This paper describes a study that investigated Western Australian senior high schools' cultures. Researchers developed the School Cultural Elements Questionnaire to examine six aspects of school culture: professional values, emphasis on learning, collegiality, collaboration, shared planning, and transformational leadership. A group of 422 teachers in 8 schools completed the instrument. Also, teachers in two of the schools completed interviews designed to confirm the survey data. Researchers used the original theoretical framework and the study findings to develop the School Improvement Model of School Culture. This paper applies the model in an examination of the nature of school culture, school improvement, and educational systems change. Discussion of these matters is based on a set of propositional statements concerning: internal and external influences on cultural stability; school subcultures; school improvement and cultural growth; cultural inertia; traditional school improvement programs; cultural stimulation; systemic school improvement; and school improvement by cultural intervention. (Contains 24 references.) (SM)
THE DEVELOPMENT, MAINTENANCE AND TRANSFORMATION OF
SCHOOL CULTURE

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ABSTRACT

A study of Western Australian senior secondary schools utilised quantitative and qualitative methods in an investigation of their cultures. The School Cultural Elements Questionnaire (SCEQ) was developed and refined to examine six aspects of school culture; professional values, emphasis on learning, collegiality, collaboration, shared planning and transformational leadership. Data from instrument administration to 422 teachers in eight schools in conjunction with interview data from two schools were used to profile school culture.

The original theoretical framework and the findings of the study were used to develop the School Improvement Model of School Culture. In this paper, the model is applied in an examination of the nature of school culture, school improvement and educational system change. The discussion of these matters is based upon a set of propositional statements concerning; internal and external influences on cultural stability, school sub-cultures, school improvement and cultural growth, cultural inertia, traditional school improvement programmes, cultural stimulation, systemic school improvement and school improvement by cultural intervention.
RATIONALE

Contemporary approaches to understanding how schools improve in response to the educative needs of their students emphasise the importance of school culture in this process (Dalin, Rolff and Kleekamp, 1993; Fullan, 1993).

Culture is the way of life of a given collectivity (or organisation), and a reflection of shared values, norms, symbols and traditions (Mitchell and Willower, 1992). The culture of schools results from individual and collective perceptions of the social environment existing within specific schools. These perceptions, in conjunction with prevailing beliefs, attitudes and values govern the norms and consequent behaviour of the members of the school community. Within the school staff, social interaction between teachers and with the school administration produces the organisational culture which in turn has influence on the work of teachers and school improvement undertakings. School culture is not simply the product of social interactions between school personnel. Culture is also shaped by the interaction. The school culture is also affected by interaction between school personnel, parents, the local community and the educational system. Similarly, at the classroom level, social interaction amongst students and between the class and the teacher produces a culture of learning (Cole, 1991). However, the culture of the individual classroom is not necessarily a reflection of overall school culture.

These conceptions of culture are derived from a view of schools as open social systems with interaction occurring between internal individuals and groups and also between the school and its external environment (Getzels and Thelen, 1960). The culture of a school is both a consequence and a manifestation of this interaction. Examination of the prevailing beliefs, attitudes and values existing within the school community allows exemplification of the culture of the school. It is asserted that these shared beliefs, attitudes and values which characterise the culture of the school also are responsible for the development and maintenance of that culture.

Cavanagh and Dellar (1996, 1997a and 1997b), investigated the culture of Western Australian government secondary schools within the policy context of the educational system and the macro socio-political environment affecting schooling. The investigation utilised quantitative and qualitative research methods to collect data on staff perceptions of prevailing and preferred school cultures in conjunction with the social processes which shaped the specific school cultures. The framework guiding the examination of culture was developed from a distillation of critical attributes identified in school effectiveness research as conducive to improvement in educational outcomes of schooling (Cavanagh and Dellar, 1997b).

The empirical findings of the study were then applied in the development of the ‘School Improvement Model of School Culture’ (Cavanagh and Dellar, 1997b). This model has an open systems structure with six internal cultural elements. Further refinement of the theoretical outcomes of the study was undertaken and eleven propositional statements about school culture and school improvement were developed.
Cultural Stability: The stability of a school’s culture results from the culture being able to maintain itself when subject to pressures from inside or outside of the school;

Internal Influences on Cultural Stability: Internal aspects of a school’s culture can induce cultural change;

External Influences on Cultural Stability: Cultural change can be induced by participation in externally instigated innovations;

School Sub-Cultures: School communities contain sub-cultures which are influential on overall school culture;

