrator committed to the idea. On the other hand, the committee support and verification of the research findings would defuse a possibly damaging influence of single person ownership or enthusiasm. Both these views were seen by experienced researchers involved with the research. This two-way cushioning effect of the committee was, in the view of another committee member, an important enabling condition for widespread acceptance of the research findings.

The Liaison Committee was also seen to provide important safeguards for the researchers. Committee members who were not managers in the system acknowledged that the committee structure had avoided any pressure on researchers from any individual administrator who might have been keen to

push a particular direction. The committee provided credibility for the research both internally to the Department and externally to other interested researchers since it verified the independent nature of the research. It was asserted by an experienced member of the committee that "I did not think there would have been any difference in the approach to the research taken than that which an outside researcher would take". It was considered important that the rigour of the research was reflected in the publication of the full report and details of data, as well as the interim summary which alone might have been taken to satisfy the administrator's needs. The full report provided supporting evidence on which schools could judge for themselves the advantages and disadvantages of unitisation.

Impact on policy and emerging issues

During the course of the study in 1985 and 1986, there was considerable concurrent activity in two policy-making arenas. The Schools Board was developing a new form of certification, the Tasmanian Certificate of Education, to replace the former School Certificate and Higher School Certificate. This not only involved certification but also course structures and syllabus redevelopment. Many courses (developed by teachers and subject specialists) were emerging in a unitised format.

At the same time within the Education Department, a major policy document *Secondary Education: the Future* was being developed. Much of the thinking which underpinned the emergence of unitisation as a curriculum strategy was reflected in *Secondary Education: the Future*. This document did not prescribe any particular curriculum organisation but did state that:

> designing the curriculum in modules or grouping students vertically may give the flexibility required to organise suitable programs for each student.

> (Education Department, 1987, p.12)

These two threads — the Schools Board acceptance of unitised syllabi for the new Tasmanian Certificate of Education and the support of *Secondary Education: the Future* — were seen by many teachers as "the writing on the wall". As one of the school personnel involved in the research said,

> many teachers feel that *Secondary Education: the Future* pushes the concept and the Schools Board proposes structures to support it, and this puts pressure on the schools to unitise.

Certainly several people involved in both the research and in the principals' and vice-principals' conferences felt that distributing information from the research was "fairly crucial". This was in mid-1986 when "several groups were involved in unitisation and related matters and people really wanted to know about it." The data were seen as "really important in facilitating uptake of unitisation" and "taking the heat out of the arguments against it." One of those closely involved with the development of unitisation felt that "the research was an essential element in the whole process" of bringing about change. One of the researchers was subsequently involved in extensive in-service activities with teachers and further developmental work in the broader field of curriculum organisation which grew from her involvement in the research.

Whilst within the Education Department through such meetings and other seminars, curriculum leaders were promoting the concept of unitisation, at the Schools Board some of the issues which required policy clarification were emerging. The Secretary noted some matters which had come to light partly as a result of his involvement in the research. These included:

- the implications for moderation which has to be focussed on moderating teachers' standards of assessment rather than student performance;

- the implications of two models of unitisation (one at year 9/10, the other at year 11/12) — breaking down courses into units or building courses from units;

- developing criteria for assessment of each unit within the guidelines for syllabus development;

- relationship between number of units or levels of study in determining awards.

The investigation entered this policy arena at an early stage of policy development. In fact at this stage (in late 1987) there is no formal policy towards unitisation except that it is possible, at a technical level, for unitised courses to be certificated. Nevertheless, in the eyes of many teachers, it is a policy of the Department or of the Schools Board. The phrase "being pushed as a bandwagon" was used by those interviewed. It was emphasised by the Secretary that the Schools Board was not directly pushing unitisation and still had some concerns to be resolved in the widespread use of unitisation in the new Tasmanian Certificate of Education. Many teachers felt the Schools Board had taken decisions on curriculum policy from their hands. Others felt that the Board was being used to promote unitisation by making all the courses unitised. Whilst some of the interviewees expressed the view that teachers felt curriculum policy should be led by the Education Department and was being "taken from the Department's hands", the point was not overlooked that many senior officers of the Education Department were members of the Schools Board and its committees.

Thus, although policy in a formal sense did not emerge, many people observed the courses of action and assumed an underpinning policy stance. Following the early wave of interest in this particular curriculum organisation strategy from 1985 to 1987, general policy redirections for secondary schools embodied in *Secondary Education: the Future* (Education Department, 1987), other government policy initiatives and changes in certification turned schools' energies for change to other issues. A brief chronology of the research and associated policy developments is shown in Figure 15, below.

One committee member summarised the process of policy change at school level in the following way.

> What we need to bring about change is people who are prepared to take risks. But they also need some support at senior level. If a Superintendent is negative about an idea, schools will not take it on because the Superintendent is an authority figure and because they believe that that person has expertise. An objective look at the idea is where research is useful. In the case of unitisation, it allowed the development to go ahead without political opposition. Change and policy development is also to do with people giving support and information.
>
> The only *decision* is the decision to let people have a go.

Figure 15   Brief Chronology   Case 3: Unitisation

1983	Schools Board approved certification of short courses from 1985.
1984	Several schools reviewed curriculum, facilitated by officers of Curriculum Development and Evaluation Section.
1985	Unitisation of Year 9 and 10 curriculum implemented in four schools.
	Research and monitoring of unitisation in the four schools negotiated and funding received from Participation and Equity Program to support research.
	Liaison Committee established under chairmanship of Director, Education Programs.
	Centenary conference, *Secondary Education: the Future.*
	Data collection completed and draft case histories sent to schools for verification.
1986	Draft interim report of major findings distributed at Vice-Principals' and Principals' conferences by committee chairman.
	Liaison Committee supports dissemination of the report on the study.
	Several other schools unitise curriculum in years 9 and 10.
1987	Policy statement, *Secondary Education: the Future* released. Unitisation endorsed.
	Project committees work on syllabus overviews for Years 9-12 and detailed syllabus statements for Year 9 and 10. Many adopt unitised format.

Summary

The extensive research on unitisation was not undertaken with a view to contributing to policy except at individual school level. The constitution of the Liaison Committee, however, acknowledged that the research could be of widespread interest at all levels in the education system. Policies of curriculum organisation and content were largely determined at school level, yet by the time the research was completed, there was a widespread belief that policy at Departmental level was directing schools towards unitisation as the preferred mode.

The research was seen to have contributed to policy outcomes in two respects in this emerging policy issue: a favoured position in the department towards unitisation and in highlighting specific policy issues in respect of certifying unitised courses. In addition to this use of the research, there was a possibly wider impact through early dissemination of the findings to key policy actors, the principals and vice-principals. Given the positive responses to unitisation by both teachers and students, the evidence contributed to greater acceptance of the curriculum leaders' press towards this mode expressed in the major curriculum document, *Secondary Education: the Future* (Education Department, 1987).

There were no clear processes or administrative responsibilities for formal policymaking on curriculum issues, except in the Schools Board activities. The Liaison Committee was set up to guide the research and keep administrators informed rather than as a policymaking forum. Individuals on the committee pursued policy actions in different forums which were subsequently interpreted as demonstrating a Departmental policy.

Perhaps because curriculum policy was not dependent on corporate Departmental processes and lay within the scope of schools to implement largely without additional resources, the research information could be readily used to influence policy actions. In addition, the innovation was consistent with the economic and political climate and was endorsed by teachers and students. The close contact of appropriate policymakers gave key individuals immediate access to the information. As a final aspect of the research which might positively dispose it towards having an impact, the curriculum reorganisation had been initiated and undertaken by schools themselves, and hence could be seen by other schools as feasible and practical, and not imposed by Departmental direction.

Further analysis, in terms of the conceptual framework, of the factors and conditions which influenced the linkage between research and curriculum policymaking is provided in Chapter 8.

Chapter 7:   Case 4 —
Learning a trade:
Studies in apprentice training
and career patterns of tradesmen

Introduction

The training of apprentices forms a significant proportion of the effort of the Technical and Further Education (TAFE) system. In 1979, approximately one third of all TAFE students in Tasmania were apprentices. A considerably higher proportion of full time teachers in technical colleges were teachers of apprentices and a major component of capital resources and equipment was devoted to apprentice training. At this time the author was employed as research officer for the TAFE Division of the Education Department and given the emphasis in apprentice training this led to a focus on work in this field.

The school sector was showing growing interest in apprentice and technical college training with the growth in work experience programs in schools and other activities linking school to work or further study. Around the same time, reports began to emerge (see for example, Committee of Enquiry into Employment and Training, 1979) which demonstrated the general lack of information about a very significant element of the skilled labour force in Australia.

Some early work by the researcher (Hocking, 1979) led to further questions about training of apprentices and their future retention in the respective industries. The later study was supported by both the Tasmanian Division of TAFE and by the national coordinating body, the Technical and Further Education Council (TAFEC). This work culminated in the production of the report *Learning a trade: tudies in apprentice training and career paths of tradesmen* (Hocking & Burns, 1981).

The study broke new ground both methodologically and as an information base on a significant element of TAFE activities. It was undertaken with the knowledge and involvement of officers of the TAFE division, the local apprenticeship authority and the TAFE Council, yet no changes were observed in policy or practice which could be attributed to the research.

Case 4 was selected to explore the evidence from an example of the final cell in the selection grid: research initiated by researchers which did not have apparent policy outcomes.

Apprentice training and entering a trade

A number of categories of employment are designated trades, access to which is dependent on completion of a period of apprenticeship. A young person seeking to enter a trade must gain employment as an apprentice and undergo a period of indenture, usually four years, during which he or she undergoes training, both on and off the job. The indenture is a form of contract which binds apprentices to the employer who accepts responsibility for providing training. Attendance at technical college is compulsory for most trades and lasts for three of the four year indenture period.

In Tasmania since the early 1970s, there have been two distinct modes of release for apprentices for their 740 hours per year of off-the-job training. Under day release the apprentice attends college one day per week during the technical college term, over the whole year. Block release in Tasmania, on the other hand, is an attendance mode where the apprentice attends college for two weeks in each of the college terms. As far as the TAFE system is concerned, this could be determined either on educational grounds or for rationalisation of resources if only limited numbers of apprentices are indentured throughout Tasmania in a given trade. In reality, industry also brings some pressure to bear on the mode of training if, for example, the nature of the workplace prevents block release of students for training. Thus, in practice the mode of training is determined by industry demands and economic necessity rather than on the basis of an educational rationale or policy.

At the time of the study, apprentices who failed a college subject progressed to the next stage but were expected concurrently and in their own time to repeat the failed subject. A significant proportion of apprentices was still attending college in their fourth year of apprenticeship in an attempt to complete their college certificate. However, for many trades, a college certificate was not required in order to be accepted by both employers and unions as a tradesman. It was only essential if the trade was a registered trade, that is, one governed by regulations requiring successful completion of college training, such as electrician or plumber.

The policy context

The training of skilled tradesmen through apprenticeship has been well-established for centuries. At the time of the study, apprentice training lay under the control of the Apprentices Act of 1942 in the state of Tasmania. The Act was administered by the Apprenticeship Commission made up of representatives of employers, unions and training agency (Division of TAFE) with an independent chairman and a full-time secretary. The Commission had ten specific powers.

The Apprentices Act 1942 is an Act to encourage, regulate and control the employment and training of apprentices in certain trades. It gives ten specific powers to the Commission —

(1)   To inquire into the conditions obtaining in any trade to determine the desirable number of apprentices to be employed and the number of prospective apprentices available.

(2)   To appoint trade and advisory committees for any trade or group of trades.

(3)   To exercise a general supervision over the theoretical and practical training of apprentices.

(4)   To examine and inquire into the character and scope of practical training.

(5)   To inquire into and determine whether an employer has adequate training knowledge and facilities for the instruction of apprentices or is otherwise a suitable person to employ apprentices.

(6)   To ascertain the degree of efficiency attained by an apprentice (examinations, inspections, reports).

(7)   To issue grade or progress certificates to apprentices who have attained prescribed standards of efficiency.

(8)   To endorse, if an apprentice has duly served his term of apprenticeship and

performed all other conditions of his indentures, upon the apprentice's part of the indentures a certificate to that effect under the common seal of the Commission.

(9)   To issue final certificates of efficiency to apprentices who have completed their apprenticeship and attained the prescribed standards of education and trade experience.

(10)   To recommend to the Minister the remission of school fees to any apprentice in any trade.

(Apprenticeship Commission, 1981, p.8)

In practice, the major effort of the Commission's small secretariat was in maintaining records on the approximately five thousand apprentices in training at any given time, and in resolving any problems with regard to employment, technical college attendance, accommodation or general conduct.

The Act made provision for the establishment of advisory committees to determine the scope of the technical college curriculum for each trade. These committees, chaired by a TAFE division represen-tative, had a majority of local industry representatives, thereby ensuring that the technical colleges responded to employer or industry perceptions of the core requirements of theory and practice to be taught through the college. The methods of teaching and assessment were the responsibility of technical college teachers. All teachers in the apprentice area must themselves have been qualified tradesmen for a minimum of five years. There was however, no compulsory pre-service teacher training and many TAFE teachers had to rely on the forms of teaching methods they themselves had experienced. The TAFE system also had little control over the quality or ability of apprentices at entry. The Apprenticeship Commission established minimum entry requirements (based on performance in School Certificate) for admission to each trade which varied according to four different categories. However, if an apprentice was offered employment without these qualifications, conditional entry was allowed and the apprentice was admitted to technical college classes. The TAFE system did not have any restrictive entry policies with respect to numbers of apprentices and it was obliged to provide training in given trades for all those indentured. Therefore neither the Apprenticeship Commission nor the Education Department had any role in determining number of tradesmen being trained. This aspect of labour market development was left to market forces.

Policy on apprentice training must surely have had one of the longest histories of any educational policy. It has emerged from the social and industrial fabric of employer responsibilities and rights, union influence and protection, and educational response and support. There has been a long-standing and tightly controlled policy context yet one which was starting to waiver under social, economic, educational and individual forces in the late 1970s. In addition, there was growing interest on the one hand of schools in improving links between the compulsory education sector and employment, and on the other hand, of national agencies in developing effective and efficient ways of training skilled manpower. These pressures were leading to the consideration by education and training authorities of the need for other kinds of policies related to the area of apprentice training (Stevens & Hocking, 1979; Schools Commission, 1980; Committee of Enquiry into Education and Training, 1979).

The operating environment

The economy in Australia began a period of recession in 1974. The consequences of the recession were manifested by the late 1970s in increasing unemployment and instability in major industrial sectors.

Tradesmen were adversely affected from the start of the recession (Committee of Enquiry into Education and Training 1979, p.688) with numbers registered for work in trades categories outnumbering available vacancies. Despite this, there was also a perceived shortage of tradesmen in some trades and in some geographical areas. The available pool appeared adequate, yet particular industries found tradesmen to be in short supply. The general decline in employment opportunities led to pressure on the intake of apprentices. Openings for apprenticeships declined, but less dramatically than for other types of employment for school leavers. As a general trend, educational qualifications on entry increased (Hocking, 1979) as a result of employers selecting the best qualified from a larger pool of applicants.

The conditions of apprentice training and in the industries in which apprentices and tradesmen were employed, were protected by a powerful and unified trade union movement. Change was resisted despite in some cases quite dramatic changes in the nature of the work of tradesmen. Technology had affected many industries, notably printing and metal trades industries and to a lesser extent electrical and motor vehicle industries. Some trade occupations were being polarised in skills, particularly by computer-based installations such as word processors in the printing area and numerical control lathes in the machining area. Some tradesmen might be required to undertake highly technical programming activities whilst operators could leave their former trade skills to be taken over by mechanical or electronic means.

The influence of a downturn in the economy was beginning to flow through to affect families as well as industry, and families suffered poverty from unemployment. The education system sought to respond by improving transition from school to work, and encouraging staying on to complete education, though this strategy was often at tension with an individual's drive to leave school if a job was offered. Students who in the past might have had aspirations to higher education, began to see apprentice training as a desirable option (Hocking, 1979).

Faced with the complex of factors affecting the labour market, yet recognising the need to maintain a supply of tradespeople, the Federal Government initiated some countercyclical labour market policies. Some states also introduced schemes to encourage participation in apprentice training by groups which traditionally had a low participation rate, such as girls. The need for some alternatives to traditional trade training was apparent from the introduction on a trial basis of programs such as accelerated trade training, and pre-vocational programs (Stevens & Hocking, 1979) but attempts to change the system overall did not get far (Hocking & Burns, 1980). Given that the pool of tradespersons was larger than short term vacancies, it ought theoretically to have been possible, through facilitating re-entry to trades, to sustain the supply of tradespeople. However this issue of retraining tradespeople to meet skill shortages was not tackled in any policy or program context.

The social context was turbulent and uncertain in the late 1970s. In a traumatic series of events, the Labour government was replaced by a Liberal government in late 1975 but the new government was struggling to develop policies to address the economic and social needs of the country as a world-wide recession took hold. The Committee of Enquiry into Education and Training (1979) reflects the ambivalence and uncertainty of the time.

> There is always a tendency to forecast the future in terms of the present ... The deep depression of the thirties was followed by a substantial period of rapid growth which made possible a growth in both incomes and leisure. The present recession has generated gloomy predictions of sustained unemployment which may prove to be as false as the predictions in the thirties (p.47).

The research into apprentice training and career patterns of tradesmen grew out of this general pattern of uncertainty and change, rather than in response to any particular policy issue.

Conducting the research

The research was undertaken when the author was research officer for the TAFE division, located within the Research Branch of the Education Department. Financial support from two bodies enabled the employment of a project officer and an interviewer. If anything, an understanding of the issues concerned with linkage between researchers and policymakers was less well developed at this time, but contained the basic elements outlined in the other case studies described.

State and field of knowledge

The concept of "career" had been used in sociological studies describing the patterns of progress of individuals or groups of individuals in particular employment areas. Much work had been undertaken with respect to the professions: very little had been undertaken to describe and analyse progress in other employment categories. In the area of skilled trades, knowledge was traditionally derived from gross employment statistics and economic analyses of demand and supply of tradesmen. There was little or no insight into the features, dynamics or dimensions of these supply and demand figures from a sociological, psychological or educational perspective. Duke, Sommerlad and Berry (1980) demonstrate the paucity of study on socialisation in the trades compared with the professions. Similarly, the apprenticeship system itself had been subject to little rigorous investigation. Little was known (beyond simplistic, formal statistical records) about reasons for drop out from training or the influence of school or college academic performance on subsequent performance or career paths. Indeed, as the study progressed, the very notion of a career path seemed inappropriate for some, if not many, trades. The apprentice training concept had not been subject to systematic study in a policy context (Stevens & Hocking, 1979). Career counselling in schools and education and training provisions for apprentices were addressed within a framework of broad economic rationality, unsubstantiated by pedagogical, psychological or sociological research.

In summary, research of the kind undertaken in the project broke new ground in an area which had not previously been subject to detailed scrutiny. This meant not only the exploration and application of ideas from several disciplines to novel settings, but also that the audience for the research had not had prior experience or knowledge of research processes or products. Further, research was fairly new to the TAFE area in general and had an extremely poorly developed professional base and network of communication.

Initiation of the research and establishing the Advisory Committee

The research was initiated by the researcher, building on previous work on qualifications of apprentices at entry (Hocking, 1979), a study originally prompted by a request from school principals. Subsequently, the need for more detailed information on apprentice training and careers of tradesmen was prompted by the emerging economic situation and the important place of apprentice training in the TAFE operation in Tasmania (Hocking & Burns, 1980). Application was made by the researcher and funding received firstly from the TAFE Division (Tasmania) through the Particular Purpose Recurrent Funds and then also from the (national) TAFE Council.

It may be assumed that the financial support indicated also commitment and concern on the part of these two bodies. In fact, staff of the TAFE Council of the Tertiary Education Commission (prompted by an expression of interest by the researcher) collaborated to initiate a submission from the Education Department of Tasmania following receipt of a submission from another research body which was considered inappropriate. The researcher was invited to "indicate ... some alternative approaches which might be adopted" (letter from TAFEC, 1.11.78). As a result, a submission from the researchers received funding which enabled further interviewing, data analysis and production of a report.

In accordance with the practice which the Research Branch was developing, an Advisory Committee was established. Potential interested parties and individuals were identified by researchers and the invitation to participate was made by the Director-General. Only persons involved with the institutional training of apprentices were considered.

Members of the committee included nominees of each of the funding agencies: the TAFE Division and a staff member of the TAFE Council in Canberra. The Secretary of the Apprenticeship Commission participated, not only because of the interest of that body but also to facilitate access to the Commission's records. The Technical Colleges Staff Society (technical teachers union) had a representative, not only because some interviewing was to take place at college and during college time, but because the Staff Society was a powerful and active interest group both directly in the education system and indirectly to government through their union colleagues in the workforce. An external researcher working at the Royal Melbourne Institute of Technology (RMIT) was included to provide additional expert advice and an interstate perspective on the data and their interpretation. The group was chaired by the Senior Superintendent (Research) who had not only research expertise but also provided a potential line of communication to the compulsory education sector.

