

Ambiguity models

Central features of ambiguity models

Ambiguity models include all those approaches that stress uncertainty and unpredictability in organizations. The emphasis is on the instability and complexity of institutional life. These theories assume that organizational objectives are problematic and that institutions experience difficulty in ordering their priorities. Sub-units are portrayed as relatively autonomous groups which are connected only loosely with one another and with the institution itself. Decision-making occurs within formal and informal settings where participation is fluid. Individuals are part-time members of policy-making groups who move in and out of the picture according to the nature of the topic and the interests of the potential participants. Ambiguity is a prevalent feature of complex organizations, such as schools and colleges, and is likely to be particularly acute during periods of rapid change. The definition below incorporates the main elements of these approaches.

Ambiguity models assume that turbulence and unpredictability are dominant features of organizations. There is no clarity over the objectives of institutions and their processes are not properly understood. Participation in policy making is fluid as members opt in or out of decision opportunities.

Ambiguity models are associated with a group of theorists, mostly from

the United States, who developed their ideas in the 1970s. They were dissatisfied with the formal models which they regarded as inadequate for many organizations, particularly during phases of instability. March (1982) points to the jumbled reality in certain kinds of organization:

Theories of choice underestimate the confusion and complexity surrounding actual decision making. Many things are happening at once; technologies are changing and poorly understood; alliances, preferences, and perceptions are changing; problems, solutions, opportunities, ideas, people, and outcomes are mixed together in a way that makes their interpretation uncertain and their connections unclear. (Ibid.: 36)

Unlike certain other theories, the data supporting ambiguity models have been drawn largely from educational settings. Schools and colleges are characterized as having uncertain goals, unclear technology and fluid participation in decision-making. They are also subject to changing demands from their environments. These factors lead March and Olsen (1976: 12) to assert that 'ambiguity is a major feature of decision making in most public and educational organizations'.

Ambiguity models have the following major features:

1. There is a lack of clarity about the *goals* of the organization. Many institutions are thought to have inconsistent and opaque objectives. Formal models assume that organizations have clear purposes which guide the activities of their members. Ambiguity perspectives, by contrast, suggest that goals are so vague that they can be used to justify almost any behaviour. It may be argued that aims become clear only through the behaviour of members of the organization:

It is difficult to impute a set of goals to the organization that satisfies the standard consistency requirements of theories of choice. The organization appears to operate on a variety of inconsistent and ill-defined preferences. It can be described better as a loose collection of changing ideas than as a coherent structure. It discovers preferences through action more often than it acts on the basis of preferences. (Cohen and March, 1986: 3)

Educational institutions are regarded as typical in having no clearly defined objectives. Hoyle and Wallace (2005: 33) say that school goals are 'diverse'. They add that it is a problematic concept because of the distinction between the 'official' goals of the school and the 'operational' goals of individuals or groups (ibid.: 34). The discretion available to teachers enables them to identify their own educational purposes and to act in accordance with those aims for some of their professional activities. Because teachers work independently for

much of their time, they may experience little difficulty in pursuing their own interests. As a result schools and colleges are thought to have no coherent pattern of aims. As Bell (1989: 134) explains, schools face an ambiguity of purpose, the result of which is that the achievement of goals, which are educational in any sense, cease to be central to the functioning of the school.

2. Ambiguity models assume that organizations have a *problematic technology* in that their processes are not properly understood. Institutions are unclear about how outcomes emerge from their activities. This is particularly true of client-serving organizations where the technology is necessarily tailored to the needs of the individual client. In education it is not clear how pupils and students acquire knowledge and skills so the processes of teaching are clouded with doubt and uncertainty. Bell (1980) claims that ambiguity infuses the central functions of schools:

The learning process is inadequately understood and therefore pupils may not always be learning effectively whilst the basic technology available in schools is often not understood because its purposes are only vaguely recognized ... Since the related technology is so unclear the processes of teaching and learning are clouded in ambiguity. (Ibid.: 188)

3. Ambiguity theorists argue that organizations are characterized by *fragmentation* and *loose coupling*. Institutions are divided into groups which have internal coherence based on common values and goals. Links between the groups are tenuous and unpredictable. Weick (1976) uses the term 'loose coupling' to describe relationships between sub-units:

By loose coupling, the author intends to convey the image that coupled events are responsive, but that each event also preserves its own identity and some evidence of its physical or logical separateness ... their attachment may be circumscribed, infrequent, weak in its mutual effects, unimportant, and/or slow to respond ... Loose coupling also carries connotations of impermanence, dissolvability, and tacitness all of which are potentially crucial properties of the 'glue' that holds organizations together. (Ibid.: 3, original emphasis)

Weick subsequently elaborated his model by identifying eight particularly significant examples of loose coupling that occur between:

- (a) individuals
- (b) sub-units
- (c) organizations
- (d) hierarchical levels

- (e) organizations and environments
- (f) ideas
- (g) activities
- (h) intentions and actions

(Orton and Weick, 1990: 208).

