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Researching education: making meanings to make better schools

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Researching Education:
Making Meanings to Make Better Schools

Professor Bernard T. Harrison
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30 July 1996
Making links through research

I feel a strong sense of privilege to have joined a talented, successful and welcoming team of colleagues here in the Faculty of Education at Edith Cowan University. In response to the generous collegial spirit that they have shown to me, I wish to find some way of speaking today on behalf of the Faculty, as well as giving a personal viewpoint. Yet, I should add, what follows is an entirely personal view, which all are welcome to challenge. This Faculty and this youthful University are already rich and strong enough to accommodate diverse, dissenting and minority views, as well as mainstream opinions. For a University should, above all, be able to show the world that no-one has an absolute right to Truth. A University which is committed to open research and open teaching looks, above all, to high quality of evidence and high quality of argument from its members - which is something that I had better remember today.

Some weeks ago, while making some early notes for this lecture, I was invited by the Western Australian Primary Principals' Association (with its appropriate and familiar acronym of WAPPA) - it was a dauntingly large conference, with some 400 delegates attending - to talk about quality issues in school leadership for the 1990s. In my opening remarks to them, I turned - perhaps unexpectedly - to the views of a poet on the art of poetry, to explain my own view of management and leadership. The 1995 Nobel Prize Winner for Literature was Seamus Heaney, with whom I used to work, in days when he was rather less famous (we now call him Famous Seamus). In an interview in the Sunday Times (Greig, 1995) Heaney made a risqué, and, it might seem, flippant comparison between his personal life and his work as a poet. With proper precaution, of course, he quoted his wife: “My wife read somewhere,” he said “that if your sex life is going well, it occupies, say 3% of your time. If it is not going well, it occupies 97% of your time”. He then made a serious analogy with his work as a poet. For the WAPPA Conference I substituted the word “management” for “poetry”. For today, however, I insert the word “research”:

If you have the sense of access and confidence, then you can do a thousand things, as well as research. There is nobody happier, nobody more efficient, sure of their way in the world than a researcher who is on a streak.

The important point here, I think, is that although research is a serious business - and educational research, most particularly, can influence the next human generation for better or for worse - it is also worth remembering that research is best performed, shall we say, with a light and nimble touch. When things are going well in research, we do not need to worry too much about what could be going wrong. Yet we need to be aware, alert, thinking ahead, in order to guide our enquiries on secure and useful lines. And when things do go wrong, then we had better be ready to give our research project at least 97% - or even more, of our time in order to get it right again.

Research into Education aims to make useful contributions to Education, as both a service and as a discipline. I wish to look at some kinds of evidence, and kinds of research that are most useful to schools, and to commend locally-based school conducted research, wherever possible, as the best way for the profession to understand performance, and to improve the performance of a particular school - or, as Carol Taylor Fitz-Gibbon (1996) has called it, the particular “unit of responsibility” in which each teacher works. Fitz-Gibbon's book, to which I shall refer later in my talk, reveals a magnificent obsession with high quality education and with high quality research in education. In her opening pages, Fitz-Gibbon nails her thesis to the tree: education is universal, and compulsory, it is “the social science with clout: the non voluntary intervention”. Educators have “more opportunities than other professionals to have enormous influence on the next generation” (p.3). Therefore, she argues, we must get it right, and we must develop the techniques to get it right. We must feed back useful measurement to the schools, those units of responsibility where learners actually learn and teachers actually teach, in order to meet the dictum of Norbert Wiener, originator of Cybernetic theory, that “to live effectively is to live with adequate information”. Fitz-Gibbon then adjusts this dictum to read: “to
live humanely is to live with adequate information" (p.10). We should certainly expect all members of the unit of educational responsibility, that we call a university, should be willing to endorse this dictum.

As for a University Education Faculty, this must serve education both as a discipline and as a profession. A good Faculty of Education should provide an ideal point of meeting, between high quality research and high quality teaching. Through research, the Faculty makes its distinctive contribution to the discipline of education; through teaching, and the continuous development of educators it makes its distinctive contribution to the profession. A good University Education Faculty is, therefore, an important institution.

Yet there is also a sense in which all professions should be dedicated to making themselves unneeded. Medicine strives, ideally to prevent, not merely cure illness, so that 'patients' may be transformed into healthy independence. The legal profession should seek, ideally, to provide just and transparent legal systems which communities can understand and operate independently. A good Business School will, in the same way, aim to put itself out of business. In turn, educational studies should be demystified, in order to encourage teachers, learners and communities to engage in their own educational research, in their own particular, sometimes unique contexts. Certainly it is in the interests of everyone, that levels of public information and of discussion about education should be as high as possible. And that depends, as Alan Smithers has declared (1995), on forms of educational research that have usefulness as their yardstick.

Confidence in undertaking research can grow when we understand that research is a natural, inevitable activity. Curiosity about a strange world leads to interrogation - from the young child's discomforting question, "Why has that man got a red nose?", to the bush-dweller's 'reading' of a landscape, or the navigator's reading of sea and sky; and to the teacher wondering why one group of children makes progress through her teaching, while another group seems to get no benefit from it.