Purpose and methodologies

The researchers set out to try to document and describe in detail some features of apprentice training and consequent employment patterns as a basis of possible interventions at school and in technical college. Whilst the broader implications of the study for manpower planning were acknowledged, these were beyond the scope of the education system to intervene. The implications and possible policy outcomes were perceived as being at a general level rather than oriented to action on a specific policy.

The methodologies which were adopted reflected this need for a broad information base at this stage. Statistical data analyses of two complete cohort intakes of apprentices provided an overview of the situation as far as current apprentice activity was concerned. Insights into reasons underlying the evidence from the cohort data were sought through interviews of randomly selected apprentices. Careers of tradesmen and explanations of these patterns were also documented through an interview technique following up cohorts commencing indenture periods up to thirty years previously. Analysis and verification of all this information, and the drawing of implications, were supported by literature from overseas and by interviews with and correspondence from employers and union groups in other states.

Planning the research and collecting the data

The research methodology was designed by the researchers and all data collection undertaken by the research team (two researchers and a contract interviewer in the north of the State). Reactions to proposed interview schedules and approaches to data analysis were sought through the meetings of the

Advisory Committee. The Advisory Committee met four times over the period of conduct of the project of approximately one year. In addition to formal data collection, the Advisory Committee also approved a visit by the two researchers to two mainland states to explore the views of significant industry groups such as the Master Builders' Association and Metal Trades Industry Authority. This provided the researchers with important insights into how such groups perceive demand and supply issues and why particular views on such issues were portrayed by influential community groups.

Reporting and dissemination

The report of the project was completed in mid 1980 and, after referral to the Advisory Committee (which made no alterations to the substance of the report or its conclusions), it was published late in 1980. The report was distributed to technical colleges and high schools within the state. It was also sent to TAFE authorities and apprenticeship authorities. The covering letter simply indicated that the report "documents some work done ... (in the field of trade training) over the past two years" (letter 8.12.80 to the TAFE Director from researcher) and expressed the hope that it would be of interest. The Director, in response (16.1.81), thanked the researcher with the comment "no doubt the findings contain much information which needs to be considered by the Division". It was noted that the report was being studied by relevant officers and in a footnote suggested it might form a major topic for a senior staff meeting.

The findings were considered by the Advisory Committee to be sufficiently significant for teachers to suggest that a leaflet summarising findings be prepared and distributed to each trade teacher in Tasmania. Apart from listing the report in the accessions of the National TAFE Clearinghouse, no further dissemination of the report was undertaken by the researchers.

The role of the researchers

At the commencement of the study, the principal researcher was employed as a research officer for the TAFE Division but located within the Research Branch which served the whole Education Department. The role of the researcher, in this project as in others in the TAFE area, was to provide information which would improve the quality of services in the TAFE sector, although the process by which the research might be linked to policy or practice were not clearly articulated. By the time of completion of the study, the principal researcher had attained a more senior position in the Research Branch and wider responsibilities. The other researcher was employed on a temporary basis to undertake the project and, on completion, gained a permanent position in the Department of Labour and Industry. Thus neither researcher was in a position to facilitate further dissemination or to follow up the implications drawn out in the study.

The administrators on the Advisory Committee

At the time of the study, only one member of the advisory committee, the Director of TAFE, could be considered to have direct responsibility for policy matters related to apprentice training in Tasmania. These policy matters only covered part of the whole policy framework, that of some aspects of technical college training. In practice, the Director nominated a delegate to attend on his behalf, and no one person regularly attended Advisory Committee meetings in this capacity. The Secretary of the Apprenticeship Commission was not involved in policymaking but rather in the implementation of a long standing legal and organisational support for the employment of apprentices. Subsequent changes

to the Apprenticeship Commission, noted hereunder, left the Secretary supporting the traditional apprenticeship system in a similar way. Two other members of the committee, the chairman and the RMIT staff member were primarily researchers, though the former subsequently became head of Executive Support Services and the latter joined the Ministry of Employment and Training (Victoria). The nominee of the Technical Colleges Staff Society was on the committee to represent and protect their industrial viewpoint. He subsequently became college vice-principal and then a superintendent where he is now a significant policymaker on matters relating to apprentice training both through the TAFE Division and through representation in other arenas. The last member of the committee was the nominee of the TAFE Council who had policy advisory responsibilities in relation to Commonwealth support for Technical and Further Education.

Only policy actors involved directly or indirectly in the *educational* aspects of apprentice training were involved in the Advisory Committee for the project. It was pointed out by certain Advisory Committee members that an internal (Departmental) committee could not change much. One said

> we would have needed representatives of trade unions and of employers. We would have had more chance of "success" by changing these sort of people rather than an internal committee.

Outcomes of the research process

Policy outcomes

There were no observable policy outcomes which could be linked to the research. Initially, within the first two years after its release, no changes took place in the education of apprentices. Neither was there any perceptible effect on the compulsory sector in areas of career counselling or course selection, despite the fact that the original request for information from which the substantial project flowed had come from school principals. To all appearances, this was another piece of research which had been shelved, no use having been made by administrators, and no influence in policy.

Impact

Interviews with members of the advisory committee however indicated that some members, at least, believed there had been some impact from the research, though over a long time scale and on a broad front. Two examples of this were cited, one in the area of manpower planning, the other in the area of incremental changes to the apprenticeship system.

The study was the first of its kind in Australia in attempting to develop some understanding of career patterns and progress among tradesmen. Shortly after the study was published, a national study was commissioned by the National Training Council (1983) which adopted the methodology. Subsequently, the Industry and Commerce Training Commission of the Queensland Department of Employment and Labour Relations (1983) undertook a similar study and the National Training Council (1987) commissioned a study to build on the earlier pilot. As one interstate member of the advisory committee put it

> (the study) was the first cab off the rank; the others followed it up. There is now much more sophistication in labour market thinking. No longer do people think in terms of training for a life time or make judgemental decisions about being "lost to the trade".

The report of the Committee of Enquiry into Education and Training (1979) reflected this earlier, "unsophisticated" view and the lack of information.

> To maintain the stock of qualified tradesmen in the labour force at a constant proportion of the population it would be necessary to increase the number of new tradesmen by the percentage growth of the population plus the percentage loss from the labour force due to deaths, retirements and net emigration. The annual percentage loss is not known, and this greatly complicates the problems of planning ...

> Forecasting the need for tradesmen is also complicated by evidence of unemployed tradesmen and claims by employers that there is still a shortage of skilled labour. (p.687)

> ... little is known of the annual loss of tradesmen or of the reasons for it. In some cases tradesmen, after further experience and training, are promoted to technician status; in other cases they move into selling or management activities. Even firm knowledge of the extent of upgrading does not exist. (p.698)

> It is an indication of incomplete information and understanding of the labour market that there is a continuing debate on the significance of measured unemployment of trades-men and persistent claims that there are shortages of tradesmen. (p.688)

A review undertaken for the Bureau of Labour Market Research (1983) reported on data from recent surveys, including Hocking and Burns (1980) and the National Training Council (1983) study. The concept of career paths was used in the analysis but the emphasis of the report remained largely a numerical approach. Nevertheless, this may have represented the beginning of a change in conceptu-alisation. It was suggested by three members of the Advisory Committee that through agencies such as the TAFE Council and National Training Council, *Learning a trade* and subsequent studies in other states adopting the concept and methodology had led to greater understanding of the fluid nature of labour markets and more flexible approaches to analysing data on training. This trend was reflected for example in a report of the Department of Labour Advisory Committee (DOLAC) Working Party (1983) which

> concluded that rather than follow a "number crunching" model such as that used by DOLAC in 1980, it would be preferable to develop an analytical framework for assessing future supply and demand in trades labour markets (p.2).

As one Advisory Committee member reflected

> I recall that the results were often quoted (especially around 1982-84) to illustrate the importance of wastage, mobility and career progressions in and beyond the trades.

The second example of impact of the study was at a more personal level. The one active advisory committee member with a direct line into policy on apprentice training felt that the information from the study had been useful. In his mind the study had confirmed and verified his working knowledge about apprentice training and he felt that such research had "a place in changing attitudes — in encour-aging more open attitudes towards alternatives". This was not in any formal sense but simply used to back his arguments for more flexibility in training systems. Thus the research was not used in a direct instrumental sense towards particular policy changes, but rather as a contribution to a general forum of debate over a long time scale.

The place of research in TAFE was in its infancy, though supported by the national TAFE Council, and facilitated by a National TAFE Clearinghouse established in 1979. By 1981, the Apprenticeship Commission of Tasmania was asserting that

> a quick review of the report (*Learning a trade*) leaves no doubt in our minds of the significance of our request for the Commission to have its own research capacity to follow up the good work of such a report (p.8).

At the time the research was published, the links between TAFE at national level and more industrially oriented sectors of the bureaucracy were not particularly strong. The research raised issues of an industrial as well as an educational nature, and, as one advisory committee member put it, "the timing may have been bureaucratically wrong". The balance of responsibility for training and economic revival between industry and government was a matter for debate, exacerbated by lack of clarity in roles of TAFEC and more industrially-oriented sections of the ministry at federal level.

Subsequent changes in training

The report raised a number of issues concerning training which it was suggested should be addressed by appropriate authorities. Although there was no obvious or direct relationship with the research, a number of suggested changes in policy or practice have taken place in the six years since the release of the report. Changes in approaches to manpower planning have already been noted (foreshadowed in pp.142-145 of the report *Learning a trade*). Other more specific changes to training of skilled workers have also occurred.

Expanded role of the Apprenticeship Commission. In common with moves in other states, the Apprenticeship Commission has been reconstituted as the Training Authority of Tasmania (TAT). The Authority administers the Industrial and Commercial Training Act 1985 which controls and approves any vocational training in the state whether at certificate, technician or trade level, and is also involved in re-training and post trade training. For a time, a manpower planning authority also existed but became defunct.

Group apprenticeships. A group apprenticeship scheme in the building industry began in 1982 with Commonwealth funds made available to employ a coordinator. It was claimed by the secretary of the Apprenticeship Commission (now TAT) that this was a consequence of a downturn in the building industry at the time and initiation of such schemes was favoured by Commonwealth authorities and facilitated by financial support.

Recently, a similar scheme has been approved for the hospitality industry. Though the report *Learning a trade* had made this suggestion for educational and training reasons, the move was prompted by economic conditions.

Adult entry. Some trades now accept older apprentices though still as a general rule the indenture period must be completed by age 23, and an older apprentice must accept the award wages for apprentices which are not age related.

Retraining. Provision for retraining has been accepted in principle but has been difficult to apply in the limited labour market situation in Tasmania. One specific example of retraining of welders in X-ray welding techniques has been made available in response to a specific industry need.

Length of indenture period. Solidarity amongst craft unions behind the implicit notion of a minimum

wage for tradesmen has operated against any moves to reduce length of training. Nevertheless, the widespread introduction of full time technical college prevocational courses has led to reduction in technical college attendance in specific trade courses and, on an individual basis, negotiation of some time off the indenture period.

Prevocational training. The report *Learning a trade* argued for a more flexible approach to career counselling and more contact with industry in enabling students to select their field of work. Although "pre-apprentice" schemes had been attempted earlier, these had been aborted because of union pressure. With a downturn in available numbers of apprenticeships in the early 1980s, the Commonwealth facilitated the introduction of prevocational schemes with financial incentives to the states to provide programs and to the individuals to participate in the schemes. One committee member said he would

> like to believe it was (not only political but also) because of the downturn in the economy
> and in anticipation of the need for additional skills when economic conditions improved.
> It's also partly to do with their beliefs about training.

He added that he had

> a feeling that, given another three or four years, it would be almost mandatory (to do a
> prevocational course) in order to pick up an apprenticeship.

Qualifications at entry. At the time of the study, an upward push in selection of older (year 11 completed) students and more able students with School Certificate results well above the required minimum was noted. Since that time selection measures have changed. Screening tests by some employer groups have been abandoned, more students are undergoing prevocational courses. By 1986, the Tasmanian Training Conference had recommended "that the TAT undertake to abolish current School Certificate pre-requisites for entry into apprenticeships" (Unpublished report of Training Conference, Training Authority of Tasmania, 1986, p.7).

A chronology of events is shown in Figure 16, p.108.

Perceptions of the value of the research

The Advisory Committee for the project was a small one with access to limited aspects of policymaking in apprentice training. Perceptions of the value of the research varied, both personally and in terms of its general impact. Representatives of the TAFE division had little ongoing contact with the research and did not follow up its findings at system level. The Secretary of the Apprenticeship Commission found it of no immediate personal value. The Staff Society nominee, while having no specific expectations for the research except perhaps to verify his ideas, found it interesting and useful to get into the research field. He felt his use of research in debate had "rubbed off" on others. Interstate committee members felt that research had made a significant contribution to general understanding about apprenticeships and careers of tradesmen.

On the other hand, it was clear to the members of the committee that research had very limited capacity to influence policy decisions in this context. Even the TAFE division itself had to be reactive rather than proactive in relation to apprentice training. Its influence was constrained by pressures from employers and unions as well as economic conditions. It was suggested that a combination of issues influenced change and it took time for "good ideas to be sold". Even so, union and employer pressure could restrict its effectiveness. As one committee member commented

Figure 16   ***Brief Chronology   Case 4: Apprentice training***

1979   Research on apprentice training in Tasmania extended by study funded by Technical and Further Education Council.

Committee of Enquiry into employment and training (Williams Committee) report.

1980   Research continued, report released December 1980, *Learning a trade: Studies in apprentice training and career paths of tradesmen.*

Report of an Enquiry into Tasmanian Apprenticeship System.

Report of Department and Labour Working Party (1st DOLAC Report) on demand and supply of labour.

1981   Pilot study for National Training Council adopting Hocking and Burns methodology.

1983   Department of Labour Advisory Committee report on a framework for supply and demand of skilled labour.

Bureau of Labour Market Research, conference paper no 41 summarises recent research on career pathsof tradespeople.

Commonwealth funds full-time prevocational programs. Some reduction in college attendance for apprentice training for those successfully completing prevocational courses and some flexibility in length of indenture period.

1984   First group apprenticeship scheme in Tasmania begins in the building industry.

1985   Industrial and Commercial Training Act (Tasmania)established wider framework for role of former Apprenticeship Commission, now termed Training Authority of Tasmania.

1986   Commonwealth Traineeship Scheme commences.

Tasmanian Training conference recommends extensive review of training system.

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you don't take the difficult unions on. You get a sympathetic union that is prepared to look at changes and work with them first. If it is implemented succesfully, others will follow.

It is clear that whatever weaknesses might be observed in the research itself, the nature of the linkage with policymakers or the limited range of policy actors associated with the research, that research was likely to be a very limited force in policymaking in this area. Although many of the changes foreshadowed by the evidence of the research have subsequently taken place, indicating a most appropriate timing of the information, the changes were a consequence of economic and political pressures rather than the result of a rational policy model. A downturn in the economy and in certain industries in particular enabled policy changes to occur facilitated by financial support (and national acceptance) through Commonwealth sources motivated by political and economic reasons.

Summary

The research undertaken in this case extended studies of socialisation and career patterns into trade areas. It brought increased understanding and quantifiable estimates of phenomena which had been of concern, especially to trade teachers but also on a widespread scale in industry and government. The results and their implications became available at a time when the economic downturn was already affecting apprenticeships, yet no observable policy outcomes in the area of trade training could be linked to the research.

The advisory committee set up to support the research was limited in its constitution and role. The research focussed on educational issues and the committee constitution reflected this in a rather limited way. Even the educational aspects of apprentice training could not be divorced from the other aspects of this highly complex policy area. Thus it was not surprising that larger changes in the economic, political and social context had to occur before changes in apprentice training policy could eventuate. These were consistent with suggestions emerging from the research but not associated directly with it.

Despite this apparent lack of use of the research, some advisory committee members felt it had had an impact, both in their thinking as policymakers and in changing attitudes to conceptions of manpower forecasting. Perhaps these lines of influence might have been strengthened had different lines of communication, and avenues and strategies for dissemination been established.

Further consideration of the evidence of the case within the context of the conceptual framework is given in the following chapter, Chapter 8.

Chapter 8: Analysis of the four cases

Introduction

Four cases were selected to explore the relationship between research and policy. These have been described in Chapters 4 to 7. The purpose of this chapter is to present an analysis of the data from the four case studies with reference to the conceptual framework outlined in Chapter 3. The conceptual framework consists of four major components: policy, research, linkage and outcomes. The component policy comprises three sub-components: the operating environment, policy process and policymakers. The component research comprises two sub-components: researchers and enquiry. Each of the components or sub-components consist of a number of elements which form the basic concepts against which the evidence of the cases is analysed.

Organisation of the chapter

The analysis of conditions, events, activities and personal perceptions in the cases is presented with reference to each element of the conceptual framework. Similarities and differences between the four cases are noted. The elements are grouped in components or sub-components. At the end of each of these groups of elements, comment is made on aspects of the sub-component or component as a whole which appear significant in the research/policy relationship.

The analysis follows the sequence of presentation of the conceptual framework in Chapter 3. This leads the analysis from the macro-environment of the state of society to the micro-climate of the particular case and from the general setting of research and policy to the specific details of actions and beliefs of the individuals concerned.

The analysis commences with the component of policy. This has three sub-components: operating environment, policy process and policymakers. The operating environment provides the context in which both researchers and policymakers work. The policy process is the particular context to which the research may relate. The sub-component policymakers specifically refers to those individuals who were directly involved with the research in each case. Chapter 1 contains a detailed description of the particular organisational and policymaking context in which the cases took place. The analysis of the component policy draws on material from Chapter 1 as well as the evidence from the four case descriptions.

The component research has two sub-components: researchers and enquiry. The sub-component enquiry attempts to establish the significance of the fields and status of knowledge and methodologies, while the sub-component, researchers, identifies beliefs and activities of the particular individuals involved. Interviews with committee members with research expertise and with researchers involved contributed additional insights in this analysis.

The next sections of the chapter deal with the component of linkage. The analysis addresses the effectiveness of the linking processes. It highlights the developing understanding of linkage processes which occurred over the time span of the case histories.

The final component of the conceptual framework is outcomes, which includes policy outcomes (both related and unrelated to research) and research impact. The issue of timescale and timing is also included under this heading.

The analysis of the case data with reference to the conceptual framework concludes with comment on the validity of the framework itself. This leads to a re-examination of the assumptions underlying the grid from which cases were selected.

The conceptual framework

Component 1: Policy

Three subcomponents comprise the component "policy": the operating environment, policy process and policymakers. The elements of these subcomponents are interrelated, both within and between subcomponents. For example, features of the policy process are a product of the operating environment, and the characteristics of policymakers are at least partly attributable to the policy process of which they are a part. For the purpose of initial analysis, the elements are treated separately, although there is an organic and dynamic interaction between the elements during the timespan of any research. This creates major difficulties for both interpreting and facilitating research and policy relationships.

Component 1: Sub-component A — The operating environment

The operating environment of an organisation arises from a complex of interrelated external conditions. Hall (1977) identifies seven conditions: technological, legal, political, economic, demographic, ecological and cultural. The amalgamation of these seven conditions into three elements — economic context, political context and social context — in the conceptual framework for use as an analytical tool acknowledges the relationship between the various conditions. The significance of the separate conditions (which themselves contain a range of important themes) should not be overlooked. On other policy issues, certain conditions subsumed under the general heading of social context may be highly significant and deserve separate treatment. For example, the demographic conditions are critical for policy addressing the planning of facilities for declining enrolments, and technological conditions are significant in determining policies and strategies for distance education.

The three elements of this sub-component provide a broad framework for analysis of the situation in which the four case studies took place.

Economic context

The four studies took place over a period from 1979-1987. The general state of the Australian economy had begun to decline in the mid 1970s with consequences on industry and employment. By the time the earliest research (Case 2, Incentives for Teachers in Isolated Areas and Case 4, Studies in Apprentice Training) was completed, the effects of the economic downturn had reached government agencies. The reduction in financial resources accelerated and proved a significant limiting factor on the Education Department in determining policy in Incentives for Teachers in Isolated Areas (Case 2) and notably later on Alienated, Disturbed and Disruptive Students (Case 1).

The research undertaken at the behest of the Committee on Incentives for Teachers in Isolated Areas did not consider economic issues, except in so far as the higher costs of living in remote areas were concerned. The assumptions underlying the data collection, though not made explicit, evidently underestimated the emerging economic context. On the other hand, the limitations of government resources underpinned the deliberations of the Task Force on Alienated, Disturbed and Disruptive Students operating some three to four years later, and the kinds of data generated enabled the Task Force to develop low cost policy strategies.

The economic downturn, coupled with demographic factors, in fact changed the policy issue related to teachers in isolated areas. Implementation of some educationally and professionally important policy actions was not possible despite a fairly speedy research process, with high involvement of the Incentives Committee, a direct line into formal Departmental policy processes, and an ideological support for equitable educational provisions in isolated areas. No longer were incentives needed to induce teachers to go to, or remain in isolated areas: the problem became one of lack of mobility and stagnation in the whole teaching force with particular implications for isolated and country schools.

Two other cases (Case 3 Unitisation and Case 4 Apprentice Training) demonstrate the incentive for educational change as a consequence of economic and social change. Unitisation of the curriculum was partially a response to indirect economic effects such as providing for students who might previously have left school before Year 10 and providing a greater range of options. Unitisation offered opportunity for better use of school resources and therefore was regarded positively by educational managers: the research was supported and its educationally favourable outcomes were embraced enthusiastically.

