This paper presents interim findings of the Improving the Quality of Education for All (IQEA) Project, a school-improvement and development project implemented by approximately 30 schools in East Anglia, North London, and Yorkshire in England. The overall project goal was to strengthen the school's ability to provide quality education for all students by building upon existing good practices. Following an overview of the project's principles, strategies, and school-improvement framework, a methodology for mapping change is presented. A conclusion is that school improvement works best when a clear and practical focus for development is linked to simultaneous work on the internal conditions within the schools. Conditions that underpin the work of successful schools include attention to enquiry and reflection; a commitment to collaborative planning and staff development; involvement of staff, students, and community in school policies; effective coordination strategies; and effective, shared leadership. The school-change techniques cluster around two key elements in the change process—school culture and the role of the individual teacher. The paper uses the metaphor of a "journey" to describe the progress of the project over time. The project is distinctive in that support, intervention, and research occur simultaneously. Three figures are included. (LMT)
School Improvement and Cultural Change: 
an interim account of the 
'Improving the Quality of Education for All' [IQEA] 
Project

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Cambridge School Development Group, 1994
In the UK during the past fifteen years the change agenda has increasingly been set by politicians, rather than being advocated by educationalists or support agencies. The public debate on educational standards and accountability, which began in the mid seventies, has resulted in a plethora of nationally inspired changes. A variety of legislative efforts to improve schools occurred during the nineteen eighties that culminated in a series of Education Reform Acts of which the 1988 was the most important. These were further consolidated by the Education Acts of the early nineties. Whilst the detail of this radical reform agenda is beyond the scope of this paper, it is worth briefly summarising the four fronts on which this attack on the traditional organisation of the school system was carried forward.

The first was *prescription* of which the prime examples are the National Curriculum and the schemes for National Testing at seven, eleven and fourteen. Second is *decentralisation* and here the Local Management of Schools, the increase in the power of School Governors and the demise of the Local Education Authority were the main policy initiatives. Third is *competition* which was encouraged by the expansion of Grant Maintained status for schools, open enrolment which was supported by the publication of 'league tables' and a general emphasis on the use of performance indicators. Finally, there was the *privatisation* of those who provide services to schools. This ranges from cleaners, advisers, the creation of curriculum agencies and most recently, school inspectors.

As we move through the nineties the educational agenda is increasingly being dominated by a concern to implement and institutionalise this radical reform agenda. This quest for stability however is being sought against a background of continuing change, as expectations for student achievement rise beyond the capacity of the system to deliver. As a result, there are seemingly contradictory pressures for centralisation and de-centralisation, yet it is clearly evident that neither approach works by itself.

Those of us in the UK, and particularly England and Wales, have been struggling for longer than most with the challenge of this centralised-decentralised dichotomy. At the same time as the national government has drawn to itself more power than ever
before, the usual infrastructure of support has been eroded, and schools are finding themselves increasingly alone in the struggle to take charge of the process of change. This situation complicates and places great strains on school improvement efforts.

Despite these constraints, it is also an exciting and instructive time to be engaged in school improvement. We find it fascinating, if not unsurprising, that other countries are so interested in the British experience of educational change. At international conferences the British presentations are always fully and enthusiastically attended; and there are a steady stream of visitors from overseas to Institutes like ours who come to find out 'what is going on'. What ever one thinks of our National Reforms, there is no doubt that we are in the middle of a radical and ambitious attempt to revolutionise the character of an educational system and to redefine the locus of decision making at various levels. It is the radical and intensive nature of our reforms that interest others. By the same token, if our attempts at school improvement are successful in raising quality during such turbulent times, then it is likely that similar strategies will work anywhere!

It is this radical background that provides a context for the symposium. In this introductory paper, which gives but only an interim report on the IQEA, three aspects of our work are reported:

- First, we give an overview of the principles and strategies that underlie our approach to school improvement;

- Second, we describe the school improvement framework on which we base our intervention;

- Third, we suggest a possible link between school improvement and cultural change in schools;

- Fourth, the methodology we have developed for mapping change in schools is described.

