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ABSTRACT

This paper discusses the rationale behind information-based approaches to school and systemic improvement and identifies some alternatives to the quality assurance model used in New South Wales (Australia). It outlines the structures established for identifying and reporting issues and trends on a systemic basis and discusses some of the implications for the educational system in light of an analysis conducted in the first year of the quality assurance programs. The New South Wales Quality Assurance Model unites two functions of the school system--school development and accountability. The 1993 review report, which analyzed 70 individual school reviews, obtained data from interviews with 1,870 staff, 3,531 students, 2,335 parents, 122 community members, and almost 300 classroom observations. Findings indicate that, overall, schools set high standards of care for the communities they serve. However, the review suggests a need for development in several areas: the provision of system-wide resource allocation; improvement of participative decision making; improvement of student welfare programs; and development of a statewide assessment policy. (LMI)

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OUTCOMES FROM QUALITY ASSURANCE SCHOOL REVIEWS: THEIR USE IN SYSTEM PLANNING AND DECISION-MAKING

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OUTCOMES FROM QUALITY ASSURANCE SCHOOL REVIEWS: THEIR USE IN SYSTEM PLANNING AND DECISION-MAKING

INTRODUCTION

Many of the attempts to improve the performance of schools and school systems over the past decade have been predicated on the assumption that improved planning and decision making will flow from the availability of more and better information about school processes and outcomes. This information-driven approach to performance improvement also underpins many of the current trends in business management, such as Total Quality Management.

The *Review Report 1993*, which presents a synthesis of the findings of the Quality Assurance school reviews in the New South Wales (NSW) public school system, is a further example of an attempt to drive systemic improvement in education based on the provision of high-quality and comprehensive information about the performance of schools.

This paper discusses the rationale behind information-based approaches to school and systemic improvement and identifies some alternatives to the quality assurance model that has been used elsewhere and in NSW in the past. The paper outlines the structures established for identifying and reporting issues and trends from the school reviews on a systemic basis and goes on to discuss some of the outcomes and implications for schools, regions and the system that resulted from the analysis of almost 300 reviews conducted in the first twelve months of the quality assurance program.

REPORTING AND RATIONALITY AS A BASIS FOR SYSTEMIC IMPROVEMENT

The belief that information changes things for the better underpins the work of most researchers in the social sciences. It is also a belief held dearly by many policy makers and adherents of rationalist decision-making models. They believe that information enhances the capacity to control, monitor, and evaluate, and, that as a consequence, improvements will follow from the ability to make better decisions and produce better outcomes. Information

allows the individual to act rationally — to select the behaviour or set of circumstances most relevant to (his or her) presumed wants or needs (Bennett, 1964:84).

This belief has perhaps gained greatest credence in the economic world, where it has been the driving force behind the push for availability of data on the national accounts and other economic indicators as a means of assessing current economic performance. The need for governments to have a clear understanding of the possible impact of policy initiatives in the light of changing economic and social conditions became apparent during the Great Depression of the 1930's, and has created the demand for accurate and timely data on such variables. A wide range of economic indicators are today regularly featured in news reports and the mass media, and are familiar to, if not understood by the community at large.

In school education, the demand for public access to performance information has been slower to materialise. Until recently, increasing population growth and the drive towards universal literacy has largely protected the school sectors of developed nations from the need to monitor closely the impact of their activities. As a result, there has been relatively little information about the outcomes of schools and the ways in which these outcomes have been achieved. There are a number of explanations for the lack of information on school performance. These range from arguments concerning professionalism to the apparent difficulties of quantifying the outcome of education. These arguments have been buttressed by other dominant beliefs about the nature and organisation of public school systems. In many countries, for example France, Australia, Sweden and the USA, it was assumed historically that the public schools were for all intents and purposes uniform, serving populations with similar needs and deriving the same benefits from common educational processes. These assumptions supported, and were supported by the concern to provide common inputs — best illustrated by extensive curriculum regulation, as in Sweden, monitoring of curriculum provision in Australia, the UK, France and The Netherlands, and the concern for fiscal equalisation in the USA (Ruby, 1991).

In the context of the post-war expansion of education, the main data elements demanded by policy-makers were about inputs and processes. The use of tax revenues to establish and maintain public school systems also supported the demand for data on enrolments and completion rates — to

justify the expenditure on grounds of fairness and efficiency. Policy-makers of these times had no need for quantitative information on school outcomes or processes of learning. Instead the focus was on quantifying resources, to ensure common inputs and measuring stocks and flows of students. There was no need to inform parents about the relative performance of schools or to provide for choice of schools because it was assumed they were essentially all the same.

These organisational principles produced a managerial ethos for public school systems which demanded relatively little information on performance. Nor was there any need for a lot of information about processes because these were, largely, regulated to ensure uniformity. Monitoring of processes and performance was equated to apparent conformity with regulations and was carried out by political agents or inspectorates.

These conditions persisted until the 1980's when a coalescence of forces saw a change in the dominant concerns of education policy-makers across the western world. Declining school-age populations, a general downturn in economic conditions and a shift in the prevailing ideological ethos have resulted in a greater demand for information about the outcomes of schooling — sometimes couched in the language of 'value for money' of the services provided. Demands for comparative information about national school performance to address issues of international economic competitiveness and national efficiency have also contributed to this outcomes orientation.

The changing conceptions of educational management provide a parallel explanation of the changing priority given to data collection and information in education. Levin, Windham and Bathroy (1990) argue that historically the dominant influence on educational management was "scientific management". The first principle of scientific management, as enunciated by F.W Taylor in 1911, was that decision-making should not be intuitive but scientific. It should be based on observation, analysis and inference guided by the goals of efficiency. This principle continues to underpin many of the management models prevalent today. It is interesting to contrast the emphasis on statistical control in TQM models championed by Demings for example (see for example, Paine *et al*, 1992) with that of measurement and observation in scientific management models. This is not to say that the implementation of TQM or any other information-driven model remotely resembles the oppressive and paternalistic implementation of Taylor's ideas

as described by Callaghan (1963), but recognises that there are some common underpinnings to both.