School Improvement and Cultural Growth: School improvement is a process of cultural growth;

Cultural Inertia: A well developed school culture has inertia resulting from internal stability and common perceptions of the school’s mission;

Traditional School Improvement Programmes: Organisational or Cultural Change?: The effectiveness of traditional school improvement programmes is restricted by the influence of organisational management conceptions of the nature of schools and organisational change;

The growth of a school’s culture is effected by school improvement strategies which focus on prevailing teacher beliefs, values and norms and also upon the processes of cultural development and maintenance;

Positive cultural stimulation by external agencies can be considered as a process of intervention;

Systemic school improvement initiatives can stimulate either growth or the decline of school culture; and

School improvement effected by cultural intervention relies upon teachers being knowledgable about their school’s culture and being sufficiently empowered to assume control of its growth. (Cavanagh, 1997).

This paper presents a discussion of the major theoretical implications of the study, including a description of the ‘School Improvement Model of School Culture’ and a critique of the propositional statements.

BACKGROUND
The notion that there is an ‘informal organisation’ within schools which could be characterised by a ‘school climate’ can be traced back to the early 1960s (McLeary and Hencley, 1965). Halpin and Croft (1962), made a significant contribution by identifying six profiles of organisational climate in elementary schools based upon data they collected on eight determinants of school climate. Tagiuri (1968) described the ‘environment’ of the school organisation as a combination of ecology, milieu, social systems and culture. In 1974, Moos also identified characteristics of organisations including climate and psychosocial characteristics, ecological factors, behaviour settings, organisational structure, average personal characteristics and functioning dimensions of specific situations. Anderson (1982) utilised Tagiuri’s classification in an analysis of the findings of previous research and concluded that many of the findings were inconclusive when relating school climate variables to student outcomes, particularly with regard to the ecology, milieu and social system variables. The situation with the culture
variables was different. Anderson attested that student outcomes were directly influenced by cultural variables including teacher commitment, peer norms, cooperative emphasis, expectations, academic emphasis, rewards, praise, consistency, consensus and the specification of clear goals.

Contemporary school effectiveness and improvement research has confirmed the relationship between cultural aspects of schools on student learning outcomes. Stoll and Mortimer (1995) synthesised the research findings on school effectiveness and improvement and identified eleven factors requiring consideration in the design of programmes intended to improve student learning. Factors included participatory leadership, shared vision and goals, teamwork, a learning environment, emphasis on teaching and learning, high expectations, positive reinforcement, monitoring and inquiry, pupil rights and responsibilities, learning for all and partnerships and support (Stoll and Mortimer, 1995 p.5). These authors also suggested that school improvement could be stimulated by external agencies including school inspectors, local education authorities, certification bodies and business and industry organisations.

At the whole school level, the phenomenon of school culture can be examined from a variety of perspectives. These research perspectives can be categorised as being descriptive, effective and process oriented. Descriptive research has produced typologies of school and faculty behaviour which describe different whole-school and sub-school cultures (Fullan and Hargreaves, 1992; A. Hargreaves, 1994; D. Hargreaves, 1995; Murgatroyd, 1988). The effective research perspective assumes examination of school culture in terms of the extent to which it is supportive of the educational purpose of schools. Finally, adoption of a process orientation enables focus upon the mechanisms by which the school culture has developed, is maintained and grows (Erikson, 1987; Maxwell and Thomas, 1991). Cavanagh and Dellar (1997b) incorporated the three approaches in conducting research into secondary school culture in Western Australia.

**RESEARCH METHODOLOGY**

A survey type instrument, the School Cultural Elements Questionnaire (SCEQ) was developed and administered to a sample of 422 teachers in eight Western Australian schools. The original instrument contained eight scales, eight items per scale and actual and preferred forms. The scales were designed to gauge teachers’ perceptions of the extent of collaboration, shared visions, school-wide planning, collegiality, teachers as learners, teacher efficacy, mutual empowerment and transformational leadership within their school (Cavanagh and Dellar, 1996). Following exploratory factor analysis, the number of scales and items was reduced to six scales with seven items per scale. Details of the development and validation of the SCEQ have been reported elsewhere (Cavanagh and Dellar, 1997a). The instrument solicited information on six elements or indicators of school culture; professional values, emphasis on learning, collegiality, collaboration, shared planning and transformational leadership (Cavanagh, 1997). The refined instrument was then utilised in a quantitative two year study of three schools (n = 190 teachers). In two of the schools, quantitative data were supplemented by an interview programme in a case study investigation (Cavanagh and Dellar, 1997a). Interview items sought to confirm and
exemplify the SCEQ data and they were also designed to investigate the influence of site specific factors and educational system policies on the prevailing school culture.