The concept of loose coupling was developed for, and first applied to, educational institutions. It is particularly appropriate for organizations whose members have a substantial degree of discretion. Professional organizations, such as schools and colleges, fit this metaphor much better than, say, car assembly plants where operations are regimented and predictable. The degree of integration required in education is markedly less than in many other settings, allowing fragmentation to develop and persist. Hoyle and Wallace (2005: 170) refer to the loose-coupling arising from distinct teacher and headteacher 'zones' of influence but they add that, in England, this distinction has been eroded by enhanced accountability requirements.

4. Within ambiguity models *organizational structure* is regarded as problematic. There is uncertainty over the relative power of the different parts of the institution. Committees and other formal bodies have rights and responsibilities which overlap with each other and with the authority assigned to individual managers. The effective power of each element within the structure varies with the issue and according to the level of participation of committee members. The more complex the structure of the organization, the greater the potential for ambiguity. In this view, the formal structures discussed in Chapter 3 may conceal more than they reveal about the pattern of relationships in organizations.

In education, the validity of the formal structure, as a representation of the distribution of power, depends on the size and complexity of the institution. Many primary schools have a simple authority structure centred on the head and there is little room for misunderstanding. In colleges and large secondary schools, there is often an elaborate pattern of interlocking committees and working parties. Noble and Pym's (1970) classic study of decision-making in an English college illustrates the ambiguity of structure in large organizations:

The lower level officials or committees argue that they, of course, can only make recommendations. Departments must seek the approval of inter-departmental committees, these in turn can only submit reports and recommendations to the general management committee. It is there we are told that decisions must be made ... In the general management committee, however, though votes are taken and decisions formally reached, there was a widespread feeling, not infrequently

expressed even by some of its senior members, of powerlessness, a feeling that decisions were really taken elsewhere ... as a committee they could only assent to decisions which had been put up to them from one of the lower tier committees or a sub-committee ... The common attribution of effective decision making to a higher or lower committee has led the authors to describe the decision-making structure in this organisation as an involuted hierarchy. (Ibid.: 436)

These structural ambiguities lead to uncertainties about the authority and responsibility of individual leaders and managers. Referring to English further education colleges, Gleeson and Shain (1999: 469) point to 'the ambiguous territory which middle managers occupy between lecturers and senior managers', a position which also affects middle level leaders in schools (Bush, 2002). One middle manager interviewed by Gleeson and Shain (1999: 469) illustrates this point: 'The staff don't really know where we fit in and I don't think the senior management really knows either ... I don't know where we fit'. These uncertainties undoubtedly create tension for middle level leaders but also gives them a certain amount of scope to determine their own role. 'Ambiguity ... allows middle managers some room for manoeuvre' (Gleeson and Shain, 1999: 470).

5. Ambiguity models tend to be particularly appropriate for *professional client-serving* organizations. In education, the pupils and students often demand inputs into the process of decision-making, especially where it has a direct influence on their educational experience. Teachers are expected to be responsive to the perceived needs of their pupils rather than operating under the direct supervision of hierarchical superordinates. The requirement that professionals make individual judgements, rather than acting in accordance with managerial prescriptions, leads to the view that the larger schools and colleges operate in a climate of ambiguity. Hoyle and Wallace (2005: 167) argue that professional practice in education is 'endemically indeterminate' and that attempts to reduce ambiguity, and to enhance accountability, lead to a 'danger of impoverishing the quality of professional practice' (ibid.).
6. Ambiguity theorists emphasize that there is *fluid participation* in the management of organizations. Members move in and out of decision-making situations, as Cohen and March (1986) suggest:

The participants in the organization vary among themselves in the amount of time and effort they devote to the organization; individual participants vary from one time to another. As a result standard theories of power and choice seem to be inadequate. (Ibid.: 3)

Bell (1989) elaborates this concept and applies it to education:

By their very nature schools gain and lose large numbers of pupils each year and ... staff may move or change their roles ... Membership of the school also becomes fluid in the sense that the extent to which individuals are willing and able to participate in its activities may change over time and according to the nature of the activity itself. In this way schools are peopled by participants who wander in and out. The notion of membership is thus ambiguous, and therefore it becomes extremely difficult to attribute responsibility to a particular member of the school for some areas of the school's activities. (Ibid.: 139–40)

Changes in the powers of governing bodies in schools in England and Wales during the 1980s and 1990s add another dimension to the notion of fluid participation in decision-making. Lay governors now have an enhanced role in the governance of schools. Nominally, they have substantial responsibility for the management of staff, finance, external relations and the curriculum. In practice, however, they usually delegate most of their powers to the headteacher and school staff. The nature of delegation, the extent of the participation of individual governors in committees and working parties, and the relationship between the headteacher and the chair of governors, may be unpredictable elements of the relationship.

