ABSTRACT
                This paper examines teachers' perceptions of policy related
to accountability and professional development in site-based management. The
methodology included the development and administration of the Teacher
Professional Development and Accountability Questionnaire. Dimensions in the
questionnaire were derived from policy documents on accountability and
professional development issued to all schools by the Department of Education
in Western Australia. The resulting dimensions centered on the self-managing
school, performance management, system-oriented professional development,
school-oriented professional development, professional attitudes and values,
collegiality and collaboration, and responsibility for professional growth.
The final instrument had 72 items and was administered in 10 secondary
schools to 279 teachers. Results were grouped around the instrument's five
dimensions. For site-based management, 89 percent of the teachers claimed
that central-office policies strongly influenced school operations. Regarding
performance management, teachers did not perceive it as intended in the
policy. For provision of system-oriented professional development, 82 percent
believed that recent professional development activities were foisted on them
by the central office, and 61 percent believed that organizational matters,
rather than educational matters, dominated professional development. Some 85
percent believed that professional growth is dependent on improvement in
knowledge and skills in the classroom. (Contains 13 references, 26 figures,
and 1 table.) (RJM)

# The impact of system-wide restructuring on teacher professionalism and accountability: A Western Australian study.

Graham B. Dellar
Faculty of Education
Perth, AUSTRALIA

1

Paper prepared for presentation at the Annual meeting of the American Educational Research Association (AERA), San Diego, April 1998.

BEST COPY AVAILABLE

## Background and Rationale

The 1980s and 1990s has been an era that has witnessed wholesale restructuring of both public and non-government school systems around the world. Every state and territory system of education in Australia has been involved in extensive review and restructuring over the past decade, but particularly over the past five years. The central management mode of the previous century - tight prescriptive control of schools, teachers and the curriculum by and within a centrally devised education system has been superseded by new designs and solutions, many derived from the private sector and most reflecting a move towards corporate managerialism and site-based management (Beare, 1995).

While various rationales have been offered for the establishment of site-based management, a common view is that self-managing schools enable the system as a whole to become more responsive to local conditions, more flexible in the use of resources to maximize desirable outcomes and be more accountable for school-level decisions (Dellar, 1994). The achievement of such goals at the school-level necessitates fundamental changes in both the teacher's professional role and the mechanisms employed for teacher accountability. In Western Australia, a range of policy documents concerning the establishment, performance management and teacher accountability have been introduced. However, the appropriateness of such policy and guidelines remains untested and contested. There is continuing debate about the feasibility and desirability of applying performance management approaches in school systems where productivity can not be easily specified, expected or demonstrated.

For many teachers the changes associated with these policy developments pose a dilemma which results from two competing sets of expectations. The first set concerns the enhanced "traditional" professional responsibility and accountability for effective classroom practice and improved student learning outcomes (Darling-Hammond, 1988). Here the focus is on the content and pedagogical knowledge and skills associated with particular subject area

2

specialization's. The second set concerns extended professional responsibility and accountability for active participation in the formulation, implementation and evaluation of system and school goals and priorities. Under this set of expectations the focus moves from the classroom and subject area through a whole-school to a system level perspective.

Militating against the adoption of a genuine whole-school professional perspective by teachers is the prevailing isolation of teachers from each other, the administration and the community. This is particularly so of secondary school teachers, where the school is organized around separate teaching areas or departments and teachers are viewed as specialists rather than cross-curriculum generalists. Teachers' decisions about teaching and learning are bounded by the walls of the classroom and shaped by administrative decisions that dictate who is to be taught, when and with what resources.

Consequently, for site-base management to transform schools into responsive effective learning communities there needs to be a fundamental change to the "traditional" roles of teachers Rallis (1990). Teachers need to collaborate more and to believe in the notion of collegiality and their own decision-making power. This is what Rosenholtz (1989) refers to as a collaborative work culture. For Fullan (1991) and Elmore (1992), suggests that focus of restructuring and reform should be on facilitating change to teacher perceptions and beliefs about teaching and learning. Similarly, McLaughlin (1993) suggests that comprehensive reform must embrace effective opportunities for teachers to learn the new strategies, knowledge and expanded expectations for students success. That is, in order to truly focus on the teaching and learning contexts, emphasis must be put on professional enhancement by providing opportunities for teachers to learn and grow in professional communities.

## Policy Context on Accountability and Professional Development

According to the policy guidelines on School Accountability (1991), teachers are invested with the authority and expected to take responsibility for planning for contributing to the achievement of the learning outcomes described in the school's Development or Improvement Plan. The guidelines indicated that the principal and the teachers will establish collaboratively how teachers can demonstrate that relevant aspects of the school's purpose are being addressed. Within the 1991 guidelines, the nature of this collaborative association is amplified in terms of Line management relationships, whereby the Manager/Principal is concerned with the rigor with which teachers accept responsibility for their work and engage in a process of accountability.

By 1996, the Education Department formalized the process of teacher accountability through the introduction of a policy on performance management. While the rationale for accountability remained unchanged the new policy document provided more detail about the roles of supervisors in managing the performance of teachers. The supervisors were identified as Principal and senior staff to which the Principal delegated authority. According to policy, the process of performance management consists of four elements. The first element termed staff self-reflection, involves the staff member reviewing their performance against the key duties for which they are deemed responsible. Included in this self-reflection is the identification of skills and knowledge for further development, professional aspirations and specific professional development needs. The second, element is the planning meeting. Here the supervisor, now referred to as the performance manager and the teacher develop a performance agreement. This agreement details not only the professional development goals of the teacher but also the evidence that will indicate achievement of these goals, strategies and time frame for their achievement. The third element is concerned with the implementation of the agreement. During this phase some amendments to the agreement may be undertaken provided they have been discussed and endorsed by the performance manager. The final element is a review meeting. It is at this meeting that the teacher must demonstrate

4

accountability for his/her performance. The performance manager is provided with an evaluation report which details significant achievement and contributions made by the staff member, identifies sub-standard performance and confirms areas for further development.