Despite the interim nature of these remarks we hope that they will be of some interest to those, who like us, are struggling to make sense of educational change and school improvement in complex times.
Improving the Quality of Education for All

During the past three years or so we have been working closely with some thirty schools in East Anglia, North London, and Yorkshire, on a school improvement and development project known as Improving the Quality of Education for All (IQEA). IQEA is a school improvement project that involves schools in working collaboratively with a group from the Institute of Education at Cambridge, and representatives from their Local Education Authority (LEA) or with a local support agency. The overall aim of the project is to strengthen the school’s ability to provide quality education for all its pupils by building upon existing good practice. In so doing, we are also producing and evaluating a model of school development, and a programme of support. IQEA works from an assumption that schools are most likely to strengthen their ability to provide enhanced outcomes for all pupils when they adopt ways of working that are consistent with their own aspirations as well as the current reform agenda. At a time of great change in the educational system, the schools we are working with are using the impetus of external reform for internal purpose.

We often use the metaphor of 'the journey' to describe our work in the project, in an attempt to capture the non-prescriptive and investigative nature of our collaboration. There is however another, perhaps more important, aspect to our approach to school improvement as a journey. The image was captured by the head of a large secondary school recently, when he said at one of our meetings 'that we journey as pilgrims, not as nomads'. What he was reminding us of was that our collaborative approach to school improvement was based on a set of values that characterised and disciplined all our work. So although we had all rejected the 'blueprint' or 'top-down' approach to change, we were not lurching from 'fad to fad' on a whim or impulse. Rather we were journeying in a direction that was, although not always well signposted, informed by goals or by a vision that reflected a core set of values.

At the outset of IQEA we attempted to outline our vision of school improvement by articulating a set of principles that provided us with a philosophical and practical starting point. Because it is our assumption that schools are most likely to provide quality education and enhanced outcomes for pupils when they adopt ways of working that are consistent with these principles, they were offered as the basis for collaboration with the IQEA project schools. In short, we were inviting the schools to identify and to work on their own projects and priorities, but to do so in a way which embodied a set of 'core' values about school improvement. They represent both the
expectation we have of the way project schools would pursue school improvement, and as an *aide-memoir* to the schools and ourselves, about principles that are likely to foster enduring school improvement initiatives.

The five principles of IQEA are:

- The vision of the school (the school-in-the-future) should be one to which *all* members of the school community have an opportunity to contribute.

- The school will see in external pressures for change important opportunities to secure its internal priorities.

- The school will seek to create and maintain conditions in which *all members* of the school's community can learn successfully.

- The school will seek to adopt and develop structures which encourage collaboration and lead to the empowerment of individuals and groups.

- The school will seek to promote the view that the monitoring and evaluation of quality is a responsibility in which all members of staff share.

We feel that these principles have a synergism - together they are greater than the sum of their parts. They characterise an overall approach rather than prescribing a course of action. The intention is that they should inform the thinking and actions of teachers during school improvement efforts, and provide a touchstone for the strategies they devise and the behaviours they adopt.

We underpin our school improvement work with a *contract* between the partners in the project - the school and its teachers, in some cases, the LEA or sponsoring agency, and ourselves. The contract defines the parameters of the project and the obligations of those involved to each other. It is intended to clarify expectations and ensure the climate necessary for success. In particular the contract emphasises that all staff be consulted, that co-ordinators are appointed, that a 'critical mass' of teachers are actively involved in development work, and that sufficient time is made available for classroom observation and staff development. For our part, we co-ordinate the project, provide training for the school co-ordinators and representatives, make regular school visits and contribute to staff training, provide staff development materials, and monitor the implementation of the project. The detail of the contract expresses in our opinion the minimum commitments necessary for success:
The decision to participate in the project is made as a result of consultation amongst all staff in the school.

Each school designates a minimum of four members of staff as project co-ordinators (one of whom is the head teacher) who attend training and support meetings. The group of co-ordinators is known as the 'project cadre'.

The whole school allocates substantial staff development time to activities related to the project.

At least 40% of teachers (representing a cross section of staff) take part in specified staff development activities in their own classrooms. Each participating teacher is regularly 'released' from teaching in order to participate in these classroom based aspects of the project.

Each school participates in the evaluation of the project and shares findings with other participants in the project.

From the beginning of the project we were determined that we would attempt to affect all 'levels' of the school. A major purpose of the contract is to ensure that this happens. One of the things that we had learned from research and our previous work is that change will not be successful unless it impacts all levels of the organisation. Specifically our focus is on the three levels outlined in Figure 1 - Integrating the Levels and the ways in which these interrelate. The school level is to do with overall management and the establishment of policies, particularly with respect to how resources and strategies for staff development can be mobilised to support school improvement efforts. At the level of working groups the concern is with working out the details of and arrangements for supporting improvement activities. Finally, at the individual teacher level the focus is on developing classroom practice.