The teacher who is willing to wonder, or reflect, is a truly valuably professional. It was through an instinct for research, for example, that a professional friend of mine, who is a redoubtable and highly successful infants' school teacher in one of the poorest parts of one of the poorest cities in the UK - Rotherham in South Yorkshire - found a solution to an urgent problem (see Dobell, in Bell and Harrison, 1995). When Betty Eddleston first took up her headship she became understandably fed up, when she found that the only reason why parents called on the school, was to attack her, verbally or otherwise. Because it was the only symbol of authority in a grossly deprived area, her school was vandalised, and her teachers were abused. Then, after observing some mothers waiting for their children at the school-gate, she arranged for individual colour photographs to be taken of every child in the school. After that, whenever an irate parent marched into her room, Betty would simply take out the appropriate child's photograph and say, "Have you seen this lovely picture of ....?". She had noticed how the mums at the school-gate became immediately friendly and admiring when they exchanged snapshots, instead of quarrelling about whose son bashed whom first. Following some alert observation, Betty had interpreted her data well, formed a plan, and brought about a swift improvement in the essential area of school-parent relations. Later she showed, in her handling of many more complex tasks, a thorough understanding of stages in educational research-and-planning, such as those defined by Tewel (1995: 128-130) and others, from forming a team, through identifying issues, collating data, assessing and interpreting evidence, drawing clear conclusions, forming action plans, then evaluating and reporting.

As a further initially modest example of research flair shown by an alert teacher, I recall (in Harrison, 1995: 370) an account by the children’s writer Philippa Pearce of being "played-up" by a naughty class of children when she was a teacher. She tells how she derived the title story of her collection of short stories called The Shadow Cage (1977) from this:

The story grew as a strategy to quell some phantom whistlers at the back of the room who could be heard when she, as a supply teacher, read a story to the class. Through wittily enlisting her audience to help her find an answer to the unanswerable question, 'Who are the whistlers?' she invited them to share her teacher's discomfort, even fear, when meeting something unidentified and hostile. Thus the familiar school background becomes menacing at nightfall for young Kevin, when 'He saw the bars of the shadow as he approached; he actually hesitated; and then, like a fool, he stepped inside the cage of shadows ....'
Again, a teacher shows her acuity in studying a particular problem, analysing data, and ingeniously carrying through a successful plan without, on this occasion, needing recourse to punishment. It is an elaborate solution, not as easy to follow as Betty’s plan with the photographs - but it worked for her.

These are certainly modest examples of the research process yielding dividends, though I hope you will agree that they are not trivial. Arguably, the professional well-being, if not survival, of the individual teacher concerned, depended on a successful outcome to the problem that she faced. Of course, research questions can be much larger, and have a wide and general impact and, inevitably, the truly inquisitive researcher will soon confront complexities through systematic questioning. The many factors that cause a man’s nose to be red; that influence a particular land, sea and skyscape; and that help or hinder a learner’s progress, may dismay the would-be researcher who has no resources or training, or support, for systematic enquiry.

Where research in Education is concerned, a Faculty of Education can be most effective when it is enabling research to be undertaken at the point where it is particularly needed, and by those who have the greatest interest in research/education outcomes - that is, professional teachers and leaders. Such studies may require particular instruments for highly localised conditions, and their findings are likely to provide essential evidence that may, for example, help to modify the more generalised, abstract findings of large-scale research projects. Research, evaluation, development - call it what you will - benefits from a partnership between academic and professional players. Through good questions that lead to good research, schools are improved, and so too are the profession and the discipline of education. It is through seeking to make itself unneeded, then, that a Faculty of Education may serve and succeed best and, paradoxically, become most valued. Just as it is claimed that business should make a profit in order to stay in business, and not vice-versa (Carnegie, 1996), so an Education Faculty can ensure its future through being profitable to the profession.

In the same way it follows that, just as the academic-professional partnership is vital, so is the professional-to-community relationship. As Hugh Busher and Rene Saran have pointed out (1995: 202) where schools really share their information with the community, then “teachers are once again trusted professionals who are believed by the community to know how to construct a high-quality experience with and for students”. It is “honest and open dialogue”, not “mysterious expertise”, that secures good partnerships. A significant and most welcome initiative in this field has been promoted through the National Teaching and Learning Consortium of fourteen Australian Universities, to which our Faculty has contributed. This consortium has developed innovative links between schools and universities, for teacher professional development, and is co-ordinating numerous valuable school-based projects (see Hayward, ed, The Big Link, 1996).

**Incremental change and drift**

However, before my colleagues begin to wonder whether I am plotting the early closure of the Faculty, I ask them to share my confidence that there will always be more than enough good work for us to do in Education. On a recent trip to the Pilbara, I heard the Environmental Officer of one of the largest iron ore mining companies in the world declare that, although the questions he faced remained more or less the same, the answers kept changing. As an environmental specialist, he was acutely aware that his own object of study, the environment, was continuously shifting - not least, in his case, through the gross shifting of enormous loads of ore to the coast, as well as shifts of weather, of populations, and many other less obviously visible, yet vital factors.