7. A further source of ambiguity is provided by the signals emanating from the organization's *environment*. There is evidence that educational institutions are becoming more dependent on external groups. Self-managing schools and colleges are vulnerable to changing patterns of parental and student demand. Through the provision for school choice, parents and potential parents are able to exercise more power over schools. Funding levels, in turn, are often linked to recruitment, for example in the student-related element of school and college finance in England and Wales. The publication of examination and test results, and of OFSTED inspection reports, also serves to heighten dependence on elements in the external environment.

For all these reasons, institutions are becoming more open to external groups. In an era of rapid change, they may experience difficulties in interpreting the various messages being transmitted from the environment and in dealing with conflicting signals. The uncertainty arising from the external context adds to the ambiguity of the decision-making process within the institution. When there is exceptional environmental turbulence, as with schools and universities in post-Apartheid South Africa, the notion of ambiguity is particularly powerful (Bush, 2003).

8. Ambiguity theorists emphasize the prevalence of *unplanned decisions*. Formal models assume that problems arise, possible solutions are formulated and the most appropriate solution is chosen. The preferred option is then implemented and subject to evaluation in due course. Proponents of the ambiguity model claim that this logical sequence rarely occurs in practice. Rather the lack of agreed goals means that decisions have no clear focus. Problems, solutions and participants interact and choices somehow emerge from the confusion.

In England and Wales, ambiguity models can be illustrated by the resource allocation process in schools and colleges. Because there is little clarity about the goals of organizations, the notion of linking budgeting to aims is problematic. It is difficult to determine priorities among competing alternatives and the notion of an optimum choice is contentious (Bush, 2000: 113). Budgetary decisions are likely to be characterized by ambiguity rather than rationality, as Levačić's (1995) research suggests:

The rational model is undermined by ambiguity, since it is so heavily dependent on the availability of information about relationships between inputs and outputs – between means and ends. If ambiguity prevails, then it is not possible for organizations to have clear aims and objectives. Reliable information about the relationships between different quantities and combinations of inputs and resulting outputs cannot be obtained. This state of affairs would explain why decision-making, particularly in the public sector, does not in fact follow the rational model, but is characterized by incrementalism. (Levačić, 1995: 82)

Bennett et al.'s (2000) study of development planning in English primary schools also casts doubt on the validity of rational models. They claim that primary schools are working in a highly turbulent environment and that this inevitably affects the planning process:

It is impossible to predict the environment in which the school must operate, and management is so taken up with day-to-day responses to events as they occur that resources for strategic planning ... are unlikely to be available. (Ibid.: 349)

These examples serve to illustrate the problematic nature of the relationship between the decision-making process and the outcomes of that process. The rational assumption that implementation is a straightforward element in the decision-making process appears to be flawed. In practice, it is just as uncertain as the process of choice.

9. Ambiguity models stress the advantages of *decentralization*. Given the complexity and unpredictability of organizations, it is thought that

many decisions should be devolved to sub-units and individuals. Departments are relatively coherent and may be able to adapt rapidly to changing circumstances. Decentralized decision-making avoids the delays and uncertainties associated with the institutional level. Individual and departmental autonomy are seen as appropriate for professional staff, who are required to exercise their judgement in dealing with clients. Successful departments are able to expand and thrive, while weaker areas may contract or even close during difficult periods. Weick (1976: 7) argues that devolution enables organizations to survive while particular sub-units are threatened:

If there is a breakdown in one portion of a loosely coupled system then this breakdown is sealed off and does not affect other portions of the organization ... when any element misfires or decays or deteriorates, the spread of this deterioration is checked in a loosely coupled system ... A loosely coupled system can isolate its trouble spots and prevent the trouble from spreading. (Ibid.: 7)

While decentralization does have certain merits, it may be difficult to sustain when leaders are increasingly answerable for all aspects of the institution. Underperforming departments or units can be identified through the inspection process, and the publication of performance indicators, and this limits the scope for 'sealing off' the weak sub-units. Rather, action must be taken to remedy the weakness if the institution is to thrive in a period of heightened market and public accountability. As Hoyle and Wallace (2005: 100) note, decentralization may be constrained by 'the iron cage of government policy'.