In very effective schools these three levels of activity are mutually supportive. Consequently a specific aim of the IQEA project has to be to devise and establish positive conditions at each level and to co-ordinate support across these levels. It is in this connection that we require the establishing of a team of co-ordinators in each school whose task includes the integration of activities across the various levels. We refer to these co-ordinators, in association with advisory colleagues from the local authority, as the cadre. They are responsible for the day to day running of the project in their own school and for creating links between the ideas of the overall project and
practical action. In many schools members of the cadre establish an extended cadre which serves to extend the project in a more formal way within the school.

Figure 1 - Integrating the Levels

So far we have summarised our broad approach to school improvement. There is now the conundrum of how best support to schools through this complex process. Our current thinking and practice is best summarised by describing what we do within and outside school.

Our within school work concerns the nature of our own intervention. As is by now quite obvious, we have explicitly chosen an interventionist role. Our roles vary from time to time and from place to place. On some occasions this may involve us in questioning our school-based colleagues in order to encourage them to 'think aloud' about their work. Often they tell us that simply having an outsider who poses questions in a supportive way and then helps to set deadlines is in itself very helpful. However, having established a long-term agreement to collaborate with colleagues in a school, and then invested time in creating a working relationship with those
colleagues, it is appropriate that we should be prepared to offer a critique of their proposals and action. In this way we are seeking to balance our support with a degree of pressure that is intended to push their thinking forward.

It is important to add that we do at times elect to adopt more proactive roles in project schools. We do this in order to provide specific support to school co-ordinators at particular times. For example, we often contribute to school-based staff development programmes, working in partnership with school colleagues. Sometimes this involves us in team teaching in order to provide demonstrations, practice and feedback related to particular staff development techniques. We may also assist in the planning and processing of significant meetings. So, for example, one of us recently helped the Head teacher and certain of his senior colleagues devise a plan for a key meeting of staff. This involved modelling how the meeting might be managed and then providing feedback as the head teacher and deputy head practised how they would carry out their tasks during the meeting.

Our outside school role focuses mainly on the meetings we hold for the various cohorts of schools involved in the project. There is a strong emphasis on 'reflection and enquiry' within these sessions. Reflection is the essential building block of professional competence and confidence. The training is based around the conditions we regard as necessary for successful school improvement which are described briefly later. Within training sessions we consistently try to model good staff development practice, share our knowledge of the change process, and provide time for high quality planning and consultancy. We also believe that it is appropriate that involvement of staff in school improvement should be acknowledged. Here an advantage of the school - university collaboration is that it provides opportunities for teachers to accredit their school based professional development activities through a series of academic awards.

**A Framework for School Improvement**

Although the term school improvement is in common usage, few commentators have fully explored the potential of this approach as an alternative means of educational change. Most have been content to use the term as a collective noun under which to group a variety of strategies for innovation and change that pay some attention to the organisational context in which they intervene. The more rigorous definition that we prefer requires a broader and more sophisticated view of the concept, in a sense it requires us to 'see school improvement whole'.
In summary, we regard school improvement:

- as a vehicle for planned educational change; but we also realise that educational change is necessary for school improvement
- as particularly appropriate during times of centralised initiatives and innovation overload when there are competing reforms to implement
- as usually involving some form of external support
- as having a dual emphasis on strategies for strengthening the school's capacity for managing change; whilst
- raising student achievement (broadly defined); through
- specifically focusing on the teaching-learning process.

Keeping this definition in mind, and recognising that the IQEA project was in fact made up of many individual school projects, we attempted to establish a way of working with schools which was both flexible and focused. To help us to do this, we developed an action framework (see Figure 2 - The Logic of School Improvement) that provides the setting for a series of assumptions upon which the project is based. In describing these assumptions we relate them to the main components of the diagram: i.e. outcomes for students and staff; school culture; the school's background and organisation; the selected developmental priorities; the conditions necessary to support such changes; and the school improvement strategy.

The first assumption is that school improvement will result in enhanced outcomes for students and staff. We define 'outcomes' broadly, and there will obviously be variations in outcome according to the focus of the improvement effort. For students, the outcomes could be critical thinking, learning capacity, self esteem and so on, as well as improved examination and test results. For staff they could be increased collegiality, opportunities for professional learning and increased responsibility.