Levin *et al* argue that in the 1980s the dominant managerial model has been "applied science" where available information is used to identify and define problems and then select a course of action. This model which subsumes the "reflective practitioner" uses scientific information as well as a common sense, and practical knowledge. They believe that this model links information and the quality of education and extends the "demand for the development of more extensive and more imaginative educational information systems than planners have used in the past". (1990: p78)

A number of major reform programs that aim to provide better information about schools to improve management, accountability and parental choice have been initiated in many countries. Ruby (1991) argues that these deserve closer examination because they represent a significant and substantial break in the prevailing doctrine about the information and data in education. They also bear directly on ideas of accountability and illuminate wider policy questions, such as who controls information about the functioning of schools and where the responsibility for poor performance is located.

When we speak of information-based models of decision making, we are also speaking to a large extent about evaluation. Information is more than raw data, but is data to which a particular meaning or value is inferred. The method of reporting is only one half of the equation in this approach to systemic improvement — the means of generating the information is equally as important. Often the two go hand in hand, with the form of reporting being dictated by the kind of information generated by the evaluation methodology employed. A number of evaluative models have been used at various times and in various contexts in attempting to drive systemic improvement in education systems. These models fall into a number of categories, which include (1) accountability-based approaches; (2) self-studies; (3) the effective schools paradigm; (4) school recognition or lighthouse programs; and (5) models based on rich, contextualised descriptions of schools. These models differ in important ways and the extent to which they have proven to be of enduring value. Haertel, Katzenmeyer and Haertel (1989) in reviewing the rationale, purpose, and inspection and accreditation systems; (2) performance indicator systems; (3) strengths and weaknesses of several of these approaches argue the following as essential conditions for the

and weaknesses of several of these approaches argue the following as essential conditions for the comprehensive evaluation of schools. The same conditions hold for the evaluation of school systems.

"In order to diagnose problems in a school's functioning and at the same time suggest possible avenues and approaches for improvement, a comprehensive evaluation must examine the school's instructional processes, as well as its formal and informal administrative and decision-making processes. It must elicit the views of the school's participants concerning problems and solutions, as well as inferring problems from evidence of poor learning outcomes, negative parent or community sentiment or other sources. Above all, these different forms of information and evidence must be brought together to create a coherent picture, a sort of casual model of the school's functioning. Mere description will not suffice" (p2)

In the light of these conditions, the following section describes the NSW Quality Assurance model and provides support for this present approach to improved decision making. This process is contrasted with two other models for providing policy information — those provided by the establishment of Inspectorates and those based on performance indicators.

THE NSW QUALITY ASSURANCE MODEL

In 1992 the NSW Government announced its commitment to a program of quality assurance reviews of schools and the services and programs provided to schools. Quality Assurance is a new function in the NSW Department of School Education. While there have been many means by which schools and education systems have attempted to demonstrate accountability in the past, quality assurance is based on a different approach that unites two distinct functions of the school system — school development and accountability (Cuttance, 1993a and 1993b).

This approach to quality assurance addresses the charge provided by the Director-General, Dr Ken Boston, that we *make sure, be sure, and give assurance to others* about the quality of our work in education. Quality Assurance is — or should be — an integral part of all our work throughout the school system — it is about building-in quality. That is, continuous improvement must become part and parcel of everything that we do. This approach to quality assurance differs in both philosophy and practice to previous models of quality control in education which are based on

inspecting—out inferior outcomes after they have been produced. Quality assurance seeks to prevent performance problems arising in the first place. It is therefore one of the cornerstones of a quality system, a system for managing the quality of what we are attempting to produce. This model of quality assurance adopted in NSW differs from that used in industry and indeed other education systems in both philosophy and implementation, although it does draw considerably on the South Australian School Review Model described by Cuttance (1990).

Quality assurance school reviews are only one part of the entire quality assurance strategy. School reviews assess the effectiveness of practices and processes for achieving improved student outcomes in schools. They contribute to the process through which schools as learning organisations develop a planned approach to constructing their future.

In NSW the quality assurance school reviews are a collaborative enterprise, in which review teams work with school communities to assess:

- how the school goes about the task of meeting the community's needs for education, in the context also of addressing statewide priorities for student outcomes;
- what the school is attempting to achieve for its community;
- how the school knows it is achieving what it set out to do;
- how the school responds to what it knows about its achievements.

The need to assure quality does not mean that there is something inherently wrong or deficient in the current operation of schools. Rather it reflects the need to provide a clear framework for public accountability and provide the information about current performance required to improve performance further.

Quality assurance reviews of individual schools focus on the way in which the school is providing for its community's education needs. They are concerned directly with student outcomes and the quality systems in place to bring about their improvement, through effective management and leadership in schools, communication and community participation within the perspectives and constraints of statewide priorities and resources. Integral to the concept of quality assurance is the community's ownership of the review and development process. In the review process, staff, students and members of the school community participate with a review team to assess the current

achievements of the school and the types of activities that would, through the planning and development process, contribute most to future achievements.

The starting point for all school reviews is the development plan for the individual school. This plan, developed collaboratively by the school community to meet local educational needs, forms the basic terms of reference for the review process. The primary focus areas for the review are negotiated with the school community.

School reviews also serve an accountability function by providing the community and the Department of School Education with public information about the success of programs and initiatives of schools. Further, they place on record the key issues that individual schools will give priority to in revising their plans for future development.