RESULTS
The SCEQ data revealed differences between the cultures of the secondary schools and their subject faculties. The interview data from the case study schools and supplementary qualitative data from the other schools enabled examination of the nature and influences upon prevailing school and faculty cultures. In particular, data were collected on temporal stability of cultures and also the influence of government and educational system policy initiatives, school initiated innovations, organisational processes and professional development activity on cultures. The findings indicated that school and faculty cultures could change over a period as short as one year. Furthermore, the stability of culture was dependent upon the ‘strength’ of the prevailing culture and perceptions of the level of congruity between the prevailing values and norms and the anticipated impact of innovations (Cavanagh and Dellar, 1996 and 1997a).

THEORETICAL OUTCOMES
1. School Improvement Model of School Culture
The School Improvement Model of School Culture (Figure 1) has an open systems structure consistent with the notion of schools being open social systems. It assumes that the culture of a school is in continuous interaction with the external environment, including the educational system, statutory agencies and government.

![Figure 1. School Improvement Model of School Culture](Cavanagh and Dellar, 1997b).

The internal structure of the model includes six cultural elements:
Professional values concern the importance of the social institution of education and the need for school growth is grounded on pedagogical principles;

An emphasis on learning produces a learning community in which there is a commitment to professional growth and improved outcomes for students;

Collegiality empowers teachers to exercise professional judgements through the development of supportive inter-personal relationships;

Collaboration is interaction between teachers in which information is shared on school operational matters including the instructional programme;

Shared planning is a collective process whereby a common vision of the school is actualised by logical planning; and

Transformational leaders share power and facilitate a school development process that engages the human potential and commitment of teachers.

These six elements are interactive and in a state of dynamic equilibrium. The elements were also considered as the vehicles of cultural development and maintenance as they transform individual values and norms into the collective values and norms that constitute the culture of a specific school.

2. School Culture and School Improvement

Cultural Stability

Implicit within the notion of cultural stability is the proposition that individual cultural elements and school cultures can be considered ‘strong’ or ‘weak’. This classification of elements and school culture was facilitated by comparison of SCEQ scale mean scores for different schools and faculties in conjunction with Single ANOVA analysis of variance (Cavanagh, 1997c). A ‘strong’ individual cultural element is evidenced by a statistically significant high scale mean score for that element. A ‘strong’ culture was operationally defined as one in which four or more of the elements were ‘strong’. Similarly, a ‘weak’ culture was defined as one which two or fewer cultural elements were ‘strong’.

The six cultural elements provide mechanisms for the school staff to discuss and evaluate demands being placed upon the school. They are able to make collective decisions about acceptance or rejection of new programmes and policies and these decisions will have widespread support within the school. The capacity of the teachers to decide upon a common response is dependent upon the school culture being well developed. If the cultural elements are weak, the pressure for change will fall on individual teachers, producing a diversity of individual responses including both rejection and acceptance. This inconsistency of response has the capacity to further divide the staff and in turn weaken and de-stabilise the culture.

A culture with weak elements also has the potential for growth. Stimulation of particular elements and their subsequent development can lead to the formation of a new equilibrium between the six elements. This will occur when the stimulus is perceived by sufficient numbers of teachers to be of personal or professional consequence. Although the culture is weak, there are latent common beliefs and attitudes amongst the staff which may emerge with sufficient stimulation. In particular, the cultural elements of
professional values and emphasis on learning are expected to be responsive to changes which may impact upon the school’s instructional programme. Similarly, innovations affecting interpersonal relationships within the school could trigger changes in the level of collegiality within the school.

**Internal Influences on Cultural Stability**

Changes in the internal conditions of the culture have the potential to stimulate changes in the overall culture, because the beliefs and attitudes of teachers collectively expressed through the school’s culture are not static. The culture is susceptible to influences of an internal nature through changes in value systems and norms, resulting from the interaction between individuals and groups within the school.

This change appears to be a cyclical evolutionary process in which individual and group needs influence the development of collective values and norms, which in turn govern behaviour and professional activity. If the original needs of individuals and groups are not realised in the new patterns of behaviour and work, another cycle commences. The culture is continuously being regenerated by adjusting to changing internal conditions.