The garbage can model

The most celebrated of the ambiguity perspectives is the garbage can model developed by Cohen and March (1986). On the basis of empirical research, they conclude that ambiguity is one of the major characteristics of universities and colleges in the United States. They reject the sequential assumptions of the formal models in which decisions are thought to emanate from a rational process. Rather they regard decision-making as fundamentally ambiguous. They liken the process to that of a 'garbage can':

A key to understanding the processes within organizations is to view a choice opportunity as a garbage can into which various problems and solutions are dumped by participants. The mix of garbage in a single can

depends partly on the labels attached to the alternative cans; but it also depends on what garbage is being produced at the moment, on the mix of cans available, and on the speed with which garbage is collected and removed from the scene. (Cohen and March, 1986: 81)

In their analysis of decision-making, the authors focus on four relatively independent streams within organizations. Decisions are outcomes of the interaction of the four streams as follows:

1. *Problems* are the concern of people inside and outside the organization. They arise over issues of: lifestyle; family; frustrations of work; careers; group relations within the organization; distribution of status, jobs and money; ideology; or current crises of mankind as interpreted by the mass media or the next-door neighbour. All require attention. Problems are, however, distinct from choices; and they may not be resolved when choices are made.
2. *Solutions*. A solution is somebody's product. A computer is not just a solution to a problem in payroll management, discovered when needed. It is an answer actively looking for a question. The creation of need is not a curiosity of the market in consumer products; it is a general phenomenon of processes of choice. Despite the dictum that you cannot find the answer until you have formulated the question, you often do not know what the question is in organizational problem-solving until you know the answer.
3. *Participants* come and go. Since every entrance is an exit somewhere else, the distribution of entrances depends on the attributes of the choice being left as much as it does on the attributes of the new choice. Substantial variation in participation stems from other demands on the participants' time (rather than from features of the decision under study).
4. *Choice opportunities*. These are occasions when an organization is expected to produce behaviour that can be called a decision. Opportunities arise regularly, and any organization has ways of declaring an occasion for choice. Contracts must be signed, people hired, promoted or fired, money spent and responsibilities allocated (Cohen and March, 1986: 82).

Cohen and March's analysis is persuasive. They argue that problems may well be independent of solutions, which may be 'waiting' for a problem to emerge. Participation in decision-making is fluid in many schools and colleges and the 'decision' emerging from choice opportunities may well depend more on who is present for that meeting than on the intrinsic merits of the potential solutions. Hoyle and Wallace

(2005) link the 'garbage can' model to complexity theory. They refer to Morrison's (2002: 9) four elements of complexity:

- 'Effects are not straightforward functions of causes.'
- 'Uncertainty and openness prevail.'
- 'The universe is irregular, diverse, uncontrollable and unpredictable.'
- 'Systems are indeterministic, non-linear and unstable.'

Morrison (2002: 189) adds that, within this scenario, 'the power of bosses is limited', but Hoyle and Wallace (2005: 41) assert that 'leaders and managers can at least give a steer to emergent events'.

Cohen and March regard their garbage can model as particularly appropriate for higher education but several of the concepts are also relevant for schools. The major characteristics of ambiguous goals, unclear technology and fluid participation often apply in the secondary sector, although they may be less evident in small primary schools.

The major contribution of the garbage can model is that it uncouples problems and choices. The notion of decision-making as a rational process for finding solutions to problems is supplanted by an uneasy mix of problems, solutions and participants, from which decisions may eventually emerge. The garbage can model has a clear application to educational institutions where there are many participants with ready-made solutions to apply to different problems. Levačić (1995: 82) contrasts this model with rational approaches: 'In the garbage can model, there is no clear distinction between means and ends, no articulation of organizational goals, no evaluation of alternatives in relation to organizational goals and no selection of the best means'.

Applying the ambiguity model: Oakfields School

The ambiguity model is an important contribution to the theory of educational management. It is a descriptive and analytical model which sets out its proponents' views of how organizations are managed rather than a normative approach extolling the 'right' way to manage institutions. However, there are few empirical studies which employ a conceptual framework drawn from the ambiguity perspective. One important example is Bell's (1989) research at Oakfields, then a newly amalgamated secondary school in the English East Midlands.

Oakfields was formed by the amalgamation of three schools as part of the LEA's strategy for dealing with falling pupil numbers. The new school opened with 1,500 pupils but numbers were expected to fall to about 900 within five years, with obvious implications for staffing levels. This uncer-

tainty was aggravated by teachers' union action which meant that planning could not be undertaken at the end of the normal school day. The new school also operated on two sites. These factors created a turbulent environment with a high degree of ambiguity.

Bell refers to a lack of clarity about school aims, technology and school membership. The new head identified the goals but these were not shared by all staff. Attempts to resolve differences of view were inhibited by the teacher action, as the headteacher indicates:

You may not agree with some of the policies and procedures, or even with the long term aims, but until we can discuss these I should like everyone to enforce them for all our sakes, but especially for the sake of the children. (Bell, 1989: 135)

Bell notes that the lack of clarity about aims emanated from different perceptions held by staff from each of the three constituent schools, particularly in respect of discipline and aspects of the curriculum. It was clear also that teachers' opinions about the nature of the former schools influenced their attitudes:

Staff ... interpretation of the goals of the new school, and their stance towards operationalizing those goals, owed as much to their perception of the three constituent schools as it did to any statement of intent from the head of Oakfields. (Bell, 1989: 136)

Disagreement about the technology of the school centred around teaching styles and about the relative merits of separate or integrated subjects in science and humanities.