School reviews are conducted by teams of size and composition which vary according to the enrolment of the school. The team leader is responsible for setting up the review, managing it during the period in the school and producing the report of the findings and recommendations. The host school principal is involved throughout the review, and participates as a full member of the team. For public accountability purposes it is important that the review team contain members from outside of the school. In general, review team members are peer principals, executives or teachers from other schools. In addition, the review teams contain at least one parent or member of the local community.

Each review results in a written report to the school within 20 days of completion of the review. The reports conclude with a number of recommendations for the strategic development of the school. The individual school review reports provide an extremely rich source of policy-relevant information for the education system as a whole. When aggregated on a state-wide basis, the findings and recommendations of the reviews reveal trends and issues emerging in the management and operation of schools which have the potential to significantly influence policy formulation and resource allocation.

OTHER MODELS OF QUALITY CONTROL

Quality assurance as practiced in NSW is only a relatively recent phenomenon. Historically, the most important means by which education systems obtained information about themselves has been through the establishment of corps of Inspectors, who have reported on a school-by-school basis to the Director of Education. NSW has a rich tradition in the quality control of schools through school inspectors, beginning even before the appointment of William Wilkins as the first Inspector and Superintendent of Model Schools in 1854, until the abolition of the inspectorate in 1990. Until recently, most other Australian states also had similar inspectorial services.

From the very early days, formality was the keynote of the NSW education system. Initially, the chief role of the inspector was as an examiner.

With poorly trained teachers to contend with, his method was to whip his teachers along by severity and criticism until they achieved the maximum possible percentage of passes in the Standards of Proficiency (Logan, 1984: p2).

While school development was seen as a part of the Inspector's role since at least 1904, it is fair to say that inspectors never really became the friend, guide and adviser that one of the early Directors of Education, Peter Board, envisaged them to be. Rather, assessment of teacher's proficiency continued to dominate the workload of inspectors for most of their existence.

For a brief period in the early 1970's, whole school appraisals entered into the Inspector's duties. These were to be a formal appraisal of a school by an inspector or inspectors, which took into account the evaluation made by the principal and staff, and were to be followed by a written report for the information of the Director-General at intervals of no more than six years. The inspector was to have detailed information about successes and failures in setting goals, selecting methods and constructing tests which he [and inspectors were almost always male] could discuss with the teachers concerned so that he could form his own ideas about their quality.

His attention will be riveted on process and outcomes not on personality. The attempt here is to involve schools and teachers in their own appraisal and so rid the system of the fear and mistrust which is generated by an imposed method (Grassie 1971 in Logan, 1984).

A number of appraisals were carried out. Some were reported to be quite successful, but by 1979, Logan notes, appraisals were as good as dead. We need not trace here the reasons for the fall from grace of either the inspectorate as a whole nor the school appraisal schemes which showed such promise, except to draw attention to the complex political and industrial circumstances prevailing at the time. What is important to note is that even if the school appraisals had been successful themselves, no formal mechanisms were established that could have made it possible for system wide improvement to follow. School appraisal, on its own, was doomed to failure as an agent of large scale change.

David Hargreaves (1987), writing in the context of Chief Inspector of the Inner London Education Authority (ILEA) in the late 1980's, commented that he considered the two functions of monitoring the quality of education and improving the quality of education to go hand in hand. As a result, he identified three central problems in carrying out this work as:

- 1) what information is needed centrally by the authority;
- 2) what is the purpose of collecting the information; and
- 3) to whom is the information to be reported.

He went on to outline the history of performance monitoring in ILEA. While written in that specific context, the weaknesses he highlighted are generic to most inspection systems.

We had the tradition going back for most of the century of full inspections, which gave a very detailed report of the work of the school. When the HMI decided to publish the results of their inspections, we decided to publish the results of our inspections too. These reports were made available to the press, parents and the public. If it was a favourable inspection report, full of praise, you would find that principals had them at the entrance to the school, available for any casual visitor. If the report was not so favourable they are usually kept in a cupboard in the back of the school.

There are weaknesses in this approach to monitoring. This model is satisfactory for the HMI because they are drawing on a sample nationally, and although the sample is very small it is probably large enough for them to be able to make general statements about overall conditions.

In the ILEA I did not have enough information to make such statements each year even though I increased the number of inspections. The chances of a school

being inspected in London under the full inspection model are about 1 in 50 in each year, hardly enough to strike terror or even apprehension in any principal. It is a terribly weak base from which to generalise. How could I draw on a sample of 1 in 50 and make general statements about the quality of education in the system? A second disadvantage was that this model is not as helpful for developmental purposes as we would have wished. It took about a year to get the full school inspection report printed and made public, by which time conditions in the school had most likely changed. Of course we gave the schools oral feedback as soon as the inspection was completed but the gap of a year to complete the written documents was too great. There is a third problem, and a very important one. This system of sampling does not identify your weakest schools, the schools in difficulty, the schools that are being poorly led, or the schools where there is serious under achievement. If you are taking monitoring seriously, samples will not do. You need to identify every school that needs help. This kind of approach using full inspections, though it has some value was not cost effective. . . . (Hargreaves, 1988 p.127).

In a third model of school improvement — school self-evaluation — ILEA was also considered one of the pioneers in the field. Schools were guided by the document *Keeping the School Under Review* in order to make judgements about themselves with some assistance from inspectors. This proved not to be a terribly effective system either. Nor were similar systems in other areas any more effective. Hargreaves found that schools tended to write long accounts of what they had been doing which were heavily descriptive and heavily defensive. Teachers were not good at analysing what they were doing. These school self-examination reviews were extremely weak at examining what went on in classrooms. They were very weak at analysing pupil performance. The final weakness was that schools were not very good at forward planning, which was often couched in the vague and conventional rhetoric of education of the time.