Changes in the culture can be described as growth or decline. If interaction between teachers results in personal and group needs being satisfied the interactive behaviour will be reinforced and the culture will grow. Alternatively if the interaction does not satisfy these needs, the interactive behaviour is not reinforced and the culture may decline. The cultural elements of professional values, emphasis on learning and collegiality are an expression of beliefs and values concerning the education of students and mutually supportive interpersonal relationships. These three elements are the key elements of internal cultural stimulation because their focus is upon fundamental professional and social values. The other three elements are also expressions of beliefs and values, but these are more oriented towards the needs of the school rather than those of the individual teacher.

Cultural change can be stimulated when teachers express their own professional and personal needs to colleagues. If this discourse reveals commonality of needs and results in collective values being established, there is potential for cultural growth. However, if there is no commonality of needs and collective values are not established, there is potential for cultural decline. A school in which teachers do not have strong professional values, do not value learning and do not feel a need for collegiality, does not have internal conditions conducive to cultural maintenance or growth. In such schools, cultural change is dependent upon influences emanating from the formal school organisation and external agencies. These influences may facilitate cultural maintenance or stimulate cultural growth, alternatively they may also result in cultural decline.

**External Influences on Cultural Stability**

The susceptibility of a school’s culture to external influence is consequent on the strength of the culture and also upon the congruency between the existing culture and the external demands. The strong culture is stable irrespective of the congruency between external demands and the inherent beliefs and values of the teachers which constitute the culture. In a weak culture, congruent demands have the potential to stimulate growth, whereas incongruent demands may cause the culture to further decline.
A strong school culture has the capacity to accommodate or reject specific external demands because of the presence of mechanisms which facilitate the development of collective attitudes towards the demands. If there is congruency between existing values and the requirements of an externally instigated innovation, it is likely that teachers will accept and implement the innovation. If the requirements of the innovation conflict with the prevailing culture, teachers may reject the innovation and resist implementation. In this instance, the common values and bonding between teachers produce unified opposition. The resulting resistance is given increased momentum by the resolve of individuals being strengthened through the support of their colleagues. There is resonance within the culture which amplifies the original level of resistance.

A school culture in which the six elements are not well developed can be destabilised when subjected to external pressures. There is potential for either cultural growth or decline and it is the beliefs and values of individual teachers which will determine the nature of the response. If an external demand causes teachers to come together and develop common attitudes, the culture will grow. The trigger for this process occurring is the formation of a critical mass of individual attitudes. When a sufficient number of teachers have independently evaluated the consequences of accepting or rejecting an innovation and there is consistency of opinion amongst the staff, the critical mass has been formed. By sharing their opinions with colleagues, the commonality of needs and expectations become evident and teachers with a similar disposition group together. Membership of this group reinforces individual attitudes and colleagues support each other in responding to the external demand. Teachers experience the benefits of participation in collective activity, including collegiality and collaboration, which strengthen bonding and professional relationships. The culture grows and is intensified as teachers appreciate the power of collective activity and a unified response to common concerns. From the initial presence of common attitudes towards an external demand a new value system has developed within the school, teachers value their culture.

External demands also have the capacity to cause further fragmentation of a weak school culture by increasing the disparity between the beliefs and values of individual teachers. The teachers in a weak culture are relatively independent of one another and focus their energies on the classroom and not on school-wide matters. Their knowledge and skills centre upon student instruction and they may be naive when confronted with initiatives requiring an understanding of non-instructional issues. The notion of a critical mass of teacher opinion can be used to explain cultural decline. An external demand may be of consequence for teachers, but in a weak culture it is possible that the critical mass will not form. When the teachers perceive the existence of disparate attitudes concerning implementation of an externally instigated innovation, it is likely there will be reluctance to openly express opinions. Expressions of acceptance or resistance will be made in a confidential manner to colleagues who are perceived to have a similar disposition. The lack of empowerment and collegiality necessitates caution when discussing controversial matters because of the likelihood of criticism or conflict. Although in reality common ground may exist, teachers will not take the risk of having their values questioned or rejected. The formation of the critical mass of common opinion is frustrated by entrenched beliefs about the protection provided by isolation and the security of membership of a cadre of like minds. The
fragmentation of the school staff is compounded by the cohesion within these cadres and their capacity to reinforce a value system opposed to school-wide collegiality and collaboration. The school culture declines and sub-cultures are strengthened.