The notion of school membership was highly problematic because many staff retained a loyalty to their former school rather than to the newly amalgamated unit. This was particularly true of teachers at the former secondary school who returned to that school's site for certain lessons. The most potent example concerned the former head of the secondary school, who was based at the satellite campus as 'associate head', and also influenced the views of several colleagues:

He could only be described as being a member of Oakfields school if the notion of membership is used to indicate the most tenuous of connections. Several of his erstwhile colleagues took up a similar position to the extent that they were in the new school but not of it. (Bell, 1989: 140)

The ambiguous aims, technology and membership were reflected in the decision-making process which was often unpredictable and irra-

tional. Bell claims that Oakfields illustrates the limitations of formal theories and the salience of the ambiguity model:

The traditional notion of the school as an hierarchical decision-making structure with a horizontal division into departments and a vertical division into authority levels needs to be abandoned. Such a conceptualization is unsuitable for the analysis of an organization attempting to cope with an unstable and unpredictable environment ... The fundamental importance of unclear technology, fluid membership and the problematic nature and position of educational goals has to be accorded due recognition in any analysis of the organization and management of a school such as Oakfields. (Bell, 1989: 146)

Ambiguity models: goals, structure, environment and leadership

Goals

Ambiguity models differ from all other approaches in stressing the problematic nature of *goals*. The other theories may emphasize the institution, or the sub-unit, or the individual, but they all assume that objectives are clear at the levels identified. The distinctive quality of the ambiguity perspective is that purposes are regarded not only as vague and unclear but also as an inadequate guide to behaviour:

Events are not dominated by intention. The processes and the outcomes are likely to appear to have no close relation with the explicit intention of actors ... intention is lost in context dependent flow of problems, solutions, people, and choice opportunities. (Cohen et al., 1976: 37)

Ambiguity theorists argue that decision-making represents an opportunity for discovering goals rather than promoting policies based on existing objectives. The specific choice situation acts as a catalyst in helping individuals to clarify their preferences: 'Human choice behaviour is at least as much a process for discovering goals as for acting on them' (Cohen and March, 1986: 220).

Hoyle and Wallace (2007: 18–19) show how organizational goals often arise uneasily from external prescriptions and expectations. This leads 'headteachers and teachers to represent their work to the agencies of accountability in order to appear to be meeting the requirements of these agencies'. This requires a process of adaptation, which might be seen, broadly, as 'compliance', 'non-compliance' or 'mediation'. This may lead teachers to modify externally-generated goals so

that they become more congruent with their professional values.

Organizational structure

Ambiguity models regard *organizational structure* as problematic. Institutions are portrayed as aggregations of loosely coupled sub-units with structures that may be both ambiguous and subject to change. In many educational organizations, and certainly in larger schools and colleges, policy is determined primarily by committees rather than by individuals. The various committees and working parties collectively comprise the structure of the organization.

Enderud (1980: 248) argues that organizational structure may be subject to a variety of interpretations because of the ambiguity and sub-unit autonomy that exists in many large and complex organizations: 'What really matters to the way in which the formal structure influences the processes is not what the structure formally "looks like", but the way it is actually used'. Enderud (1980) points to four factors which influence the interpretation of structure:

1. Institutions usually classify responsibilities into decision areas which are then allocated to different bodies or individuals. An obvious example is the distinction made between the academic and pastoral structures in many secondary schools. However, these decision areas may not be delineated clearly, or the topics treated within each area may overlap. A pupil's academic progress, for example, may be hampered by personal or domestic considerations. 'The result is that a given decision may quite reasonably be subject to different classifications of decision area. This again means that the circle of participants, who are to deal with the matter, is also open to interpretation' (Enderud, 1980: 249).
2. Decisions may also be classified in other ways. Issues may be major or minor, urgent or long term, administrative or political, and so on. These distinctions offer the same opportunities for different interpretations as exist with delineation by area.
3. Rules and regulations concerning the decision-making process within the formal structure may be unclear. The choice of rules for decision-making is often subject to ad hoc interpretation. The adoption of a voting process, or an attempt to reach consensus, or a proposal to defer a decision, may be unpredictable and have a significant influence on the final outcome.
4. Rules and regulations may be disregarded in certain circumstances. Most organizational structures have elements designed to deal with

emergencies or procedural conflicts. The formal structure may be circumvented to deal with particular occurrences where participants can agree on such practice (Enderud, 1980).