Given the very limited funds available for professional development, preference is given to programs that support systemic or school initiatives. Indeed, from the middle of 1997 the Education Department took the view that non-system or school centered professional development was to be undertaken at the individuals expense. Since the commencement of 1998 the Education Department has shifted focus from an investment in the human capital of its teachers to an employer of individuals who have to take responsibility for their own professional growth.

### Research Approach and Methodology

The purpose of this research was to examine teachers' perceptions of policy related to accountability and professional development. The research approach involved the development and administration of a Teacher Professional Development and Accountability Questionnaire. Dimensions to be included in the questionnaire were derived from the policy documents on accountability and professional development issued by the Department of Education to all schools in Western Australia. The resulting dimensions included the self managing school, performance management, system oriented professional development, school oriented professional development, professional attitudes and values, collegiality and collaboration, and responsibility for professional growth. Within each dimension items were written, grouped and then checked to ensure a comprehensive coverage of the dimension. Each set of items was next reviewed by a number of researchers who had previously developed or used instruments in secondary schools. The questionnaire field-tested by a sample of 16 secondary school teachers from two different schools and redrafted accordingly.

## TABLE 1

## Dimensions and Items for the TPDAQ

| Dimension | Sample Item |
|---|---|
| School Based Management | School development planning in this school supports classroom work |
| System Policy Expectations | This school has been able to negotiate with the Education Department to identify aspects of its operations for which it will be formally accountable. |
| Performance Management | Performance management allows school leaders to make informed judgments about the work of teachers. |
| Systemic Orientated Professional Development | Professional development in this school centers upon the implementation of Education Department initiatives. |
| School Orientated Professional Development | The agreed priorities of this school are the focus of school professional development activities. |
| Individual Responsibility for Professional Growth | Individual teachers are sufficiently responsible to assume control of their own professional development. |

7

The final version of the instrument contains 72 items. Each item has a four-point Likert format with responses of strongly agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). To establish a sample representative of urban high schools, the questionnaire was administered in 10 secondary schools, drawn from the metropolitan school districts in Perth Western Australia. All teaching staff involved in the four core discipline areas of Mathematics, Science, English, and Social Science were targeted in the sample (n=279). The resulting data enabled analysis using SPSSx at whole-school as well as across all schools in the sample. It is the findings derived from this analysis that forms the basis of the discussion that now follows.

## The Nature of School Based Management

Central to the restructuring endeavors in Western Australia has been the establishment of school decision-making groups (SDMG's). These groups serve as the basis of an approach to school-based management that permits school staff and community representatives to exercise more autonomy over decisions concerning educational policy and school development. The central responsibility of the SDMG is establishing a management plan that relates directly to Education Department and school policies and priorities. This management plan has been variously referred to as the School Improvement Plan, the School Strategic Plan and the School Development Plan. The plan is intended to articulate both central office and school level policy through statements of purpose, priority and the establishment of specific strategies for the implementation and review of the plan. Associated with the development plan are mechanisms for resource allocation and accountability within the school.

In many respects the structures and procedures associated with this school-based management approach are intended to coordinate and align the work of the school with the stated priorities of the education system. Such a function reflects an assumption that secondary schools are "loosely coupled systems" (March and Olsen 1976; Weick, 1976) That is, the school organization lacks co-ordination within the various sub-systems that constitute the organization. For Firestone

7

(1985) and for Wilson & Dickson Corbett, (1983) this was especially so with respect to co-ordination between the administrative sub-system and the pedagogic sub-system, (that system concerned with teaching and instructional activities). In support, Deal and Celotti (1980) argued that due to such loose coupling, the formal organization and the administration of the school do not significantly affect methods of classroom instruction. That is, teachers in their classrooms function largely independently from the administration of the school.

The introduction of a performance management approach incorporating professional development attempts to align the administrative and pedagogic sub-systems of the school. Through this mechanism, teachers become accountable for what happens in their classrooms to both the administration of the school and to the system.

Analysis of school level policy documents in all 10 schools indicated that while there is some variation, each school has in place procedures for the performance management and professional development of its staff that conforms to the Central Office framework on accountability and professional development.

### The impact restructuring on teacher professionalism and accountability

For the purposes of analysis, items were grouped around the five dimensions contained in the TPDAQ (see Table 1). Responses for each dimension were examined and item and dimension summaries written. In the brief discussion of items within these dimensions responses for strongly agree and agree were collapsed as were responses for strongly disagree and disagree.

### Site-based Management

The first dimension sought response to the structures and procedures for school based management; specifically the reality of site based autonomy, teacher participation in school policy decision-making and development planning. While all schools involved in this study had established school decision-making groups to facilitate site-based management the exercise of discretionary decision making was controlled by Education Department policy guidelines. This was evidenced by 89% of respondents indicating that Central Office policies had a strong influence on the operations of the school.