The studies in apprentice training were initiated by the researchers who had recognised the emerging economic trends and their potential implications for the apprenticeship system. The same trends were recognised by funding agencies who sponsored the research. The findings acknowledged the highly significant economic pressures and predicted consequences on training of skilled labour. Despite this, and the identification of some policy implications, no actions were implemented. Education policymakers, particularly if only one group in a complex policy arena, cannot respond to economic indicators until the political and social context is in an appropriate state.

Political context

The political context refers only marginally to party politics and ideologies and rather more to the distribution of power in society. In the framework of the case studies it was manifested in the relative power of the government bureaucracy and other agencies and interest groups in determining policy and using research. In one case (Case 4) federal and state power distribution was significant in subsequent policy actions. In three of the cases, the original stimulus for research can be traced to particular interest groups. The Tasmanian High Schools Principal Association requested information on apprentice qualifications which led to the subsequent more extensive work, initiated by the researcher, on apprentice training and careers of tradesmen (Case 4). The Association did not follow up on any of these data including that generated as a result of their original request. The problem of selection of apprentices was evidently no longer an important agenda issue. On the other hand, the Principals Association's request for the establishment of the Task Force on Alienated, Disturbed and Disruptive Students was pursued. The Association participated in its operation, requested comment from the Director- General on its progress and utilised policy documents produced.

The third case where research was stimulated by a pressure group's initiative was the Committee on Incentives for Teachers in Isolated Areas. Again the Tasmanian Teachers Federation participated in

the research and pursued outcomes over several years.

The one case where no interest or pressure group was involved in the initiation of the research was Case 3 (Unitisation). This was an educational issue at this emergent stage. However potential power groups were identified including high and district high school principals and were included in the Liaison Committee. The involvement of the Schools Board was particularly important since it represented a group with power of a different kind through tertiary institutions, community and non-government schools. The views of this group could make or break the moves to unitisation.

The effect of distribution of power in the operating environment on policy actions formed a continuum along which the four case studies might be placed. Case 3, Unitisation, related to an educational issue largely within full control of the Education Department and without political implications. Case 1, Disruptive Students, was of concern to particular groups within the education bureaucracy, but also had potential for public pressure on government ministers and hence was sensitive to wider political influences. Case 3, Incentives for Teachers in Isolated Areas, though initially of internal concern to the Education Department, raised matters of general political concern at state level because of implications for the whole of state services. At the other extreme of the continuum from Case 3 is located Case 4, Apprentice Training. This research had significant political implications involving both major interest groups (unions and employers), and federal and state power interplays, particularly in relation to the initiation of new forms of skill training.

Social context

The social context element refers to ideologies and acknowledged social issues, though other kinds of conditions also contributed in particular cases. Thus technological conditions were significant driving forces in perceived need for change in apprentice training and demographic and ecological conditions contributed to the context for policy action (or inaction) on the provisions for teachers in isolated areas.

The general social context sets the expectations and demands of an education system and social reaction determines, to some extent, what are acceptable and appropriate outcomes. The social context established parameters for the policy stance in all four cases. Thus recommendations from the apprentice training study for manpower planning policies of a totalitarian kind would have been unacceptable in a society which believes in individual rights of choice. Conversely, the positive preventive strategies for dealing with alienated and disruptive students could arguably be more publicly acceptable because of the changing social context.

All four cases had continuing and defined social issues at their roots. Student behaviour (Case 1) was an obvious instance, while Case 4 addressed questions of employment and economic development. Cases 2 and 3 had less obvious but nevertheless highly significant links: unitisation enabled curriculum change to match social and personal needs, and support for teachers in isolated areas was an indirect way to tackle the problem of equality of educational provision.

The directness of the link between defined social issues and policy outcomes might be interpreted as an indicator of the relevance of the research. However, this did not have a linear relationship with the extent to which the research resulted in outcomes in policy or influence on policymakers. It is important to note also that social context, particularly acceptable social values as well as beliefs, ideologies and pressing social issues can change over relatively short periods of time. Thus the disruptive student behaviour which prompted the work of the Task Force and was briefly stirred through media coverage, by the time the enquiry was completed was largely a management issue for senior staff of schools rather than an issue of active social concern.

The operating environment and the research/policy relationship

In summary, it is clear that the conditions of the operating environment have significant effects on the research/policy relationship. All the research had its roots in the pressures of economic, political or social contexts of educational programs. In some cases it could be argued that insufficient account was taken of some aspects of these conditions in designing the data collection, though this can be asserted with the confidence of retrospectivity. The operating environment constrained possible use or impact of research findings on policy, influenced extent of uptake by policymakers and even changed the policy issue. On the other hand, the economic context and political context enabled policy action to occur which had been implied in research findings.

The effect of conditions of the operating environment on the research/policy relationship is summarised in Table 7. The four cases are arranged on hypothetical continua illustrating influence on perceived impact of research.

Table 7: Analysis of the four cases

Apparent affect of the operating environment on the influence of research on policy

| | PERCEIVED INFLUENCE | | | |
	LEAST ◄——————————————► GREATEST			
Economic Context	Unitisation	Alienated, Disturbed and Disruptive Students	Isolated Teachers	Apprentice Training
Political Context	Unitisation	Alienated, Disturbed and Disruptive Students	Isolated Teachers	Apprentice Training
Social Context	Apprentice Training	Isolated Teachers	Alienated, Disturbed and Disruptive Students	Unitisation

The table demonstrates that Case 3, Unitisation, took place with least negative influence of economic pressures, least external political influence and the most supportive social (including technological and legal) context. In contrast, external political pressures, the state of the economy and resistance to social change provided a constraining influence for the research in Case 4, Apprentice Training.

The timing of research in relation to defined social issues and readiness of the operating environment for policy change remains problematic. Of the four cases analysed, perhaps the study of alienated, disturbed and disruptive students had the best "fit" with timing, though the total policy picture has yet to emerge and disruptive students will continue to be a problem. The unitisation study provided research data in a relatively limited operating environment in advance of pressures on policy decisions. However, the difficulty now remains that practice is moving ahead of formal policy and curriculum changes at school level are vulnerable to the effects of other forces in the operating environment. The Committee on Incentives for Teachers in Isolated Areas attempted to gather data quickly, but changes in the economic and social conditions overtook policy action. On the other hand, the information from

Case 4 clearly showed a need for change to apprentice training which could, theoretically, have been acted upon by policymakers in training authorities. These moves however had to wait until changes in the operating environment, notably increasing unemployment, inability of some industries to train manpower and the adoption of counter-cyclical labour market policies by federal authorities, to enable changes to occur.

Component 1: Sub-component B — Policy process

Each of the four case studies were undertaken within the same Department, though over an extended time period during which organisational changes were made which were predicated on improved policymaking and management processes. Analysis of policy processes involved is based on the evidence of the case studies and the established organisational structures outlined in Chapter 1. Five elements of the policy process are identified for analysis: like the elements in each of the other sub-components of policy, they are closely interlinked.

Policy issue emergence
The research which was the focus of each case study was prompted initially by the concerns of educators rather than those who were primarily policymakers at system level. Case 1 was prompted by the Principals Association, as was the original work in the area of apprentice training (Case 4), though later taken up and more widely interpreted by the researchers. Pressures from the Teachers Federation (perhaps strictly operating as a political rather than educational interest group) led to the research described in Case 2, while the interest of teachers, curriculum developers and researchers fostered research on unitisation (Case 3).

The two cases identified in the selection grid (Figure 12, p.47) as initiated by policymakers, in fact were a response by the policymakers (through the Director- General) to what had been identified by others as a policy issue which should be addressed. The two cases identified as researcher initiated demonstrated two different forms of policy issue emergence, and two different responses by the policymakers. Policy issues were identified through research in the training of apprentices, and were readily observable through contact with the field, yet were not acted upon by education policymakers because other agencies were involved and because TAFE could only be reactive rather than proactive in this important area of its operations. Case 3, research on unitisation, was begun with little recognition of possible policy ramifications. As the research progressed, such issues did emerge both for Departmental curriculum policies (and subsequently for policies on staffing and resources) and also for Schools Board accreditation and certification policies. Such policy issues would have emerged over time if unitisation persisted as a curriculum organisation strategy, but perhaps emergence was accelerated by the research process. The origins of policy issue emergence in the four cases observed may be atypical, or a consequence of the types of research undertaken or the types of policy issue in which research data was perceived to have potential contribution. However, the four cases demonstrated that policy issues do not necessarily emerge with or are first recognised by policymakers, and that interest groups can use policy processes and research processes to bring a policy issue to the fore.

Models of policymaking
The evidence of the four cases clearly showed that a variety of approaches to policymaking existed with respect to the educational issues considered. Further, despite moves in restructuring the Education Department and establishing channels for policy development (the Executive Management Group) and support for policy processes (Executive Support Services), there was little to suggest more formal and rational policy processes had emerged. This too might be a result of the limited cases observed,

and the time necessary for new structures and organisational practices to become integrated into the behaviour of the organisation. This was exacerbated by lack of articulation of levels of responsibility and autonomy following Departmental reorganisation. There was evidence to suggest that educational leaders continued to act individually in situations where corporate management processes could have been adopted.

It was clear that much "policy" still emerged from practice as was the case with unitising the curriculum and providing alternatives to traditional forms of apprentice training. Developing policy from practice is perhaps one of the starting points for a garbage can model (Cohen, March & Olsen, 1972) of policymaking. This approach to policymaking occurs where an organisation has ill-defined goals and a fluid group of participants in the policy process. In contrast, the development of policies for incentives for teachers in isolated areas could be seen to conform to an interest group model (Truman, 1951) though an attempt was made to initiate a more rational approach using the data from the enquiry as a basis for formulation of policy actions.

The case study of alienated, disturbed and disruptive students illustrated a range of approaches to policymaking within the one arena. The initiation of the Task Force suggested roots in an interest group or bargaining approach. The concern was translated by senior managers into the need for a Task Force which might operate through a rational policy process. A rational approach to policy development on alienated and disruptive students was the hope or expectation of at least some Task Force members. What eventuated might be classified in Lindblom's model of "disjointed incrementalism" (Harman, 1980a) since marginal changes were made in policy strategies, or garbage can models where changes were emerging in *ad hoc* ways in practice. Each of the marginal policy changes were decisions made by one or two individuals and did not reflect a corporate level of policy development either by the Task Force or by formal policymaking groups within the Department. It is tempting also to suggest however that there was some evidence of an organisational model of policy (Harman, 1980a). Some organisational learning had occurred for Task Force members in the development of shared beliefs about positive approaches to student behaviour as a core of policy action, though other steps characterising organisational models of policymaking were not evident.

Systems or process approaches to the analysis of policy focus on the phases of the policy process. Although the selection of cases was confined to research in the policymaking phase, there was no evidence of a process approach to policy. Notably, attention to implementation and evaluation phases was very limited and not integrated into an holistic policy process.

State of policy
Pre-existing policies emerged over years of practice, tradition and (often individual or idiosyncratic) decision making. Organisational structures and funding mechanisms had been such as to allow resources to be allocated and priorities established quite independently in different aspects of related policy areas. This was an inevitable consequence of the evolution of such a bureaucracy during that time.

All of the four cases examined had some prior policy context. Even in Case 3 where no specific policy existed on that particular form of curriculum organisation, there was a general policy devolving responsibility to schools for curriculum organisation. (It was this prior policy of devolution of responsibility which led to some conflict and confusion amongst schools in response to the perceived policy stance by senior administrators favouring or directing towards unitisation as an organisational strategy.) Given that a prior policy context existed, in all cases any new data provided by the research could serve only to modify or change policy direction rather than determine new policy initiatives.

Perhaps the closest to a proposed new policy initiative lay in the moves for positive discrimination for teachers in isolated areas, alongside increased support through pre-existing policy provisions. In terms of Rose's four models of public policy (see Figure 2, p.19), the policy directions were either static or marginally linear in moves towards policy objectives.

The two areas considered in Cases 1 and 4 had pre-existing policy of a complex kind. Both areas also impinged on policies and practices of other agencies, particularly in the field of apprentice training. In this case, those other agencies shaping policy might have had quite different values and goals underpinning their policies, including, it was suggested, between federal and state governments. In contrast, agencies concerned with alienated, disturbed and disruptive children were, it is postulated, more likely to share broadly common social goals and values. In addition, in the case of disruptive students, changes to existing policies were feasible within education without the need for reference to or support from other policymaking bodies.

The four cases examined therefore had, to differing degrees, a varied and complex network of longstanding policy and practice prior to the undertaking of the related research.

Nature of policy

In each of the three cases where substantial prior policy existed, a range of kinds of policy were evident. These included legislated responsibilities, resource provisions, program provisions, support structures, procedural statements, educational strategies, value positions and contractual obligations. In some instances there was no written statement of policy, and in none of the cases was there a coherent overview of the various policies which together determined Departmental actions. Further, there was scope for interpretation of policy and a generally held, though unspecified, commitment to devolution of responsibility to schools and colleges and to regional offices (Hughes, 1982).

Actors in the policy process

Over the period covered by the four case studies, it appeared that both researchers and Education Department administrators developed a more sophisticated understanding of the notion of policy actors. As delineated in the conceptual framework, policy actors are those who might participate in the policymaking phase of the policy process as leaders or administrators within the organisational or interest group setting. The two earliest case studies (Cases 2 and 4) included few policy actors in the committees involved. The Incentives Committee was established to provide recommendations to the Director-General as the key policy actor, and its membership drew more from interest groups (the Teachers Federation and Departmental committees) rather than policy actors who might be influential in resource allocation, legislation or leadership. The Advisory Committee for the studies on apprentice training also took a "political" view: membership reflected the need for support for the study from the teachers union (Technical Colleges Staff Society), apprenticeship commission and funding agencies. Though the potential for policy outcomes from the study was recognised, only one committee member, a representative of the TAFE division, might be considered as a policy actor with official administrative responsibilities in that policy area.

It is clear that in Cases 2 and 4, Isolated Teachers and Apprentice Training, many other actors were involved in the policy process than those represented in the two committees. For Case 2 these could include senior personnel of the Department with responsibility for determining priorities for financial resources and state service legislators and administrators. In Case 4, a wide group of policy actors existed including employers and unions, federal and state governments and training authorities. The consequences of the scope and diversity of policy actors for devising facilitating circumstances for linkage with research are considerable.

The two later studies, Case 1 undertaken between 1983-85 and Case 3 in 1985-86, had much wider membership and broader representation of policy actors involved. The Task Force on Alienated, Disturbed and Disruptive Students was established by the Director-General and included those with functional responsibilities covering all facets of the problem as well as the major interest group (Principals Association). Some had suggested even broader representation to include outside agencies but this would have led to a broader focus for the Task Force. The policy actors were identified by the Director-General in terms of functional responsibilities, for resource allocation and leadership in the area. The Task Force did, however, bring together key policymakers who would not normally have worked collaboratively in policy development under the organisational structure or policy processes of the Department. At no stage in the deliberations of the Task Force were there suggestions of significant omissions or gaps in representation of key policy actors.

The Liaison Committee for the Unitisation project was established at the request of the researchers and potential key policy actors were nominated after discussion with the committee chairman, the Director of Education Programs. Bearing in mind this was an emerging policy issue, in an area traditionally determined by schools themselves, school and regional office personnel were also included. Two other members were added subsequently, a parent representative and a Professor of Education, more representing interest groups than as policy actors. The Teachers Federation was not formally represented but became informed incidentally about the study through participation of two of its active members as temporary members of the research team. Since this was an emerging policy issue, key actors were identified on the basis of their positions in curriculum leadership and resource allocation. One member, the Secretary of the Schools Board, had a clear role in the formal elements of policy on certified courses. In this case also, there was no suggestion of omission of other key policy actors from the committee.

This increased capacity to identify and involve policy actors in the research process reflected increased understanding of policy processes by administrators and researchers and their increased commitment to participation in research processes. It also reflected changing management practices within the Education Department over that period of time.

Policy process and the research/policy relationship

A summary of the evidence of the four cases in the sub-component policy process is shown in Table 8. The table demonstrates the heterogeneity which existed between cases within just this one subcomponent of the framework. It also illustrates the variety of policy processes within a given policy issue/arena in education.

The analysis of the elements of the policy process demonstrates the complexity and diversity of policy-making in one government department. Policy itself was clearly an elusive and broadly interpreted concept, more readily recognisable as a collection of practices than an articulated, coordinated set of goals with a supporting course of action (Table 8, Column C). During the period of study, responsibility for policymaking was diffuse and still remained to some extent an individual rather than corporate activity (Table 8, Column A). There was little evidence of a coherent, rational policy process, although individual small scale decisions may have been made on some rational basis. Given that policy largely existed already, research at best could expect to contribute to incremental shifts (Table 8, Columns B, C). In cases where major shifts might be anticipated, these might also require other agencies or groups beyond education to participate in policy change (Table 8, Column D).

Identification of key policy actors is an important variable. However the weak development of the notion of a total policy process, especially addressing the implementation of policy, creates further

Table 8   *Analysis of the four cases*   *Evidence of elements of the policy process*

CASE	Column A Apparent approaches to policymaking	Column B State of policy development at the time of the research	Column C Nature & expression of existing policies	Column D Policy actors	Column E Sources of policy issue emergence
1. Alienated Disturbed and Disruptive Students	Interest group Disjointed incrementalism Garbage can	Linear	Complex, varied, extensive. Legal, procedural, organisational, educational, school autonomy.	Administrators in schools, regions and head office, other welfare agencies, legal authorities	Principals Association
2. Isolated Teachers	Rational Interest group Political	Static	Complex, varied, Organisational	Government bureaucrats, Industrial Commission, Unions	Teachers Federation
3. Unitisation	Garbage can, Rational	- (linear?)	School autonomy. Formal Schools Board framework	Teachers, Education Department administration, Schools Board	Curriculum Development and Evaluation Researchers
4. Apprentice Training	Interest group Political Disjointed incrementalism	Static	Complex, extensive. Legal, procedural, organisational, educational	Unions, employers, federal and state agencies, commiss-ions, teachers union, politicians	Researchers

difficulties for those seeking to enhance a relationship between research and policy. Uptake of research into policymaking may not reach its real potential if policy is not actively implemented.

The identification of policy issues did not necessarily rest with policymakers with formal responsibilities (Table 8, Column E). Researchers or interest groups may often perceive emerging problems or trends which were not obvious to administrators engaged in day to day management. This may be an important element in the contribution of research to the policy process.

Component 1: Sub-component C — Policymakers

The policymakers involved in the case studies were those policy actors who were members of the respective committees or task forces. They were policymakers in a broad sense. Some influenced policymaking indirectly through interest groups or as executive officers in government commissions or agencies. Most were administrators within the Education Department at various levels. The most senior amongst them were of Director (or Executive Director in later Departmental structures) status. Almost all of them had been teachers.

Administrative roles

Most of those involved in the committees had responsibilities within the Departmental management structure which could be classified under "decisional roles" (Mintzberg, 1973; Webb & Lyons, 1982). These roles included system maintenance, disturbance handling or organisation problem-solving, organisation, negotiation and resource allocation. Yet these decisional roles did not constitute their whole administrative role, any more than decisionmaking can be equated with policymaking. The two other classes of roles identified by Mintzberg, interpersonal roles and informational roles, also formed an important part of these administrators' roles. Aspects of these other roles included leadership, motivation, providing liaison and initiating contacts, consultation and information exchange. These types of roles were particularly evident amongst the administrators involved in committees associated with Cases 1 and 3. These were the two more recent cases which, as already noted, included more policy actors, particular targetted for their responsibilities in the respective policy areas.

It was also noted that although decisional roles such as resource allocation or organisational disturbance handling can provide visible evidence of a management role, this was not a necessary condition for policymaking. Thus, for example, the Task Force on Alienated, Disturbed and Disruptive Students acted as leaders and motivators in determining a preventive, positive approach for discipline policy. The matter of resource allocation to put this into practice was left to be determined at school level. Similarly, no resources were provided to implement unitisation as a curriculum policy, but the leadership and information dissemination by the key policy actors was clearly perceived by many as an act of policymaking. It is postulated that where implementation processes are not articulated and/ or the policy itself is open to interpretation or local adaptation, then administrative roles such as leader or figurehead, and disseminator or spokesperson are crucial to policy performance. This has important consequences for predicting and interpreting the role and use of research in policymaking.

The range of policy actors involved in the four cases and their administrative roles are summarised in Table 9. Cases 1 and 3, Alienated, Disturbed and Disruptive Students and Unitisation, had a broader spread of representation and more scope in administrative roles. These were the two cases more generally perceived to have had policy outcomes.