Hargreaves concluded from this experience that there are four features vital to any central monitoring system, whether established as an inspectorate or not. First it has to be driven by credible people. They must be credible not only to people in schools but also in the community. Secondly, they must be trustworthy. They will receive a lot of confidential material, some of which itself is not made public, although it may be used to contribute to some broader picture that will be. These first two features suggest that the people involved need a degree of bureaucratic independence from the system. The third

feature is that they must combine the two functions of monitoring and development. Finally, they must be people who can really act to encourage and support the work that principals and teachers do. They must be people who can give praise and give help. Simply having some indicators or greater accountability will not automatically improve schools. These ideas have become key principles in the operation of Quality Assurance in NSW (see Cuttance 1993b).

The ILEA experience had one other important legacy for shaping new ideas about ensuring systemic quality. In a short space of time the system of school inspections (called substantial visits) had generated thousands of reports from the system of school visits established as the means of overcoming the weaknesses of self-appraisal and the old full inspections. This system was great on reporting back to the schools themselves, but it was weak on collecting central information. An annual report was produced for the politicians to give an account of the substantial visits, and to begin to quantify some of the judgements about what had been seen.

To do this a rating scheme was established to quantify aspects of school life on a four point scale, ranging from outstanding to satisfactory, not satisfactory, to very poor. There was no middle category. Inspectors were asked to make a very hard judgement about what was satisfactory, and what was not. Each lesson observed was rated, as was the effectiveness of departments in secondary schools, the management and organisation of the department by its head, the quality of the accommodation and resources, the quality of schemes of work, the capacity of the schools to differentiate to meet the needs of pupils who were very able and those with special education needs, and so on. These were quantified in an annual report which gave an overall picture.

This report was a very substantial document, which for the first time for the ILEA gave a picture of the whole system, and gave something for principals to compare their school in relation to the average. Hargreave's systemic report then, is primarily a presentation of quantitative information, even if based on qualitative judgements.

The model of school review and reporting closest to that adopted by Quality Assurance in NSW is the review of the total provision of Local Education Authorities (LEA) by Her Majesties Inspectorate (HMI) in the United Kingdom during the mid 1980's. These reviews commented on a wide variety of areas

of operation of the LEAs, including consideration of policies, consultation, budgeting, ethos, standards, curriculum offering and organisational patterns. The strength of the HMI reviews lies in their ability to synthesise information from schools across the LEA and to link school-derived information with commentary on the support structures in place at LEA level. They also demonstrate that it is possible to sensitively and constructively report on a system wide basis.

There are also major differences between the Quality Assurance and HMI reviews. Not least is the difference in scale of school population and geographic size between NSW and Local Education Authorities in the UK. The major difference is the internal frame of reference which drives the review. The HMI reviews are much more structured and less negotiated than the Quality Assurance school reviews. They also differ in the regularity and frequency of the reviews — it is possible that an LEA would not experience another full review within a decade, if at all. They also differ in composition of the review team (HMI being completely external to the LEA), and thus have limited potential to offer the developmental experience to school-based staff which underpins Quality Assurance and in the extent to which they are able to provide guidance for individual schools within the review process.

ILEA, of course, is no more, and even the role of Her Majesties Inspectors has now been radically redefined. Other approaches to system wide quality control have come and gone. Performance indicators have been embraced with much enthusiasm. The following section examines this concept briefly. While it will be seen that they offer some advantages over inspection based systems, there are also distinct shortcomings in their usage, which will be examined below.

The performance indicator approach

Performance indicators provide an approach to information management and reporting which has captured a great deal of attention in education systems in the last decade (see Wyatt, 1991 and 1992 for a comprehensive discussion of this movement). By the late 1980's almost all states within the US have implemented indicator-based accountability systems of one kind or another (Selden, 1987). Indicators have become adopted as part of the national education reporting strategy in countries as diverse as Portugal

(Climaco, 1992) the USA (Griffith, 1990) the Nordic Group, and by the OECD itself (Bottani and Delfau, 1990).

Indicator schemes report on a wide variety of variables, and usually include measures of inputs, such as pupil-teacher ratios and per-pupil expenditures, processes and outcomes. Variables representing educational outcomes are prominent in all indicator systems, and these most frequently feature student test scores in one form or another. Because educational outcomes are strongly influenced by some factors beyond a school's control, most also report background data of some kind to help guide reporting and use of outcome variables.

Indicator systems have several features that could allow them to contribute positively to comprehensive school improvement efforts, and indeed have been a driving force in many examples of systemic reform (eg Fetler, 1986). They can provide benchmarks for comparing educational progress over time and place. They can help to describe changes in key features of the education system and direct attention to present or potential problems and inform policy decisions (Oakes, 1986).

However, there are several difficulties with indicator systems as models for comprehensive evaluation. They employ a limited range of variables, and tend to focus excessively on outcome measures, especially objective test scores, rather than measures of education processes. Despite their stated intentions, most do not provide any coherent model of a school's functioning, and so are of limited value for either describing schools or diagnosing their problems. Finally, although some of the more successful accountability systems have been designed and operated at the local school level (see Wyatt, 1992), those managed at the state level are unlikely to promote the kind of systematic, cooperative effort among teachers and principals that is needed to effect significant school change because they are often perceived as imposing irrelevant, additional demands on schools (David, 1987).

Most indicator systems rely primarily on data already obtained for other purposes. This is both a strength, in that the cost of information gathering is reduced, and at the same time also a weakness. Because these various data collection activities have been initiated for different purposes and administrated under different auspices, there is potential for poor coordination of data collection or integration of the information collected. In the United States, for example, the development of educational accountability systems

has led to some consolidation of state education data, but these data have not been adequate to create systematic, coherent, and comprehensive indicator systems. The variables included may be informative in themselves, but taken together they often fail to address important aspects of school structure, function, and outcomes (OERI State Accountability Study Group, 1988).