9

**Item 19. The Policies of the Education Department have a strong influence on the operations of this school.**

A bar chart showing responses:
- STRONGLY AGREE: 30
- AGREE: 59
- DISAGREE: 9
- STRONGLY DISAGREE: 2
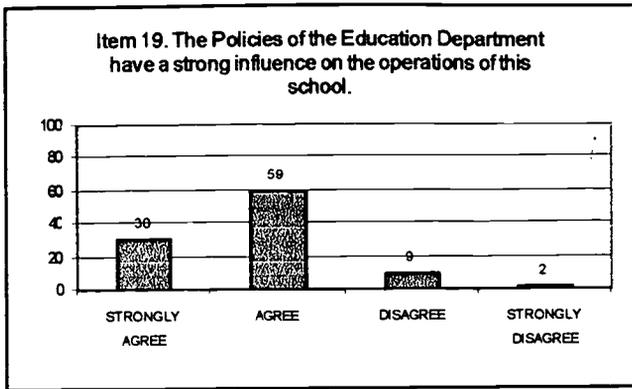
Respondents rejected the notion that the administration and senior staff alone, participate in the establishment of school priorities and objectives. Data give clear indication that school-based management has afforded teaching staff the opportunity to participate in school planning. Indeed 73% of those sampled agreed that decisions made in committees an staff meeting were implemented.

**Item 1. Decisions made in committees and staff meetings in this school are implemented.**

A bar chart showing responses:
- STRONGLY AGREE: 8
- AGREE: 65
- DISAGREE: 21
- STRONGLY DISAGREE: 6
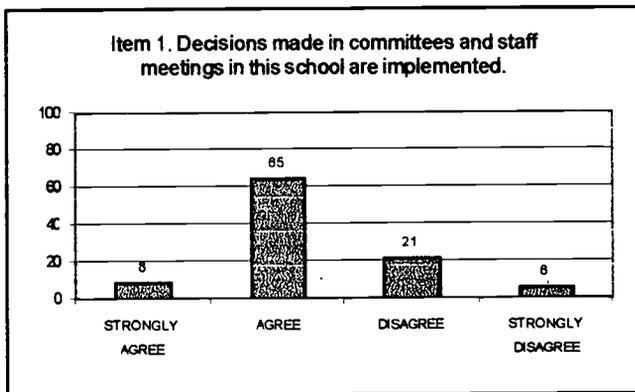
However, there was less agreement (41%) that the planning processes produced valid information about the success of the school's instructional program.

**Item 38. Performance management is structured upon the hierarchy of promotional positions within the school.**

A bar chart showing responses:
- STRONGLY AGREE: 20
- AGREE: 53
- DISAGREE: 20
- STRONGLY DISAGREE: 7

10

**Item 11. Performance management at this school ensures that teachers are provided with support to effect improvement of their work.**

| | STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|---|---|---|---|---|
| Value | 5 | 39 | 37 | 18 |

And for 94% of respondents, the down side of restructuring and reform policies was the increased staff workload associated with their implementation. Teachers further indicated that as a direct consequence of devolution, there had been a reduction in time that teachers could spend on curriculum planning and classroom issues.

**Item 55. Education Department policies and guidelines have increased the staff workload in this school.**

| | STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|---|---|---|---|---|
| Value | 64 | 30 | 4 | 2 |
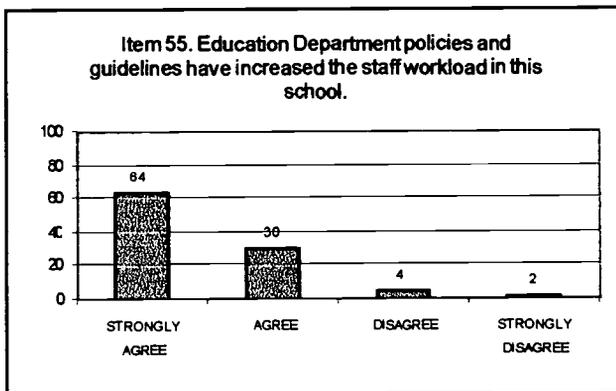
The extent to which teachers perceived central policy constricted and confined school self-management was the focus of next dimension. Opinion was divided about the increase in control of the school by the central office, with 50% agreeing the had been an increase in control and 50% disagreeing. Perhaps this can be explained with reference to an improvement focus on both system and specifice school-level priorities

11

**Item 69. There has been an increase in the control of this school by the Education Department.**
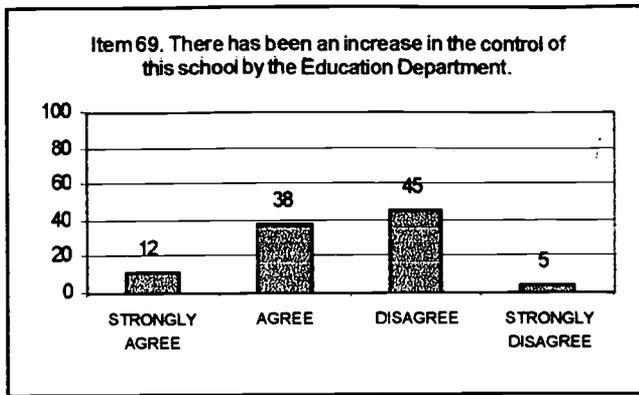


However, only 33% of staff believing that the school could negotiate with the central office about aspects of its operations for which it would be accountable. These responses reinfoce the system /central office control over the criteria used to evaluate school improvement and teacher performance.

**Item 60. This school has been able to negotiate with the Education Department to identify aspects of its operations for which it will be formally accountable.**
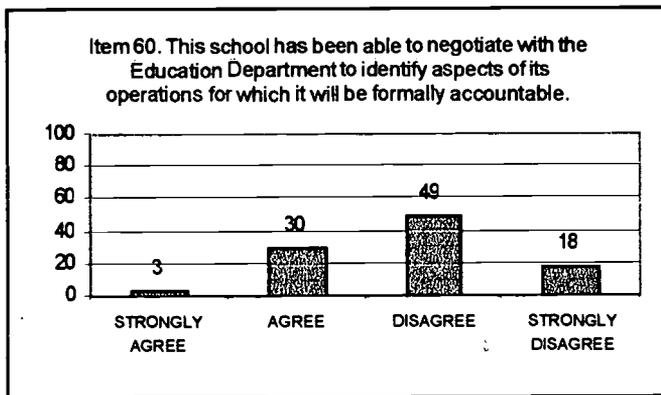


Performance Management

In general teachers did not perceive performance management operating as intended in the policy. However, the belief that performance management is be based on a collaborative effort between administration and staff is not widespread. Here 73% or respondents indicated that performance management was structured on the hierarchy of promotional position within the school rather than having an inclusive application. For such respondents the purpose of performance management appears more concerned with accountability and review that teacher improvement.