Table 9:   **Analysis of the four cases**   **Policymakers involved in the committees and their administrative roles**

Case / Policymakers	1. Alienated, disturbed disruptive students	2. Isolated teachers	3. Unitisation	4. Apprentice Training
Policy actors involved	Education Department administrators including Head Office, Regional Office, Principals' Association (total 7 persons)	Education Department administrators (Head Office), Teachers' Federation (total 5 persons)	Education Department administrators: Head Office Regional Office, Secondary College and Principals' Associations, Schools Board, parent (total 7 persons)	Education Department (TAFE) administration, Staff Society, TAFEC, Apprenticeship Commission (total 5 persons)
Administrative roles	Interpersonal, Informational, Decisional	Informational	Interpersonal, Informational Decisional	Informational, Interpersonal

Note: Numbers indicating committee constituency of policy actors do not include research personnel

Careers and rewards

Careers within a bureaucracy are largely based on prior performance in the diverse administrative roles described above. It can be argued that attitude to research may be dependent upon the extent to which each policymaker can use the information to reinforce or improve capacity to undertake elements of these interpersonal, informational or decisional roles. In general the research generated in the cases observed did not address issues related to the policymakers' decisional roles, with the possible exception of the change in use of a withdrawal unit for disruptive students (Case 1). On the other hand almost all the committee members in all the cases acted as disseminators, spokespersons or information exchangers which reinforced their positions in the system or with their interest groups. Institutional concerns relating to careers or rewards were reinforced through the interpersonal roles enacted in committee participation *per se* and were further enhanced by acting as leaders and motivators in any consequent policy actions.

Over the period of the study, several career shifts were made by the participating policymakers. Five retired without further career change. Among the school-based personnel on the various committees, all remain at the same or similar status. One member of the Incentives Committee who at the time was a seconded vice-principal working in head office later became a school principal. The Technical College Staff Society representative (Case 4) later took up an administrative role as Superintendent (TAFE). Three other administrators had upward career moves either from Superintendent to Deputy Director or from Deputy to Executive Director. It is not argued that the specific research facilitated such moves. However each of the four who achieved more a senior position, plus some of those who had held senior positions and retired, indicated that they sought and used research and information in their approach to their work.

Working knowledge and experience

All the policymakers had "come up through the ranks" mostly originating in the teaching service but also including guidance services. All therefore had considerable experience and working knowledge both from a practical and from an administrative perspective. The debates in the meetings of researchers with committee members demonstrated how ideas and data were interpreted against this working knowledge. Clearly working knowledge coloured the interpretation accepted by each policymaker. For example, a principal who had experienced the after effects of a poorly implemented attempt at unitisation was not readily convinced by the positive outcome data of the research. In contrast, the case study of discipline in a school provided readily acceptable evidence of the importance of a whole school approach led by the principal. This confirmed the administrators' prior convictions of the significance of the principal's role.

Belief systems

Values and beliefs form an important part of policymaking and also form the basis of interpretation of information. The policymakers interviewed saw their policy role largely in terms of their own administrative responsibilities rather than a corporate process. In the two cases where the committees had been established by the Director-General (Cases 1 and 2), corporate recommendations or statements were made through which the beliefs of individual members were shared. In the case of the Incentives Committee, the research process developed a common value position amongst members and agreement on all but one of the practical recommendations. The very strong commitment of the Committee led the members to have high expectations that others responsible for formalising and implementing the policy recommendations would also be convinced.

The Task Force on Alienated, Disturbed and Disruptive Students had operated for almost two years when an attempt was made to articulate basic beliefs as part of the policy development. Differences in beliefs and values between members became apparent and common ground had to be found before an agreed position could be stated. In this case, some members had strong philosophical stances which were not modified by the evidence to the extent of a shared philosophy, although some policy actions had already been made by individual members of the Task Force which were acceptable to others.

Where the research evidence coincided with or reinforced the beliefs and values of the policymaker, then this was used to promote certain actions or positions. Examples of use by policymakers on this basis was seen in all four cases. At this same time and often by the same individuals, there was a realistic view of the limitations of their role, or that of the Education Department, on some policy issues.

As for their beliefs about research, their expectations for the contribution of research to specific decisions were not high. Whilst some valued research in general, most saw that at best the research might provide clarifying data or evidence to support their own working knowledge.

Policymakers and the research/policy relationship

Policymakers provide for researchers the link into policy processes. It was clear, both from the nature of policy processes and from the administrative roles of policymakers, that policymaking is much more than decision-making. Linking research to policymaking can be pursued through interpersonal and informational roles as well as providing data to assist decision-making. However, research is processed by each policymaker in terms of working knowledge and beliefs and may be used in accordance with beliefs about their policymaking role and the policy process. Each case provided common evidence on these themes. The concepts embodied in this sub-component warrant more detailed exploration.

Component 2: Research

It could be argued that the operating environment also influences the functions of this component, and indeed Weiss' model (Figure 8, p.29) of an in-house research facility reflects such influence. The focus of this component of the framework lies specifically in the nature of the research and its undertaking by researchers.

Component 2: Subcomponent A — Enquiry

All the cases were undertaken through an in-house research facility which retained independence in research design and in maintaining the right to publish its findings.

Field of knowledge

None of the research was confined to a specific discipline area. In each of the cases, a variety of disciplines might have formed frameworks for enquiry. The knowledge base and concepts associated with particular fields of knowledge would variously influence the information base for policymaking. This may be illustrated by Case 1, Alienated Students. The concept of alienation or disruption is based on a deficit or maladjusted notion of the individual. Thus much of the data provided by schools was of a punitive or management of negative behaviour model. The literature review, experience of alternative (positive) strategies overseas and in Tasmania, and beliefs of the Task Force members provided other perceptions. Data collection based on a learning theory approach which might have yielded other information would have been conceptually much less well developed, and methodologically much more difficult. A medical or psychiatric model for disruption was considered too limited,

though this perspective could be appropriate for very limited special cases. It was not considered a conceptual field for data collection and a more general social science approach was adopted.

The research questions in all the cases emerged from the reality of educational issues and hence the fields of knowledge drew from concepts of administration and management, sociology, psychology, learning theory, even history. Since education has no formal discipline base of its own, such an eclectic approach seemed appropriate and received approval of each related committee. This eclectism also is more likely to match with the policymaker's own working knowledge and provide more perspectives on the particular policy issue. Any deficiencies in theoretical base of the individual researchers were overcome by involving other expertise. For example, a guidance officer on the Task Force devised a coding system to group IQ data using different IQ measures on the survey of disruptive students, vice-principals with experience in school level management became part of the research team for some parts of the data collection on unitisation and other experts on advisory committees such as the research officer from Royal Melbourne Institute of Technology (Case 4) and a Professor of Education at University of Tasmania (Case 2) assisted in refining instrumentation and data interpretation.

It is possible that additional insights might have been provided by other disciplines such as economics or policy analysis. But that is with the advantage of hindsight.

State of knowledge

Given the broad approach adopted, and the nature of the particular research problems tackled, the main basis for authoritativeness of the research lay in its acceptability to the policymakers. Beyond this, there are major limitations in the ability of the research to provide "answers" to the research problems. Thus, research did not determine whether a unitised curriculum was the best or even a good way to ensure learning: the assumptions had to be made that it was a desirable alternative since the students' attitude to it was positive. The research on disruptive students, including a review of the literature and insights provided by several disciplines could not offer a strategy to deal with the hard core of really disruptive students. And the work on career paths of tradesmen was acknowledged as being a "first" in that field.

Despite this lack of authoritativeness, policymakers found the research useful and did not have expectations for definitive answers from the research.

Methodologies

Each of the cases incorporated a range of methodologies including statistics, literature analysis, survey data, interview, case study, and historography, and documentation. Cooley and Bickel (1986) emphasise the importance of being methodologically eclectic in research oriented to policy. This approach was adopted in practice to obtain a range of types of information incorporating the different fields of knowledge. The different methodologies have their own particular persuasive power and different individuals are often predisposed to one form of data over others. This being so, provided the data is compatible, as it appeared to be in the four cases studied, agreement may be reached by policymakers adopting their own preferred information processing mode.

In addition, the eclectic approach to both methodology and discipline brought significant insights between data sets. For example, without undertaking the historical analysis of development of unitisation at each of the four sites, differences in the forms of unitisation would not have been apparent and interpretation of survey data would have been diminished. In the work on disruptive students, the survey data did not reflect the whole school approach to discipline policy revealed by the case study. And in the work on apprentice training, the data on subsequent career patterns of tradesmen provided additional information to the apprentice data base for career counselling and manpower forecasting.

Purpose

All the cases are examples of research undertaken with a "client-orientation" (Cooley and Bickel 1986), although only one study, Incentives for Teachers in Isolated Areas, might be considered oriented to specific policy decisions. The unitisation study was initially planned to provide an information base on an innovation, with some element of formative feedback to be used by the schools concerned. Its purpose in the minds of the researchers changed in the hands of different policymakers, some of whom used the data to support a policy stance, while the Schools Board Secretary used it as a source of indicators of difficulties and issues to be resolved in framing formal policy on certification of unitised courses. The research on alienated, disturbed and disruptive students was still more open-ended. The data generated were not directed to any particular aspect of the complex of existing policies, but the policy actions which ensued developed naturalistically from the research, the policymakers' working knowledge and contextual feasibility. The research on apprentice training was not decision oriented and of all the cases was more "basic" or "conclusion oriented". Despite this, a number of findings and issues emerged which could have been used in policy and practice. The fact that they did not directly find their way into policy processes or have an impact on practice is not, it is postulated, due to the nature, quality or purpose of the research but rather to the policy process in this arena and perhaps to some degree to the weakness in the linkage strategy.

The distinction between "decision-oriented" and "conclusion-oriented" or "basic" and "applied" research does not seem to be a valid or useful one in the research/policy relationship. A very limited range of research fields and methodologies was examined in the present study. Nevertheless, they showed that different policymakers held different expectations for the purpose of the same research; that research which might be considered "applied" or "decision-oriented" still needed translation into the local context (and therefore in a sense was also "basic"); that research which might be considered "basic" whether undertaken directly or acquired through the literature was transformed by the policymaker's own information processing activities and applied to local issues, and that "decisions" or problem solutions were not based on factual knowledge alone and required other kinds of information and convictions.

Enquiry and research/policy relationship

From the limited evidence of the four studies, interactive linkage is at least feasible using an issue based approach incorporating various disciplines and being eclectic about methodology. Whether or not the research is directed towards specific decisions seemed immaterial, a finding consistent with the statements about the concept of policy as more than decision-making and the evidence in the administrative roles played by policymakers in the cases studied.

Component 2: Subcomponent B — Researchers

The author was a principal researcher in two of the cases (1 and 4) with a co-researcher in Case 4. The author was also involved in Case 3 as senior officer of the Unit in which the two principal researchers worked. The research in Case 2 was coordinated by a colleague of the author.

Researchers in a governmental agency have dual institutional settings: the research community and the bureaucracy. The cases illustrate how the dual demands and rewards were met.

Rewards and career patterns

Researchers in government agencies recognise that if their work is to have acceptance and reward it must be sustained through the research community. However within the agency, rewards and

promotion depend on the perceived contribution made to management processes. To meet these demands of dual institutional settings, the researchers had to utilise different forms of communication and participation, and produce a variety of forms of documentation.

Reinforcement and acknowledgement of expertise was achieved through publication of research, through adoption of methodologies (in Case 4, career patterns of tradesmen), requests for research advice, use of reports by tertiary institutions and continued involvement in related developmental activities. Of the five different researchers involved, only the two responsible for the most recent study (Case 3) have not advanced career-wise. Two of the others gained more senior positions, still with a research base, but integrated into Departmental management processes. The remaining contract researcher achieved a permanent position first in Employment and Training and subsequently in the office of the Premier.

Ideologies about the research process

The principles of undertaking research with respect to issues such as confidentiality, ownership and access to data, bias, and rights for publication were sustained in the four cases described. Issues such as confidentiality arose also in the administrative sense, for in committee forums members might offer information or share experiences from other sources. This notably occurred in the Task Force on disruptive students where current crises might be alluded to. Thus policymakers were themselves experienced in matters of confidentiality and respected sharing of raw data where particular schools, for example, might be identified.

Ownership of data was seen to rest primarily where the data were generated, so that in cases where sites could be identified, reports were returned to the school for verification and permission for public release (Case 3). In one case (Case 1) the procedure met with approval from the school but release was prevented by the Task Force since some members were concerned that the school would be identified.

Publication of full reports was supported by the Department, though in two cases (Cases 1 and 3) early release of a summary of interim data was negotiated to meet requests for information. External researchers attached to two of the cases verified that similar standards for research had been applied, as those generally adopted by external researchers.

Beliefs about the role of research

All the researchers worked from a position of believing that research can and should be used to improve policy and practice. There was also a belief in the role of research itself as a social and learning process. Therefore they worked with progressive refinements towards increasing involvement of those with responsibility for enacting changes. Beliefs about the role of research were a strong motivating force in attempts to improve all aspects of the research and policy linkage.

Researchers and the research/policy relationship

It has been a clear parameter of the study that the researchers had positive views on the research/policy relationship and set out to facilitate the relationship. The evidence of the four cases indicated that this was not at cost of researchers' ideologies about the research process, nor did it inhibit in any obvious way, reward or career progress either in the research community or in the institutional setting.

Component 3: Linkage

The development of better linking processes was central to the activities of the researchers. Over the years, understanding of what might be appropriate and who should be involved in such linking

processes increased. These developments took place alongside changes to Departmental organisation and changes in the operating environment, as well as refinement of the beliefs about the role of research and understanding of linkage by researchers.

The evidence from the case studies represents some elements of an evolutionary sequence initially attempting to addressing the relationship between research and policy from propositions about non-use of research, then moving to propositions closer to theories of organisational learning.

Initiation

The question of who initiated the research was one dimension of the design grid for selection of the case studies (Figure 12, p.47). It is a commonly held assumption that commissioned research is more likely to be used than "free" research. Two cases (Cases 1 and 2) were clearly initiated outside the Research Branch. In each case, although the committees were established by the Director-General, the request for some enquiry had been generated by an interest group within the Department. Despite this origin, the policy actors involved in these committees clearly were committed to research as a central part of their information base.

Two cases (Cases 2 and 4) were initiated by researchers. In one case (Unitisation) the policy actors and others on the committee also were mostly very committed to the research and used the data generated. Case 4, undertaken some years earlier and with a smaller and less representative committee, had less commitment to the point where there was no consistent representation of the TAFE Division attending meetings. Despite this, individuals on the committee used the data, and some long term impact of the study was noted.

From these limited cases it appears that while research initiated by administrators may be more likely to be used, this does not imply that researcher-initiated research is not used. If the topic of the research is significant to administrators, it may be used, but it is further postulated that other elements of linkage will be critical in enhancing use or impact.

Facilitating circumstances

A similar form of facilitating circumstance was adopted in all four cases, that of a committee or task force comprising policymakers, representatives of interest groups and/or those with particular expertise. Two were established by the Director-General, the earlier (Case 2) by a small group consisting more of representatives of interest groups, the later (Case 1) with all key policy actors.

The two which were established on the initiation of researchers demonstrate a shift in emphasis over the years. The earlier (Case 4) undertaken in 1979-80, was nominated as an "Advisory Committee", chaired by the Superintendent of Research and consisting of representatives with a financial or political stake in the research and an outside expert. The role of the committee was to facilitate access to data sources, ensure quality of data collection and reassure funding agencies of progress and process of the research. In contrast, the more recent study (Case 3) had a Liaison Committee chaired by the Director of Education Programs. Its membership included policy actors, interest groups and an outside expert. The roles of the Liaison Committee were broader and included system management roles such as liaison, dissemination and integration into planning. It was also seen to have had other, unintended, roles in relation to the internal politics of the Department and in verifying the credibility of the research.

From the limited evidence of the four cases it is not possible to generalise about this form of facilitating circumstance or linkage strategies as a whole. The more comprehensive committees (Cases 1 and 3) involving key policy actors and with broader roles as a committee *appear* to have led to stronger links

and greater to use of research. But other factors could have made at least an equal contribution such as the time frame, the policy issue, aspects of the related policy process and the nature and outcomes of the research process.

Negotiation

The focus of the research and the research questions to be addressed were negotiated between researchers and committees in all cases. Obviously where the researchers had initiated the research they had some clearer ideas of what they wished to investigate but these were verified with committees on the criteria of appropriateness, scope and feasibility. Research initiated by policymakers (Cases 1 and 2) was less clearly defined at the outset. The Incentives Committee planned its own data collection and approached the Research Branch for verification. As a result of ideas suggested by researchers, the research base was considerably extended to encourage a broader basis for subsequent recommendations. The Task Force on Alienated, Disturbed and Disruptive Students knew it wanted local "statistical" data but the scope of the research was negotiated with the researcher. The research questions surrounding Unitisation (Case 3) were negotiated with participating school representatives, partly because they were a primary audience for the study, and partly because they had insights about issues which might not, at that stage, be evident to the researchers.

Once the research questions had been negotiated, the design and technical aspects of the research were left to the researchers. Draft instruments were submitted to the committees for comment, as much for the purpose of participation as negotiation. Release of interim and final reports was also negotiated, based on generally agreed protocols.

The researchers acknowledged that Departmental officers felt potentially dangerous information (such as the schools bending legal procedures in Case 1) should not be made public whilst committee members respected the researchers right to protect confidentiality and quality.

Participation

Several forms of participation were evident, from a basic level of attendance at advisory committee meetings (Case 4) to active participation in data gathering (Case 2). All the committees had opportunity to participate through comment on design of the research, survey instrumentation and reading draft reports. The Task Force in Case 1 contributed to the identification and sharing of literature. They were also involved in clarifying the framework for data collection and in ratifying the survey instrument. This ensured a mutual understanding of the theoretical framework of the study and that the data would be appropriate to their perceived information needs. The Task Force was invited to nominate priorities for data analysis and comment on interpretation. Task Force members also spent a day together working on all the evidence as a preliminary to preparation of the summary document perhaps not strictly part of the research phase but a follow-up which was to translate the results of their deliberations on the research into practice.

Given the time limitations on policymakers, most valued the opportunity to participate where possible. Undertaking interviewing in isolated areas (Case 2) clearly had a powerful influence on the Incentives Committee, while members of the advisory committee on Unitisation and the Task Force on Alienated, Disturbed and Disruptive Students had more knowledge about the surveys and their interpretation through their participation.

Communication and dissemination

The participation of the committees as the research proceeded formed an important basis for communication. It enabled understanding to be developed and ongoing feedback of data. Verbal and

written progress reports were the foundation of the meetings. However, researchers controlled what information was provided at what stage and in what form, to protect confidentiality and meet obligations given to those providing the data.

Thus the policymakers had access to information at the earliest possible time and where they made requests to researchers for distribution to wider audiences of interim data (Case 1 and 3) these were agreed as far as possible. The distribution of interim reports to schools served several purposes: the activity of the committee (Cases 1 and 2) was demonstrated, the commitment of committee members was made public, information was available for early action should schools wish to use it. Expectations were also raised for a later more detailed account of the research.

All the cases generated a major report that was published by the Education Department and distributed to schools or colleges. Other strategies were also used to disseminate findings, including preparation of a summary leaflet (Case 4) which was sent to all TAFE teachers and survey participants, follow-up seminars conducted by researchers (Case 3), and preparation of a summary booklet (Case 1). In the latter case, the Task Force members took an active part in distribution of the booklet to groups for which they had administrative responsibility. And for those committees set up by the Director-General there was interim reporting and presentation of final recommendations.

All the formal research documents were listed in the Australian Education Index or TAFE Clearinghouse. One case (Case 1) led to a paper published in the proceedings of the Annual Conference of the Australian Association for Research in Education (Hocking, 1984). Perhaps the weakest part of the dissemination process lay in the lack of preparation of the findings in forms to be submitted to professional journals. This may demonstrate the priorities and pressures on government researchers rather than unwillingness to subject research to peer scrutiny or institutional barriers to publication.

Linkage and the research/policy relationship

It was postulated that linkage is crucial to a relationship between research and policy. The analysis of the case studies illustrates the progressive learnings that emerged through a single form of facilitating circumstance. Important elements emerged, some of which could be equally applied to other ways of facilitating linkage.

Component 4: Outcomes

The distinction is made between outcomes of the research in terms of its use by or impact upon the policymakers and outcomes in terms of perceived policy actions which ensued. Note is made of policy actions recommended but not enacted, and of policy actions which subsequently occurred but were unrelated to the research. These data, together with comment on the influence of the time dimension on several aspects of the research/policy relationship provides the critical focus for the judgement of the propositions about research/policy relationship.

Use

The term "use" is limited to direct, instrumental use of research. In Weiss' typology this includes four categories: linear, problem solving, political and tactical. No examples of linear use were noted. In Case 3, the adoption by curriculum leaders of the research findings which showed positive attitudes towards unitisation could be classified as political use of research. The findings were used as a basis from which to promote this form of curriculum strategy amongst schools. One member of the Task Force on Alienated, Disturbed and Disruptive Students claimed that the problems concerning student

behaviour were already widely known and that commissioning of research was a delaying tactic. Other members did not suggest such tactical use.

The last of Weiss' categories, problem-solving, might be applied to the use made of the research by the Incentives Committee (Case 2). The strategies they recommended were developed from the evidence of the research. However, only minor changes were made as a consequence of the research since the research suggested solutions which were not feasible in the economic, political or policy context. There may also have been some elements of problem solving use in the decision to alter the use of a unit (Case 1) though the policymakers concerned recognised that the decision had occurred over a period of time and other factors were involved. Given the propositions about the policymakers working knowledge and the notion of them operating as information processors, isolation of research use as the significant component in problem solving must be questioned.