The second assumption is less obvious. School culture is the vital yet neglected dimension in the improvement process. It is, of course, a difficult concept to define. In general we see it as an amalgam of the values, norms and beliefs that characterise the way in which a group of people behave within a specific organisational setting.
Figure 2 - The Logic of School Improvement

SCHOOL BACKGROUND & ORGANISATION

CULTURE OF

PRIORITIES
STRATEGY
CONDITIONS

THE SCHOOL

STUDENT & TEACHER OUTCOMES
The types of school cultures most supportive of school improvement efforts, and those that we are working towards in the project, are those that are collaborative, have high expectations for both students and staff, exhibit a consensus on values (or an ability to deal effectively with differences), and support an orderly and secure environment.

The third assumption is that the school's background and organisation are key factors in the school improvement process. Unfortunately most school improvement efforts address organisational factors, which are often the main inhibitors of change, as only explanatory factors. It is also interesting to note that a school's organisational structure is inevitably a reflection of its values. Consequently, there is a strong, but not clearly understood, relationship between the school's organisation and its culture.

The fourth assumption is that school improvement works best when there is a clear and practical focus for the development effort. The school's 'priorities' are normally some aspect of curriculum, assessment or classroom process which the school has identified from the many changes that confront it. This means that decisions about 'priorities' must be made. Three principles should guide this process of choice amongst priorities:

- **manageability** - realistically, how much can we hope to achieve?
- **coherence** - is there a sequence which will ease implementation?
- **consonance** - how well do internally identified priorities coincide or overlap with external pressures for reform?

Schools that are able to see externally generated changes as providing opportunities, as well as (or instead of) problems, are better able to respond to 'top down' demands. In IQEA, therefore, schools are encouraged to review, and in some cases to reconsider, their own priorities at the outset of the project. We ask schools in the project to:

- define for themselves an area or issue to be tackled.
- ensure that this is not a 'new' or 'additional' activity undertaken simply because of involvement in the project, but a real issue, problem or opportunity which the school needs to work on anyway.
consider how this can be tackled in a way which develops the school and moves it some way towards the external requirements (stemming from national reforms) for quality improvement and assurance facing all schools.

communicates this to all staff in the school.

The fifth assumption is that the conditions for school improvement are worked on at the same time as the curriculum or other priorities the school has set itself. Conditions are the internal features of a school and ways of working that enable it to get work done. Without an equal focus on conditions, even priorities that meet the above criteria can quickly become marginalised. We have also found that when circumstances exist that are less supportive of change, it is necessary in the initial stages to concentrate much more on creating the internal conditions within the school which facilitate development, limiting work on the priorities until the conditions are in place.

From our work on the IQEA project, we have been able to elaborate a series of conditions that underpin the work of successful schools. Although the following list represents our best estimate, rather than a definitive statement, of what the important conditions are at present, we believe that there is both research based and practical evidence to support them. Broadly stated the conditions are:

- attention to the potential benefits of enquiry and reflection.
- a commitment to collaborative planning.
- a commitment to staff development.
- the involvement of staff, students and the community in school policies and decisions.
- effective co-ordination strategies.
- effective leadership, but not just of the head; the leadership function is spread throughout the school.

The sixth assumption is that a school improvement strategy needs to be developed in order to link priorities to the conditions. The strategy will need to be more or less powerful depending on the relative 'strength' of the other factors. Strategies take very
different forms. In many cases for example, a school will use the opportunity of an external change (and the additional resources that often go with it) as a means of linking a priority for development to the necessary conditions. For example, many schools are using teacher appraisal as a strategy for linking together work on teaching styles (priority) with peer observation in the classroom (condition).

School Improvement and Cultural Change

The framework for school improvement is based on our observation that the most successful schools increase their capacity to handle change by linking together priorities and conditions in imaginative and innovative ways. A key finding from the early phase of the project was that school improvement works best when a clear and practical focus for development is linked to simultaneous work on the internal conditions within the school. Effective change strategies appear to focus not only on the implementation of centralised policies or chosen initiatives, but also on creating the conditions within schools that can sustain the teaching-learning process. In our experience unless this is the case then the impact of any change will only be tangential to the daily life of the school.

We are also beginning to gather evidence that school improvement strategies can lead to cultural change in schools through modifications to their 'internal conditions'. In these instances it is the cultural change that then supports the teaching-learning process which leads to enhanced outcomes for students. In terms of our 'action framework' school improvement is the process through which schools adapt external changes to internal purpose. When successful, this leads to enhanced outcomes for teachers and students, and ultimately affects the culture of the school, as well as its internal organisational structures. As we have continued to work with schools, we are finding some common patterns in the way in which this process unfolds.