12

**Item 38. Performance management is structured upon the hierarchy of promotional positions within the school.**
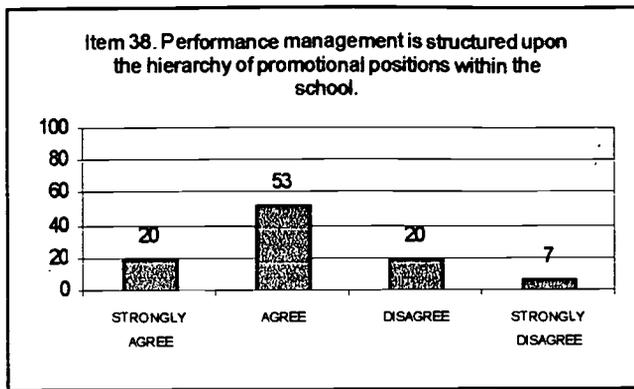


When asked if performance management allowed school leaders to make informed judgments about the work of teachers, 47% disagreed with a further 16% strongly disagreeing.

**Item 56. Performance management allows school leaders to make informed judgements about the work of teachers.**
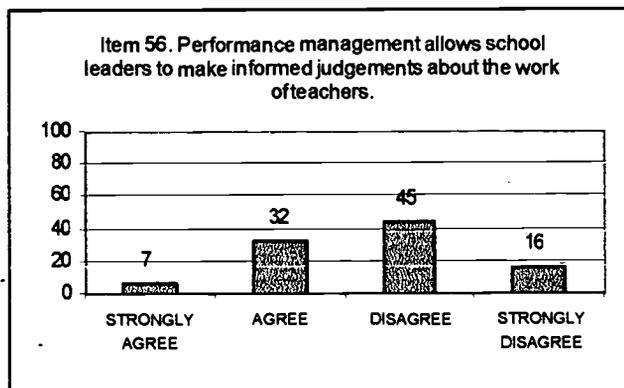


Further, only 44% indicated that performance management ensured the provision of support to effect improvement it teachers work. When combined with the next item in this dimension, it could be inferred that what support is provided is directed towaeds professional developemnt associated with non-pedagogical issues and process.

13

**Item 11. Performance management at this school ensures that teachers are provided with support to effect improvement of their work.**

Chart values:
- STRONGLY AGREE: 5
- AGREE: 39
- DISAGREE: 37
- STRONGLY DISAGREE: 18
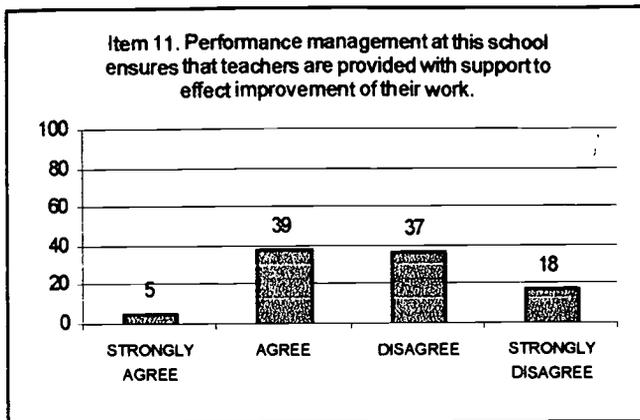
Indeed 77% of respondents believed that performance management demanded teachers find both time and resources to effect such improvement.



**Item 2. Performance management in this school demands that teachers find the time and resources to effect improvement of their work.**

Chart values:
- STRONGLY AGREE: 23
- AGREE: 54
- DISAGREE: 20
- STRONGLY DISAGREE: 3
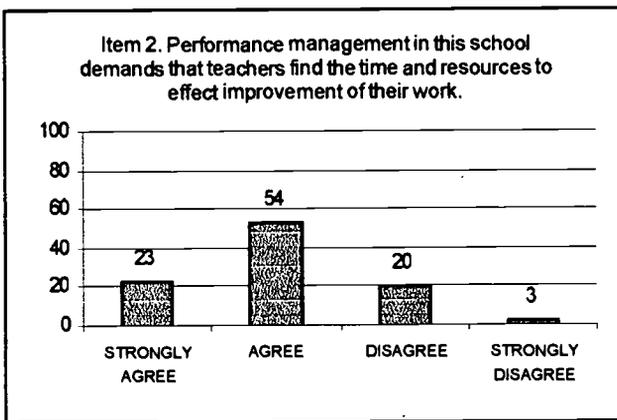
Finally, 56% of teachers indicated the existing performance management procedures reduced teacher autonomy in improving the effectiveness of their work. These responses run counter to the policy guidlines on School Accountability (1991) which states that teachers are invested with the authority and the responsibility to effect improvement in their work.