An additional category of instrumental use might be added: problem generating. The identification of policy problems concerning the certification of unitised courses (Case 3) by the Secretary of the Schools Board suggests that research can be used in an instrumental way to isolate emerging specific policy questions.

Impact

The term "impact" is used for the indirect enlightenment effects of research. Evidence for such impact was drawn from self-reporting by those interviewed, and their perceptions of broader effects of the research. Some individuals in all four cases reported that the research had had an impact on their attitude to the issue or understanding of it. This took the form of increasing their knowledge base, developing their understanding, verifying ideas and shaping their thinking and beliefs. The notion of the decision-maker or policymaker as an human information processor was implicit in the comments made by those interviewed.

The research impacted corporately on two of the committees, the Incentives Committee and the Task Force on Alienated, Disturbed and Disruptive Students. They developed shared beliefs and commitment through the research. It is probably no coincidence that these were the two groups established by the Director-General and which themselves initiated the research. They needed a shared understanding in order to fulfil their task in making policy recommendations: the research provided the vehicle through which this could happen. For the Incentives Committee, the research provided a powerful vehicle through which strong commitment was developed to pursue implementation of its recommendations by the Department.

The research enabled the Task Force on Alienated, Disturbed and Disruptive Students to develop shared perceptions of the issues, understanding (but not necessarily acceptance) of the different perspectives, and ultimately some common beliefs about a most complex policy issue. This provided the context for policy development which extended beyond the group to most of the principals and created an implementation climate with a common information base and some shared values and beliefs.

The other two committees (Case 3, Unitisation and Case 4, Apprentice Training) had no such corporate task and the impact or use of research might therefore be expected to be more individual or idiosyncratic, and more dependent on characteristics of the particular policymakers involved.

In all of the cases it was claimed by various people interviewed, that the research had had a wider impact beyond the immediate committee. The report of the Incentives Committee, it was suggested, had

created a more positive attitude within the Education Department to needs of teachers in isolated areas. It was also suggested it had an impact on government thinking on all state employees in isolated situations, possibly halting moves towards increases in rental and other changes.

An influence on "climate" was also a reported impact of the research on alienated, disturbed and disruptive students. The research had contributed to the policy position espoused in *Let's Look at Disruptive Behavior*. This document acknowledged the problem in schools and favoured a positive and multi-faceted approach to the problem which became acceptable to schools. It provided a philosophical context into which other policy actions fitted. In a somewhat similar way, the unitisation research had a general impact on the positive attitudes of policymakers and schools towards that form of curriculum organisation.

Even though the fourth case, the research on apprentice training and careers of tradesmen, did not have direct influence on policy outcomes, it was suggested that the findings, particularly the career patterns data, created a different construction for those attempting to describe and forecast labour demand and supply. In turn, these new understandings could underpin policy decisions in areas such as training and retraining programs.

The impact of research was diffuse, hard to track and even harder to verify. But the spontaneous, persistent and independent reporting of the phenomenon by different individuals and across all cases suggests it was a significant reality.

Policy outcomes

In all the policy areas of the case studies, there have been policy developments since the time of the research, though not necessarily related to it. The policy changes were varied in expression and largely remained as separate elements in the complex of pre-existing policies in that particular area. In Rose's terms (see Figure 2, p.19) they represent a slight acceleration in linear policy developments. Changes were incremental and in the same general direction despite pressures from interest groups involved in some cases (Cases 1 and 2) for new policy goals. As previously noted, in the area of providing incentives for teachers in isolated areas, the policy objective subsequently changed as a consequence of external conditions.

Some policy changes were seen to be related to the research undertaken. These identifiable policy outcomes differed in form. A written policy document outlining general philosophy and broad strategies was produced on the topic of student behaviour (implementation was left up to schools). An appointment of an officer to assist teachers in this area was also made, and changes made to the use of a withdrawal unit. The Incentives study generated a policy of additional financial considerations for teachers in isolated areas. The Unitisation study, and to some extent the Alienated, Disturbed and Disruptive Students research led to support for policy emerging from practice. Apart from these diverse manifestations of policy, participants in these three areas suggested an important policy outcome was the emergence of a certain climate towards that policy issue: the underpinning system of values and beliefs which is an important component of policy (Nisbet & Broadfoot, 1980).

Policy changes also occurred in the area of apprentice training. Some of these, like group apprenticeship schemes, expansion of the role of apprenticeship commissions, broad band prevocational training and adult entry, had been foreshadowed in the report (Case 4) but there was no evidence to link the research with subsequent changes which occurred some years after the research.

Some policy changes were recommended as a result of research but were not enacted within a few years after they were made. These included policy clarification and support for schools on hard core

discipline problem students, positive discrimination on matters of leave and superannuation for teachers in isolated areas and increased resources for these schools; and changes to the apprenticeship system including length of indenture periods. All these policy issues reflect long term social issues, with economic and political constraints and consequences, and go beyond education authorities or any single agency's policy responsibilities.

Timing

Timing and timescale have been underpinning themes in the component: outcomes. Analysis of time and its influence on the research/policy relationship can be made from several perspectives.

Firstly, it can be observed that policy development (leaving aside implementation) can be a lengthy process*, particularly where it is a complex area and a number of agencies are involved. This despite the fact that mostly some form of policy exists already. On the other hand, a sudden shift in priorities, or particular events, can precipitate change. The four cases took place each in a different time frame and locus in policy development. The research on curriculum unitisation was undertaken whilst policy was in an embryonic state (though, significantly was emerging from practice). During the life of the Task Force in Case 1, changes in practice, community expectations, needs of schools and the economic constraints ran concurrently with the research evidence and a series of other unplanned events or activities or "critical incidents" coincided. In terms of policy theory, the notion of critical incidents fits well in the concept of disjointed incrementalism and the policymaker as human information processor. In terms of linkage between research and policy, critical incidents are an unknown and unpredictable factors impinging on this interrelationship.

The work of the Incentives Committee was seen by one member as being "just too late" in terms of economic conditions, state services legislation and the snowballing effect of other pressure groups attempting to gain similar incentives. By contrast, the research on apprentice training provided data on an emerging policy issue: one on which policy action or even pilot programs could not occur until the economic and political climate forced at least some of the suggested changes to be put in place several years later.

When research was used or had a direct impact on policymaking, it appeared to have an effect rather quickly, often during the life of the research rather than awaiting its fruition to reporting stage. If several conditions were met — the research relevant and understandable, coinciding with working knowledge and beliefs of policymakers, external environment was ripe, policy process amenable to speedy action and action was low cost — then research had a ready influence. Sometimes particular events precipitated uptake, such as the scheduling of a principals' conference at which preliminary data on unitisation was disseminated.

It is often asserted that policymakers operate in a short time span. This may be true for specific decisions, but some policy issues carry over extensive time periods. The Task Force on Alienated, Disturbed and Disruptive Students operated over a period of nearly three years. During this time period a number of other events and activities contributed to the deliberations of the group and helped shape their thinking on these policy issues. As to the endurance of impact of the research on the thinking of the policymakers, the evidence of those interviewed, specially from the earlier cases which had been completed some six years previously, indicated continuing integration and incorporation into their working knowledge and beliefs.

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* *See Appendix 3, 4, for timelines of policymaker initiated research and policy outcomes.*

Outcomes and the research/policy relationship

Table 10, p.135, summarises the outcomes of the research. While little evidence of the "use" of research is apparent, each case revealed "impact" in the policy area. This was not confined to specific policy decisions: it also included other important aspects of the policy process such a creating an implementation climate, developing a corporate set of beliefs on a policy issue and contributing to change in conception in a broad policy field.

The analysis demonstrates that simplistic notions of research use, particularly when assessed in terms of observed policy outcomes are quite inappropriate. The influence of research is much more pervasive and its outcome in terms of policy is subject to a great many additional variables beyond the control of the researcher or the quality of the research. Any researcher attempting to get the timing of research "right" needs to estimate the effects of these variables (and any likely changes in the variables), to hope for good fortune with unanticipated incidents, and to keep a keen ear to the ground to identify emerging policy issues.

Validity of the frameworks for the study

Analysis of the evidence from the four cases invites evaluation of the conceptual framework and basis for the selection of cases. A more detailed critique of the methodology follows in Chapter 9.

The conceptual framework

The conceptual framework was devised as a means of focussing and, to some extent, bounding the collection of data. The purpose of the study was to investigate the relationship between research and policy processes and to take steps towards a general theoretical framework for the research/policy relationship. The conceptual framework set out to capture the major elements derived from the literature and from experience. Inevitably, as the data were progressively gathered, other elements (such as critical incidents) emerged and the importance of some elements (such as managerial roles) became more apparent. It would have been tempting to reshape the data collection to pick up these emphases and explore these elements in greater depth. Similarly, some tentative relationships began to emerge. But, it was postulated, such further explorations would divert from the aim of the research to investigate the scope of factors in the research/policy relationship and develop a broad theoretical framework.

The conceptual framework had sufficient flexibility to satisfy the purposes for which it was developed.

The case study selection grid

The case studies were identified within a two-by-two design grid (Figure 12, p. 47) on the dimensions of the initiation of the research and whether there were policy outcomes. The criteria for identification on each dimension lay in what might be termed the "organisational mythology" — the generally held perceptions about events. It was also based on the assumption that policy outcomes were a valid measure of use of research. It is appropriate at this stage to review the validity of the selection grid.

Initiation of the research

Initiation of the research by researchers, although a substantially accurate definition, nevertheless reflected the researchers' institutional setting. This led to observation of the changes in the operating

Table 10   ***Analysis of the four cases***   ***Outcomes of research and policy outcomes***

OUTCOMES	Case 1 Alienated, Disturbed and Disruptive Students	Case 2 Isolated Teachers	Case 3 Unitisation	Case 4 Apprentice Training
Use	Tactical (? 1 individual only)	Problem solving (?)	Political Problem generating	
Impact	Individual learning Shared beliefs Commitment Context for policy development Implementation climate	Individual learning Shared beliefs Commitment Expectation for implementation	Individual learning Shared knowledge of curriculum initiative	Individual learning Long term influence on conceptual issues
Policy outcomes a) Related to research b) Unrelated to research	Policy statement on general philosophy and broad strategies. Appointment of officer for staff development Change in use of a unit Support for policy emerging from practice	Additional financial support to teachers in isolated areas.	Support for policy emerging from practice Perceived policy stance	Group apprenticeships Expansion of role of Apprenticeship Commission Pre-vocational courses Adult entry to trades

environment and awareness of emerging policy issues. Research identified as policymaker initiated had its origins traced a stage further back to requests by interest or pressure groups. This is not to suggest policymakers do not originate research requests but that these interest groups were using policy processes to pursue their concerns and research became one of the vehicles. It might further be argued that the involvement of interest groups, however indirectly, in the initiation might have predisposed policymakers to use the research and pursue policy action. There is insufficient evidence to comment further on this possibility.

Policy outcomes

The assumptions underpinning this selection criterion erred on several counts. Firstly, the organisational mythology proved inaccurate with respect to Case 2. Detailed data collection demonstrated that some policy actions had occurred, though these were modifications to existing policy rather than new policy directions which had been a widespread expectation. It seems that the high hopes of some dramatic positive discrimination overshadowed the smaller changes which ensued.

Secondly, although none of the policy directions suggested in Case 4 were acted upon as a direct consequence of research, it was suggested by some members of that advisory committee that the research had influenced values and beliefs about supply of tradesmen which shaped thinking about manpower planning. Manpower planning is an underpinning notion in developing policies on training and retraining for skilled man-power. Since a system of beliefs can be incorporated within the notion of policy, in the views of some people, the research on apprentice training might be classified as having policy outcomes. The fact that policy actions did occur, but independently of the research, provided another facet to Case 4, Apprentice Training, as it invites analysis of why these could not be implemented as a consequence of the research.

Conversely, while many school level personnel perceived that unitisation (Case 3) was "departmental policy", other officials saw it differently. The case highlights the problems associated with the concept of policy in an organisation which had both "top down" and "bottom up" policy responsibility.

Thirdly, it is evident that observable policy outcomes are not a good measure of the influence of research for two major reasons. Use of research clearly goes beyond an instrumental part of decision making, and in the four cases, had a much larger impact, individually and corporately in the sense of enlightenment. Whilst such an effect may lead to specific policy action, it also has a longer term and an ecological impact. Once integrated into organisational climate and policymakers' working knowledge, the link from research to policy action is likely to be extremely hard to trace. In addition, policy action is dependent on the quality of policy processes and the time scale between a policy decision and its implementation. There is a tautological problem within the definition of policy as a course of action since the evidence for the existence of a policy lies in its implementation. This was not a particular problem with the four cases in the study but it is theoretically a problem in analysing the influence of research on policy.

Validity of the selection grid

On both dimensions, the classification of the cases is dubious, though for the purposes of the study it had value in capturing significant elements of linkage. The selection grid further served to highlight, through its weaknesses, the complexity of the research/policy relationship and its interpretation. The changed perceptions also demonstrate the developmental and reflective approach adopted in the study.

Summary

This chapter presented an analysis of the data in Chapters 4 to 7. The analysis was undertaken with reference to the conceptual framework laid out in Chapter 3. Where notable differences occurred between the four cases, these were summarised in tabular form. The analysis of the data leads to a re-examination of the design grid for selection of the four cases.

The analysis demonstrates the great complexity and variability of the policy process which must be addressed if the research/policy relationship is to be enhanced. The findings and conclusions with reference to the questions posed for the study, together with implications for theory and practice, are presented in Chapter 9.

Chapter 9:   Conclusions and implications

This chapter contains a summary of the study outlined in the previous chapters. Conclusions and implications are drawn. The chapter commences with an overview of the study, outlining the research problem, the organisational context, the conceptual framework and the methodology. The second section presents the findings and draws some tentative conclusions based on the study. The validity of the case study approach and the conceptual framework are examined in the third section. Implications of the study for theories of the research/policy relationship in education are discussed in the fourth section. The chapter concludes with implications for improving the research/policy relationship as a basis for educational development.

Outline of the study

The research problem

The general problem for research was to examine the outcomes of attempts at linkage between research and policy and thus to develop greater understanding of the possible influence of research on policy. Specifically, a situation was examined where deliberate attempts were made to develop a linkage between research and policy. It was argued that this situation could illuminate the role of research in policy processes, illustrate some ways of linking the research and policy processes, demonstrate ways in which policymakers use research, and identify some factors which may intervene in the research/policy relationship.

The sub-problems which guided the study are set out below.

1.   CAN RESEARCH INFLUENCE OR HAVE AN IMPACT ON POLICYMAKING?

   What is meant by impact or use?

   What is the time scale in which impact should be acknowledged?

   Which policymakers are influenced by research?

   What kind of research influences policymaking?

2.   HOW CAN THE RESEARCH PROCESS BE USED TO FACILITATE THE RESEARCH/ POLICY LINKAGE?

   What linking processes should be established?

   How can policymakers participate in research?

   How can research integrity be preserved?

   What dissemination processes should be adopted?

   What are the consequences of linkage through the research process?

3.   WHAT ELEMENTS IN THE POLICY PROCESS ARE SIGNIFICANT IN THE RE- SEARCH/POLICY LINKAGE?

   What kinds of policymaking are influenced by research?

   Who are the key policymakers?

At what stage in the policymaking process can research have an influence?

What aspects of the policymaker's role can research address?

How might key policy issues be identified?

4.   WHAT OTHER FACTORS FACILITATE OR INHIBIT THE RESEARCH/POLICY RELATIONSHIP?

What part does timing play?

What is the influence of the external environment?

What other factors intervene?

The organisational context

The study was undertaken within the Education Department of Tasmania. The period 1979-1987, during which the study was conducted, was characterised by structural changes in the Department and efforts to improve policymaking processes. Nevertheless, policymaking remained a diverse and diffuse process.

The research that was the subject of the study was undertaken by an in-house research facility which, over the years covered by the study, sought to improve the link between research and policymaking. The researchers adopted a proactive stand in encouraging interaction with the policymakers. They also continually reflected on their practice with the aim of improving the integration of research into policy processes.

The conceptual framework

A conceptual framework was developed to focus the collection of data, to assure multi-site comparability of data and to form the basis for data reduction and analysis.

The conceptual framework was built from an extensive review of the literature on research use in education. Other elements from policy theories and from organisation and management theory were introduced to clarify insights derived from practice. The core of the framework was based on Weiss' (1978a) model of the interrelationship between researchers and policymakers. Weiss provided the closest portrayal (amongst existing models) of the interface between researchers and policymakers. The major components added to Weiss' model were policy processes, linkage and outcomes. Some modification of components of Weiss' model was necessary in order to accommodate the new components and to clarify the concepts in such a way as to identify variables for data collection. The conceptual framework consisted of four major components further divided into subcomponents. Components were as follows: *policy* comprising the subcomponents operating environment, policy process and policymakers; *research* comprising researchers and enquiry; *linkage* and *outcomes*.

Methodology: Case studies

The general problem for the study was to develop understanding of the research/policy relationship. In the absence of interactive models for analytical study, it was concluded that evidence from practice might produce some "intermediate level principles as a stepping stone from the specific to the theoretical" (Nisbet & Broadfoot, 1980, p.62). Therefore a case study approach was adopted in an attempt to map the variables which might influence the research/policy linkage.

As a step towards generalisation, four case studies were undertaken. The case studies were subjected to two stages, a descriptive stage and an analytical stage. The chronological descriptive narrative for each case study was recorded in Chapters 4-7. The analysis of the evidence from all four cases was presented in Chapter 8.

Selection of cases

Four cases were selected based on two elements of the conceptual framework: initiation of the research (researcher or policymaker) and related policy outcomes (observed or not observed). These elements were arranged in a two-by-two grid, with one case selected in each cell. Selection of specific cases was based on the researcher's knowledge of the origins of the research activities and of the widely accepted views held within the Education Department about the effects on policy. These assumptions were tested in the course of the study. An assessment of the validity of the selection grid was given in Chapter 8.

The earliest research was undertaken in 1979-80, while the latest was in 1985-86.

Descriptive narrative

The descriptive narrative of the cases was derived largely from primary sources such as file records, correspondence, records of meetings, news releases, parliamentary records and official government publications. Related documents and reports which existed prior to the particular research, and the reports emanating from the research were used to establish contextual and historical information. The narrative was amplified with personal recollections and perceptions of policymakers and others involved in each case.

The timescale for the descriptive narrative of each case was extended from the commencement of the activities which led to research being undertaken, up to the end of 1987. Thus the time varied from one to seven years in which policy changes subsequent to the research might be observed.

Interviews. Interviews were conducted with researchers and policymakers and others involved in each study. The purpose of the interviews was threefold: firstly, for verification of the descriptive narrative of events and social and policy context; secondly, to collect information on perceptions of the process adopted and thirdly, to establish perceived outcomes of the study, both personally and in policy.

Open-ended, responsive interviews were conducted based around a series of core questions. For each case study, the researcher (where other than the present author) was interviewed, together with most of the members of the committee or Task Force which was linked to the research.

Descriptive verification. Each case study was verified for fairness and accuracy by each of those interviewed.

Analysis of the four cases

Verification of the accuracy of the four case descriptions provided the basis for the next stage of the study. Evidence from the four cases was analysed according to techniques of multi-case analysis described by Miles and Huberman (1984). This analysis formed the basis of a general analysis (Chapter 8) from which the conclusions which follow were drawn.

Summary of findings

This section addresses each of the research questions and sub-questions and provides responses.

1.   Can research influence or have an impact on policy-making?

1.1 What is meant by impact or use?

1.2 What is the time scale in which impact should   be acknowledged?

1.3 Which policy actors are influenced by   research?

1.4 What kind of research influences policymaking?

1.1   *What is meant by impact or use?*

Two factors have led to the need for clarification of the terms "use" and "impact": the recognition of wider effects of research than a simple linear use in decision-making and the confusion created by attempting to assess the effect of research by observing policy outcomes. The term "use" was, in the present thesis, confined to direct application of research information to a particular decision and also for instances where research information was applied in an instrumental sense for other organisational goals. Such use has been described as tactical or political. Research use fits into decisional aspects of policymaking and management, although research was not the only input into selecting decision alternatives.

Non-instrumental research use is variously described in the literature as the enlightenment model (Weiss 1979), percolation (Husen 1984), cultural diffusion (Anderson 1984), or the conceptual model (Kennedy 1984). Kennedy argues that conceptual use is a formative process which is not timebound. Therefore, the research evidence itself ceases to be recognised *per se* and only the user's reinterpretation of the evidence remains.

The notion of conceptual use has connotations of conscious application of knowledge to an existing body of theory. "Enlightenment", "percolation" and "cultural diffusion" are passive and diffuse terms. The term "impact" was adopted to capture the dynamic effects of research on the beliefs and values of individual policymakers, groups of policymakers and the organisation as a whole.

Policy outcomes were treated separately since, it was argued, other factors in the policy process intervene in the transmission of the influence of research into policy outcomes or decisional changes. Given that in all cases there was pre-existing policy (in some cases quite extensive), expectations for policy changes might at best be marginal.