From their study of indicator systems in 50 states, Kaagan and Coley (1989) conclude that indicator results are being used prematurely to hold local schools accountable; that there is insufficient investment to insure high quality of the measurement that becomes part of the state indicator system; and that there is a reluctance to stress understanding of the indicators, that is, to postulate relationships between inputs and outcomes for the purpose of recommending policy action.

Odden (1990) underlined the need to be clear about the purpose of an education indicator system and not to use it inappropriately. He saw the biggest weakness in indicator practice as the need for better interpretation of what the indicators portray. Both Kaagan and Coley (1989) and McDonnell (1989) argue that using indicators for accountability is still premature because few systems yet provide enough information and there is still too much to learn about the linkages of cause and effect between indicators. Current systems also provide data too far removed from the classroom level to improve local conditions. These authors conclude that the indicators are therefore best used to offer policy makers a broad overview of the education system.

None of these reasons are sufficient in themselves to suggest that performance indicators have no place to play in the strategic management of education systems. However, it is also obvious that neither the indicators or the uses to which they are currently put provide decision makers with the information needed. The best solution, as Porter (1993) suggests, is likely to be a mix of indicators and context sensitive information about school processes.

The Quality Assurance plan for systemic reporting

To complement the individual reports produced as a result of the school review process, the Quality Assurance Directorate intends to institutionalise a process for bringing synthesised information from the collected reports into

the policy-making arena for the education system as a whole. The framework for this systemic reporting contains several important elements.

First, the reporting will be tailored for several levels of decision-making across the system. Reports synthesising information from the school reports will be prepared for regional authorities (the Assistant Directors-General (Region)), State Office directors, and the Director-General. (The Quality Assurance Directorate also reports to the Minister and the public through the Department's Annual Report). Secondly, the framework recognises the importance of timeliness for the delivery of information. The time frame for reporting to each of these levels differs, with reporting to those closest to schools occurring most frequently. Reporting to regions and state office directors every six months and to the Director-General every 12 months. Third, the framework recognises the different needs for information at each level. Information for regions will be drawn largely from the recommendations for development made in each school. Greater emphasis on implications drawn from the review findings and school context statements will be more appropriate for the needs of state office personnel. The main vehicle for information transmission is through formal written reports, although the reports to the Regions and state office directorates will be delivered in conjunction with a verbal briefing and informal discussions held with senior staff members. These reports to regions and state office directors will be public reports.

While each of these reporting strategies are important, the remainder of this paper describes in greater detail the method of analysis, the findings and the outcomes of the publication of the Directorates major public reporting vehicle in its system-wide *Review Report*.

The Review Report 1993

The *Review Report 1993* is in many respects a unique document and represents a significant milestone in the development of the Quality Assurance Directorate as a vital and integral part of the education bureaucracy. The first edition, while in many respects a pilot venture, was important in demonstrating that it is possible to report in an accurate, meaningful and comprehensive manner on the status of schooling across the education system. The document is unique in that this is the first time that the Department has published a detailed account of both the processes and outcomes of schooling. Together with an analysis of areas of operation

requiring further development, this information provides a powerful indication of the strategic directions for improvement across the system. It is also unique in that while Directors-General in the past have reported to parliament through Annual Reports, these tended to favour description of input to and resource deployment across the system rather than an analysis of its performance.

The first of the systemic reports is based on the trends and issues arising from the findings and recommendations of the school reviews conducted in Terms 1 and 2, 1993. School reviews, as described earlier, form the cornerstone of the Quality Assurance process, but are by no means the only part of the Quality Assurance Directorate's review activities. Future editions of the review report will also incorporate summary information and commentary on the findings of program evaluations and reviews of Best Practice conducted by the Directorate. These activities are described in Highett, (1994).

As the compilation of the *Review Report* is such a significant undertaking, both in terms of its potential impact and in the magnitude of the undertaking, it is worth spending a little time outlining the processes involved in its construction.

While qualitative methods have been an accepted tool in educational research since the late 1970's (eg. Guba 1978), practical guidance on the mechanics of qualitative data analysis (as opposed to data collection) is comparatively thin in the literature. Firestone, and Dawson describe the under-development of data analysis techniques as perhaps the major stumbling block to further use of qualitative methodology. Miles (1979) cites a study by Seiber which found that only 10 percent of the content of the better textbooks on qualitative methods was devoted to issues of analysis.

The potential for "fuller appreciation of the phenomena of interest" (Eisner, 1979) offered by qualitative methods must be balanced by the need for studies to be conducted in a disciplined manner which can withstand external scrutiny. Any information offered to decision-makers which proposes directions for action requiring significant resource shifts must have a high level of credibility if it is to have any chance of acceptance. In constructing the *Review Report*, it was essential, therefore, that the data analysis was able to demonstrate a high degree of methodological rigour.

Firestone distinguishes three general approaches that may help discipline qualitative inquiry without sacrificing subjective understanding — intuitive, procedural and intersubjective approaches. Each of these approaches has strengths and weaknesses and contribute differently to the research process, but in practice the three approaches are generally used in combination.

The intuition of the individual analyst is sometimes described as the richest and primary source of subjective understanding in qualitative research, as the researcher immerses themselves in the rich and thick data resulting from the transcription of field notes, interviews and records of observations. The weakness of intuitive approaches is that because intuition is such a private process, it is difficult to convey the results to external scrutiny or confirmation.