**Item 65. Performance management gives teachers autonomy in improving the effectiveness of their work.**

Chart values:
- STRONGLY AGREE: 3
- AGREE: 51
- DISAGREE: 37
- STRONGLY DISAGREE: 9

14
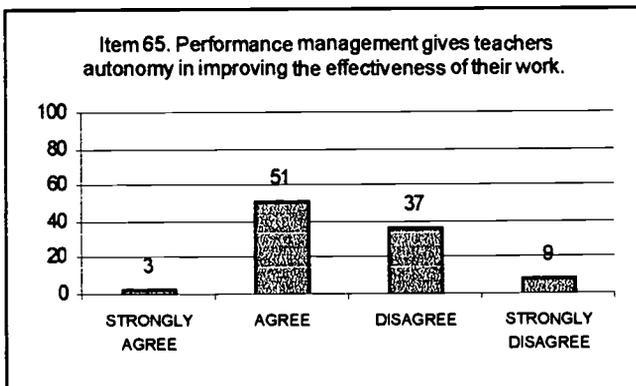
## Provision of System Oriented Professional Development

The third dimension sought perceptions about the nature of and the provision for system oriented teacher professional development. Under the prevailing performance management policy, a planning meeting held between the "manager" and teacher should identify professional development goals of the teachers. The responses indicate that professional development goals and the programs to support those goals are in fact determined at system level. Overwhelmingly 82% of respondents believed that recent professional development activities had been dominated by changes forced on schools by central office.

Item 12. The programme of recent professional development activities have been dominated by changes forced on the school by the Education Department.

| | STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|---|---|---|---|---|
| Value | 43 | 39 | 15 | 3 |
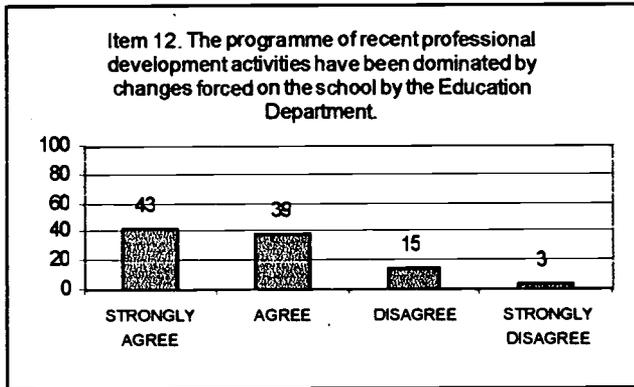
Some 76% believed that the professional development offered in their school focused only on education department priorities. Accordingly, there appears minimal focus on school and classroom level issues.

Item 48. The agendas of professional association conferences supported by government funding focus on Education Department priorities.

| | STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|---|---|---|---|---|
| Value | 17 | 59 | 22 | 2 |

15
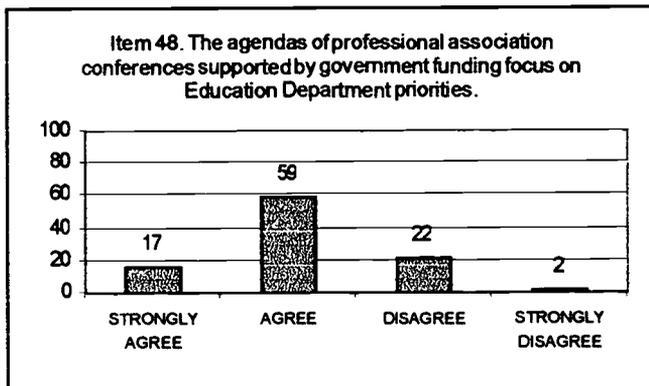
Further, 69% indicated that the topics for such professional development were selected by senior officers in Central Office <u>without</u> school level input.

Item 30. The topics of the Education Department funded professional development programmes are selected by senior officers in the education department.

| | STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|---|---|---|---|---|
| 100 | | | | |
| 80 | | | | |
| 60 | | 50 | | |
| 40 | 19 | | 24 | |
| 20 | | | | 6 |
| 0 | | | | |
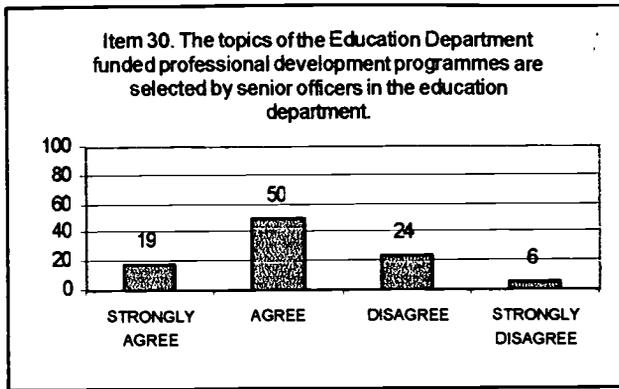
Finally 72% believed that the consultants engaged to present professional development programs were not knowledgeable about school, classroom and teacher concerns. Collectively these responses indicate a central office dominated professional development process that focuses primarily on system level priorities rather that classroom level issues.

Item 66. The consultants who present professional development programmes are knowledgable about school and classroom teacher concerns.

| | STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|---|---|---|---|---|
| 100 | | | | |
| 80 | | | | |
| 60 | | | 53 | |
| 40 | | 23 | | 19 |
| 20 | 5 | | | |
| 0 | | | | |
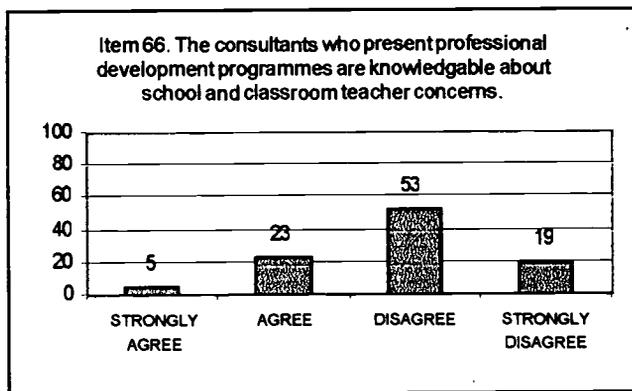
<u>The provision of School Oriented Professional Development</u>

The provision of School Oriented Professional Development was the forth dimension addressed in the questionnaire. Here items sought perceptions about the extent to which school level issues can be addressed within the broader system-level priorities for professional development. Responses were also sought about the extent to which school-level personnel can determine the nature professional development programs undertaken.