For the reasons argued above, both "use" and "impact" are clearly best judged by self-reporting by individuals on their own behalf and on behalf of the organisation. Both "use" and "impact" of research were reported by policymakers in the four cases studied. Individually and corporately, research had greater influence through impact rather than direct use. Subsequent policy outcomes occurred which were consistent with the research in all four cases, though the directness of relationship and line of influence varied. The development of shared beliefs by policymakers and the creation of an implementation climate were, perhaps, more significant to policy development.

1.2   *What is the time scale in which influence might be acknowledged?*

The influence of the research extended over a long time scale. Research might be used in particular decisions immediately, in fact during the life of the research when facilitated by linkage. However, the impact of the research continued much longer when the understanding

of an individual policymaker had been changed or reinforced by research. Some policymakers reported continuing influence of research in this mode.

1.3 *Which policymakers are influenced by research?*

Policymakers from senior administrators to school principals were influenced by research, representing the full range of those involved in the study. Some, through their position in the organisation or through personal management style, more readily applied research findings and spread impact through the organisation. In two cases, policymakers at a variety of levels in the organisation were involved in linking processes. This led to an expectation for implementation of change and, to varying degrees, a positive climate in schools towards emerging policies.

1.4 *What kind of research influences policymaking?*

The policymakers found all methodologies useful and valid in contributing to their knowledge and understanding. Theory underpinned rather than dominated the research and the research attempted to portray the broad situation rather than focus on specific decision questions. It might generally be described as "client oriented" (Cooley & Bickel, 1986) and the interpretation of the purpose of the research varied amongst the policymakers.

It was therefore concluded that a variety of kinds of research influence policymakers and hence policymaking: the principal criterion being client orientation, rather than a single purpose orientation. It was further concluded that defining purpose is incompatible with the notions of impact of research as defined, and of the policymaker as a human information processor.

Methodological eclectism offered two-fold advantages: a variety of insights into the problem area are offered, and alternative information processing styles of policymakers can be satisfied.

In summary, it was apparent that the research influenced policymaking in a variety of ways. Most significantly it influenced levels of knowledge and understanding, beliefs and values by impact on individuals and the organisation. This was established by detailed analysis and interviews. It was not necessarily externally obvious or publicly acknowledged. This kind of impact was sometimes also complemented by specific use of research findings.

Research which had an influence was client oriented but not otherwise limited in purpose, theory or methodology. It had an impact on policymakers at a range of levels, and its influence carried over an extended period of time.

2. How can the research process be used to facilitate the research/policy linkage?

2.1 What linking processes should be established?

2.2 How can policymakers participate in research?

2.3 How can research integrity be preserved?

2.4 What dissemination processes should be adopted?

2.5 What are the consequences of linkage through the research process?

2.1 *What linking processes should be established?*

The influence of research described in Question 1 occurred in the context of an in-house research facility with specific linking processes between researchers and policymakers. The

principle of involving key policymakers who could be actively involved in the research process from the outset was adopted in each case. In two cases the linking committees were initiated by researchers and in two cases by policymakers.

Although only one form of linking process was explored, the evidence of the four cases demonstrated that the basic principles of interactive context, sense of ownership, and identifying all key policymakers were necessary ingredients for enhancing the research/policy relationship. The learning that occurred through some continuous linking could not be substituted by dissemination of research on completion.

2.2   *How can policymakers participate in research?*

A number of ways in which policymakers participated in the research process were identified. These included initiating research, establishing research questions, identifying priorities for data collection, facilitating responses, generating ideas, commenting on design, providing expertise, reacting to data interpretation, disseminating findings and framing recommendations.

2.3   *How can research integrity be preserved?*

It was an assumption by the researchers that in developing the research/policy relationship, research and researcher integrity must be preserved. Even in the case of an in-house research facility, boundaries of confidentiality, access to and ownership of data, responsibility for research design quality and rights of publication were negotiated. The researcher established credibility in two contexts or role sets: that of the policymakers through conduct of research and that of other researchers through peer review processes. Preserving the integrity of the research in such interactive settings generated cost in terms of researcher time.

2.4   *What dissemination processes should be adopted?*

Dissemination to policymakers commenced with their participation in the research activities. It was enhanced by interim reports on the research, made available to policymakers involved in the research, and sometimes also to a wider audience. A variety of publications during and on completion of the research was required for the variety of potential audiences.

Policymaker participation in dissemination activities enhanced ownership of research and kindled wider impact. It was argued that if researcher credibility is to be sustained, then reporting should at least consist of detailed documentation of research for the research community, and short documents in lay language for teachers and administrators.

2.5   *What are the consequences of linkage through the research process?*

Engagement in linkage had consequences beyond the conduct of the research. For policymakers, these included the acquisition of a shared knowledge base with other policymakers, deeper understanding of the viewpoints and perceptions of other policymakers on particular policy issues, the opportunity to participate in policy development in ways not offered through normal Departmental structures or processes and the development of shared beliefs. It also increased the level of understanding about the research process itself: its possibilities, limitations and potential in the administrative setting.

For researchers, participatory approaches to linking research with policy added a different dimension to their research activity. This dimension required greater understanding of the

policy process in general, the particular policy context and characteristics of individual policymakers within it. It required different forms of interaction and communication. Increased time was absorbed in "non-research" types of activity, though the need to report progress and keep to a schedule encouraged time constraints. Researchers became involved in more and different dissemination activities, spreading over into utilisation and implementation.

In summary, linkage through the research process enhanced the research/policy relationship through the active participation in various ways and various levels of engagement by policymakers. Such linkage may not be a necessary condition for research to influence policymaking but certainly it appeared to facilitate impact on those involved. Linkage had further consequences on policymakers of particular significance in the corporate setting. Linkage created a different dimension for research, though researcher integrity was maintained. Linkage highlighted potentially expanded roles for researchers in facilitating organisational learning, in assisting in dissemination and utilisation of knowledge, and in implementation of change.

3. **What elements in the policy process are significant in the research/policy relationship?**
    3.1 What kinds of policymaking are influenced by research?
    3.2 Who are the key policymakers?
    3.3 At what stage in the policymaking process can research have an influence?
    3.4 What aspects of the policymaker's role can research address?
    3.5 How might key policy issues be identified?

3.1   *What kinds of policymaking are influenced by research?*

A range of approaches to policymaking were noted and, within policy issue arenas, evidence of a variety of policymaking models existed. There was little evidence, however, of a rational policy process in which instrumental use of research might apply. The more significant policymaking "models" were forms where a fluid group of participants, operating within broadly defined institutional goals, worked from a variety of starting points to achieve incremental change. Such approaches could be influenced by research as the concern with a common problem created a need for a shared knowledge base. Though the focus of the study lay in the policymaking phase of the policy process, it was evident that there was not a clear vision of the subsequent phases of the policy process.

The potential for research to influence policymaking appeared not to be limited to particular kinds of policymaking. Instead, research influenced policymaking in different ways according to the different policymaking approaches adopted.

3.2   *Who are the key policymakers in the research/policy link?*

Over the years of research described in the study, the researchers developed a better understanding of the notion of key policy actors, and of the role the linking group might play. It was argued that those involved in linkage activities should include all those with a stake or interest as well as those with financial or legislative power. However, it was clear that some issues which were important educationally were also significant for a range of interest groups and agencies. The creation of a linking group comprising largely Education Department personnel was, perhaps, a factor in limiting the influence of the research.

Administrative roles of the policymakers constituted significant variables in the propensity for research to be influential. Individuals with leadership responsibilities were key policymakers in the research/policy relationship. Thus while individuals may have had functional *management* responsibilities, greater impact at a system level might have been derived from a policymaker who used research in a *leadership* role.

3.3   At what stage in the policymaking process can research have an influence?

The term policymaking could be interpreted as a misnomer since all the cases studied had some prior policy context, mostly of a complex kind and variable forms of expression. Impact and consequent policy changes could at best be expected to be marginal in the short term, which was precisely what occurred in two cases. In the other two cases, the research (initiated by researchers) impacted at a very early, pre-developmental, stage in policy redirection. In one case impact was acknowledged because it was a local issue, supported by key leaders at a crucial stage of policy development and could be implemented at school level. In the other case, a diffuse, long term impact was alluded to by those policymakers who reflected on the research. The translation of the influence of that particular research into policy outcomes was retarded by factors in the operating environment.

There was little evidence of research being directly applied at particular decision points in policymaking. Where this occurred, research was only one of the factors influencing the decision.

3.4   What aspects of the policymaker's role can research address?

Since policymaking is more than decision-making, it was hypothesised that aspects of the policymaker's (or administrator's) role other than decision-making might be influenced by research. This proved to be the case. Those policymakers involved in linkage drew on the research in informational and interpersonal roles including information exchange, dissemination, liaison, motivation and leadership. These roles played by the policymakers provide a link between the notions of the information processor, impact on individuals, system level impact, and subsequent policy outcomes and policy performance.

3.5   How might key policy issues be identified?

Issues of policy significance arose in a variety of ways and were not necessarily perceived initially by policymakers. In each of the four cases, interest groups and researchers outweighed policymakers as the source of initiative for research, yet all the research had policy implications. It is postulated that interest groups and researchers had reflected on and predicted consequences of changes in the operating environment. This had led to identification of emergent issues, though the interest groups clearly had a political as well as an educational motive in mind. Nevertheless, the issues on which they urged attention could have subsequently flared into an immediate management issue had not the research strategem been applied.

Thus if enhancing the relationship between a research and policy is desirable, it does not necessarily depend on addressing only policy issues identified by policymakers. In fact the reverse may have been true: that those who stood aside from organisational issues perceived emerging policy issues earlier.

In summary, the policy process is a complex area which researchers need to understand if research is to be brought into closer relationship. Clearly the rational decision-making model of the policy process on which charges of non-use of research are based, is inappropriate. In its place the complex view of the policy process presented in the study offer the potential for impact of research but in a diffuse way, dependent at least partially on the models of policymaking adopted and administrative roles (especially leadership) of policymakers. It is not necessary for the initiation of the research or the recognition of an emerging policy issue to rest with policymakers nor for the research to be available at specific decision points in policy development.

Unless implementation issues are addressed, change predicated on research will falter. Significant impact of research on the policymaking phase can create a favourable implementation climate and foreshadow appropriate implementation strategies.

The proposition that research influences a variety of policymaking models, often of a diffuse kind, was consistent with the proposition that much of the influence of research is via the broad impact on individuals and groups of policymakers.

4. What other factors facilitate or inhibit the research/policy relationship?

   4.1 What part does timing play?

   4.2 What is the influence of the external environment?

   4.3 What other factors intervene?

4.1   *What part does timing play?*

Research can influence policymaking by creating an impact, particularly in a conceptual sense, in advance of or at very early stages in policy development. This influence may not necessarily be acknowledged because the information is processed by the policymaker and it becomes integrated into that individual's working knowledge. It can have an impact or be used in a tactical sense early in policy changes to foster certain climates for implementation. If the timing of research coincides with policy development, it can be used simultaneously for specific policy decisions and have a general impact on shaping values under-pinning policy development. Research may be used tactically or politically as retrospective justification for policy decisions.

Examples of all these instances of timing of research use were observed or reported in the four cases. The issue of timing of research in relation to policymaking is therefore more complex than it might appear.

4.2   *What influence does the external environment play?*

The external environment had a powerful influence in all four cases, in both negative and positive reinforcement of the research findings as a basis for policy changes. Policy processes could be lengthy, to the point where changes in the external operating environment altered the policy issue or its priority was diminished in comparison with other more pressing issues. Under such conditions, research might be seen to have had no influence on policy, though in the longer term the impact on understanding of the original issue may be relevant in the new scenario. Conversely, the external environment may change before policy changes predicated on research can be implemented.

4.3 *What other factors intervene?*

Two important factors were observed which significantly modified the influence of the research: critical incidents and teacher autonomy.

Unpredictable or unplanned events in the life of the research or the duration of the policy development activity, intervened both positively and negatively in the research/policy relationship. Examples were noted in the case studies. Such incidents can have a powerful impact on the frame of reference, the beliefs or the understanding of policymakers involved. One factor that was only marginally touched upon in the present study was the question of policymaking at school level. It is argued that much significant education policymaking in fact occurs within the classroom. While administrators can make policy in the sense of producing statements of beliefs and indicating courses of action, the quality of these policies in practice depends on how each school and each teacher interprets that policy in action. Interpretation of policy at school level was a significant element in two of the cases studied.

In summary, a variety of other factors may emerge outside the immediate research process, policy process and any linkage established between them. These factors have potential to inhibit or enhance the research/policy relationship and may form important variables influencing the types of research undertaken and interpretation of its effects.

Critical incidents can occur in the operating environment (stockmarket crash or natural disaster), the organisation (radical reorganisation or change of government), the project (change in personnel in school under study) or policymaker (change in position, chance meeting with international expert). Researchers cannot control the occurrence of such incidents or their effects, but since they may influence research/policy relationships, their potential to strengthen or undermine should be recognised.

If researchers and policymakers seek to improve the research/policy relationship, it is argued that the most fertile areas lie in research that has an impact on conceptual development and facilitates reflection on values and beliefs. This necessitates identification of emergent issues and collaboration between researchers and policymakers. The operating environment generates policy issues and it is here that researchers and policymakers should seek clues as to what might be emerging issues for research.

Since timing does not bear a linear relationship with research use, research needs to be continuous and interactive. Finally, since policy is made at all levels in education, research needs to be undertaken for, and linked with, policymakers at all levels from senior administrators to teachers.

Reflections on the study

Introduction

Some tentative conclusions and generalisations have been laid out in the previous section. These were derived from the evidence of the four case studies. The purpose of this section is to undertake a short critique of the study to analyse it as a basis for theory building, and to highlight methodological issues for future researchers in this field. Finally it demonstrates the reflective approach which underpinned the study and the *modus operandi* of the researchers.

Particular assumptions and limitations were discussed in Chapter 3. Apart from the general limitations

of case study method, this study was further limited to in-house research in a small bureaucracy with efforts towards linkage. This was adopted as a deliberate strategy to research a familiar situation. It was not thereby seen to limit the potential applicability of the findings to other contexts, including external (university-based) researchers.

Case study method

Case study method provided the means by which a range of dimensions of the research/policy relationship could be explored simultaneously. The conceptual framework derived from a review of the literature provided the key elements: the extent to which this adequately and accurately captured all the dimensions of the relationship is discussed in the following section and in the development of a model later in this chapter. Two factors enabled the case study approach to be adopted with some confidence of generalisation. Firstly, the framework was based on evidence from worldwide literature and secondly, the local context concurred with that in other states of Australia at that time. The detailed contextual statement in Chapter 1 will enable personal judgements to be made of transferability to other contexts. Finally, there were advantages in exploring and documenting a familiar territory to capture fine detail and nuance.

The selection of the four cases was critically reviewed in Chapter 8. The partial rejection of the validity of the selection criteria demonstrates the move from a simplistic, superficial interpretation to a deeper understanding which case study method offers. Examining four cases in the same organisational context enabled the variables and the relationship between the variables to be explored and clarified. Reinterpretation of the selection criteria provided additional insights to the analysis rather than an undermining of the fundamental postulates.

The conceptual framework

The conceptual framework was derived from literature in the field of relationship between research and policy in education. No model existed which captured all the elements referred to in the literature. Other elements were also added as result of the researcher's personal experience with and learning from undertaking research with policymakers. These elements were conceptualised and operational-ised through management and policy theories. Case study method offered the opportunity to identify other variables not included in the conceptual framework: documentation of extensive time lines of events and the adoption of responsive styles of interview allowed such variables to emerge.

Some particular aspects of the conceptual framework will now be addressed since they relate to the following section of this chapter which discusses the implications of the study for theories of the research/policy relationship.

Literature on evaluation use

There is an extensive literature on evaluation use in education. This was not included in building the conceptual framework for reasons outlined in Chapter 3: such literature focussed on a different phase in the policy process, and mostly focussed on program evaluation studies which are limited in scope, specific in purpose and lie within a bounded system. There has been little overlap in the literature on evaluation use and research use, largely, it is hypothesised, because of the distinction perceived by researchers between "research" and "evaluation".

> On the one hand, there are studies designed primarily to add to the body of knowledge (research), on the other, those studies designed primarily to provide information for

decision-making (evaluation) (Alkin, Daillak & White, 1979, p.13).

As long as researchers see their work adding to knowledge rather than providing information for decision-making, evaluation use theories will hold little relevance in discussion on research/policy relationships. This is despite the fact that analysis of the literature on research use indicates that theorising is grounded in a utilitarian paradigm. Recent years have seen a shift in both camps.

Some researchers are urging research in a client-oriented, stakeholder-type approach derived from evaluation theory (Scriven, 1984; Cooley & Bickel, 1986) and writers on evaluation use are reflecting broader conceptions of use, distinguishing "instrumental and conceptual" (Leviton & Hughes, 1981) or "mainstream or alternative" (Alkin, Daillak & White, 1979). Similarly, writers on research are now groping towards a different understanding of use. So what might be gained from the evaluation use literature?

Two analyses of evaluation use summarise much of the literature (Alkin et al., 1979; Leviton & Hughes, 1981). Alkin et al. list eight categories of factors influencing use: pre-existing evaluation bounds, orientation of users, evaluator's approach, evaluator credibility, organisational factors, extra-organisational factors, information content and reporting, and administrator style. Alkin and associates (1979) present the categories as a "first step toward a theory of evaluation utilisation" (p.259) and recognise that the broad categories encompass a wide range of factors which they document idiosyncratically in relation to the cases they examined. They admit that the categories do not "translate unambiguously into variables" and do not attempt further sub-categorisation.

Leviton and Hughes (1981) provide a scheme of factors influencing evaluation use derived from a review of the literature. The five clusters of variables are shown in Table 11.

Table 11 :   ***Variables affecting evaluation use***

Major cluster	Variables
Relevance	Evaluations address client's needs Policymaker's needs Program manager's needs Timelines
Communication	Direct communication of user's needs for evaluation Communication in bureaucractic hierarchies Dissemination
Information processing	Awareness of relevance Presentation of information Information processing style of administrators
Credibility	Comparison with other information Preconceptions of users Credibility of evaluation producer Quality
User involvement and advocacy	Commitment to evaluation Advocacy of programs and policies

Source: Derived from Leviton and Hughes, 1981.

The clusters of variables provide useful points of analysis within the bounded systems and limited purpose which constrain traditional evaluation activities.

The variables identified in the two studies provide detail which might be valuable in aspects of the research/policy theory, for example in user characteristics such as information processing style or orientation. The variables are not inconsistent with the variables identified in the conceptual frame-work but are focussed largely, of course, on the nature of the evaluation and its utility within a bounded system.

Definitional issues

The adoption of the term "use" for direct instrumental use of research either in particular policy decisions or for tactical purposes has been clarified (pp 45 and 129).

The adoption of the term "impact" for what is elsewhere termed conceptual use, enlightenment model, percolation or cultural diffusion is more problematic. It is further confused by the use of the term "impact" in some earlier literature as meaning observed outcomes of research in terms of policy actions. For the purpose of the study, impact provided an adequate concept to capture the reported influence on individuals (knowledge, beliefs, values, etc) or on the system (climate for implementation, shared beliefs, etc). Separation of the notion of policy outcomes was also a valid development in conceptualising elements. Nevertheless there might be advantage in subsequent further refinement of the concepts of impact and policy outcomes. The development of some unique descriptors to avoid further conceptual confusion would reflect advances in understanding.

The descriptors, "policymakers" and "policy actors" were used in quite specific ways in the conceptual framework. Policymakers were those actually involved in the linkage processes in each of the cases examined. The degree to which policymakers included the whole range of policy actors varied. It is hypothesised that the extent to which it is possible to equate the two terms in operationalising the linkage model is one of the critical variables in the effectiveness of linkage.

A further set of definitional issues surround the sub-component of enquiry. The term was used to distinguish the research investigation from the general component termed "research" which also included researcher characteristics. It is argued that research in this context is bound with researcher beliefs and ideologies: the sub-component "enquiry" relates specifically to technical aspects of the research. The enquiry in the study, it might be argued, did not fall under the rubric of research because it was not solely directed to theory building. But neither was it "evaluative", nor was it "applied" in all cases. It was, it is argued, a systematic gathering of information for the purpose of increasing knowledge. And herein lies another reason for adopting the term enquiry. Innumerable reports and enquiries of a non-research or quasi-research based type have had varying influences on education. Is there potential for the research/policy relationship hypotheses to be applied to these forms of enquiry with a view to improving their effectiveness?

Descriptive issues

As noted previously, some elements from evaluation use literature which might have brought up other detail in the descriptions were not included. They would not have added to the broad overall picture which was the objective of the study. Some elements, such as relevance and credibility, were functions of the linkage process rather than descriptive elements of the study.

The descriptive nature of the case study method enabled additional elements such as critical incidents to emerge. The variable *time* remained problematic since its influence was manifested in different ways being a mediating factor in all the other components of the framework. The issues related to time raised in the literature review emerged from rationalist approaches to the research/policy relationship. The evidence from the study demonstrated that elapsed time, timescale and timing require reinterpretation

• in an interactive relationship between research and policy. Thus the timescale of research activity was not finite since policymakers enjoyed continuing contact. Elapsed time for impact of research was also continuous as policymakers progressively integrated the findings of research to their working knowledge. Timing of research information as a variable influencing impact or use needed to be viewed in context of a range of elements of policy processes.