To provide the credibility public reports require, we are therefore forced to adopt a more procedural approach such as that offered by content analysis (see for example Berg, 1989) in which a hierarchy of significance is constructed, based on the frequency with which an issue occurs in the data. Content analysis itself is sometimes criticised as approaching the positivistic (the antithesis of the naturalistic philosophy), as it requires pre-determining the concerns or hypotheses that are to be tested against the data. Alternatively, grounded theory (Glasser and Strauss, 1967) provides a strategy for generating hypotheses from systematically acquired data. One element of the grounded theory strategy — constant comparative analysis — involves ongoing, systematic organisation and classification of the data into various categories. When categories of data or themes begin to emerge, other data that fit the category and other related sub-themes can then be discerned.

For the first edition of the *Review Report*, the organising framework chosen for the analysis draws on both the content analysis and grounded theory approaches. The focus areas for review were selected as the primary unit of analysis, and the four most frequently occurring areas used as the major headings under which information would be reported. These areas were: School and Community; Student Welfare; Curriculum, Teaching and Learning and School Planning and Decision Making.

Within each of these areas, we initially identified practices that were the subject of particular commendation, findings in relation to strengths or areas in need of further development, and directions for changes suggested by the recommendations. Within each focus area, themes in these findings were identified and tallied, and linkages between themes sought. Illustrative

examples under each of these headings were noted and used to further illuminate the issues identified. To keep the report within manageable bounds, only those issues that were noted in a considerable number of schools (in this instance at least one-fifth of the schools in the sample) were included in the final write-up. From these issues, implications for various levels of the system were then identified and directions for further development suggested.

Alternative analytical models

The analytical framework adopted for this report is not the only one possible. One of the problems encountered in imposing a structure on the analysis based on the titles of the focus areas is that often these titles cover different content in individual reviews. For example, a review of "Decision Making" in one school may have covered very similar ground to that in another school which might have been labelled "Management Structures". Likewise a review of "School and Community Relations" might have much more in common with a review of "Communication Processes" in another school than similarly titled reviews elsewhere.

Other schemes for categorisation and therefore other units of analysis are possible and will be explored in future syntheses. One method is to adhere more closely to the principles of the grounded theory approach and thus identify themes or topics as they emerge from the analysis as it progresses without any prior categorisation. Alternatively, a different framework for content analysis might prove more appropriate, for example by developing *a priori* a set of topics of interest to various audiences and then searching for information about each of these from the data. A third possible analysis would use the Best Practice Statement dimensions, areas and aspects as the categorisation framework (see Highett et al, 1994).

Our intention is that the work we undertake and the documents we produce will not only be considered useful by our client audiences but also used by them. In the spirit of *kaizen*, we seek continual improvement of our own processes. The direction of future analyses will thus be based on the feedback from our clients as well as further consideration of emergent methodologies.

Use of technology

One of the greatest disadvantages of any qualitative data analysis is that it is of necessity extremely labour intensive and relies on the subjective judgement and expertise of the analyst. The compilation of the *Review Report 1993* was no exception. Each of the individual school review reports typically ran to about 30 pages in length. Even a cursory scan of each copy took several minutes to complete, and one reading was scarcely sufficient to unearth all of the information pertinent to any topic or to understand the nuances of context and relationships between issues which were embedded in the reports. When fully operational, the systemic reporting process will draw on around 15,000 pages of data for each reporting cycle.

Clearly, even though systemic reporting is the responsibility of the equivalent of one full-time officer, it remains a Herculean task in the time frame required when conducted as a manual exercise. Unlike quantitative data analysis, where the ready availability of desktop computer processing capacity has made possible the almost instantaneous analysis of huge data sets, there is no equivalent software that substantially reduces the burden of qualitative analysis. While there are at least ten specially written computer programs designed to handle the storage of coded data for analytic purposes, none has yet proven entirely satisfactory for our purposes, primarily because the necessity for coding of data is almost as time consuming as manual methods. As yet, computers do not analyse or interpret qualitative data. We concur with Ely (1991), who noted that although the software packages can remove most of the drudgery from the cut and paste process, the computers are unable to do the actual analysis for the researcher. However, Richards (1990) has designed a package called NUDIST, which not only codes and retrieves text, but also "assists the users in shaping their understanding of the data, and helps them form and test their theories about the data". We will watch the further development of this and other systems with interest.

Some commentators on qualitative methodology (Pfaffenberger, 1988; Fielding and Lane, 1981; Merriam, 1988) take a very cautious, if not entirely negative view of the use of technology in analysis. They believe that researchers and their audiences may become seduced by the convenience presumed credibility of the program's rendering of sense, without understanding the assumptions implicit which, while present in all forms of qualitative analysis, are often hidden from view in computer software.

Notwithstanding these dangers, in practice we are faced with a significant data management problem, for which a technological solution has several long-term advantages. For the next cycle of analysis we will be trialing the use of a commercially available software package called IDAS (Intelligent Document Analysis System). IDAS has several features which will relieve some of the more mundane tasks in analysis. Firstly, it allows the analyst to create summaries of documents at a level of summarisation set by the researcher. Second, it creates an index of the most frequently occurring themes within a document and allows the user to transfer from this index to the places in the document where the desired word, theme or concept occurs. It is possible for the user to customise this word search to a certain extent. For example, similar information might be indexed under several terms, such as assessment, testing and examination and so on. We are not yet in a position to be able to evaluate the effectiveness of IDAS for our analytical purposes.

What the first report found

The first systemic *Review Report* is based on the findings and recommendations contained in 70 of the 93 individual school reviews completed at the end of Term 2, 1993. These school reports collectively draw on interviews with 1870 staff, 3531 students, 2335 parents, 122 other community members and almost 300 classroom observations.