Ambiguity models portray structures as 'loosely coupled' (Weick, 2001). Goldspink (2007: 40) draws on this metaphor to discuss the 'rich multidimensional coupling' between the many agents involved in schools and colleges, who each make sense of their role in their own ways.

A further source of ambiguity concerns the extent of *participation* within the organizational structure. Certain individuals within the institution have the right to participate in decision-making through their membership of committees and working parties. Cohen, March and Olsen (1976: 27) stress that committee membership is only the starting point for participation in decision-making: 'Such rights are necessary, but not sufficient, for actual involvement in a decision. They can be viewed as invitations to participation. Invitations that may or may not be accepted'.

A basic assumption of ambiguity models is that participation in decision-making is fluid, as members underuse their decision rights. One consequence of such structural ambiguities is that decisions may be possible only where there are enough participants. Attempts to make decisions without sufficient participation may founder at subsequent stages of the process. Lumby's (2001: 99) research on English further education colleges suggests that staff roles are likely to be even more problematic than formal structures: 'Whether the official place within the structure of any role had changed or not, the way the role was seen by the role holder and by others continued to change, and was likely to be subject to ambiguity, conflict and overload'.

The external environment

The *external environment* is a source of ambiguity which contributes to the unpredictability of organizations. Schools and colleges have a continuing existence only as long as they are able to satisfy the needs of their external constituencies. People in educational institutions have to be sensitive and responsive to the messages transmitted by groups and individuals.

Perhaps it needs to be recognized more explicitly that organizations, including schools, sometimes operate in a complex and unstable environment over which they exert only modest control and which is capable of producing effects which penetrate the strongest and most selective of boundaries ... many schools are now unable to disregard pressures emanating from their wider environment. (Bell, 1980: 186)

The development of a 'market economy' for education in many

countries means that schools and colleges have to be increasingly sensitive to the demands of clients and potential clients. Institutions which fail to meet the requirements of their environments may suffer the penalty of contraction or closure. The demise of certain schools as a result of falling rolls may be regarded as a failure to satisfy market needs. Closure is often preceded by a period of decline as parents opt to send their children to other schools which are thought to be more suitable. One way of assessing these events is to view the unpopularity of schools as a product of their inability to interpret the wishes of the environment.

Despite the environmental complexity engendered by decentralization, government policy remains the most potent influence on school actions and decision-making. In England, for example, the government exercises considerable power over schools through the national curriculum, patrolled by a tight inspection regime, through 'national strategies' for literacy and numeracy, and through a tightly defined target-setting culture. The paradoxically 'tight-loose' relationship between schools and government may be interpreted as representing a desire to leave school leaders with discretion about *how* to implement centrally-determined policies but not about *whether* to do so.

These external uncertainties interact with the other unpredictable aspects of organizations to produce a confused pattern, far removed from the clear, straightforward assumptions associated with the formal models. A turbulent environment combines with the internal ambiguities and may mean that management in education is often a hazardous and irrational activity, as Gunter's (1997) study of 'Jurassic' management suggests: 'The future is created by the sensitive response to fluctuations in the environment rather than proactive and systematic installations of new structures and tasks' (ibid.: 95).

Leadership

In a climate of ambiguity traditional notions of *leadership* require modification. The unpredictable features of anarchic organizations create difficulties for leaders and suggest a different approach to the management of schools and colleges. According to Cohen and March (1986: 195–203), leaders face four fundamental ambiguities:

1. There is an ambiguity of *purpose* because the goals of the organization are unclear. It is difficult to specify a set of clear, consistent goals which would receive the endorsement of members of the insti-

tution. Moreover, it may be impossible to infer a set of objectives from the activities of the organization. If there are no clear goals, leaders have an inadequate basis for assessing the actions and achievements of the institution.

2. There is an ambiguity of *power* because it is difficult to make a clear assessment of the power of leaders. Heads and principals do possess authority arising from their position as the formal leaders of their institutions. However, in an unpredictable setting, formal authority is an uncertain guide to the power of leaders. Decisions emerge from a complex process of interaction. Leaders are participants in the process but their 'solutions' may not emerge as the preferred outcomes of the organization.
3. There is an ambiguity of *experience* because, in conditions of uncertainty, leaders may not be able to learn from the consequences of their actions. In a straightforward situation, leaders choose from a range of alternatives and assess the outcome in terms of the goals of the institution. This assessment then provides a basis for action in similar situations. In conditions of ambiguity, however, outcomes depend on factors other than the behaviour of the leaders. External changes occur and distort the situation so that experience becomes an unreliable guide to future action.
4. There is an ambiguity of *success* because it is difficult to measure the achievements of leaders. Heads and principals are usually appointed to these posts after good careers as teachers and middle managers. They have become familiar with success. However, the ambiguities of purpose, power and experience make it difficult for leaders to distinguish between success and failure.