Many of the schools we are working with use the school development plan as a overarching strategy that focuses innovative efforts, generates ownership, and galvanises support. This process encourages schools to express their developmental aspirations in the form of priorities. The priorities tend to relate to teaching and classroom organisation in a broad sense, rather than curriculum in the conventional sense. The school's development plan consists of a series of priorities which should be supported by action plans. These are the working documents for teachers. In them the priority is subdivided into targets and tasks, responsibilities are allocated, a time frame established, and evaluation or progress checks are identified.
Through this approach to planning, priorities are then reformulated within a *strategy*. A strategy typically involves teachers in some form of collaborative classroom based action. Many of our schools are using some form of classroom or 'paired' observation as a strategy to implement their priorities. The exact nature of the strategy, or combination of strategies, is peculiar to each school. Strategies need to take account of the priorities that have been agreed, existing conditions and the resources that are available. So for example, the *priority* in one of our secondary schools was developing ‘resource based learning’, one of the strategies they used to implement this priority was classroom observation.

Schools in the UK are now used to planning in this way and to establishing working groups for developmental tasks. But it is as they move into action that problems tend to arise. Beginning to work on something new, to change, inevitably creates some difficulties, both for individuals and the institution. Teachers are faced with acquiring new teaching skills or mastering new curriculum material; the school is often faced with new ways of working that are incompatible with existing organisational structures. So with the example of resource based learning, teachers had to work out what it meant to them, to their teaching styles, and the curriculum content. They then had to adapt their classroom practice to match this understanding. The 'school' for its part, had to provide time on the time-table for classroom observation, and to give increased responsibility to relatively junior members of staff.

This phase of de-stabilisation or 'internal turbulence' is as predictable as it is uncomfortable. Yet many research studies have found that without a period of de-stabilisation successful, long lasting change is unlikely to occur. It is at this point that most change fails to progress beyond early implementation. In these cases, when the change hits the 'wall' of individual learning or institutional resistance, internal turbulence begins to occur and developmental work begins to stall. Often the working group continues for a while, but eventually it fragments, or another priority is found for them to focus on. The change circles back on itself and nothing much is achieved - so we start something new. This is the cycle of educational failure, the predictable pathology of educational change.

Many of the schools that we have been working with have survived this period of de-stabilisation by either consciously or intuitively adapting or accommodating the *internal conditions* in the school to meet the demands of the agreed on change or priority. In order to overcome the 'wall', we encourage schools to diagnose their internal conditions in relation to their chosen change *before they begin developmental*
work. They can then begin to build these modifications to the school's internal conditions into the strategies they are going to adopt. So in our running example, time was found for the classroom observation, staff training days were devoted to discussing the definitions that various curriculum groups had of resource based learning and the 'wall' was successfully breached or dismantled.

Paranthetically, there are now in the UK a number of recent national innovations that are 'content free' and offer the potential of supporting change at the school level. Although innovations such as self evaluation, development planning, changes in staff development policy and practice, and teacher appraisal - have a carefully specified process or structure, the substance of each i.e. what they are used for, is for the teacher and school to decide. Some schools are taking the opportunity of these statutory obligations to modify their internal conditions by creating a 'development infrastructure' at the school level that facilitate the implementation of specific curriculum changes or teaching methods that have a direct impact on student achievement.

When this happens, we begin to see changes occurring to the culture of the school. In our example, as a result of the staff training day and the classroom observation, teachers began to talk more about teaching, collaborative work outside of the project became more commonplace, and management structures were adapted to support this and future changes. When taken together, these changes in attitudes and structure created a more supportive environment within the school for managing change. The school's 'change capacity' was increased and the ground-work was laid for future change efforts. Instead of rebounding against the wall, a virtuous circle of change began to be established. Schools who have been through similar 'change cycles' either experience less internal turbulence, or are able to tolerate greater levels of turbulence, because they have progressively enhanced their capacity to change as a result of this developmental process.

When we talk about this process we often summarise it using the following notation: P stands for the priority the school sets itself, S the chosen strategy, the wavy line the period of de-stabilisation, Co the schools' internal conditions that are modified in order to ameliorate the de-stabilisation, and Cu the resulting change in culture.

\[ P > S > \{\} > C_o > C_u \]

We realise of course that real life is not as simple or as linear as this formula suggests. We have found though, that this way of describing the development process resonates
with the experience of many of those that we talk to and work with. The process of cultural change is also not a 'one off' as implied by the notation, but evolves and unfolds over time. Often many sequences have to be gone through before a radically different culture emerges in a school.