The review reports published in Terms 1 and 2 documented many examples of sound practice, but also revealed that there was great variability in the effectiveness of practices both within and between schools. Several areas of commendation were noted. Strongest among these was the very positive perception in the community of teachers, principals and programs in the majority of schools reviewed. The efforts of schools to ensure the welfare of students in their care was also noted for commendation in several instances. Many schools reviewed thus far could justifiably take pride in the academic, sporting and other extra-curricular achievements of their students.

Student welfare was a focus for review in many schools. The review teams noted a very large number of programs instituted by schools to address the needs of their diverse student bodies. On the whole, these programs were perceived positively by school communities. However, an issue emerging in many schools was the perceived inconsistency of application of discipline and merit award schemes. Also apparent was a degree of concern about the

effectiveness with which information about these programs is communicated to parents. Another frequently occurring theme was the need for greater student involvement in decision making in many schools.

Reviews of curriculum and teaching and learning took two forms. In primary schools the focus was most often on the implementation of particular Key Learning Area syllabuses (with English, Mathematics and Science and Technology the most frequently nominated). In secondary schools the focus was more frequently on the structure and organisation of the entire curriculum offering. The main areas requiring further development were the identification of expected student outcomes, the coordination of sound practice in evaluation and assessment, particularly the use of outcomes to drive forward planning, and the adequacy with which assessments of student progress is reported to parents. There was an awareness in schools of the need to match student learning styles with appropriate teaching strategies. In response to growing student retention rates, almost all of the secondary schools reviewed had begun a self-examination of the content and organisation of their curriculum offering, especially at the senior secondary level.

In the area of school and community relationships, it was clear that while there was considerable parent involvement in schools in terms of working in the canteen and classrooms, for example, and there was evidence of increasing participation in management issues, there is as yet relatively little parent participation in strategic or long term planning. School Councils, where they exist, were often still at the stage of refining their roles and responsibilities. Recommendations in this area frequently expressed encouragement for them to seek a deeper understanding of the concept of participation, to seek wider community participation and to enhance communication with the entire school community.

In school planning and decision making, the effectiveness of practice across the system emerged as a matter requiring further attention. Only a few schools were commended for exemplary practices in planning. Some schools did not yet have adequately documented plans and others did not use them as working documents. There was a need to strengthen the strategic focus of school plans identified. There also needed to be more substantial involvement of all stakeholders in the development of plans. The extent to which the planning process is information-driven and clearly linked to desired student outcomes was another area requiring further attention.

Other issues raised were often matters primarily of importance to the particular school, such as particular resource or properties matters. A mechanism for bringing these issues to the attention of the appropriate authorities has been established to complement the school review reporting process. Issues raised in this manner which have wider significance were very similar to those made in other schools where the subject was a focus for review.

What were we able to say to the system

The *Review Report 1993* has been able to satisfy at least part of the requirements of quality assurance that we *make sure, be sure and assure others* of the status of public schooling in NSW, in that it quite clearly provides a very public accounting of the strengths and weaknesses of the sample of schools reviewed during the review period. Although this first effort was based on a fairly limited number of self-nominating schools, and this shortcoming is recognised in the analysis, future editions will each draw on over 500 individual reviews of a cross-section of school, or one quarter of the schools in the NSW public school system each year and thus provide very substantial evidence of systemic performance.

The *Review Report* has been able to *assure others* by being able to substantiate the many fine achievements of schools across NSW. Schools reviewed were seen in the main to be setting high standards of care for the communities they serve. There was evidence that schools are moving towards becoming an integral part of the wider community.

These achievements notwithstanding, the synthesis of findings from the school reviews indicated the need for further development in several areas, which had implications for different levels of the education system. While the recommendations made in the review reports relate to the individual school communities, when viewed collectively, they suggest important roles for state office directorates and regions in terms of the delivery of system-wide support.

For example, issues which require significant resource allocation for their successful resolution are generally beyond the capacity of individual schools to respond to. Major capital works, and substantial program augmentation, such as provision of expanded school counselling services and teaching of

languages other than English are examples of where a system-based response may be necessary.

On the other hand, improving school-community relations is largely a matter for resolution at the local level. In most schools reviewed thus far, review recommendations tend to suggest the expansion of current good practices, and extending the range of areas and depth of information provided to parents. Likewise, extending the range of activities in which parent participation is sought, the greater inclusion of staff, students and parents in decision making, and seeking the inclusion of more representative cross-sections of the community are matters for the school to implement. Line management has a role to play in providing advice and support about successful strategies for enhancing communication and participation. In terms of fostering the successful introduction of school councils, Regions and State Office could play an increased role in communicating policy frameworks and advice, perhaps using illustrative case studies of successful practice in formulating the role, function and operation of school councils across the state.

The implementation of student welfare programs is another area where practice can largely be improved by school-based initiatives. Other areas of student welfare, such as the provision of specialist teachers, and coping with extremely disruptive students are beyond the scope of individual schools' response.

In the curriculum domain, student assessment was identified as the area most in need of further development. Some issues in assessment, such as the co-ordination of practices across years and designing appropriate reporting formats are largely matters for school communities to resolve. However, the system can assist schools by articulating a consistent statewide policy on assessment, clarifying and promoting outcomes-based teaching, profiles and other implications arising from national trends in curriculum development. State offices also have an important role in continuing to provide information on how Basic Skills Test results, for example, may be interpreted and used appropriately for diagnostic purposes. The Training and Development Directorate, Regions, and Education Resource Centres have a role to play in providing professional development aimed at improving practice in areas such as the technical aspects of appropriate identification and measurement

of student outcomes, and encouraging the use of student outcome data in school planning and resource allocation.