To facilitate further descriptive work, time should at least be sub-divided to include timing in relation to policy and context, timescale for research and policy processes, time as variable of policymaker involvement and of researcher activity. Time should be considered as a mediating factor rather than as a constraint and explanations of non-use should be modified accordingly.

Huberman's integrated model of research utilisation
Late in the life of this study, a paper by Huberman (1987) came to hand. It described steps towards an integrated model of research utilisation. Huberman starts from the assumption that "we already know a great deal about research utilisation in the social sector" (p.586) and should therefore be behaving in a confirmatory rather than exploratory way.

Huberman's model pulls together a multitudinous range of variables from a wide range of studies drawing from fields of social research and administrative theory. Many of these variables draw on instrumentalist theories of knowledge use which lead to assumptions of "more is better and the best variety of 'more' is 'multiplicity of ties'" (p.601). However Huberman also points out the distinction between "instrumental" or "technological" vision of the dissemination and utilisation process and a "conflict-theoretic" or "transactionalist" paradigm. The latter paradigm, he suggests, will lead the researcher to want to know more of the institutional parameters and relative power among actors. Thus Huberman hints at some of the elements encompassed by the conceptual framework of the present study, in elements of policy in particular. The model he presents emphasises the dissemination aspects of research activities and utilisation particularly as a consequence of the research itself and the linkage mechanisms. It thereby de-emphasises the broader contextual issues which the present study sought to address from a general perspective of research and policy.

The Huberman model does not conflict or replicate the conceptual framework, but rather extends certain aspects. The article itself also raises some important interpretative and theoretical issues on research and policy relationships which might subsequently be applied to the data in the present study.

Conclusions about the conceptual framework
While the conceptual framework generally stood up well for the purpose for which it was designed, it is conceded that certain elements need further clarification, and that detail might have been added by review of evaluation use literature and administrative theory. This might have obfuscated the broad picture the study set out to capture.

Timing of the study

It might be argued that events have overtaken the execution of this research and therefore its applicability is diminished. Certainly education systems around the world have become more politicised with increasing ministerial determination of policy and a concurrent increase in devolution of responsibility to schools (Hocking, 1987). This polarising of locus of control to the minister and to schools might be perceived as making obsolete the approaches to policymaking outlined in the study. How far then are the propositions emerging from the study generalisable and transferable in the current context?

Education systems remain loosely coupled systems (Weick, 1976), with large components of policy implementation and many aspects of policymaking the responsibility of administrators at all levels from senior managers to schools. The same operating principles for the research/policy relationship may still generally be applied. Indeed, the utilisation of knowledge in bringing about change is even more critical at the present time.

A critique of the study

The relationship between research and policy is not a simple one. Although rejection of the simplistic utilitarian notion of use led to the undertaking of the study, perhaps the interactive approach proposed was also too simplistic. In fact this was certainly the case, as this brief critique of the study has illustrated. Nevertheless it is argued that the approach of looking critically at a situation set up to try to improve the relationship as a means of improving our understanding falls within the currently accepted paradigms of researching exemplary practices and adopting a reflective approach to action. This approach has served the purposes outlined at the commencement of the study, namely to address the question of whether research does influence policymaking, and if so, which elements in the research process and in the policy process are significant in facilitating the linkage.

Implications of the study

Implications for theory

The study is subject to the general limitations of case study methods. However it also draws on research and experience around the world, for example Cooley and Bickel (1986) in Pittsburgh, USA, Husen (1984) and Marklund (1984) in Sweden, Huberman (1987) in Switzerland, Angus (1981) in Perth, Australia, Sim (1985) in Singapore, and others.

The findings of the study have a number of implications for theories concerning the relationship between research and policy in education. In fact it might be conjectured that the absence of general theory in the field has contributed to poor understanding and few attempts by researchers to improve practice. Partial theories exist to explain aspects of the relationship: theories of non-use of research, theories of types of use and nature of impact and theories of the status, or perceived status or potential status of the research/policy relationship. The analysis that follows attempts to address these partial theories, and adds some new theories to provide a model of the research/policy relationship.

Research in the policy process

Current theories of non-use of research either implicitly or explicitly locate the blame or responsibility almost solely with researchers. It is clear that this is erroneous since the adoption of research and translation of findings into practice is influenced by a range of highly significant factors inherent in policy and policy processes.

1. Research may only influence policy marginally in the complex of pre-existing policies which already encompass most educational issues. "Nudging the tiller" is an important element of policy change as the external environment changes or knowledge develops, yet it is not gross enough for casual observation to satisfy those who seek to identify the influence of research.

    This is particularly so when change occurs at the school level interface. Conversely, major policy

shifts may involve wider issues and groups outside the education field. However good or extensive, well-intentioned or well-communicated the research, and however committed education policymakers are to change, this may have to await movement in other social arenas before change can be implemented. Nevertheless, research may have made a significant contribution.

2. Policymaking is as much a political as a rational act. Therefore research which contributes to policymaking can either attempt to be politically neutral or acknowledge the political nature of generation and ownership of information. In the former case, research which attempts to be politically neutral will still be subject to individual interpretation. If researchers acknowledge the political nature of research and policy, then avenues exist for addressing the emancipatory, rather than cultural or technical interests (Habermas, 1973) of policymakers. This would provide a vehicle for the development of mutually adaptive policy decisions.

3. A range of approaches to policymaking occur, least frequent of which may be the rational process. Though policymakers sought information as a basis for their understanding underpinning other forms of policymaking, the notion of instrumental use of research is largely a logical inconsistency.

4. Past judgements of the influence of research on policy have sometimes been based on interpretations of impact through observed policy outcomes. This ignores the quality of the implementation processes for which policymakers are responsible. Without proper regard for implementation, policies can be aborted or nominal in their effects, regardless of any research underpinning them.

5. Current theories of research use focus on decisional aspects of policymaking. Clearly, both from the literature and from the findings of the study, policymaking also includes values and beliefs. Instrumental interpretations of research use cannot incorporate these elements of research influence. Conceptual use or enlightenment scarcely capture the scope of this notion, perhaps because of a lack of willingness to concede the input of anything other than rationality to policy processes. A theory of the research/policy relationship cannot ignore the importance of beliefs and values, firstly because it is a significant element of policymaking activity and secondly because it is an area where research can make a real impact.

6. Personalising the assertions about policy in the previous section, it can be argued that policymakers are more than just decision makers and therefore other aspects of their administrative roles are relevant to a theory of research/policy relationship. Linked to non-decisional aspects of policymaking, it is obvious that leadership, dissemination of information and liaison play an important part in developing beliefs and values which underpin an institutional policy.

7. The working knowledge of policymakers forms the base with which research information interacts. Each policymaker reinterprets research use in this way and the new working knowledge becomes integral to that policymaker.

This may partially account for some reported levels of non-use: source of knowledge, once adopted, may not be significant. It has further implications for theory since each policymaker has his/her own information processing style and unique working knowledge. The extent to which these concur or are compatible among policy actors may be directly proportional to the potential influence of research on a particular policy.

8. Some theories of non-use seek to justify the claim on the grounds that there is little evidence of major policy changes as a consequence of research. Such claims are misleading. Major changes have political and social origins and consequences. A range of interest groups and policy actors are involved. Research may help shape thinking about the issue, but in an instrumental sense can offer little which is independent of policy actions based on other rationales. Research can facilitate the understanding of the "policy-shaping community" (Cronbach & associates, 1980) and can contribute in other ways at other phases of the policy process.

9. Much significant education policy is developed at school or classroom level. Whilst responsibility for some elements of policy at this level lie with the quality of implementation processes adopted by senior administrators, it is also necessary to recognise in a theory of the research/policy relationship the role of teachers in policymaking. Equally, a theory of the research/policy relationship may have applicability in the research/practice relationship.

10. Theoretical analysis of the relationship between research and policy must address a number of variables to ensure an accurate and fair interpretation. This is exemplified by the notion of critical incidents: those unplanned and largely unpredictable events which can intervene between both conceptual and instrumental use, both negatively and positively affecting the influence of research.

The nature of the research/policy relationship

The relationship between research and policy generally remains poorly understood, despite some recent studies and some examples from practice. It is argued that clarification of the nature of the relationship is a critical prerequisite to further theoretical development.

1. The relationship between research and policy can only be considered weak if direct instrumental use is considered. Whilst conceptual use (or impact) is indicated in the literature, its existence is elusive unless self-reporting by policymakers is adopted. The policymakers in the study consistently reported influence of research, not only from the specific enquiry that was the focus of each case, but also from other sources. Why then the "common misconception" (referred to in the quotation which introduced this thesis) that the relationship is weak? It is suggested the reasoning might go along the following lines. Education is a social science and social science attempts to follow scientific principles. Scientific principles are rational principles. Therefore social science is a rational logical process, as is education policymaking. Rational bureaucratic models are promoted as reality by policymakers and research funding agencies. *Ergo* if research is not seen to influence (supposed) rational, decisional policy processes, the relationship is weak. It is argued that this is fallacious.

   Further, it is postulated that an increase in technological corporate management processes may not necessarily enhance even genuine instrumental use of research but may encourage greater tactical, strategic and symbolic use as well as increase distortion and polarisation of research findings.

2. Both instrumental "use" and conceptual "impact" can occur, in the same policy issue and with the same individuals. The separation of the two ideas — the one based in the technological, the other in the transactionalist paradigm (Huberman, 1987) — assists in clarifying the importance of impact. Yet in reality the two forms of influence are extremes of a continuum, for research is not the only or possibly not even the major factor influencing a policy decision and the reconceptualising of beliefs has its roots in direct application of knowledge to prior working knowledge.

3. Theories of research utilisation suggest that to be usable, research must be applied, not basic, decision-oriented rather than conclusion oriented. Policymakers approach research from different knowledge bases, with different expectations and different information processing styles and integrate research in a general way rather than utilise it for specific decisions. Therefore identification of research purpose in policymaking by the researcher is inappropriate and self-defeating. It limits understanding of the possibilities of research influence. The criterion ought to be relevance to a policy issue and even then must be interpreted broadly. The potential remains for interpretation of its purpose by the policymaker or collaboratively, through linkage, with researchers.

4. The influence of research policy cannot be judged simply by observing policy outcomes, partly because these are dependent on implementation processes and partly because the impact of research may be indirect through developing corporate beliefs in creating a favourable climate for implementation. Influence must largely be judged from reporting by policymakers of conceptual use or impact, and theories of research/policy relationship should incorporate mediating factors, additional to these inherent in the policy process, which intervene between the influence of research and policy outcomes.

Linkages between research and policy

It is postulated that the relationship between research and policy can be strengthened by the adoption of deliberate linking strategies. The study examined one such form of linkage. From this, some elements and consequences of linkage processes emerged.

1. The presence or creation of a committee with some form of linking role, facilitated communication of research to policymakers. It is hypothesised that the various forms of participation that ensued were integral to the uptake of research findings. Similar arguments have been put in theories of evaluation use: these principles were sustained and may therefore be incorporated in conceptualising research/policy relationships. It should be noted that creating linkages need not always form a similar pattern, and that linkage will not necessarily lead to uptake of research findings or development of a shared vision by policymakers.

2. It is often argued, and sustained through funding arrangements, that policymaker initiated research is more likely to be useful in policymaking than research initiated by researchers. This proved to be neither a necessary nor a sufficient condition. Rather than a direct relationship, the likelihood of adoption of policymaker initiated research findings was perhaps enhanced by the commitment to develop policy through the committee structure. Initiation therefore becomes a dependent variable of facilitating circumstances rather than an independent variable of research use.

   Researcher or interest group initiated research can also influence policy: the criterion is that of relevance to the policy issue.

3. The development of ownership through participation in the research process forms an important connection between the research and the administrative roles of policymakers. Both because of these administrative roles and through their enactment, research does or does not influence policy.

   Through linkage with research, different information needs may be satisfied for different administrative roles at different stages in policy development.

4. The role of the researcher in linkage activities is both a pragmatic one and a conceptual one. The pragmatic role has two dimensions: one related to the research, the other related to policy. With respect to research, the researcher orchestrates policymaker involvement. With respect to policy, the researcher identifies policy processes, key policy actors, emerging policy issues and conditions of the operating environment. The conceptual role of the researcher is to refine understanding of features of linkage in the particular setting.

5. Linkage creates new dimensions for the research process and emergent roles for researchers. The policy process does not finish with policymaking and likewise policymakers see research or enquiry as one phase in the change process. Thus, engagement in circumstances actively linking research with policymakers creates a role as facilitator of change in policymaking. Researchers are recognising the importance of dissemination but still in a traditional research paradigm. New aspects of the dissemination process follow from linkage with policymakers. At a further stage beyond dissemination, researchers operating in interactive mode will be engaged in utilisation, application and implementation.

These new roles create researcher cost in time and effort, and for some researchers will be alien to their beliefs.

Organisational learning

The impact at organisational level which led to shared belief, commitment and climates for implementation, illustrates the potential for research to form an avenue for organisational learning (Argyris & Schon, 1978). As such, it becomes an even more powerful tool for organisational change. The notion of organisational learning encompasses consulting approaches outside the scope of the propositions of the present study. But it is argued that the strategies for linking research and policy form a vehicle by which organisational learning can occur. The proposition is this: research provides a task external to, but related to, the administrator's role. The circumstances established to facilitate linkage create a forum for debate. The group of administrators or policymakers reflect on the implications of the research findings for the organisation, not only about the nature of the policy response, but also the organisational response to ameliorating implementation. Argyris, Putnam and McLain-Smith (1985) describe this form of thinking "action science".

> We are accustomed to distinguishing between theory and practice, between thought and action, between science and common sense. Action science proposes to bridge these conceptual chasms (Argyris et al., 1985, p.1).

Engagement with research, and particularly participation in the research process, creates a situation for "reflection-in-action" (Schon, 1983) leading to both individual professional development of policymakers and organisational learning.

A model of the research/policy relationship

A model of the relationship is now proposed. The model, shown in Figure 17, p.156, demonstrates the complexity of the research/policy relationship and hypothesises many of the elements involved. The model draws together the factors which appear to be significant in describing and explaining the research/policy relationship. The model is not restricted to a particular ideology. It therefore may be interpreted in instrumentalist or transactionist terms (Huberman, 1987), or separatist, positivist, managerial or relationist terms (Scriven, 1983). However, it will be evident from the implications drawn for theory and practice that it reflects more the transactionist paradigm.

Figure 17 A model of the research/policy relationship

RESEARCH

Researcher

- ideologies about research process
- beliefs about role of research
- rewards and career patterns
- understanding of policy process
- institutional setting
- experience with organisational R, D and U

Enquiry

- field of knowledge
- state of knowledge
- methodologies
- relevance to policy issue

Linkage

- facilitating circumstances
- policymaker participation
- dissemination
- interpreted purpose

Other mediating factors

- researchers credibility, timescale, timing
- critical incidents priority of policy issue
- transformation of data
- organisational experience with research
- researcher experience with R, D and U in the organisation
- translation to policy implications
- implementation strategies

POLICY

Operating environment

- economic conditions
- technological conditions
- legal conditions
- political conditions
- demographic conditions
- ecological conditions
- cultural conditions

Policymakers

- administrative roles
- belief systems
- working knowledge careers and rewards
- information processing style
- prior experience with research
- institional setting

Policy process

- models of policymaking
- policy state
- policy issue emergence
- nature of policy
- policy actors

Outcomes

- use
- impact on individual policymakers
- impact on system
- policy outcomes

Secondary outcomes: Researchers

- costs
- new roles
- increased understanding of policy process

Secondary outcomes: Policymakers

- organisational learning
- professional development

Development of a model is a step towards theory- building. Having laid out the elements involved (and described associated variables) further steps may be taken to develop some general principles, generate and test some hypotheses and derive some explanations for observed phenomena.

The model sets out elements involved in research and policy. Variables within each element are not displayed. The component policy broadly groups together three interrelated sub-components — policy process, operating environment, and policymakers.

Similarly, researchers and enquiry are grouped as research. But researchers also are embedded in the same general operating environment though its effects may be somewhat differently manifested in the researchers' and policymakers' respective institutional settings.

The model incorporates both instrumental use and conceptual impact of research and can be interpreted in both technological and transactionalist terms. Both external and in-house research is reflected in its elements. The model is not inconsistent with recent models of evaluation use, but lays some different emphases in the broad sweep of user context and the notion of relevant research emerges in this setting. The model does not attempt to display interrelationships between elements, nor positive or negative directions the elements may play in creating a closer relationship. Each of those factors and the manifestations of variables is likely to have a unique configuration for any particular research in a given organisational setting at a given time. The model is not a predictive one though may be used as a limited explanatory model.

A model should not only form the basis to enlighten theory but also to improve practice. Thus research-ers will be alerted to policy processes which must be considered, linkage and other mediating factors which should be highlighted and acted upon. Some ways the model might be used are as follows:

- The model forms a basis of dialogue between researchers and policymakers about the contribution of research to policymaking and organisational learning.

- The model provides a framework for researchers to learn about the context in which policymakers operate.

- The model offers a framework in which to analyse and explain attempts to link research and policy and the efficacy of traditional research models.

At a more detailed, practical level, users of the model will be alerted to:

- identify key users (level of policymaking in appropriate policy model) and target linkage activities;

- identify researchers with characteristics most likely to achieve positive linkage to appropriate policymakers;

- maximise effects of linkage and mediating factors towards positive outcomes;

- initiate activities towards organisational learning.

The model captures those elements derived from the literature, hypothesised from practice, resulting from the research findings and emerging from reflection. Further exploration will refine and improve the model. The model illustrates a paradigm shift from a quasi-scientific and rational model of research and of policy. The alternative paradigm is rooted in the acceptance of human qualities and social interaction as a basis for the generation and application of knowledge.

Implications for practice

The findings of the study have implications for researchers, policymakers and research funding agencies. While the implications relate to the practices in which these groups engage, the study also speaks generally to education development.

Implications for Researchers

This section is written with the clear assumption that researchers wish to improve the impact of their work and its usability by education practitioners. It does not thereby exclude any particular forms of research, nor does it suggest that research should be controlled by external agencies.

1. The findings of the study indicate that linking research to policymaking in interactive ways led to use and impact of the research. Therefore researchers will need to seek such interactive ways of communicating research and not rely solely on improvements to the traditional research dissemination and diffusion model. The model provides some starting points.

2. In-house researchers have an advantage in their knowledge and understanding of the policymakers' immediate environment. External researchers need to develop a greater "savviness" (Huberman, 1987) about the policy process, particularly in their local setting. They will need to be familiar with the legislative and organisational context and policymaking models in currency in organisations. They will need to identify key policy actors and the organisational roles they play. Only with such contextual background can their interactions be fruitful.

3. The study showed that research that had an impact was initiated by research or interest groups as a result of picking up weak signals from the external environment. Researchers need to be aware of emerging policy issues by reflecting on the changing operating environment and the educational trends and issues this creates.

4. The findings of the study illustrate that researchers preserved their ideologies about research even though an interactive linkage was established. Researchers should reflect on their ideologies about research, and to ensure that if they adopt interactive strategies, their credibility as researchers is retained.

5. The study showed that policymakers found a range of methodologies give broader insight into particular policy issues. Researchers will need to find ways of being methodologically eclectic, either by diversifying their skills, by contracting other expertise or by working in teams.

6. Research undertaken with links to policymakers demanded other non-research type skills from researchers. These included facilitation of group processes, communication and dissemination activities and involvement in utilisation, application and implementation activities. These potential new roles offer opportunities for challenge and extension for researchers but must be traded off against other activities researchers may wish to engage in.

Implications for policymakers

The section is written with the assumption that policymakers are seeking a solid base of information and articulated beliefs on which to develop policy. It is further assumed that they perceive policy as

more than just specific decisions about a particular course of action. The implications are directed specifically to senior bureaucrats, middle managers and ministerial advisors who form the key policy shaping community at a public level.

1. The findings of the study demonstrate that research can have an impact on policy that goes beyond simple use in particular decisions. Such impact often goes unacknowledged, for a number of reasons. Nevertheless it offers an important contribution to levels of understanding, to the development of values and beliefs underpinning policy and commitment to policy change. This role of research needs to be acknowledged and fostered.

2. The findings of the study demonstrate what is common knowledge: that research does not necessarily point to specific solutions to problems or issues, nor does it indicate a course of action to implement change. With this common sense knowledge substantiated, policymakers should cease criticism of research on the grounds of its "shortcomings". Whilst researchers could arguably have a role in helping policymakers to clarify appropriate courses of action, or devise appropriate implementation strategies, as such this is not a function of research. Thus while the potential for research in policymaking should be acknowledged, so too should its limitations.

    Policymakers need to accept their part in responsibility for translating research into policy and implementing knowledge-based change.