Cohen and March (1986) point to the problems for leaders faced with these uncertainties:

These ambiguities are fundamental ... because they strike at the heart of the usual interpretations of leadership. When purpose is ambiguous, ordinary theories of decision-making and intelligence become problematic. When power is ambiguous, ordinary theories of social order and control become problematic. When experience is ambiguous, ordinary theories of learning and adaptation become problematic. When success is ambiguous, ordinary theories of motivation and personal pleasure become problematic. (Ibid.: 195)

These ambiguous features imply that leaders cannot control the institution in the manner suggested by the formal models. Rather they become facilitators of a complex decision-making process, creating

opportunities for the discussion of problems, the participation of members and the exposition of solutions.

Two alternative leadership strategies are postulated for conditions of ambiguity. One stratagem involves a participative role for leaders to maximize their influence on policy. Cohen and March (1986) and March (1982) suggest the following approaches for the management of uncertainty:

1. Leaders should be ready to devote *time* to the process of decision-making. By taking the trouble to participate fully, leaders are likely to be present when issues are finally resolved and will have the opportunity to influence the decision.
2. Leaders should be prepared to *persist* with those proposals which do not gain the initial support of groups within the institution. Issues are likely to surface at several forums and a negative reception at one setting may be reversed on another occasion when there may be different participants.
3. Leaders should facilitate the *participation of opponents* of the leader's proposals. Occasional participants tend to have aspirations which are out of touch with reality. Direct involvement in decision-making increases members' awareness of the ramifications of various courses of action. The inclusion of opponents at appropriate fora may lead to the modification or withdrawal of alternative ideas and allow the leader's plans to prosper.
4. Leaders should *overload the system* with ideas to ensure the success of some of the initiatives. When the organization has to cope with a surfeit of issues, it is likely that some of the proposals will succeed, even if others fall by the wayside.

These tactical manoeuvres may appear rather cynical and they have certain similarities with the political models discussed in Chapter 5. The alternative stratagem is for leaders to forsake direct involvement in the policy-making process and to concentrate on structural and personnel matters. Attention to the formal structure enables leaders to influence the framework of decision-making. In deciding where issues should be discussed, there is an effect on the outcome of those discussions.

This second stratagem also requires leaders to pay careful attention to the selection and deployment of staff. If heads or principals recruit teachers who share their educational philosophies, then it is likely that their preferred solutions will become school or college policy. The structural and personnel aspects of management can overlap. Heads may encourage like-minded staff to join committees and working parties to improve the prospects of favourable outcomes.

Both these strategies suggest that leaders in ambiguous situations should proceed by stealth rather than through overt proclamation of particular policies. This approach may be appropriate for periods of high ambiguity but the tensions inherent in turbulent organizations may be very stressful for heads and principals who have to absorb these pressures, both to facilitate institutional development and to foster personal survival and growth.

The most appropriate leadership approach for turbulent conditions is the contingency model.

Contingent leadership

The models of leadership examined in the previous chapters are all partial. They provide valid and helpful insights into one particular aspect of leadership. Some focus on the process by which influence is exerted while others emphasize one or more dimensions of leadership. They are mostly normative and often have vigorous support from their advocates. None of these models provide a complete picture of school leadership. As Lambert (1995: 7) notes, there is 'no single best type'.

The contingent model provides an alternative approach, recognizing the diverse nature of school contexts and the advantages of adapting leadership styles to the particular situation, rather than adopting a 'one size fits all' stance:

This approach assumes that what is important is how leaders respond to the unique organizational circumstances or problems ... [that] there are wide variations in the contexts for leadership and that, to be effective, these contexts require different leadership responses ... [I]ndividuals providing leadership, typically those in formal positions of authority, are capable of mastering a large repertoire of leadership practices. Their influence will depend, in large measure, on such mastery. (Leithwood et al., 1999: 15)

Yukl (2002: 234) adds that 'the managerial job is too complex and unpredictable to rely on a set of standardised responses to events. Effective leaders are continuously reading the situation and evaluating how to adapt their behaviour to it'. Hoyle and Wallace (2005: 189) extend this discussion by saying that the type of leader likely to be successful will depend on the specific set of circumstances facing the school. 'Some schools are in such a parlous state that only heroic leadership can "turn them round" ... But for many schools ... effective leadership is ... marked by the long haul towards

improvement'. As Vanderhaar, Munoz and Rodosky (2007) suggest, leadership is contingent on the setting.