As with the landscape environment, so also with the environment of an organisation, such as a school or college: the same questions tend to be asked year after year, decade after decade, although the environment continuously changes. A useful paper by Gerry Johnson (1992) sought to explain how dangerous gaps can develop between the culture of an organisation and the environment changes around it, which the organisation may or may not be noting. Johnson provides this diagram of patterns of strategic development, which he sees in three modes of ‘drift’, ‘flux’ and ‘radical change’:
In Mode 1, the environment is changing swiftly, but the organisation is in a state of drift, or what Johnson terms "incremental change". In Mode 2, the organisation has become aware of the gap that is widening between its own cultural position and actual environmental changes. Understandably, this may cause confusion and loss of direction, or "flux", as Johnson terms it. In Mode 3, the organisation has to make rapid, causing possibly painful adjustments in order to close the gap between culture and reality.

Johnson identifies six factors that make up the cultural web, or paradigm of an organisation:
Let me give an example, from Bell and Harrison (1995), of how this theoretical view proved to be useful to a college which was experiencing problems with its Adult Education Department. It was a familiar old story, where the key players included a Head of Department who had been in post for a number of years; a well established older group of staff who were well used to the ways of the Head of Department; an increasingly critical body of newer, part-time staff; and a student population which was declining at a worryingly fast rate. In short, the Head of Department had become an unconscious example of James Russell Lowell's precept, that the leader who is "firmly seated in authority soon learns to think security, and not progress, the highest lesson of statecraft". The principal of the college was sufficiently concerned about the state of drift in this department to bring it to the attention of the governing body of the college.

Following advice from one of the governors, the governing body undertook to carry out their own audit, using headings similar to those proposed by Johnson, in order to report their findings to the staff of the department. Under these headings, they identified:
Power
- Located exclusively with the Head of Department and older established staff, but exercised as an inert force, not proactively.

Organisation
- Little formal organisation.
- Head of Department seen by some tutors as being autocratic.
- Decision-making stated as being through the Student Council, but the Student Council had not met for the last two years.

Control Systems
- None in place.
- No quality assurance system, no budgeting, no mission or development plans. None had ever been asked for.

Stories and Myths
- Satisfaction of students.
- How things were in the old days, when there was no hassle about money.
- Enemies in the college, who don't know anything about educating adults.
- Loyalty of students who return year after year.

Rituals and Routines
- All staff work long hours.
- Some tutors want to introduce new ideas, but they quickly 'learn how we do things around here'.
- Classes are held from 2-4pm and 7-9pm. Students 'do not want classes in the mornings'.
- Enrolment is always on one day and one evening in September, the week before courses start.
- Classes are organised on the basis of what 'went' last year.

Symbols
- Named parking space for Head of Department.
- Office with her name and qualifications on the door. No doubt who is the boss.
- Coffee brought to her every morning by the cleaner. 'Real' coffee served in nice china. Cleaner washes the china.
- Staff toilets marked 'Private. No access for students'.

The Head of Department contested many of the statements. She said it was insulting to suggest that there was little formal organisation, and she was most certainly not autocratic. She firmly believed in democratic management. It was not her fault that the Student Council had not met for two years. If students did not want to attend, that was their right. She did not believe 'control' had any place in adult education, and the quality assurance system being introduced in the college was not suitable for their work. Standards were not good in some other departments in the college, yet people were willing to criticise adult education because they did not make money. She asked, 'are we going to have to produce balance sheets to demonstrate we are doing a good job?'.

She felt governors were criticising the work they did, but understood nothing of the values of adult education. Crisis time had arrived. One of the governors said a decision had to be made. They had all given up two Saturdays and had got nowhere with the Head of Department or staff. He suggested they went away for an hour to reconsider their approach. Anyone willing to start discussions again would reconvene, but only if they were prepared to come with an open mind and prepared to question values, beliefs and assumptions, to explain the meaning of some of the terms used, to consider the implications of some of the stories, rituals and routines and symbols, and to see if there were any ways in which a paradigm shift could be achieved without destroying the best of what had been achieved in the past.
An hour later, the group did reconvene, but without the Head of Department and one governor. Then work began in earnest.

It would be foolish to suggest that carrying out a cultural audit is a simple process. The adult educators and, in particular, the Head of Department found it painful. All their values were being challenged, and this can be wounding. Happy outcomes for the department were not immediate; yet, within a year, the department had taken new directions without wholesale changes of staff, and student recruitment was on the increase, after several years of decline.

The issues, or questions, that arise from this case, face all who are concerned with improving schools and colleges. They are familiar enough and the answers need to be continuously redefined. Any school or college which wishes to change along with the environment, will need a clear vision of the forces that drive educational change, and will also need to be just as aware of forces that can block change. Some of the main forces may be summarised as follows:

<table>
<thead>
<tr>
<th>TEN FORCES DRIVING EDUCATIONAL CHANGE</th>
<th>TEN FORCES BLOCKING EDUCATIONAL CHANGE</th>
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</thead>
<tbody>
<tr>
<td><strong>A VISION OF:</strong></td>
<td><strong>A FOCUS BLURRED BY:</strong></td>
</tr>
<tr>
<td>environmental changes ⇒</td>
<td>⇐ organisational resistance</td>
</tr>
<tr>
<td>higher knowledge/skills requirements ⇒</td>
<td>⇐ traditional curriculum</td>
</tr>
<tr>
<td>emphasis on interdependence ⇒</td>
<td>⇐ emphasis on individual success/failure</td>
</tr>
<tr>
<td>technological developments ⇒</td>
<td>⇐ defence of existing comfort levels</td>
</tr>
<tr>
<td>fair opportunities/equal rights ⇒</td>
<td>⇐ defence of privileges</td>
</tr>
<tr>
<td>performance management (with evidence of evaluation) ⇒</td>
<td>⇐ defence status (with evidence suppressed by rhetoric)</td>
</tr>
<tr>
<td>openness to student/community/employer experience ⇒</td>
<td>⇐ professional protectionism</td>
</tr>
<tr>
<td>willingness to plan, act and monitor ⇒</td>
<td>⇐ hope that the next crisis will not happen</td>
</tr>
<tr>
<td>appetite for criticism ⇒</td>
<td>⇐ fear of criticism</td>
</tr>
<tr>
<td>a 'cultural way' that supports improvement ⇒</td>
<td>⇐ this is the way we have always done it.</td>
</tr>
</tbody>
</table>
Inevitably, all change in schools must aim genuinely to improve provision for learning. Graham Dellar (1995) has looked critically at the impact of school-based management on classroom practice at the secondary level. He cites Fullan and Miles (1991), who argued that school improvement initiatives, which focus on structural and organisational changes alone, offer a too limited strategy for successful change. Rather, it is individuals and groups of individuals who need to alter their professional practices, their culture:

In short, the focus of school improvement efforts should be on facilitating change to teachers' perceptions, beliefs and practices concerning teaching and learning.

(Dellar, p.233, my italics)

In short, we need cultural change. As schools throughout Australia prepare for the important changes that were outlined in such path-finding documents as the National Industry Education Forum's Australian Schooling: Two Futures (Ashenden, 1994), or Decentralising the Management of Australian Schools (Caldwell, 1993), they will crucially need a vision for change, a resolve for action, and a programme for continuous review of change; and all this must be achieved through teachers, not by mere imposition on them. The new challenges, of course, will affect primary education just as deeply as secondary education; and, as studies such as The London Institute team's Planning Matters (MacGilchrist et al, 1995) reveal, school-based research and strategic planning need to be essential partners in shaping new directions. This study of the impact of development planning in UK primary schools, which was enriched by input from research in Denmark and Australia, is recommended reading for planner-researchers in this field.

Charting change in Education

The account above of how a governing body applied Johnson's theory of organisational culture and incremental drift to the particular problems of an academic department, provides, I think, a good example of a school or college taking responsibility for its own research needs. In my introductory comments I mentioned Carol Taylor Fitz-Gibbon's Monitoring Education (1996). In this book Fitz-Gibbon makes clear her urgent wish that the politics of education will improve on its own often dismal levels of argument and performance. Through her commitment to Popper's view, that by "piecemeal social engineering" we can "minimise avoidable suffering", she argues that the complex system of a major public service, such as education, require adequate resources for continuous evaluation: "cheap systems which do not deliver are not efficient" (p.212). As a significant example of a would-be-cost-cutting yet ineffective system, Fitz-Gibbon cites the British Office for Standards in Education (OFSTED). She shows, in a chapter called "Inspection: The Accounts are Overdue", how necessarily complex patterns of evaluation are short-circuited when measurements are inappropriate or not independent; and when inspection reports fail to be "relevant, informative, acceptable, beneficial and cost effective" (p.206). Her views on OFSTED inspection concur with those of Harold Silver (1994) and findings by Gray & Wilcox, in their assessment of inspections called "Good School, Bad School" (1996), and with those of numerous other researchers. A recent report by Kathryn Stearns (1995), for the American Carnegie Foundation for the Advancement of Teaching, for example, warned that "politically motivated" innovations, such as the new OFSTED Inspection system, have caused frustration and a loss of democratic accountability. These independent research teams have challenged facile modes of external evaluation which fail to provide often necessarily complex forms of consultation, that might lead a school or college into clearer critical understanding, as a crucial pathway to better practice and improvement in specified areas. Monitoring any area of a school's activity involves, of course, seeking evidence, and there are good and bad ways of collecting data. The criteria for good data collection must include cost, reliability, validity and appropriate size of samples. Hard pressed principals and section managers in educational organisations need workable and cost effective instruments.

Take, for example, an exercise in measuring student experience of the curriculum. Fitz-Gibbon recommends an approach that might seem too cut-and-dried to other researchers: "classroom processes can be economically monitored by questionnaires to students" (p.111). Although such questionnaires may well produce some useful kinds of data, it is clear that such an instrument is unsuitable to the point of being facile, where an investigation is needed into the finer processes of teaching-learning relations. Consider, for example, the careful consultative patterns for classroom observation that are detailed by Jon Nixon and his team in Encouraging Learning (1996); or the rich, vivid accounts by children of their classroom experience, that are provided by Maggie Moore and Barrie Wade in Supporting Readers. School and Classroom Strategies (1995).
Such comparisons force questions about "evaluation" to confront questions about "research", although Fitz-Gibbon shows some understandable impatience with the implied dichotomy here:

'Is the development of performance indicators "research"?'
This question was put to a colleague at a job interview. He indicated that he did not care whether or not it was called "research" - but it was very useful.