A school with a weak culture is vulnerable when placed under stress from external demands. If pressures from the formal school organisation or the educational system stimulate one or more of the cultural elements, teachers will be unified in their acceptance or rejection of the demand. Alternatively, the implementation strategy of an externally generated initiative could have been designed to divide the school staff and prevent a unified response. For example, initiatives which consolidate the hierarchical structure of the school organisation and emphasise specialisation of knowledge and skills within the hierarchy threaten the maintenance and growth of a school’s culture.

**School Sub-Cultures**

The School Improvement Model of School Culture is also applicable when examining the cultures of groupings of teachers within a school. The notion of sub-cultures is based upon the premise that within the school, there are groups or sub-communities of teachers who share a common purpose specific to that sub-community. This is particularly apparent in large secondary schools.

In large secondary schools, the activity within a subject area faculty is focussed upon curriculum objectives and pedagogical practices specific to that area of learning. Although the rationale for the presence of faculties derives from assumptions about the structure of the secondary school curriculum, it is also based upon the organisational management conception of specialisation of knowledge and labour. Alternative groupings of teachers can result from the application of pedagogical rather than organisational principles. For example, dividing the student population into sub-schools which are taught by a team of teachers is based upon assumptions about student learning being more effective when the student population is separated into sub-communities. It is likely that the teachers who work within a sub-school will develop their own culture with common goals related to the needs of this group of students.

Sub-communities may also develop when teachers form informal groups not resulting from the structure of the school organisation or that of the curriculum. Dissatisfaction with existing operational procedures or instructional programmes may provide the catalyst for certain teachers spending time together to discuss common concerns about the school. This reinforces individual beliefs and values, resulting in the group developing its own set of shared beliefs or its own culture which is different from the overall school culture. It is also possible that sub-cultures may form when teachers bond together as a consequence of attitudes and values not related to the school or the instructional programme. These groups are still given cohesion by a common value system, but are independent of the school and based upon beliefs about matters external to the school. These could include common political, family, recreational, religious or ethnic interests.
Sub-cultures within a school will be interactive and influential on the state of prevailing school culture. If the sub-cultures are diverse, the overall school culture will be weak and the school staff will not be cohesive. This situation will be exacerbated if the value systems and norms of sub-cultures are of non-educative nature. Sub-cultures resulting from membership of groups formed by organisational requirements or interests external to the school are potentially limiting to the development of the school’s culture.

School Improvement and Cultural Growth
Consideration of school improvement as a process of cultural growth is assisted by reconceptualising schools as learning communities. The learning community conception of schools is predicated on two propositions. Firstly, the purpose of the school is educative and its mission is to improve the learning of students. Secondly, the school community is both characterised and unified by common values and norms about student learning. The school is a learning community with a culture grounded in beliefs about improved educational outcomes for students. School improvement occurs through the growth of the learning community’s culture and perpetuation of the common values which bond the community. School culture is a culture of school improvement and the six elements in the School Improvement Model of School Culture are vehicles for both cultural growth and school improvement. In this regard, the model is dualist with both cultural growth and school improvement sharing a common purpose of improving student learning. The following discussion will utilise the model in an examination of issues associated with school cultural improvement. This will be structured upon features of the model including the stability of the dynamic equilibrium between elements, the transformation of individual values and norms into school culture and the stimulation of cultural change by contextual influences.

Cultural Inertia
The six cultural elements are in a state of dynamic equilibrium which gives the school culture overall stability. This stability is important because it ensures the maintenance of the culture under conditions which may threaten the common values and norms towards student learning and professional interaction which characterise the culture. The interdependency of the six cultural elements allows dissipation of pressure on individual elements by the equilibrium being re-established with a re-configured internal balance.

Cultural growth and school improvement results from improvement initiatives which are perceived by teachers to be consistent with the values expressed in one or more of the cultural elements. The influence of the initiative is not dissipated within the culture, instead it reinforces the culture, increases stability and may cause cultural growth. The key requirement for this process to occur is congruency between the initiative and the cultural elements. The six cultural elements were operationally defined to be conducive to improved student outcomes and initiatives which strengthen the elements supportive of school improvement.
Traditional School Improvement Programmes: Organisational or Cultural Change?
The traditional conception of school improvement is exemplified in Hillman and Stoll’s definition of school improvement. ‘School improvement is a systematic, sustained effort aimed at change in learning conditions and other related internal conditions in one or more schools, with the ultimate aim of accomplishing educational goals more effectively’ (Hillman and Stoll, 1994 p. 1). Traditional school improvement programmes can be criticised on three grounds.