While 74% of respondents indicated that agreed school priorities formed the focus of school professional development,

Item 49. The agreed priorities of this school are the focus of school professional development activities.

| | STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|---|---|---|---|---|
| value | 14 | 60 | 22 | 4 |
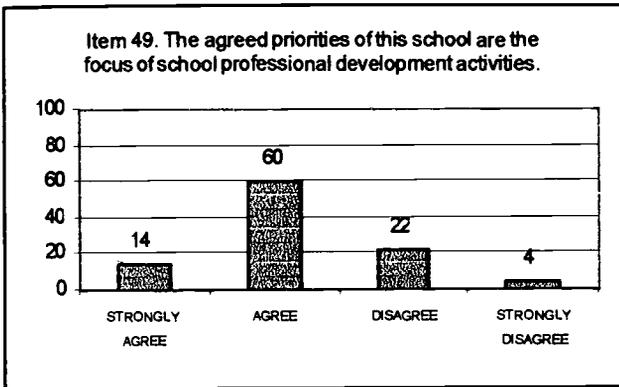
61% of respondents indicated that organizational matters rather that educational matters dominated such professional development.

Item 58. Organisational matters dominate professional development initiatives in this school.

| | STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|---|---|---|---|---|
| value | 17 | 44 | 34 | 5 |
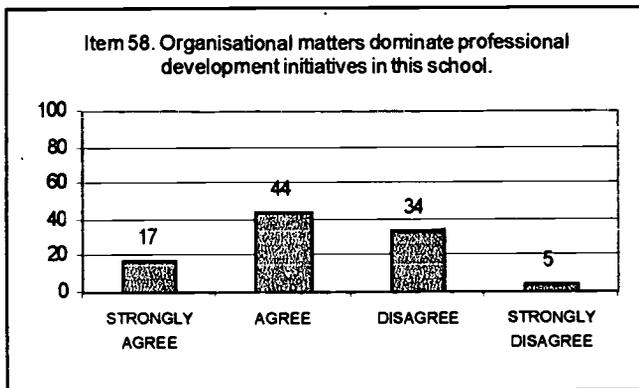
Finally, only 39% agreed that the professional needs of teachers have been addressed in recent professional development sessions.

Item 21. The professional needs of teachers have been addressed in recent professional development sessions.

| | STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|---|---|---|---|---|
| value | 5 | 39 | 37 | 19 |

17
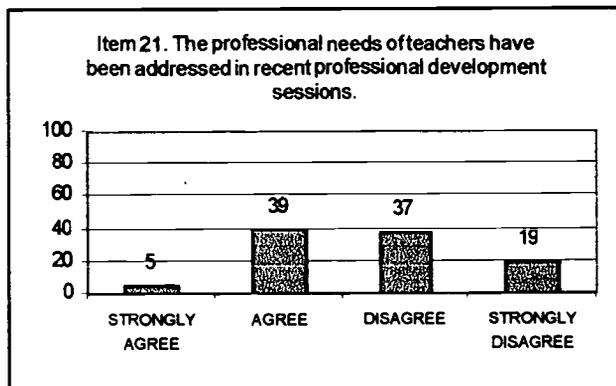
Once again, if we combine responses to the above units it appears taht the system level influences and the organizational focus of school- level determined professional development appear to neglect the educative needs of classroom practitioners.

Individual Responsibility for Professional Development

The final dimension focused on individual responsibility for professional growth. Clearly the preferred focus of professional development was teaching and learning based. Here 85% of respondents acknowledged that professional growth is dependent improvement in knowledge and skills of classroom practice.

**Item 26. Professional growth is dependent upon improving teacher knowledge and skills.**

| STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|----------------|-------|----------|-------------------|
| 33 | 52 | 15 | 0 |
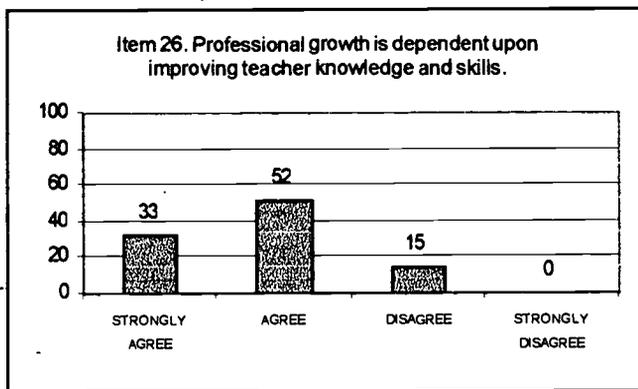
However, 77% agreed that judgments about teachers work should not be based on system-wide standards or benchmarks. This applied to both performance management and the nature of system generated professional development programs.