(p.213)

There is little point, Fitz-Gibbon declares, in debating differences between "basic" and "applied" knowledge, or in deciding whether educationists are "real" sociologists or "real" psychologists. Following H A Simon, she holds that "education, like engineering, medicine or law, is a 'design discipline'" (p.213), which is centrally concerned with the design of complex systems. On Fitz-Gibbon's own thesis, therefore, there is arguably a more important justification than she sometimes admits, for the complex, subtle indicators of school effectiveness which characterise patient, thorough qualitative investigations (say) of school classrooms. Even though such investigations may not be practicable to use as an everyday means of monitoring performance in a busy school or college, they can be of great value in contexts of continuous professional development where, for example, two teachers have agreed to provide continuous critical support to each other, in improving their classroom practice.

On the other hand, Fitz-Gibbon is persuasive in expressing her reservations about "nomothetic" research findings, which claim to provide general rules to be applied to all schools or colleges in all contexts, and which are "based on simple correlations which grab people's attention, instead of setting up monitoring systems which measure the more difficult to measure but more relevant indicators" (p.214). She warns, rightly, against research processes and findings that lead to stereotyping (which is "an over-generalisation, the application of a general trend to a particular individual") (p.215). The overall impact of every management decision must be considered in "terms of the costs and benefits for that particular system" (p.215). This critique of the over-generalising "research has shown" mentality is, I think, important. It should be understood by all educational decision-makers and politicians to alert them against the dangers of stereotyping by statistics. Particular local contexts produce "live-data" in contrast to the "dead-data" of anonymous research findings:

With an indicator system in place, head teachers will be able to monitor the effectiveness of actual departments and resist the tendency to believe rumours, even when the rumours arise from the research literature.

(p.215)

The difference between "nomothetic" research findings and local school-based evaluation may be summarised thus:

<table>
<thead>
<tr>
<th>'NOMOTHETIC' research findings</th>
<th>'NOMOTHETIC' research findings</th>
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<tbody>
<tr>
<td>★ 'research has shown .....'</td>
<td>★ 'our own data reveal that .....'</td>
</tr>
<tr>
<td>★ anonymous data</td>
<td>★ contextualised, particular data</td>
</tr>
<tr>
<td>★ dead data</td>
<td>★ live data</td>
</tr>
<tr>
<td>★ inflexible, unadjustable</td>
<td>★ can be 'value-added'</td>
</tr>
<tr>
<td>★ can only achieve 'scatter' effect</td>
<td>★ on target-feeds back effectual information to 'units of responsibility'</td>
</tr>
</tbody>
</table>
As an example of this, we might take an example of "research has shown ...." which appeared as a recent news item in The Australian (Denton, 1996). This particular study targeted property companies first, then all industries. The findings are not especially sensational, although they indicate that Australian Industry as a whole is less than delighted with the educational system:

![Table]

<table>
<thead>
<tr>
<th></th>
<th>Excellent and Relevant</th>
<th>Adequate but not commercially relevant</th>
<th>Basic Only</th>
<th>Irrelevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Australia</td>
<td>0.0%</td>
<td>76.9%</td>
<td>15.4%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total - All States</td>
<td>9.8%</td>
<td>55.2%</td>
<td>15.3%</td>
<td>16.4%</td>
</tr>
<tr>
<td>Total - All Industries</td>
<td>11.0%</td>
<td>60.2%</td>
<td>17.6%</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

Source: Australian, 16/6/96 and Morgan & Banks

Rather than simply accept this, however, I think that school/college principals need to make their own vigorous local enquiries, and ensure that they build appropriate policies on local findings, not on these highly generalised State and National figures. If the figures stimulate local studies, however, then they may serve a good purpose, by illuminating issues raised, for example, in Lifelong Learning (NBEET, 1996).

A different kind of learning example comes from recent debates on the importance of citizenship education. Reacting against what she views as over-generalised and cerebral versions of 'civics' in the curriculum, Suzanne Mellor has argued (1996: 74-75) that, in order to be meaningful, citizenship education should be interactive, locally practicable and debated. The citizenship curriculum depends, then, on creating enquiring mindedness amongst students, not just providing them with facts about national/international governance.

To sum up so far: educational leaders who wish to see their schools and colleges improve, need to include on-site research and monitoring, as an essential component of their drive for improvement.

When this is happening, it will pervade the whole discourse of management, as is revealed in a recent account of a senior secondary school management team in action, in Harrison and Knutton (1993), or to take a notable local example - in the School Development Plan of Belmont Senior High School, 1996-7. The more effective the leadership, the less need there is for outside intervention, although good school leaders will also know that the skilled observation of an outside consultant or researcher can often raise vital issues and questions which might otherwise be missed. Moreover, where there has been a failure of leadership at the top, some outside intervention is usually inevitable. In brief illustration of this, the UK Inspectorate Reports of the Further Education Funding Council (FEFC) are published and available as a public document, which may be duplicated. An examination of these reports over recent years reveals that where governments and management are rated highly, then a similar rating usually follows for all other areas including curriculum, student support, quality assurance and resources. Once good management practice has been identified, an external report is
hardly necessary in these cases. Conversely, where governance and management were found to be weak, then problems multiplied throughout the system. For example:

There are major weaknesses in the governance and the management of the college. Work has just begun to address some of these weaknesses. Insufficient information and guidance is given to students to enable them to make informed decisions about the programmes they wish to study. A particular weakness is the lack of an extended curriculum which ensures that the personal and social education, life skills and personal care are integral elements of students' programmes of study. There are inconsistencies in the quality of the care support provided for students. Some teaching staff do not fully understand the complex learning difficulties of some of the students, and as a consequence, they use inappropriate teaching strategies. .... The scope of the college's quality assurance system is limited and the procedures within it are not always followed.