Firstly, the aim of school improvement is expressed in terms of educational goals being accomplished more effectively. It is assumed that it is possible to identify specific educational goals which are expressed in advance of the improvement process and the improvement programme is planned to facilitate their achievement. Predetermination of specific educational goals and the strategies by which they will be accomplished is a potentially restrictive practice because improvement programmes are long-term exercises, over a time span typically in excess of three years. It is likely that over the period of improvement, changes in the school and its external environment may render some of the original goals and strategies irrelevant. Exploration of emergent issues and redirection of the improvement programme may be stifled by adherence to the original goals and planning to realise those goals.

Secondly, the systematic nature of traditional improvement programmes is based upon assumptions about the control and rationality of human behaviour. It is assumed that teachers will comply with programme requirements. The design of programmes to ensure compatibility with existing organisational structures and practices further reinforces the need for compliance and predictable behaviour. The presence of initial enthusiasm by teachers for scrutiny of existing practices and changing the school to improve the learning of their students will wane over time if the programme leads to a new set of constraints on their work. Alternatively, an evolutionary improvement programme which continuously questions existing and emergent practices facilitates the learning and professional growth of teachers. The success of improvement initiatives is dependent on the empowerment of teachers, which requires de-emphasising the structure of the programme and not making assumptions about the responsivity of teachers. The progress of a school improvement programme will at times be frustrated by unexpected events and unanticipated teacher behaviour. The perseverance of a programme requires acceptance of uncertainty and a flexible approach responsive to the changing personal and professional needs of teachers.

The third criticism of traditional improvement programmes concerns the focus of the change effort. The difficulty of effecting long term changes in classroom practices and the resistance of teachers to change may result in improvement initiatives being directed at formal aspects of the school. Instead of attempting to change the attitudes of teachers and their instructional practices, improvement strategies centre upon restructuring the school organisation or the curriculum. Organisational restructuring changes the roles and responsibilities of school personnel and is usually accompanied by the rewriting of role statements and policies concerning operational matters. Curriculum restructuring is typically a process of ‘repackaging’ in which existing educational objectives are retained but re-arranged within a new framework. These types of school improvement can be considered as being peripheral to the
educative mission of the school and have the potential to channel resources and the time of teachers into non-instructional activities. School improvement focussed on restructuring is likely to be ineffectual in improving the learning of students and may be detrimental to the instructional programme by diverting teachers from their classroom work.

The effectiveness of traditional school improvement programmes in improving educational outcomes within schools is limited by the application of organisational management principles. These principles include logical planning, the control of teachers and an emphasis on the formal aspects of the school. The application of community and cultural constructs in conceptualising school improvement overcomes these limitations.

**Cultural Elements: Vehicles for Cultural Growth**

The six cultural elements are vehicles for the transformation of individual values and norms into a school culture conducive to improvements in student learning. School improvement programmes which incorporate strategies to increase teacher participation in collaboration and shared planning, promote, collegiality and transformative leadership and reinforce professional values about teaching and learning, are likely to effect a positive transformation in the culture. An understanding of the cultural elements provides strategic information for use in the design of school improvement programmes.

School improvement activities perceived by teachers to improve student learning and have application within the classroom harness the values incumbent in the elements of professional values and emphasis on learning. This is exemplified by the preference of secondary school teachers for professional development relevant to their classroom work. The motivation of teachers to participate in school improvement activities appears very dependent upon teachers believing their teaching knowledge and skills will be enhanced through participation. Professional development activities focussed upon non-instructional aspects of the school or the requirements of the educational system or government policies are likely to be viewed with scepticism.

The personal and social needs of teachers are satisfied in a school culture which emphasises collegiality. Incorporation of collegiate activities within school improvement programmes is a subtle exercise because collegiality is of a personal nature and cannot be imposed upon teachers. School improvement activities which improve collegiality need to be relatively informal and sufficiently flexible to allow participants to express their own feelings and beliefs to colleagues. If organisational requirements or the objectives of the activity are predominant, the development of collegiate relationships will be restricted. School improvement programme designers need to be cognisant of the nature of collegiality and provide the time and opportunities for teachers to engage in discussion of matters of personal importance and develop bonding. Collegiality is an expression of basic social needs which cannot be controlled or manipulated. Support of the development of collegiate relationships requires sensitivity to the personal needs of colleagues in a culture respecting individual differences and which empowers teachers.
Successful school improvement is dependent upon collaboration between teachers to ensure commonality of understanding on issues concerned with the school curriculum and the operation of the school. The motivation of teachers to engage in collaborative activities is dependent upon their perceptions of the benefits of such activity. For example, participation in meetings to discuss faculty or school matters needs to be meaningful. This requires meetings to be run in a manner allowing full participation on the understanding that the decisions will be implemented. Meaningful collaboration produces decisions of benefit to the school and individual teachers and is supportive of school improvement. Alternatively, contrived collaboration is a tokenistic exercise in which people share opinions and reach decisions not put into practice. Similarly, the effectiveness of shared planning requires application of participative decision-making processes to produce a shared vision of the school and to decide upon the means by which this will be actualised.