**Item 71. Judgements about the work of teachers should not be based upon system-wide standards or benchmarks.**

| STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|----------------|-------|----------|-------------------|
| 33 | 44 | 16 | 7 |

18
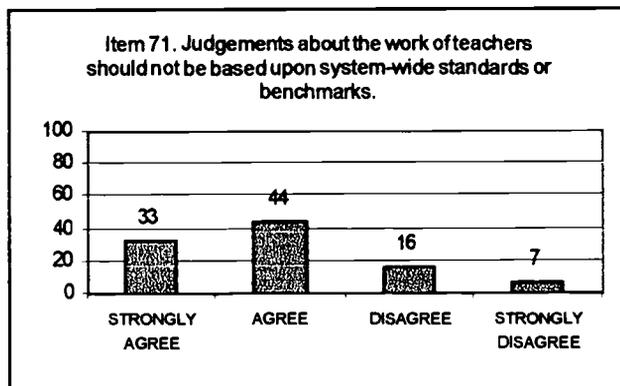
Overwhelming 86% or respondents agreed that teachers were capable of identifying aspects of their work with could be improved.

Item 8. Teachers are capable of identifying aspects of their work which could be improved.

| STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|---|---|---|---|
| 38 | 48 | 8 | 4 |
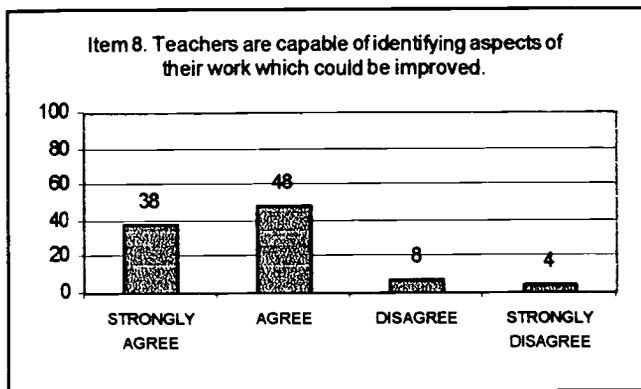
Further, 87% agreed that individual teachers are sufficiently responsible to assume control of their own professional development.

Item 62. Individual teachers are sufficiently responsible to assume control of their own professional development.

| STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|---|---|---|---|
| 43 | 44 | 9 | 4 |
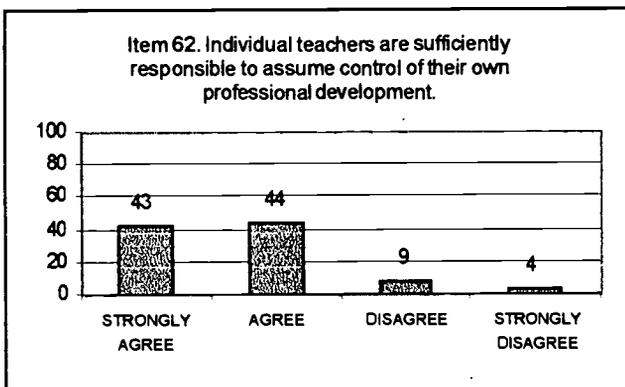
Taken together the responses to the last dimension suggest that teachers do no see self- initiated or directed professional development as a individual activity to be undertaken in isolation of colleagues. The preferred mode of delivery of professional development was school-based, collegial and reflective. Indeed, 91% of teachers agreed that discussion of classroom work with colleagues is of critical value for teacher professional growth.

BEST COPY AVAILABLE

18

**Item 35. Discussion of classroom work with colleagues is of critical value for teacher professional growth.**

| | STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|---|---|---|---|---|
| Value | 50 | 41 | 5 | 4 |
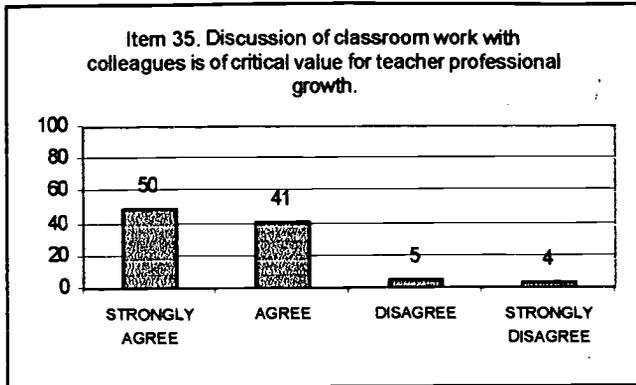
73% indicating that teachers were receptive to advice from colleagues about their teaching.

**Item 53. Teachers in this school are receptive to advice from colleagues about their teaching.**

| | STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|---|---|---|---|---|
| Value | 9 | 64 | 16 | 11 |
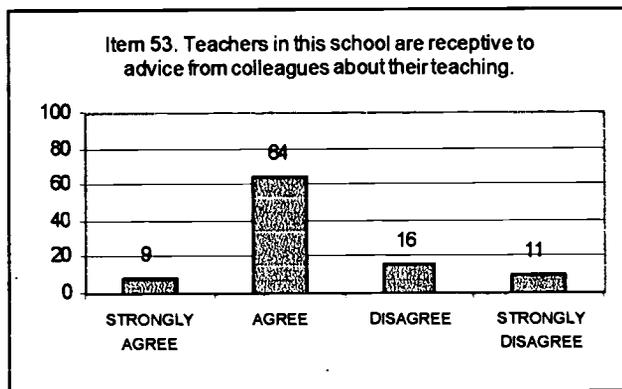
Finally 94% of respondents believed that individual reflection assists teachers to evaluate their classroom work.