Bolman and Deal's (1991) 'conceptual pluralism' is similar to contingent leadership. An eclectic stance is required where leaders adapt their styles to the context in which they are operating. Leadership requires effective diagnosis of problems, followed by adopting the most appropriate response to the issue or situation (Morgan, 1997). This reflexive approach is particularly important in periods of turbulence when leaders need to be able to assess the situation carefully and react as appropriate rather than relying on a standard leadership model.

The limitations of ambiguity models

Ambiguity models add some important dimensions to the theory of educational management. The concepts of problematic goals, unclear technology and fluid participation are significant contributions to organizational analysis. Most schools and colleges possess these features to a greater or lesser extent, so ambiguity models should be regarded primarily as analytical or descriptive approaches rather than normative theories. They claim to mirror reality rather than suggesting that organizations *should* operate as anarchies.

The turbulence of educational policy in England, and in many other countries, in the twenty-first century, lends credence to ambiguity theories. The rapid pace of curriculum change, enhanced government expectations of schools and colleges, and the unpredictable nature of educational funding, lead to multiple uncertainty which can be explained adequately only within the ambiguity framework. Similarly, Sapre's (2002) analysis of educational reform in India points to the continual failure of top-down reforms, arising largely as a result of ambiguity: 'Repeated failure of reform initiatives is unsettling for practitioners and students. Reformers need a deeper understanding of the dynamics of change, what sustains a reform and what does not' (ibid.: 106).

The ambiguity model appears to be increasingly plausible but it does have four significant weaknesses:

1. It is difficult to reconcile ambiguity perspectives with the customary structures and processes of schools and colleges. Participants may move in and out of decision-making situations but the policy framework remains intact and has a continuing influence on the outcome of discussions. Specific goals may be unclear but teachers usually

understand and accept the broad aims of education.

2. Ambiguity models exaggerate the degree of uncertainty in educational institutions. Schools and colleges have a number of predictable features which serve to clarify the responsibilities of their members. Students, pupils and staff are expected to behave in accordance with standard rules and procedures. The timetable regulates the location and movement of all participants. There are usually clear plans to guide the classroom activities of teachers and pupils. Staff are aware of the accountability patterns, with teachers responsible ultimately to heads and principals who, in turn, are answerable to government and, in self-managing institutions, to governing bodies and funding agencies.

The predictability of schools and colleges is reinforced by the professional socialization which occurs during teacher training, induction and mentoring. Teachers assimilate the expected patterns of behaviour and reproduce them in their professional lives. Socialization thus serves to reduce uncertainty and unpredictability in education. Educational institutions are rather more stable and predictable than the ambiguity perspective suggests.

3. Ambiguity models are less appropriate for stable organizations or for any institutions during periods of stability. The degree of predictability in schools depends on the nature of relationships with the external environment. Where institutions are able to maintain relatively impervious boundaries, they can exert strong control over their own processes. Oversubscribed schools, for example, may be able to rely on their popularity to insulate their activities from external pressures.
4. Ambiguity models offer little practical guidance to leaders in educational institutions. While formal models emphasize the head's leading role in policy-making, and collegial models stress the importance of team work, ambiguity models can offer nothing more tangible than contingent leadership.

Cohen and March (1986: 91) accept that their garbage can model has limitations while proclaiming its relevance to many organizations: 'We acknowledge immediately that no real system can be fully characterized in this way. Nonetheless, the simulated organizations exhibit behaviour that can be observed some of the time in almost all organizations and frequently in some'.

Conclusion: ambiguity or rationality?

Ambiguity models make a valuable contribution to the theory of educational leadership and management. The emphasis on the unpredictability of organizations is a significant counter to the view that problems can be solved through a rational process. The notion of leaders making a considered choice from a range of alternatives depends crucially on their ability to predict the consequences of a particular action. The edifice of the formal models is shaken by the recognition that conditions in schools and colleges may be too uncertain to allow an informed choice among alternatives.

In practice, however, educational institutions operate with a mix of rational and anarchic processes. The more unpredictable the internal and external environment, the more applicable is the ambiguity metaphor. As Hoyle and Wallace (2005: 60) suggest, there are limitations to the rationality of the implementation process, 'because of cognitive, logical, phenomenological and control ambiguities'.

Development planning, strongly advocated in England in the 1990s, provides a rational element of school and college management, although Bennett et al.'s (2000) work demonstrates its limitations in a climate of ambiguity and change. Wallace (1991: 182), for example, emphasizes that schools have to plan within a framework of uncertainty: 'The nature of many external innovations is liable to change unpredictably. It is in this rather frenetic context, which includes much ambiguity, that planning ... must take place'.

The ambiguity model has much to offer but it has to be assessed alongside the formal perspective and other theories of educational management. On its own, it is not sufficiently comprehensive to explain behaviour and events in education. Its relevance is overstated by its adherents but it does offer fascinating and valuable insights into the nature of school and college management.

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