3. Education policy of very significant kinds is made at the level of the school, particularly by teachers. Qualitative improvements in education depend on changes in teaching practice and policy at school level. This is a function of two major factors, one is the degree of autonomy attributed to schools and teachers, the other is the potential for flexible, or nominal interpretations of formal policy commitments by senior administrators or politicians. This has several important implications for policymakers:

    *   teacher level research should be fostered as teachers seek to improve their own practices,

    *   implementation strategies for central policy decisions must include sharing knowledge and beliefs through research with teachers as a basis of teacher level change, and

    *   the value of school level research and development should be recognised and support strengthened. School level research and development can be a rich source of practical, teacher-tested strategies for system-wide policy development.

    Management practices in education need enhanced capacity to support teacher and school level policy development.

4. The findings of the study indicated that a range of processes of policy development occur in education. It further demonstrated that decisional aspects of management form only one part of policymaking. The trend to approaches to management which focus on technological, decisional elements driven by efficiency models may undermine the value of research in the broader transactionalist aspects of management. These transactionalist elements such as leadership and information sharing are recognised in the business and industrial sector as critical to organisation development. It is in such aspects of management and policy development, that research is being

used in education. It is here that it could make the most long-lasting contribution. The study suggests that policymakers must be wary of falling into the traps of pseudo-rationality in what is also a personal and social process.

5. The findings of the study foreshadow the significant role for interactive research as a vehicle for organisational learning. In a government department, for example, it would be possible for the research activity and linkage processes in which policymakers participate to create new ways at looking at the goals of the organisation or how it delivers it services.

Implications for research funding agencies

Implications are drawn specifically for research funding agencies, since the reduction in education research funding worldwide was a major factor prompting reflection on the research/policy relationship.

1. The findings of the study indicate that research can influence policymaking, though this is frequently a diffuse impact rather than related to specific decisions. This therefore enables a broad conceptualisation of the significance of educational research to be adopted.

2. The model developed from the research findings illustrates some strategies and criteria which might be adopted to further facilitate research and policy linkage.

3. The findings of the study support the need for a range of research styles, relevant to policy issues and targetted to policymaking audiences all at levels in the education system.

4. The changing operating environment creates changing demands on education. Policymakers and practitioners need an information base on which to build changes in policy and practice. The information base must be generated from extensive and rigorous research and must be funded accordingly.

Implications for further research

The proposed model and its practical implications are a further step towards developing general theories of the research/policy relationship. Many aspects of the model and the elements within it need further exploration and testing in practice. Steps towards further refinement of the model might include:

- investigation of the model in other institutional settings;

- applying the model to different types of research;

- validating the inclusion of elements from the literature on evaluation use;

- exploring alternative means of linking research and policy;

- clarifying the new researcher roles implicit in linkage;

- developing linkage as a strategy for organisational learning.

The model could be explored from different theoretical perspectives: administrative theory (eg research in policymaking), sociology (eg research and the role of researchers and administrators),

psychology (research and policymakers cognitions and mind frames), economics (costs and benefits of research which creates favourable climates for policy implementation), and so on.

Implications for education development

Education is in a critical state of change — organisationally, administratively and conceptually. There is a need for a sound and broad research base to underpin necessary changes. The study illustrates that this can be at both conceptual, attitudinal and instrumental levels. With limited resources and political pressure, it is critical to maximise the possibility of making appropriate changes. Relevant educational research, its links to the policy process facilitated by interactive engagement between researchers and policymakers, is a fundamental prerequisite. The approach proposed does not mean education research is constrained. But it does offer challenging new ways of thinking about research and exciting new roles for researchers.

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Appendix 1

Interview guide

1. Verify role at the time of the research and participation in committee.

2. What were your responsibilities (in the policy area that was the subject of the research)?
    Prompts: tasks, administrative roles

3. Briefly verify previous experience/background.

4. What expectations did you have for the research?

5. What did you see as the purpose of the research?

6. How did you feel about your involvement in the research process?
    Prompts: participation, negotiating research questions, communication

7. What was the value of the committee operation?

8. What policy outcomes did you see from the research?

9. Were there other outcomes or effects of the research?

Additional Questions

Used with some interviewees only, as appropriate.

1. Verify existing policies and how these had been established.

2. Verify current economic, political and social context.

3. Were appropriate quality controls applied to the research?

4. What other policy actions, recommended in the research but not directly related to it, have occurred?

Appendix 2

Interviewees

CASE 1: *Alienated, disturbed and/or disruptive students*

Name	Position at the time of the research	Present position
L Blazely	Senior Superintendent, Research	Senior Superintendent, Executive Support Services
M Cove	Executive Director, Education Programs	Executive Director, Education Programs
G Fish	Regional Superintendent/ Director, Curriculum Services	Director, Curriculum Services
G Harrington	Regional Superintendent	Regional Superintendent
R Hortle	Principal, Geilston Bay High School	Principal, Geilston Bay High School
J Locker	Senior Guidance Officer	Retired
B Richardson	Superintendent, Special Education/ Director, Student Services	Director, Student Services
R Wilson	Director, Secondary Education/ Executive Director, Education Programs	Retired

CASE 2: *Incentives for teachers in isolated areas*

Name	Position at the time of the research	Present position
G Hinds	Superintendent, Personnel	Retired
J O'Grady	Senior Research Officer, Research Branch	Principal Education Officer, Executive Support Services
E Moore	Assistant to Director, Secondary Education	Principal, Rose Bay High School
J Spinks	Principal, Rosebery District High School	Principal, Rosebery District High School
A Wilson	Vice Principal, New Town High School	Vice Principal, New Town High School

CASE 3: Unitisation

Name	Position at the time of the research	Present position
M Cove	Executive Director, Education Programs	Executive Director, Education Programs
R Grosvenor	Secretary, Schools Board	Secretary, Schools Board
I Hill	Curriculum Officer	Private Secretary, Minister for Education
B Hortle	Principal, Rosny College	Superintendent, Secondary Colleges
P Hughes	Professor of Education, University of Tasmania	Professor of Education, University of Tasmania
J O'Grady	Principal Education Officer, Executive Support Services	Principal Education Officer, Executive Support Services
R Scharaschkin	Research Officer, Curriculum Development and Evaluation	Research Officer, Curriculum Development and Evaluation
R Stephensen	Vice Principal, Clarence High School	Vice Principal, Clarence High School
R Stoessiger	Research Officer, Curriculum Development and Evaluation	Research Officer, Curriculum Development and Evaluation
K Watts	Principal, Sorell District High School	Principal, Sorell District High School

CASE 4: Apprentice Training

Name	Position at the time of the research	Present position
L Blazely	Senior Superintendent, Research Branch	Senior Superintendent, Executive Support Services
K Burns	Research Officer, Research Branch	Research Officer, Office of the Premier
*P Grant	Technical and Further Education Council (Canberra)	Policy Advisor, Department of Employment, Education and Training, Canberra
J Malley	Research Officer, Royal Melbourne Institute of Technology	Senior Research Officer, Ministry of Employment and Training
J Upson	Head of School, Painting and Decorating, Hobart Technical College	Superintendent, Technical and Further Education Division, Hobart
G Williams	Secretary, Apprenticeship Commission	Executive Officer, Training Authority of Tasmania

*Written questionnaire only

Appendix 3

Time-line

Alienated, disturbed and/or disruptive students

11.5.83	Tasmanian High School Principals' Association (THSPA) writes to Director-General (DG) re concern about alienated, disturbed and disruptive students, requesting a Task Force be established.
6.7.83	DG writes to THSPA indicating Director of Secondary Education has been asked to convene a Task Force and to work with the Senior Superintendent of Research. THSPA invited to nominate a principal to participate.
6.7.83	Director of Secondary Education writes to DG nominating Task Force membership and indicating terms of reference.
July 1983	First meeting of Task Force, including researcher.
July-August	Researcher visits high school and its feeder primary schools for discussion 1983 with teachers about identification of "disruptive students".
23.8.83	Task Force meeting. Researcher presents report on school visits and some options for research, including a school survey, case studies of schools or school clusters, case studies of students and research into teacher concerns. Task Force opts for school survey as first priority. Researcher asked to draft questionnaire.
September 1983	Draft questionnaire presented to Task Force and discussed. Guidance officer offers comment and assistance in coding IQ scores.
28.9.83	Task Force chairman (now Executive Director, Educational Programs following departmental restructuring) sends covering letter with the questionnaire to all high and district high schools urging completion.
6.12.83	Task Force meeting to consider material from survey including discussion of coding processes and identification of cross-tabulations required by Task Force. Interim report on strategies recommended by schools submitted by researcher for approval for release.
8.12.83	Task Force chairman sends interim report to schools.
23.2.84	Researcher informs regional superintendents of the progress of the research.
8.3.84	Deputy Director-General writes to Task Force chairman re recommendation 23 of the report on Special Education.
23.3.84	Task Force meeting considers data from survey and discusses other research to be undertaken. Researcher informs Task Force on work in Northern Region on early school leavers.
27.3.84	Media coverage on disruptive students derived from interim report.

30.4.84 -4.5.84	Researcher visits units, schools and administrations in UK.
21.5.84	Task Force meeting, Researcher reports on UK visits and provides summary of further questionnaire analysis. High school nominated by Chairman for case study.
July- August	Researcher undertakes school case study.
12.7.84	Task Force meeting. Researcher presents list of issues for discussion to focus on recommendations for the future. Literature review on selected aspects distributed. Subcommittee established to identify key issues. Tasks and a timescale for the Task Force discussed. A planned all-day working meeting agreed to.
30.10.84	All-day Task Force meeting. Researcher provided folio of material to form background for discussion. Individual members agree to draft position papers on various aspects of discipline and researcher to summarise debate as a basis for a policy statement.
November	Researcher transferred to Curriculum Evaluation Section.
	ADD survey report (Hocking, 1984c) released.
5.12.84	Task Force meeting to consider draft statements and to hear from a primary consultant working with disaffected students. Researcher produces summary notes from outcomes of position statements of members as a basis for a policy statement.
28.2.85	Task Force meeting continue discussions on further steps. Researcher asked to produce summary of beliefs and school practices.
8.3.85	DG distributes statement on suspensions, expulsions and exemptions prepared by guidance officers on the basis of existing regulations and provisions.
2.5.85	Task Force meeting to consider draft statement. Section on basic reliefs rejected with much debate. Task Force members agree to write their own beliefs.
May 1985	Task Force chairman retires. Replaced by new Director of Educational Programs, not previously a Task Force member.
June 1985	Researcher prepares progress report for DG meeting with Principals' Association. Noted events partly attributable to the Task Force include the change in operation of a school unit and the appointment of an officer to assist with behaviour management.
26.6.85	Task Force meeting to discuss future activities, based on report to DG.
	Draft school document, with revised basic beliefs discussed. Researcher asked to complete the school case study and document beliefs and practices.
27.6.85	Executive Support Services requested to supply consolidated extracts of acts and regulations related to disruptive students in the form of questions and answers for schools.
September	Case study approved by school and sent to all Task Force members. Declined to publish because of school identity.
9-11.9.85	Centenary conference on theme "Secondary Education: the Future".

June 1986   Booklet, *Let's Look at Disruptive Behaviour*, published.

2.7.86   Task Force meeting to discuss dissemination strategy for booklet and review work of the Task Force. Discussion of reply to letter of 8.3.84 from Deputy Director-General.

4.7.86   Task Force chairman writes to Deputy DG indicating actions and planned policy statement. July 1986Booklet distributed to schools.

1986   Drafts of document *Secondary Education: the Future* prepared, coordinated by Director, Educational Programs.

1987   *Secondary Education: the Future* published as policy statement.

Appendix 4

Time-line

Case 2: Incentives for teachers in isolated areas

1975	Joint Tasmanian Teachers Federation (TTF)/Department Committee prepares a report for incentives for teachers in the West Coast.
1977	Correspondence between TTF and Director-General, TTF pressing for implementation. Director-General indicates Chairman of the District High Schools Policy and Planning Committee will convene a meeting. No record of such a meeting.
2.8.78	Chairman, District High Schools Policy and Planning Committee reports to Director-General that Committee has recommended that Chairman seek authority to reconvene joint committee with wider terms of reference to encompass country schools generally.
8.8.78	G Hinds, Chairman Priority Projects Committee invited to chair committee.
8.9.78	TTF nominates two representatives.
29.11.78	Director-General requests information from other states.
5.12.78	Director-General writes to TTF with clarification of terms of reference "to country schools generally and to concentrate on means of attracting and maintaining high quality staff".
2.1.79	Director-General (Queensland) to Director-General indicates a report presented to Cabinet by joint union/Department committee was rejected because of the implications for the rest of the Public Service.
February	Initial meetings of Incentives Committee.
21.2.79	Statement on work of Incentives Committee published in *Tasmanian Education Gazette* called for submissions to committee's deliberations.
28.2.79	Research Branch writes comments on research proposal.
6.3.79	Incentives Committee meet in Burnie. Guidelines for research discussed. Committee wanted "recommendations (to) be based on statistical evidence drawn out from an accredited research body". Researcher invited to attend meeting and participated in committee work from this date.
24.4.79	Interim report on Committee's activities in *Tasmanian Education Gazette*.
May 1979	Incentives Committee Meeting establishes interview program as major research activity. Chairman and researcher undertake preliminary interviews with exit students. Major interviewing statewide of teachers and spouses by all committee members May-July 1979.
27.7.79	Incentives Committee meeting considers detailed reports on interviews and questionnaires. Presented to researcher to compile consolidated report.

23-4.8.79	Two-day meeting of Incentives Committee to consider draft report and discuss issues and recommendations.
13-4.9.79	Two-day meeting of Incentives Committee. Further work on report.
27.9.79	Committee further revises report.
19.10.79	Report finalised at Incentives Committee meeting.
16.11.79	Incentives Committee presents report to Director-General.
3.12.79	Incentives Committee report considered at meeting of Policy Support Group.
10.12.79	Presentation of report to the Directorate by Incentives Committee chairman.
7.2.80	Chairman of Incentives Committee writes to Director-General re establishment of an implementation committee.
27.2.80	Implementation Committee, chaired by Director of Planning, initial meeting.
30.4.80	Fifth meeting of implementation committee.
26.11.80	TTF writes to Director-General re progress on implementation.
5.2.81	Director-General responds to Tasmanian Teachers Federation, pointing out delays and difficulties because of the budget issues and complexity of the area.
17.6.81	Question in Parliament on implementation (Minister H Holgate).
16.7.81	Tasmanian Teachers Federation writes to Minister (T Aulich) requesting a meeting with Premier on incentives.
August 1981	Parents and Friends Associations of various schools in country and isolated areas, send telegrams to Minister on implementation of incentives report.
24.7.81	Briefing notes for the Minister indicate that most incentives can only be determined through the Public Service Board.
21.9.81	Tasmanian Teachers Federation meet with Premier on implementation. Tasmanian Teachers Federation seek release of "Koerbin Report". Notes that isolation allowances increased by Public Service Board.
19.5.82	Tasmanian Teachers Federation writes to Director-General re progress on implementation.
26.5.82	Director-General replies to Tasmanian Teachers Federation that not possible to act unilaterally.
30.7.82	Tasmanian Teachers Federation writes to Director-General with their own assessment of the status of the recommendations (done by member of Incentives Committee).
17.8.82	Director-General writes to Tasmanian Teachers Federation indicating agreement with their assessment.
18.10.82	Minister requests copy of report following visit to the North West Coast.

22.10.82	Director-General writes to Minister that "high hopes of the report have not been realised".
29.6.83	Tasmanian Teachers Federation writes to Director-General re release of "Koerbin Report".
31.8.83	Minister (now Bingham) to Tasmanian Teachers Federation — the "Koerbin Report" is confidential.
9.9.83	Tasmanian Teachers Federation requests from Director-General an update on implementation of the Incentives Report.
17.10.83	Director-General writes to Tasmanian Teachers Federation indicating implementation of strategies to upgrade teacher accommodation and priority service provided by the Media Centre.
27.3.84	Director-General confirms in letter to Tasmanian Teachers Federation that a working party on teacher transfer has been established.
5.7.84	Tasmanian Teachers Federation raises in letter to Director-General possibility of a transfer points system for teachers in country areas in expectation of a discussion paper on transfer from the working party.
11.7.84	Director-General indicates to Tasmanian Federation that working party discussion paper not yet submitted.
28.9.84	Tasmanian Teachers Federation reports its own update on implementation.
1.10.84	Director-General indicates to Tasmanian Teachers Federation that he will consult with senior officers on matters raised.
24.10.84	Staffing procedures working party interim report.
18.11.84	Director-General and working party on staffing procedures chairman discuss interim report and committee asked to report as soon as possible.
30.1.85	Deputy Director-General raises question of whether negotiations on conditions of services are in the hands of the Commissioner for Review.
24.4.85	Tasmanian Teachers Federation reminds Director-General of letter of 1.10.84.
30.4.85	Director-General indicates to Tasmanian Teachers Federation that matters are under investigation.
1.5.85	Senior Superintendent (School and College Support Unit) informs Director-General that Staffing Procedures Working Party has completed its report and will soon be in a position to discuss its recommendations with the Tasmanian Teachers Federation.
16.5.85	Director-General suggests to Tasmanian Teachers Federation that issue of Incentives Report should be subject of a future meeting.
27.5.85	Meeting between Director-General and Tasmanian Teachers Federation on incentives report. Director-General summarises response in letter to Tasmanian Teachers Federation on 28.5.85.

20.8.85	Notes for Minister indicate "Incentives Report has been a valuable source of advice to the Government". Teacher housing recommendations have been accepted but a number of matters affect other government employees and cannot be implemented for teachers alone.
27.9.85	Tasmanian Teachers Federation requests from Director-General copy of report on teacher transfer.
21.10.85	Director-General reports to Tasmanian Teachers Federation that regrets little progress made and working party report still under discussion.
April-May 1986	Report of Working Party "Staffing Procedures". Draft discussion paper on Teacher Transfer produced following report of the Working Party on staffing procedures. discussed with regional superintendents.
11.6.86	Revised paper sent to Director-General by Working Party chairman.
19.6.86	Revised draft discussion paper sent by Director-General to Tasmanian Teachers Federation.
24.7.86	Tasmanian Teachers Federation writes to Director-General to enquire whether discussion paper on teacher transfer has been sent out to schools.
1.8.86	Director-General to Tasmanian Teachers Federation that not yet appropriate to send draft policy to all schools, as he is awaiting further input from regional superintendents.
18.8.86	Tasmanian Teachers Federation meet with Director-General to discuss transfer policy discussion paper.
28.8.86	Tasmanian Teachers Federation question Director-General on basis for transfer for 1987.
3.9.86	Director-General indicates to Tasmanian Teachers Federation intention to meet with Regional Superintendents early in third term to discuss transfer policy.
13-4.10.86	Regional Superintendents meet to discuss transfer.
31.10.86	Discussion paper on teacher transfer circulated to all schools.
October-December	Schools and individuals respond to discussion paper.
20.1.87	Working Party chairman reports on responses to Director-General. Major features noted are the high level of response, the desire for more attention to be given to incentives and dissatisfaction with two category system.
29.1.87	Report on responses circulated to Superintendents to be discussed at meetings 23-24.2.87.
11.3.87	Draft circular memorandum to schools sent to Tasmanian Teachers Federation.
19.3.87	Tasmanian Teachers Federation raises problems in draft circular with Director-General and it is not circulated.
1.4.87	Director-General responds to Tasmanian Teachers Federation comments on circular. Indicates section on incentives for teachers will be included.

9.4.87   Revised draft statement on transfer sent to superintendents for meeting.

10.4.87   Circular memorandum to all schools indicating attention being paid to teachers responses and a revised policy statement being prepared.

23-24.10.87   Meeting of Superintendents discusses transfer policy.

12.5.87   Directors and Superintendents notified of changes agreed at meeting.

27.5.87   Director General responds to the TTF comments on the draft.

18.6.87   Revised policy statement sent to directors, superintendents and Tasmanian Teachers Federation. Prepared to distribute to schools shortly and implement in Term 3.

24.6.87   Minister notified of administrative policy document on teacher transfer, indication given of process of development.

26.6.87   Teacher transfer policy statement circulated to schools.

17.7.87   Circular memorandum to schools indicating requirement for principals to provide information on teacher history.

21.7.87   Tasmanian Teachers Federation writes extensive comments to Director-General on memorandum of 26.6.87. "Widespread dissatisfaction" with statement, claimed unacceptable.

22.7.87   Tasmanian High School Principals Association writes to Director-General re returns of information on teachers. Claim they are not people to collect service record of teachers.

28.7.87   Director-General responds to Tasmanian Teachers Federation comments prior to meeting.

30.7.87   Minister revises queries with Director-General.

6.8.87   Tasmanian Teachers Federation and Director-General meet re amendments.

13.8.87   Tasmanian Teachers Federation writes to Director-General with some unresolved issues. Have advised schools not to complete forms until further meetings with Director-General have taken place.

18.8.87   Minister queries points system with Director-General.

19.8.87   Director-General writes with some clarifications to Tasmanian Teachers Federation and agrees to meeting.

7.9.87   Director-General indicates to Minister that policy will not be applied retrospectively.

September   Reappraisal of staffing needs undertaken by Head Office staff.

10.9.87   Circular memorandum to schools indicating that only applies fully to teachers appointed to permanent staff from 1.1.88.

September -   Considerable reaction to policy because some teachers had opted for isolated or 1987
December   country service in anticipation of a policy which required some service in these areas.