**Item 44. Individual reflection assists teachers to evaluate their classroom work.**

| | STRONGLY AGREE | AGREE | DISAGREE | STRONGLY DISAGREE |
|---|---|---|---|---|
| Value | 48 | 46 | 6 | 0 |
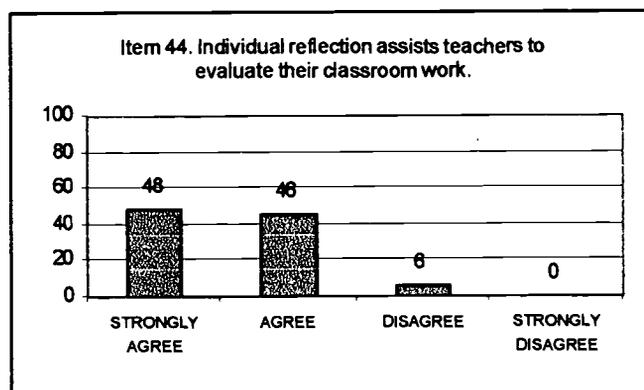
## Significance of the Research

The findings of this research are of particular interest to policy makers, system level personnel, school administrators and teachers alike. All governments are concerned with the legitimacy and productivity of public schools and accordingly

20

are seeking forms of accountability and professional development that will improve the quality of teaching and learning. Rapid devolution, restructuring and reform has seen the traditional bureaucratic structures of accountability collapse. There is need to fill the void with approaches that are appropriate to the self-managing school system and cohere with a holistic and educative approach to performance management. Any ambiguity over accountabilities distracts form the legitimacy of public education, questions the expertise that underpins educational and administrative policies and casts doubt on the professionalism of educators. In Western Australia the policy frameworks addressing performance management and professional development appear to be driven by a system orientation that seeks accountability against central office priorities and offers professional development linked to organizational and administrative issues rather than educative ones. This research focused not only on ways in which the establishment of self-managing schools has impacted on the professional roles of secondary teachers but also focused on the perceptions teachers hold about the processes of teacher accountability and professional development mandated within the policy on performance management. A synthesis of findings from administration of the Teacher Professional Development and Accountability Questionnaire will be combined with case-study data to develop a framework to guide appropriate professional development and accountability in self-managing secondary schools. It is this practical outcome of a model for professional development informed by, and linked to educative accountability procedures, that appears of critical value to secondary schools.

## References

Beare, H. (1995). New patterns for managing schools and school systems. In C. Evers & J Chapman (Eds.) *Educational Administration: An Australian Perspective.* St Leonards, NSW: Allen & Unwin.

Beare, H., Caldwell, B., and Millikan, R. (1989). *Creating an Excellent School,* London: Routedge.

21

Cuban, L. (1990). Reforming, again, again, again and again. *Educational Researcher, 19,* 3-13.

Darling-Hammond, L. (1988). Accountability and teacher professionalism. *American Educator,* 12(4), 8-13.

Dellar, G.B. (1994). *Schools as open systems: A study of site specific restructuring.* EA 025 830. ERIC Clearinghouse on Educational Management. Eugene: Oregon.

Dellar, G. B. & Giddings, G J. (1991, April). *School Organizational Climate and School Improvement.* Paper presented at the American Educational Research Association's (AERA) Annual Conference, Chicago.

Elmore, R. E. (1992). Why restructuring alone won't improve teaching. *Educational Leadership* (April), 44-48.

Fullan, M. (1991). *Education reform and teacher professionalism.* Paper presented at the ACEA Conference, Brisbane; Qld, September.

Giddings, G. J., & Fraser, B. J. (1992). A survey of teachers' views of a modular curriculum innovation. *Curriculum Perspectives, 12,* 1, 27-37.

Grimshaw, W. A. (1990). *Legislating for education quality and the New South Wales strategy.* Paper given to the Education Summit, Sydney, 13-14 November.

McLaughlin, M. W. (1993). *Contexts that matter for teaching and learning.* Center for Research on the Context of Secondary School Teaching, Stanford University.

Rallis, S. F. (1990). *Teachers and organizational change: Can professionalism transform schools?* Paper presented at the annual meeting of the American Educational Research Association (AERA), Boston, MA, April.

Rosenholtz, S. (1987). Workplace conditions that affect teacher quality and commitment: Implications for the design of teacher induction programs. *The Elementary School Journal,* 89(4), 521-540.

22

EA 029 273

**U.S. Department of Education**
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC ®

# REPRODUCTION RELEASE
(Specific Document)

## I. DOCUMENT IDENTIFICATION:

Title: *The Impact of system-wide restructuring on teacher Professionalism and accountability: A Western Australian Study*

Author(s):

| Corporate Source: CURTIN UNIVERSITY AUSTRALIA | Publication Date: APRIL 1998 |
| --- | --- |

## II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

| The sample sticker shown below will be affixed to all Level 1 documents | The sample sticker shown below will be affixed to all Level 2A documents | The sample sticker shown below will be affixed to all Level 2B documents |
| --- | --- | --- |
| PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY<br><br>Sample<br><br>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)<br><br>1 | PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY<br><br>Sample<br><br>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)<br><br>2A | PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY<br><br>Sample<br><br>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)<br><br>2B |
| Level 1<br>↑<br>[✓] | Level 2A<br>↑<br>[ ] | Level 2B<br>↑<br>[ ] |
| Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy. | Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only | Check here for Level 2B release, permitting reproduction and dissemination in microfiche only |

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

**Sign here,→ please**

| Signature: | Printed Name/Position/Title: DR GRAHAM DELLAR |
| --- | --- |
| Organization/Address: | Telephone: 61 8 9266 2181  FAX: 61 8 9266 2547 |
| | E-Mail Address: DELLARG@educ.  Date: 16/4/98 |

curtin.edu.au

(over)

# III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

# IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

# V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:
THE UNIVERSITY OF MARYLAND
ERIC CLEARINGHOUSE ON ASSESSMENT AND EVALUATION
1129 SHRIVER LAB, CAMPUS DRIVE
COLLEGE PARK, MD 20742-5701
Attn: Acquisitions

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

**ERIC Processing and Reference Facility**
1100 West Street, 2nd Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com