Many heads and school leaders seem to adopt, albeit intuitively, a similar approach to the management of change. They seem to realise that the impact of successful change needs to be on the culture of the school. There is an intuition that culture sustains change and consequently enhances the achievement of students. They therefore focus on culture first. It is almost as if they begin by asking 'What cultural changes are required?' and then, 'What priorities, strategies, and changes in conditions can bring this about?' The link between setting priorities and the culture of the school is therefore of some importance. Sequencing priorities over time can help the successive shaping of school culture. In recognition of this many school leaders 'start small and think big' in their planning for development. They also sequence priorities in such away that development work builds on initial good practice and then on subsequent success. They manipulate strategy and conditions in order to affect culture, in the pursuit of enhancing the quality of educational outcomes and experience for all pupils. The process often unfolds as seen in the following sequence.

\[
P1 \rightarrow S1 \rightarrow \{\} \rightarrow C01 \rightarrow Cu1
\]

\[
P2 \rightarrow S2 \rightarrow \{\} \rightarrow C02 \rightarrow Cu2
\]

\[
P3 \rightarrow S3 \rightarrow \{\} \rightarrow C03 \rightarrow Cu3
\]

When the process of cultural change is embarked on, it may be that \(Cu3\) is the ultimate goal. To move there immediately is impossible, various intermediate stages have to be traversed first. There are a number of interesting paradoxes here. Although real life is not as rational as this, we often need to have strategic maps in our minds as we begin and sustain the journey of improvement. There is also rarely any clarity about the nature of subsequent priorities, or the cultural change they affect, at the start of the journey. Priorities unfold almost organically as progress is made. This is not to say that everything is \textit{ad hoc}. There is often a concomitant clarification
of values within the school as the process unfolds. In this sense the notion of 'vision' which is so popular nowadays, is more about the clarification and articulation of a set of values that occurs throughout the development work, than a concrete image given by the head at the outset. It also appears in our experience that the process unfolds unevenly. There are *always* highs and lows, peaks and troughs. Even in the most successful schools development accelerates then levels off. When a new priority is set then energy flows once again. Sustaining momentum over time and appreciating the inevitability of such plateaux is consequently very important. This is especially the case as the process in our experience takes at least two years to work through, and consequently does not conform to neat planning cycles.

We have also found that something similar operates at the level of the teacher and the student. For the teacher, although the conditions may be eased and the internal turbulence reduced at the school level, the pressure of individual learning on their part often remains the same. The conditions in, and the culture of, the school are however increasingly supportive of their developmental efforts. As teachers experience a more supportive environment within the school, so they are more able to endure the threat of new learning. As they adapt the teaching and learning practices in their classrooms, they begin to see that the learning of their pupils is enhanced and this evidence gives them confidence in the change and increases their commitment to the new approach.

Similarly students will experience dissonance as a teacher provides different classroom experiences. As a result students too will have to make an adjustment to their conditions of learning before there is a payoff in 'outcomes'. This emphasises the point that in order to reduce the internal turbulence for pupils they should become equal partners in development.

It is possible, at least theoretically, to see this process operating at the three levels of school, teacher and student, with each phase complementing and supporting the other. If the de-stabilisation is to be coped with then alterations to the conditions have to occur at the organisational, teaching and learning levels. Ideally, this will result in modifications to the culture of the school, the quality of the teaching process on the part of teachers, and to the learning outcomes of students. It is in this way that the process of cultural change supports the learning of students.
Mapping the Process of Change

Important questions, however, remain unanswered. Although everybody talks about the importance of school culture in sustaining innovation and change, there are real difficulties in defining school culture and even more in knowing how to change it. Certainly culture is not changed simply by talking about it: some action is needed. As already indicated, we suspect that it is changes in certain underlying structures (or conditions) that produce the necessary cultural change: indeed, the cultural change may be an index of the more subtle structural modifications that are causally significant. We doubt whether there is one ideal set of conditions that could or should be adopted by all schools. It is for this reason we believe caution needs to be exercised in talking about the culture of the school and its importance. The concept is convenient, but when used in a simplistic way it may hide more than it reveals. In order to give our school improvement work more power, we need to disentangle the dynamics involved.