Many secondary schools have made impressive progress in examining their total curriculum provision and providing for the diverse needs of rapidly increasing and changing student populations. They should be encouraged to continue to do so. The wider education system including the Board of Studies, has also contributed to this re-alignment of senior secondary schooling through the introduction of such initiatives as Pathways and greater opportunities for joint school-TAFE courses. However, all of these are only partial solutions to a much deeper issue requiring complete re-thinking of the fundamental nature, purpose, structure and organisation of post-compulsory schooling for the next century. In this process, the Department of School Education has a vital leadership role to play in promoting informed debate and discussion.

In the planning and decision making area, systemic support could be provided to schools to help them address the strategic nature of plans, advice on the format and content of plans, and by ensuring that schools continue to monitor, evaluate and adapt their plans over time. Regions and clusters could benefit from updated advice from central authorities on planning concepts, definitions of terms, and clear and unambiguous policy advice on systemic expectations for planning, as well as practical advice in the development of planning and reporting processes.

The Quality Assurance Directorate and quality assurance processes in general, quite properly, sit outside of the line management structure of the Department. Review recommendations, and the suggestions made in this report, aim to address areas for strategic development of schools and the system, couched in terms of desired outcomes. They do not seek to prescribe solutions or to tell schools what they should do or how they should do it, rather this advice seeks to establish what should be achieved, based on the collective professional knowledge of review teams. In both the school reviews and this synthesis of issues across the state, the identification of these trends and issues provides opportunities and challenges for further development to increase student learning outcomes.

Outcomes of the reporting process

It is too early yet to make a definitive evaluation of the outcomes of the first systemic report, but there is some evidence of its potential for generating action. As part of the dissemination strategy for releasing the document, the education writers from both Sydney metropolitan daily newspapers were provided with a briefing by the Assistant Director-General (Quality Assurance). Both newspapers carried substantial articles about the report the following day which, in general, were fair representations of its content, although the headlines of one (*Report identifies failings in schools*) was not exactly what was intended. This was followed shortly afterwards by a lengthy editorial in the Sydney Morning Herald titled "How to get quality schools". This editorial also recognised the value of the report and adopted a positive tone in commenting further on one of the themes raised in the report, namely, the

'. . . need to keep parents fully informed with the functioning of an effective, efficient and community-conscious school system'. . . and . . . [the need for] schools of today to be more conscious than they have been of the needs of their consumers — the students and their parents".

The Minister for Education also released a press briefing summarising the report, which concluded with her interpretation that:

"It is clear from this first review report that schools are meeting the needs of their local community. While there is room for improvement in some schools, the public of NSW can be assured that students are receiving a world class education."

If it has not yet influenced high level policy formation, the *Review Report* has at least entered into Ministerial consciousness and has been accepted as credible source of advice.

The Department of School Education also publicly responded to the release of the report with an article in its internal weekly newspaper *School Education News*, and as the subject of the weekly column by the (acting) Director-General. These also were very positive in tone and conclusion.

"The Department of School Education welcomed the first system wide quality assurance report", the Director-General Ken Boston said.

The *School Education News* article summarised very briefly the areas covered by the report and noted system wide strengths. It also recognises that "There is also valuable comment on the content and organisation of the secondary curriculum and appropriate approaches to school planing" and goes on to say that while the responsibility for responding to these issues will

generally lie at the school level, regions and state office will meet the challenge of providing further direction for training and development in the area of outcomes based teaching, and outcomes based assessment and reporting in general.

The article concludes with commentary on how the Department has already begun to respond to the challenge of providing improved support to schools in the delivery of student outcomes by sharpening the focus on teaching and learning through the restructuring of the Department's senior management and the appointment of a Deputy-Director General (Teaching and Learning) and plans for detailed program evaluations in several areas identified in the report as in need of further development. While these processes may have already been in train before the formal release of the report, they are supported by its findings and conclusions. It is also probable that early informal dissemination of the findings from the school reviews was a source of information in the decision to move in this direction.

At an operational level, a summary of the findings of the report and an indication of their likely relevance to state office directorates was tabled at a meeting of the Department's state office directors. While no formal record of the outcome of that meeting is available, anecdotally, some participants reported a high level of interest and an unusual degree of animation in the ensuing discussion. At least one Directorate has sought more detailed advice about the implications of the quality assurance reviews for their strategic directions for 1994. Other presentations of the review report at various meetings and seminars have also created a new awareness of the power of the quality assurance reviews to provide public accountability and inform the directions taken by the system as a whole.

CONCLUSION

Proponents of any initiative inevitably view it as the last best hope for change. Quality Assurance as a management initiative is still in its infancy, and while the early signs of its success are encouraging, only time will tell if it is to survive into the next century.

We believe that the present process will prove to be of enduring worth, because it attends simultaneously to the varying needs of practitioners in schools as well as planners and decision makers at the system level. The

inspectorate, which served the system well for so many years, finally became redundant because the approach to accountability derived from the inspector's position of authority was never really compatible with their developmental role, nor did the structure match the needs of a self-managing, devolved school system. In terms of their contribution to systemic improvement, the time lag between performance of inspectors' work in schools and the aggregation of information gleaned as a part of this process through the formal and informal channels of communication available to them made it difficult for others to perceive what value they were adding to the system. The plan for systemic reporting outlined above, and the school review model from which it draws its data offers a degree of flexibility which will allow it to continue to adapt to the changing circumstances schools will face in the decade ahead.

At either school or system level, the provision of information will continue to have currency as the process of reform and devolution continues because a constant flow of information is necessary to move past rule governed management and regulated teacher behaviour to a position where professional judgement or good management is the primary means by which courses of action are selected. While it may be an article of faith that people will act reasonably if they have enough information on which to base their decisions, the process of systemic reporting described above, and plans for effective dissemination of information established by the Quality Assurance Directorate will at least ensure that information about the status and outcomes achieved by schools is brought into the policy-making arena.

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