(FEFC Inspection Report 128/95: Hereward College of Further Education, Summary Page)

And so on. The only area which was perceived to have "many strengths and very few weaknesses" was in equipment and learning resources. Some individual teachers and teams were also found to be making the best of difficult conditions, though without support from the leadership. Clearly, the only way out of such a condemnatory report as this, is for the management team to put right the many weaknesses with which it has been confronted, and then learn to monitor its own performance so thoroughly that further outside intervention may not be needed.

Researching classrooms: learning through talking

For the rest of this talk, I wish to move away from the study of whole school topics, and turn to actual issues of classroom learning - to return, then, to the roots of my own career as a classroom teacher. Active learning, or collaborative learning, or team learning has become highly fashionable in the recent literature on organisations and their development through team work (see, for example, Fawcett Hill, 1994; also, the SMART Project in this University, 1996). All educationists will know that these ideas have had at least sporadic support from the time of Socrates onwards, and a particularly inspirational influence on my own early teaching came from someone whom I first met as a classroom teacher, and later knew as an educational researcher of international eminence. This was Douglas Barnes, whose work on the importance of exploratory classroom talk was highly influential throughout the 1970s and 1980s (see Barnes, 1972; Barnes and Todd, 1977). The research question which absorbed him during the 1970s was to ascertain whether it can be shown that children actually progress in their thinking through exploratory group talk. If you have not come across this particular example from his work before, I hope you will enjoy its point. Working with a group of Year 8 students, their teacher provided them with the following passage, in which Dr William Budd of Bristol wrote about the spread of typhoid in polluted drinking water:

On October 24th, 1866, my friend Dr Grace told me that if I had half an hour to spare he would show me a striking illustration of my views on the spread of typhoid fever. The temptation was too great to be resisted; so, jumping into his dogcart, we presently pulled up in front of two labourers' cottages built in a single block by the roadside. These cottages may be called, for convenience sake, Nos. 1 and 2. In the form of a lean-to against the gable end of No.2 was a privy, which served the inmates of both dwellings. Through this privy there flowed a small stream, named the Wayne brook, which formed a natural drain for it. Having already performed the same office for some twenty or thirty other houses, higher up its course, this stream had acquired all the characteristics of a common sewer, before reaching the cottages in question.

From this point it passed into a field, and crossing, now as an uncovered drain, some three or four meadows, the stream came into the open again in a large court occupied by two other labourers' cottages and some farm buildings. These cottages, which may be conveniently called Nos. 3 and 4, had the same sanitary arrangements as the two other cottages. The outbreak began in the person of the father of the family living in No.1. Having a horse and cart, he plied a small trade in Bristol, partly as a hawker and partly as a huckster. His chief business in the city lay in the filthy back slums of St. Philip's, where, for some time immediately before his illness, typhoid fever was epidemic. That his disease was contracted there was indicated by the fact that when he was stricken all the other inmates of the two cottages were, and indeed, continued for some time after, to be in their usual health.
His attack proved to be severe and protracted, and for a considerable time was attended by profuse diarrhoea. As a matter of course, all the discharges were thrown into the common privy. In this way, the stream was fed for more than a fortnight with the excreta of the diseased patient. Four weeks later, several persons were simultaneously attacked with the same fever in all of the four cottages. Within a space of a few days, Dr Grace was attending quite a cluster of cases in each of the four and before long the majority of the persons living in them were in bed with the fever. One more fact must be recorded to render the history complete. From first to last, the outbreak was confined to these four cottages, and there was no other case of typhoid fever at the time in that neighbourhood.

These facts speak for themselves. The little stream laden with the poison fever cast off by the intestinal disease of the man who had been stricken with the same fever some weeks before, was the only bond between them.


The teacher had read the passage with the class and suggested some lines of action which could have been taken to stop the spread of infection, and then had left the group to consider this from the point of view of the people involved. “What would be their reaction?”, he asked. The following transcript was recorded from the conversation amongst the three students involved:

Anne Well, first of all, we’d have to have the streams drained out and cleaned ... and um ... we’d have to have better toilets than what there were already.

Beverley While the drainage were going on I think ... they er, they should ... make ... new drainlines so they should go ... so the sewage should go to the places instead of back in the steam and then they would ... and if it went back into the steam again with it being ... drained out, I think they ... they’d get typhoid again wouldn’t they? So ... they’d have to make a new drainage.

Carol I think they should’ve made little wooden bins to clip on the end of the ... wood and then ... everyday they should take it out and empty it somewhere convenient and if it would they could burn it.

Beverley Er, I think that’s a good idea and ... em, they’d have to tell the people first ... about how they’re catching this disease ... and, em ...

Carol But would the people understand because they’re only common people and not educational jobs or anything.

The transcript does not mention the long pause that took place on the tape, before discussion began. Anne’s practical mind is in evidence from the start - if it’s dirty, clean it; Beverley shows a more speculative response, when she notes essential drainage problems; while Carol’s approach to plumbing looks a good deal more basic. Beverley is politely supportive of her, even though her higher level of thinking has been interrupted. They continue:

Anne I know, but they could explain it in a ... in a simplified, yeah, a simplified manner.

Carol I don’t think they’d listen to you.

Beverley Ah, but would ... would em, would they believe you when they said they were contact ... contract ... contracting it from the steam?

Anne Well, they’d probably would believe you, after, after they’d being seen all these people with the disease. They’d have to they’d have to be aware of getting this disease so they must listen.

Carol How would the ... drain ... the stream.

Beverley I think if they dug a channel into ground but ... the sewage would probably soak into the ground wouldn’t it really, and then if they started ... then later in the later years if they started ploughing an that ... grou’ ... well, they’d em, they’d probably contract the typhoid again.

While Anne and Carol debate the shortcomings of rural education, Beverley sees that local unawareness of dangers could indeed be a problem. She intervenes, to rescue the discussion from impasse by reinventing the septic tank principle - though she identifies important problems here, too. Anne then responds:

Anne Well, they could probably drain all the water out. They could probably drain all the water out the stream and then clean it thoroughly all inside and they could have ... and then the water will be filled up again.
Carol  How could they get rid of the em, ... sewage ... you know, could they burn it?  Or ...?
Beverley  Oh, I doubt if they could burn sewage.
Carol  Could they dig it under ground, you know dig a right big ditch and pre ... in this right big
ditch and then dig it all over, you know, cover over ... dirt all over it.
Anne  Oh, I don't know because the disease could prob ... may be it would spread again ...
underground.
Beverley  Well, what can you do to prevent it.  Is there any way how we can prevent it or just
prevent it stopping.  It would be better than letting it spread.
(Douglas Barnes, 1972)
While Anne is still preoccupied by giving the stream a good cleaning, Carol builds on Beverley's notion
of the septic tank.  By this stage, they are clear that the sewage must be isolated from the stream, and
they have classified the problem usefully - how to isolate the sewage, then render it harmless?  Not bad
work, within a few minutes of discussion.
This is, I think, a classic demonstration from the research literature, which really does show thinking in
process in the classroom.  The tentative explorations, caution interventions, clarifications, support
processes and gentle challenges that the students provide for each other have been replicated many
times since then, in countless studies of exploratory classroom talk.  I think that Barnes's research here,
is exceptional, in not only addressing questions that are still highly topical, but also pointing to answers
that still look likely to work a quarter of a century on.  Yet the questions still need, of course, to be
posed.  For example:
• Since all teachers teach through language, should they not also see themselves as teachers of
language?
• How can teachers not only transmit knowledge, but also ensure that their students interpret
knowledge?
• How can different modes of posing questions and problems encourage or restrict pupils' response?
• In what ways should a teacher make use of a pupils' existing knowledge?
• How can a teacher provide space for these pupils' language?
• How far should a teacher experiment with different teaching styles and language strategies?
And crucially
• What evidence do you find in this transcript that student are genuinely thinking?  What else might
they be doing?
When reviewing Barnes's achievements in demonstrating the crucial role of learning through talking, I
wondered why it was that, so long after his insights were established, so few teachers were still applying
them (Harrison & Marbach, 1994).  I realise that there is little point in, say, imposing learning through
talking as yet another inert curriculum order on unwilling teachers.  What all teachers need, rather, are
the skills to examine classroom discourse, and the incessantly curious, interrogating habits of mind that
characterise the good teacher-researcher, such as was Barnes himself.  Research is a way of teaching
and of monitoring teaching, as it is a way, eventually, of reflecting on all our lived experience.

Learning through writing
'Schools can be about how to make a life' (Postman, 1995)
Just as Barnes was driven by questions of learning through talking, my own earlier research, which
began when I was still a secondary school teacher, centred on learning through writing.  Recently I
returned to this field of study, in a paper entitled "Using Personal Diaries and Working Journals in
Reflective Learning" (Harrison, 1996).  A great deal of work has been done since my earlier publications
in this field some fifteen years ago; yet, once again, familiar questions emerge, many answers to which
need to be framed in different ways.
Barnes's work on learning through talking was an important pathfinder to my earlier work on Learning
through Writing (1983), and on my long-standing research interests in language and Education
One particular aspect of learning through writing, which has attracted much attention in Australia and elsewhere, is the use of reflective writing journals in professional training and development. Wilson and his team (1995), writing in the *South Pacific Journal for Teacher Education*, have shown that use of the term "reflective" in thinking and professional action can be traced back at least as far as John Dewey (1933). Wilson's team argues that, although reflective journals are "labour intensive", they can be of great value in encouraging students who are engaged on teacher training to "develop links between theory and practice" (p.174). Of course, such claims need to be tested and retested, in various contexts, and indeed one of the Education Faculty's PhD students is at present studying the effectiveness of teaching portfolios in the field of higher education (Kulski, 1996).

The jury is still out, then, on this issue, following several decades of claims and, qualifications, and counterclaims. My own most recent contribution to this debate (Harrison, 1996), dwelled on the importance of reflective journal writing, in developing imaginative processes in learning. As Beavis and Ross-Thomas declare (1996:93): "the images and analogies that language can conjure in the imagination determine content and stimulate insight and motivate creative action". Those imaginative processes can be nurtured through the development of self-awareness (or metacognition), and through encouraging a sense of personal ownership of knowledge. This is not simply a matter of refining "sub-personal" cogitative skills. It depends, rather, on the development of the learner as a whole person, in the course of encountering the world. Reflective writing can be an especially valuable means of exploring, examining and developing a learner's experience in the world. I commend the use of reflective journals, in developing research-mindedness among student teachers. Reassuringly, many student teachers recognise for themselves the danger, of an exclusively technical and predetermined approach to professional development. They do not wish to see their career in terms of a conformist progress along the lines that are never to be questioned. They know they still have much to learn, both professionally and personally; an induction into teaching that took no account of the actively inquiring person, as well as the learning professional, would be poor indeed.

Given the opportunity to look critically, through self-directed writing, at their own education, student-teachers can reveal fine professional judgement. For example, following a substantial and detailed analysis of experience in English lessons in secondary education, a student teacher, Christine, provided a summation on the value of her critical reflections. She dwelled on the complex processes of making sense of experience, which involve (to invoke Ptolemy's phrase which he used to explain puzzling planetary movements) "loops of retrogression" in learning. Christine recorded how she became gradually empowered through her learning:

If I were asked to present a personal linear time chart that pin-pointed my learning peaks, squeaks and troughs, I could produce one. However, when it came to the end of my time chart, the enforced linear progression would no longer be valid. My reading, my understanding of what I have learnt has changed, or rather, reverted back. The books I have read more recently have reached into me now, and reached back to me then, are reaching outwards, taking me with them.

Missing pieces have been filled in and scratched edges smoothed. Doors have opened and old baggage has been unpacked; hung up; squared up; stripped of its hold. Language has power again for me, one that I can control, see under, over and through. Language is thought and feeling; its written form is its image and beyond it is a depth of in-exhaustible possibilities.

I had realised that language could do things, that it was powerful and, most important, that because of this it might be guarded jealously (its secrets to withhold), distributed in measured dollars with a caution not to jar, break or dismember your bit; to make the best of what you are given. This language still frustrates. But now I know why, and half the battle is what you are fighting and why. And why it feels good to be fighting, not retreating anymore. I feel I have a voice now, not the one prescribed to me, not the one that dolled and tied up my tongue, but one that I am enjoying learning to use. I am sharpening my tongue.

In Harrison (1996: 82-83)

I think that this provides eloquent evidence that personal writing and journal-keeping are valuable, arguably essential activities in the development of a literate imagination. More than that, I would suggest that what Christine says about learning and about language, applies just as accurately to research processes. Research makes us unpack, re-examine, reshape. It frustrates, it makes us embattled, but, when we succeed, it gives us a voice. Through refining our research processes, and sharpening our research instruments, we can reveal much more of what it really is, to live a human life.
REFERENCES


APPENDIX

The framework below draws together some points raised in this paper, concerning renewal into collaborative management processes, and into collaborative learning processes. It provides, in summary form, an account of how authority and ownership in learning, or management, or research processes may be successfully relocated:

<table>
<thead>
<tr>
<th>A framework for GUIDED LEARNING, where</th>
<th>A framework for CONSULTATIVE MANAGEMENT, where</th>
<th>A framework for CONSULTATIVE RESEARCH, where</th>
</tr>
</thead>
<tbody>
<tr>
<td>leaders/teachers work to</td>
<td>leaders/managers work to</td>
<td>leading researchers work to</td>
</tr>
<tr>
<td>• engage learners <strong>actively</strong> in learning processes</td>
<td>• engage people <strong>actively</strong> in management processes</td>
<td>• engage professionals <strong>actively</strong> in research processes</td>
</tr>
<tr>
<td>• require them to take <strong>responsibility</strong> for learning processes and outcomes</td>
<td>• require them to take <strong>responsibility</strong> for management processes and outcomes</td>
<td>• require them to take <strong>responsibility</strong> for research processes and outcomes</td>
</tr>
<tr>
<td>• <strong>share ownership</strong> of a body of learning, its values and content</td>
<td>• <strong>share ownership</strong> of the collegial body, its values and policies</td>
<td>• <strong>share ownership</strong> of research, its values, processes and outcomes</td>
</tr>
<tr>
<td>• <strong>empower</strong> learners to collaborate in making decisions, taking directions, achieving goals</td>
<td>• <strong>empower</strong> managers to collaborate in making decisions, taking directions, achieving goals</td>
<td>• <strong>empower</strong> professionals to collaborate in making decisions, taking directions and achieving goals in research</td>
</tr>
<tr>
<td>• encourage learners to <strong>take risks</strong> in sharing the educational adventure</td>
<td>• encourage team members to <strong>take risks</strong> in leading the educational adventure</td>
<td>• encourage professionals to <strong>take risks</strong> in learning research ventures</td>
</tr>
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Frameworks for collaboration in education: a relocation, not abdication of the leader's authority.