Most of the school effectiveness literature reports research in the form of correlations between process data (what happens in schools and classrooms, the attitudes and practices of teachers and students) and outcome data (students' achievements, attendance etc.). For many heads and teachers these are technically difficult to read and only by distortion and inference are they turned into accounts of what causes lead to what effects - though eager policy makers and practitioners are desperate for such. Current wisdom does indeed focus on culture - now a rather more fashionable concept than ethos - and especially on the power of collaborative cultures. But this is, in our view, to focus unduly on one element of our scheme, working together, at the expense of the other two and to privilege culture over structure.

Researchers and practitioners alike are still substantially ignorant of how structures generate or influence cultures and cultures generate or influence structures. How do leaders create certain forms of social organisation that generate and sustain certain values and belief systems (from structure to culture) and vice-versa (from culture into structure)? Do successful leaders begin by asking what cultural changes will generate the new structures that are needed to make the school more effective or do they ask what structural changes will stimulate new cultures? If they do both, under what circumstances and in relation to what issues do they adopt the one tactic rather than the other? Unless we rescue the notion of school culture from having to do too much work at the analytical level, questions such as these will go unanswered, and possibly unasked as well.
This line of enquiry has led us to a focus on the culture of the school and to a concern with finding techniques that will provide the richer data on which the necessary theoretical advances in the field should rest. By mapping the process of change in IQEA schools, we are beginning to shed some light on the issue of how to go about change, and on the social complexity of the change process. The mapping approach is a way of developing research techniques which capture the perspectives of those involved in the change process in schools, but do so in a way that is more efficient for the researcher, more interesting for the subject and more penetrating in terms of the quality of data than has been possible in the most commonly used techniques in this field - the interview and the questionnaire.

We are not attempting to devise a methodology which will separately measure some of the key concepts in the area of organisational change, such as structure, cultures, strategy or change capacity. Instead we are working on an approach that seeks to capture high quality data that span such concepts. We need richer data that will permit the provision of better answers, at both theoretical and empirical levels, to such fundamental questions as:

- in what ways and for what reasons do members of schools (and similar organisations) experience the process of innovation and change at different times?

- how and why does the experience of change over time vary by the status and role of different members of the school?

- what strategies best facilitate policy development in schools?

- what are the social experiences that characterise the cultures of 'moving schools'?

- what is the relationship between school 'culture' and the process of innovation and change?

- what social structures underlie cultural change (and vice versa)?

- what is the impact of external intervention by some kind of external change-agent on schools and how is it to be assessed?
It is becoming clear that we need a range of new methods for measuring/assessing the complex dialectical relationship between change and the culture of the school. It appears that the existing research literature can only take us so far in providing methodological guidance. Based on our existing work and attempts to respond to these fundamental questions, we have begun to develop methods that are more time efficient and that focus more directly on our area of interest. A grant from the Economics and Social Research Council (ESRC) has enabled us to develop these techniques in a more formal way. As we have progressed with this work we have also realised that the techniques will be of potential interest not just to researchers as investigative tools, but also to practitioners for staff and school development purposes.

The six techniques we have developed cluster around two key elements in the change process:

- the culture of the school
- the role of the individual teacher.

It is now well established that school climate/ethos/culture makes an important contribution to the overall success of students. Unfortunately the concept of school culture remains notoriously vague. Much of our recent work is a search for clarity in this area, mainly through the use of the following three techniques.

**School Culture** The purpose of this technique is to engage members of staff and students, individually and in groups, in reflection and discussion on the culture of their school. The technique is based around a board game - a diamond with a description by a teacher (or student) of their school culture in each of the corners. Participants first read the descriptions and make up their own minds as to which 'culture' is closest to their school. No one description fits any one school - cultures are multidimensional, but schools are often drawn like a magnet to one or two types rather than others. The subsequent discussion when participants are encouraged to agree a common position on the board usually elicits deep insights into the particular culture of their school.

**School Dynamics** If school cultures are powerful and deep rooted, and because of that difficult to access and change, the structures a school adopts to carry forward its work are far more tangible and apparent. Two contrasting teacher descriptions are provided that characterise the five structures most commonly found in schools. The
definitions do not reflect two ends of a continuum but, true to reality, they are complex, even at times contradictory, expressions of the influence various structures have on teacher behaviour. Participants are requested to indicate how close they perceive their school is to the descriptions given, and to provide in a few words a similar description of their own school.

**School Conditions** This technique is a scale for assessing the state of a school's internal conditions and consequently its potential for managing change. Each of the items on the scale (24 in all) represent the key elements of the six conditions necessary for school improvement. The scale can be used not just as a diagnostic instrument but also as a means of measuring a school's progress over time.