Transformational leadership focuses upon the maintenance and growth of the school culture. Transformational leaders support individual teachers and also ensure that organisational pressures do not conflict with the values and social processes providing the school community with cohesion. They understand the culture of the school and are committed to a school improvement process based upon cultural growth. Other members of the school community are encouraged to accept responsibility for school programmes and assume a leadership role within the school community.

School culture is dynamic and the interaction between teachers and groups occurs continuously every working day throughout the whole school. The maintenance and development of the culture is ongoing and not restricted to the occasions in which formal school improvement activities are organised. School improvement grounded in cultural growth is a continuous pervasive process underpinning all school activity. The improvement of the school requires that the six cultural elements are given attention at all levels of the school at all times. It cannot be assumed that neglect of cultural maintenance is easily rectified or can be reversed by ‘quick fix’ responses to cultural decline.

Cultural Stimulation and Intervention
School culture does not exist in isolation of the organisational aspects of the school and the external environment. School improvement initiatives resulting from changing expectations of the school organisation, the educational system or the macro-political environment have the potential to stimulate changes in school culture. The notion of cultural intervention assumes a school improvement process which is directly focussed on positively stimulating the culture of schools.

Systemic Improvement Initiatives and Cultural Stimulation
Western Australian Education Department school improvement policies and initiatives include school development planning, participative decision-making and accountability.

School development planning was intended to provide a rational decision-making framework for the evaluation and improvement of school instructional programmes. The school development planning process commences with collaborative identification of the mission of the school and the writing of
performance indicator statements to specify expectations of the instructional programme. This is followed by a cyclical process of collecting and analysing student performance data, making judgements about the effectiveness of existing programmes and finally the identification of strategies for improvement. The collaborative nature of the process and its emphasis on the school’s instructional programme, have the potential to stimulate cultural growth and effect school improvement. Realisation of this potential is dependent on the process supporting development of the cultural elements. If school development planning is implemented in a highly formal manner imposing excessive structure on the work of teachers and the operation of the school, the school culture is likely to be neglected. Alternatively, if the process is perceived by teachers to be supportive of their classroom activity and providing a means of increasing collegiality and collaboration, it can stimulate cultural growth. School development planning needs to be considered from a cultural perspective in which implementation strategies are designed in cognisance of their potential to reinforce or restrict cultural growth.

The practice of participative decision-making would be expected to increase collaboration and shared planning within a school and is an integral facet of transformative leadership. Promulgation of policies which mandate participative decision-making in schools is a powerful cultural stimulus and when implemented with fidelity, should ensure cultural growth. However, faithful implementation of education department policies within schools cannot be assumed because of prevailing attitudes and established organisational practices. In the case of policies on participative decision-making, the hierarchical structure of the school organisation may conflict with the intentions of the policy. In a school with a weak culture resulting from low levels of collegiality, collaboration, shared planning and transformational leadership, the cultural benefits of the policy could be over-shadowed by existing organisational arrangements. Although the policy expectations may be congruent with intrinsic cultural attitudes and values, the requirements of the formal school organisation could subvert policy implementation and frustrate cultural growth.

The extent of influence of a systemic initiative upon school culture is determined by perceptions of the nature of the initiative and its potential impact upon the school. If the participative decision-making policy is perceived as pertaining to the school organisation, cultural stimulation is unlikely to occur. Alternatively, if teachers view the policy from a cultural perspective, it is more likely to be accepted and effect growth in the school’s culture. Clarification of this issue in the minds of teachers is further complicated by the mandatory nature of education department policies. Although the policy expectations are of cultural relevance, the implementation process is based upon compliance with systemic requirements. It is likely that cultural growth cannot be mandated because mandation reaffirms the formal school organisation and disregards the culture of the school. In the case of the participative decision-making policy, its capacity to stimulate cultural growth is restricted by a policy implementation process essentially inconsistent with the underlying principles of cultural growth.

Accountability is an organisational management conception concerned with teachers demonstrating to super-ordinates that they are working towards achievement of the school’s organisational and instructional goals. The implementation of accountability policies at the school level has the potential to
reinforce the formal organisation and conflict with the school culture. Accountability processes designed around the line management structure of the school and the retention of control by superordinates will restrict the development of collegiate relationships within the school. Such processes are also inconsistent with the notion of transformational leadership, emphasis on controlling rather than empowering teachers. The incongruence between accountability and school culture superficially supports the proposition that implementation of accountability policies will not stimulate cultural growth.

A further consideration concerns school sub-cultures. If accountability practices cause tensions within a school staff between classroom practitioners and supervisory staff, it is possible for these two groups to develop disparate values and norms. Super-ordinates who share a common responsibility for implementation of an accountability programme and expectations of the behaviour of subordinates may develop their own sub-culture. Concurrently, the subordinates may also bond together to ward off the impact of accountability requirements on their professional activity and develop an opposing sub-culture based upon common resistance. Although the formation of conflicting sub-cultures is divisive of the prevailing school culture, stimulation of the cultural activity within such sub-cultures may effect long term cultural growth. For example, resistance to accountability procedures could result in teachers collaborating and developing a common understanding of their work and professional priorities. This is likely to trigger cultural growth by reaffirming the educative mission of the school and demonstrating the benefits of collective activity.

The accountability requirements of the formal organisation which have stimulated the cultural growth also have the potential to destroy the emergent culture. Cultural growth stimulated by collective resistance to external policy initiatives is occurring within a hostile organisational environment not supportive of the emergent culture. Furthermore, if the emergent culture is perceived by line management staff to be a serious impediment to successful policy implementation, management strategies could be utilised to frustrate cultural growth. The endurance of cultural growth is dependent on the robustness of the emergent culture. The common teacher beliefs and attitudes galvanising cultural growth need to have strength sufficient to persist over the period of policy implementation. If this is not the case, the emergent culture will fragment and the school culture will revert to its prior condition of weakness.

School Improvement through Cultural Intervention
In the preceding discussion of the influence of three systemic school improvement initiatives on school culture, school culture was portrayed as being reactive to external stimulation. The initiatives were essentially directed at improving the school by changing its organisation and operations. Effecting school improvement by cultural growth requires the target of improvement initiatives to be the culture itself and for the improvement process to be based upon cultural intervention. The objective of cultural intervention is clearly cultural growth, however the means by which it is to be facilitated and who is to assume responsibility for intervention are less obvious.
The community conception of schools is supportive of the notion of the culture being owned by the school community, which also needs to be responsible for its maintenance and growth. The fundamental issue in cultural intervention is whether or not the members of a school community with a weak culture have the inclination or capacity to take control of the intervention process. It could be assumed that formal school leadership will assume responsibility for improvement of the school and the growth of its culture. The flaw in this assumption concerns the prevailing leadership behaviour; the weakness of the culture is probably in part due to an absence of transformational leadership. School leaders who are insensitive to the culture of the school are unlikely to have the knowledge and skills to intervene and may also be negatively disposed towards intervention. Alternative agents of intervention include other members of the school staff and persons external to the school. If informal school leaders understand the nature of their school’s culture and are committed to its improvement, they could be effective agents of cultural growth. Alternatively, intervention by Education Department officers or professional consultants is less likely to be successful because these persons may be perceived by teachers as lacking commitment to the school and the needs of its community.

The foundation for cultural intervention is an educative process in which teachers learn about school culture and are empowered to influence its growth. This process needs to commence in pre-service teacher education, continue through post-graduate courses and be built into in-service and professional development programmes. The most effective agents of cultural intervention are culturally sensitive and knowledgable members of the school community. In the absence of school level intervention, cultural change will result from the influence of external pressures, which have the potential to cause either cultural decline or growth. The uncertainty associated with the impact of the implementation of systemic school improvement programmes upon school culture requires that school improvement be directed at cultural growth, with intervention occurring at the school level.

**SUMMARY**

The success of school and systemically initiated improvement programmes requires consideration of prevailing school culture. Changing school level and classroom practices to improve the learning outcomes of students invariably necessitates a change in the beliefs, attitudes and values of teachers about their work. This paper has examined the nature of school culture and the processes by which it is developed, maintained and transformed. In particular, attention was given to:

- Internal and external influences on cultural stability;
- School sub-cultures;
- School improvement and cultural growth;
- Cultural inertia;
- Traditional school improvement programmes;
- Cultural stimulation;
- Systemic school improvement; and
- School improvement by cultural intervention.
Bibliography


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