Taken together these three techniques provide a comprehensive analysis of the internal features of a school that reflect its capacity to change. But this only gives one side of the picture. The second key element is the role of the individual teacher. Despite the proliferation of externally mandated changes the success of any change initiative remains an individual achievement on the part of the teacher. At a profound level, the impact of any change on student outcomes is the result of teacher behaviour in the classroom.

**Response to Change** This technique is primarily concerned with an individual teacher's response to the changes confronting them. Two sets of five quotations from teachers reflecting a range of responses are randomly presented. Participants are invited to mark the one that most closely accords with their own views. An opportunity to add a description of their own is also provided. Three versions of the technique are available: for changes that are external and mandated; changes that represent a whole school development; and changes that are specific to an individual teacher and his or her working group.

**Experience of Change** This technique is designed to tap the feelings that a teacher has about changes they have previously experienced. Having identified a change or change event to focus on, the teacher is invited to review a series of 20 cards containing a range of feelings. They select those that best reflect his or her feelings about the change. This analysis can then provide the basis for an interview or discussion.

**Time Line** The purpose of this technique is to map a change over time and across the culture of a school. It tracks the relationship between the perceptions of individual staff involved in a change process and the change itself. By bringing
Figure 3 - Mapping the Process of Change

P -> S -> C_o -> C_u

Initiation of Change  Experience of Change  Conditions of School  Structures of School  Culture of School

Timeline of Change

together these differing perspectives, a composite history of the change can be established.

We are finding that when taken together these techniques build up a fairly complete map of the process of change in a school. They can either be used individually to gauge individual aspects, or in combination for a more thorough analysis. They also serve the needs of the researcher (either in or outside the school) who requires focused knowledge, or those (again within or without the school) who wish to facilitate the process of change. As is seen in Figure 3 - Mapping the Process of Change they fit well onto our exploratory map of the process of cultural change in schools. Although we are still in the middle of analysing the data from the field testing of these techniques we are excited and encouraged by the their ability to throw light on our area of interest, and by the motivation that they engender in schools. We will be reporting on the full impact of this work in the near future (Ainscow et al 1994).

Coda - The Journey of School Improvement

We have used the metaphor of a journey to describe our work in the project, and as we have journeyed we have also realised that what we are doing in the project is perhaps different to other school improvement or change oriented projects. What is distinctive about our work is that we support, intervene and research the journey of school improvement as we are doing it. The twin agenda of assisting in and, at the same time, researching the process of change creates many tensions. Nevertheless we believe that the insights gained from this involvement outweigh the difficulties and justify the effort. It is through considering how external change can be married to internal development that we have evolved our own framework for school improvement and described a set of internal school conditions that seem to increase the school's capacity to engage in development initiatives without surrendering to external pressure. Our commitment to working with rather than on schools, presents many difficulties and dilemmas. For example, it requires us to be continually juggling with the competing demands of giving support to innovation whilst, at the same time, making sense of the processes involved for research purposes. It also begs many questions about what our roles should be with respect to the process of change in each school.

In a more traditional project we might well have chosen to introduce the schools to an existing model of development based upon previous research activities. Then, having
set the initiative going, our task would have been to stand back and record the process and outcomes of the intervention. In IQEA we have deliberately chosen to adopt a very different approach, based upon an alternative perspective as to how change can be facilitated. Rather than seeking to impose externally validated models of improvement we are attempting to support schools in creating their own models. Our assumption is that such an approach, that builds upon the biographies and circumstances of particular organisations, is much more likely to bring about and help sustain significant improvements in the quality of schooling.

Finally a comment on the metaphor of the journey that we have been using when talking about the progress of development over time. It is a helpful image, implying as it does a dynamic view of development and change. But, to be literal, where does it lead? One of the problems with previous approaches to school improvement is that they have taken a short term view of change. In many cases this has meant focusing on the implementation of a single issue or a given curriculum development. We now live in a 'change-rich' environment, where multiple policy initiatives and innovation overload can easily oppress schools. In order to cope with change of this magnitude and complexity, we need to adopt a long term perspective. We need to focus on the management of change in general, on the creation of effective and flexible structures and on the empowering of individuals, rather than on the implementation of specific, but usually minor, changes. This is why we have chosen to journey with our schools rather than to search for 'quick-fix' solutions or easy understanding. It is therefore inevitable that this account of our travels with the 'moving school' is reflective and interim, because there is no clearly defined beginning or end to our work together. Simply, we journey on.
Bibliography

More detail of our approach to teacher and school development can be found in the following publications:


