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SINGAPORE SCHOOL TEACHERS' PERCEPTIONS OF THE CHARACTERISTICS OF GOOD SECONDARY SCHOOLS

HO Boon Tiong & LOW Guat Tin

INTRODUCTION

What makes a "good" school good? In particular, what are the characteristics of good schools as perceived by secondary school teachers in Singapore? Research studies (e.g., Brookover and Lezotte, 1977; Purkey and Smith, 1983; and Sammons, Nuttall, Cuttance and Sally, 1995) on effective schools have yielded lists of characteristics of good or effective schools. Although there are some similar characteristics across these lists, they are neither exhaustive nor definitive. However, they do serve as a precursor to further research into effective schools. Some of the more common characteristics include professional and administrative leadership, shared vision and goals, high academic expectations and a focus on achievement, frequent monitoring and home-school partnership. This present study seeks to identify what teachers in Singapore secondary schools perceive to be characteristics of good schools.

TOWARDS EXCELLENCE IN EDUCATION

In an effort to encourage schools to excel, the Singapore education system has moved from a highly centralised system with tight control over schools to one of giving more autonomy to principals in schools. In 1985, the then First Deputy Prime Minister, Goh Chok

Tong, made this call to free schools from the centralised control of the Ministry of Education. In 1986, 12 school principals were invited to accompany the Education Minister to study the management of 25 'acknowledged successful schools' in the United Kingdom (U.K.) and the United States of America (U.S.A.), and to find out what lessons could be learnt for Singapore. The principals' report, 'Towards Excellence in Schools', to the then Minister for Education, Dr Tony Tan, was published on 3 February 1987. Some of the characteristics of good schools identified in this report included "capable headmaster", "effective and committed teachers", "favourable teacher-pupil ratio" and "flexible and broad-based curriculum" (refer to Table 7 for the full listing). Since then there has been a pivotal focus on schools and a continuous effort, on the part of the Government, to encourage schools to excel and forge their own identities. This has resulted in the development of independent and autonomous schools. An independent school is in many ways free from the bureaucratic control of the Ministry of Education. The principals of these independent schools have the right to appoint and dismiss staff and, to a certain extent, devise their own curricula. They also determine the amount of fees pupils have to pay. The fees range from S\$100 to S\$200. Pupils in all other schools pay only S\$12.50 a month. Autonomous schools are like independent schools in their mission of providing high quality education but they differ in that their students' fees are similar to those from government schools. Today there are eight independent schools and 18 autonomous schools.

ASSESSING SCHOOL EFFECTIVENESS

There are many ways to assess school effectiveness and it is important to decide on the criteria for assessment. The "ST Schools 100" ranking which is based solely on the GCE 'O' level examination results has prompted many reactions from people both within and outside the education system. The "ST Schools 100", first published by The Straits Times on 19 August 1992, is a comprehensive public listing of school performance, ranking the top 50 schools in the Special/Express stream and the top 40 schools in the Normal stream, along with separate tables listing the top value-added schools in both streams. Since then, "ST Schools 100" has been published annually.

While examination results may be the best yardstick, some have argued that other factors such as character building, leadership training and moral education, most of which are achieved through extra-curricula activities (ECAs), count too. In fact, of prime concern to the principals is the fact that a ranking system based solely on academic results might undervalue the good work done by many schools in helping their students in non-academic subjects/areas and thus less tangible ways (The Straits Times, 19 September 1992).

Although such a ranking system may be a much more objective means of measuring standards, it is used, in part, because the inclusion of other non-academic factors such as ECA proved too difficult and too potentially contentious. To quote the Minister for Education, "it was not possible to give a certain mark to a particular type of ECA and a higher or lower mark to another" (The Straits Times, 2 March 1995). This debate over the ranking system is still very much alive. For instance, in June 1995, the ranking of secondary schools came under scrutiny again following reports about principals who discouraged students from taking English Literature in a bid to boost their examination scores (The Straits Times, 4 June 1995; 17 June 1995).

Another way of assessing school effectiveness is to use the concept of 'value-added schools'. A value-added school is one that has given a value-added education to its students because it helps them to perform better than expected. The Education Ministry calculates this by comparing the students' expected GCE 'O' level performance, based on their Primary School Leaving Examination (PSLE) results, with their actual GCE 'O' level results. Value-added schools are ranked based on the calculation of the mean subject grade of each school. The mean subject grade is the average of all the grades scored by all the students for all subjects. A grade that is numerically smaller is a better grade.

Whatever the arguments or counter-arguments for or against any assessment model of school effectiveness, it remains relevant and significant enough to ascertain what makes good schools or what are some characteristics of these good schools. This is partly because parents want to have such information for more informed choices when enrolling their children in schools and also partly because schools are increasingly being held accountable for their expenditure of public funds.

RATIONALE FOR THE STUDY

While research on the effective schools movement has been conducted in the U.K. and U.S.A. for almost two decades now, hardly any has been done in Singapore. In 1993, a study entitled "Improving Singapore Schools: A Study of 58 Effective Schools" (Cheung, Gopinathan, Neville, Yap, Leong, Tan and Sharpe, 1993) was published. The two key criteria that principals had identified as significant in creating effective schools were the enhancement of student success in public examinations and the enforcement of firm school discipline. Other criteria mentioned include the provision of extra-curricular activities, the cultivation of a conducive school ethos and meeting the needs of the students. The importance of principal leadership and quality of instructional programmes were perhaps taken for granted rather than regarded as unimportant. The researchers also found differences in school cultures between government and government-aided schools, as well as between new and established schools, depending on whether schools were primarily characterised as focused on examination results, or those which also gave equal emphasis on other aspects of development such as moral behaviour and good citizenship. Analyses of the two cultures showed that good academic results stemmed from a caring and conducive environment, a supportive administration, regular contacts with parents, as well as from more tangible assets like good facilities. Another study on independent schools in Singapore by Tan (1993) focused on the implications independent schools had on social and educational inequalities. In 1987, the report "Towards Excellence in Schools" was the result of a visit to study the management of 25 'acknowledged successful schools' in the U.K. and U.S.A. by a team of 12 principals and the then Education Minister.

Of these studies done on excellence in secondary schools, none dealt with teachers' perceptions of the characteristics of good secondary schools. Their perceptions should be carefully studied as teachers are at the forefront of implementation of school and educational policies. Also their perceptions of what makes a good school influence the way they teach and behave (Andrews, 1987). The power of perception must never be underestimated. In the classrooms, teachers actually have more influence than principals over day-to-day classroom management decisions and studies have shown that they have significantly greater influence at the secondary level (Firestone and Herriott, 1982). In view of this, the Louisiana School Effectiveness Study (Stringfield and Teddlie, 1983) included in its data, among many others, teachers' perceptions of their school climates.

Andrews (1987), when asked about teachers' perceptions of the leadership of their principals, said that " ... researchers may mistrust perceptions, but in a sense, the only reality is perceived reality - and people's perceptions of the surroundings have a powerful influence on what they do." After all, education is still a human enterprise. And it is **PEOPLE** - teachers, students, administrators and parents - that can, and indeed do, make the difference between schools that work and schools that do not (Hersh, 1982). Any renewal must necessarily take place in the heads and hearts of people. Following from this, administrators must find ways to give more participation and more empowerment to those who do the work. Of particular importance is the fact that change will not take place without the support and commitment of teachers who must first come to "own" new educational ideology and techniques (McLaughlin, 1978).

Logically, whatever the effects of schools, they are generated through teachers and curricula. That a link exists between teacher-effectiveness and school-effectiveness cannot be denied (Rutter et al., 1979; Barr and Dreiben, 1983; Mortimore and Sammons, 1987). Schools in which teachers are consulted on policy issues as well as issues affecting them directly appear to be more successful. It becomes crucial that teachers are involved both in designing the study and in working directly as field officers with the schools in the sample. (Mortimore and Sammons, 1987).

Therefore, in attempting to build more effective schools, we must abandon our reliance on facile solutions and the assumption that fundamental change can be brought about in a top-down manner (Purkey and Smith, 1982). In fact,

researchers who have studied innovation in general found that it is more likely to be successful when it combines elements of bottom-up planning and decision-making with top-down stimuli and support in setting directions and guiding the change process (Huberman and Miles, 1982; Hackman and Walton, 1986; Hall and Hord, 1987; McLaughlin, 1987; Pajak and Glickman, 1989). This bottom-up approach of consulting with the teachers is important because teachers may not agree with the principal (or with each other) on essential variables and the effective schools formula says nothing about overcoming or avoiding that resistance (Purkey and Smith, 1982). Indeed, a useful way to formulate a multidimensional view of school effectiveness would be to develop "grounded" definitions that reflect practitioners' subjective understandings of this term (Dwyer, Lee, Rowan, and Bossert, 1982). While Dwyer et al. were referring to their principals, I believe the same can be said of studies on teachers. This present exploratory study therefore aims to address this lack of information concerning teachers' perceptions of the characteristics of good secondary schools

THE RESEARCH QUESTIONS

In view of the lack of research on teachers' perceptions of the characteristics of good schools, this present study will examine the following research questions:

- (1) What do Singapore school teachers consider as characteristics of good secondary schools?
- (2) How do secondary school teachers' perceptions of the characteristics of good schools differ from those 15 characteristics listed in the 'Towards Excellence in Schools' report; i.e., from the principals' conclusions of their visit to 25 'acknowledged successful schools' in the U.K. and U.S.A.?
- (3) Is there a high level of agreement between the ratings of the level of importance of the characteristics of good schools by teachers with varying lengths of teaching experience; from different types of secondary schools - government, government-aided and independent / autonomous schools; and would the ratings be affected by gender?
- (4) Which characteristics would secondary school teachers place as first priority to act upon to make their schools more effective?

The findings of this study, at the macro-level, would provide empirical data for policy formulation and evaluation, programme development and management. At the micro-level, within the context of each local school, information gathered and the manner in which teachers have prioritized them can become discussion areas between teachers and school administrators for both policy implementation and programme management.

HOW THE STUDY WAS CONDUCTED

In order to answer the four research questions, the present study was carried out in two phases. In Phase One, the

survey method was used as the primary means of data collection. This method was deemed to be most appropriate since the information to be collected came directly from the respondents. The data they provided were descriptions of their perceptions, attitudes and values towards what they perceived as the characteristics of good secondary schools. Background information such as gender, the type of school and length of service could also be easily obtained. In Phase Two of the study, a 40-item instrument with a 5-point Likert rating scale was developed. These items, which are secondary school teachers' perceptions of the characteristics of good schools, were based on the responses provided in the Phase One survey.

Dependent and Independent variables

The construct, teachers' perceptions of the relative importance of the characteristics of good secondary schools, is measured by the ordinal rating scores of each of the five dimensions: staff, students, curriculum, resources and parents. These formed the dependent variables used in this study.

The independent variables are gender, the type of school and length of service. For school type, the three categories are government schools (G), government-aided schools (GA) and independent and autonomous schools (I/A). Government-aided schools form an independent category because these are mission schools with religious affiliations. Cheung et al. (1993) found that two cultures exist between government and government-aided schools. Independent and autonomous schools are considered as one category because apart from the funding considerations, autonomous schools are in many respects similar to independent schools (The Straits Times, 15 August 1992). For length of service, the three categories are 'less than 4 years' (L: low), between 5 to 14 years (M: medium) and more than 15 years (H: high). This stratification is based on the Ministry of Education's statistical records.

Phase One of the Study

The objective of this phase was for the respondents to list their perceptions of the characteristics of good secondary schools. Therefore, the questionnaire focused only on the question: "**WHAT, IN YOUR OPINION, MAKES A GOOD (OR EFFECTIVE) SECONDARY SCHOOL?**" The question was kept open-ended so as to encourage as many responses as possible.

A total of 602 questionnaires were sent to teachers in ten schools. Of these, 220 teachers (36.5%) who responded to the questionnaires submitted a list of 900 responses. Of the 900 responses, 554 (61.56%) responses were categorised under the **STAFF** dimension. This dimension had the highest number of responses followed by 190 (21.11%) responses in the **STUDENTS** dimension, 73 (8.11%) responses in the **CURRICULUM** dimension, 66 (7.33%) responses in the **RESOURCES** dimension and 17 (1.89%) responses in the **PARENTS** dimension. Table 1 on the next page shows the summary of all 900 Phase One responses by gender.

Table 1: Summary of Phase One Survey Responses By Gender

Dimension	Male	Female	Total	%
STAFF	146	408	554	61.56
STUDENTS	54	136	190	21.11
CURRICULUM	25	48	73	8.11
RESOURCES	24	42	66	7.33
PARENTS	7	10	17	1.89
Total	256	644	900	100.00

These responses from the Phase One study were then used as items for the development of the instrument for Phase Two. Table 2 below shows the numbering of the items in each dimension of the Phase Two instrument. For example, items 5, 10, 14 and 18 to 20 are all items in the "**STUDENTS**" dimension. Similarly, items 1, 2, 7, 12 and 13 are all items in the "**CURRICULUM**" dimension.

Table 2: Dimensions of Instrument by Item Number

Dimension Item Number

STAFF 3, 8, 16, 17a (i) - (iv), 17b (i) - (iii), 17c (i) - (vi) and 21 - 28

STUDENTS 5, 10, 14 and 18 - 20

CURRICULUM 1, 2, 7, 12 and 13

RESOURCES 6, 11 and 15

PARENTS 4 and 9

In selecting these 40 items, care was exercised to ensure that they were representative of the Phase One responses both in terms of weightage of each dimension as well as conveying the central ideas of the responses accurately.

Phase Two of the Study

The instrument developed for this phase consisted of a listing of these 40 descriptive items elicited from the earlier enquiry in Phase One. Teachers were asked to record their perceptions of the relative importance of each of these 40 items by checking off one box of the 5-point Likert scale alongside each item. These five numerical calibrations, together with their lexical descriptions were as follows:

1 - Of minor importance

2 - Somewhat important

3 - Important

4 - Very important

5 - Crucial

In the pilot study of Phase Two involving 31 teachers, a 6-point Likert scale was used with the lowest numerical calibration described as 'of very little importance'. No respondent checked this box at all and it was subsequently eliminated from the rating scale, reducing it to the present 5-point scale. Also, in the written instructions to this new group of teachers, it was emphasized that they were to rate **how** important they **perceived** each characteristic to be for an effective school. They were also told that these items were the characteristics which their colleagues from other schools had identified as characteristics of an effective secondary school.

In addition to these 40 items, the final question asked the teachers to identify the characteristic which they would place as first priority to act upon to make their schools more effective.

SAMPLING DESIGN

Composition of phase one sample

Table 3 below shows the composition of Phase One sample by gender and type of school. The total sample size was 220 of which 70 (31.82%) were male secondary school teachers and 135 (61.36%) were female secondary school

teachers. Fifteen of them did not indicate their gender in the survey forms. This gave a ratio of about two female teachers to one male teacher which was representative of the gender composition of the target population. The target population consisted of 8093 secondary school teachers of which 220 (2.72%) were surveyed during Phase One.

Table 3: Composition of Phase One Sample by Gender and Type of School

School Type	Male	Female	Not stated	N	Ratio of school type
Government	44	55	9	108	2.51
Government-aided	15	51	3	69	1.60
Independent/Autonomous	11	29	3	43	1.00
Total	70	135	15	220	
Ratio	1.00	1.93			

In terms of the type of school, the ratio of about three government schools to one independent/autonomous school and about two government-aided schools to one independent/autonomous school was also quite representative of that of the target population.

Composition of phase two sample

Table 4 below shows the composition of Phase Two sample by gender and type of school. The total sample size was 403 of which 114 (28.29%) were male secondary school teachers and 289 (71.71%) were female secondary school teachers. This gave a ratio of about two female teachers to one male teacher which was again representative of the gender composition of the target population. The target population consisted of 8093 secondary school teachers of which 403 (5%) were surveyed during Phase Two.

Table 4: Composition of Phase Two Sample by Gender and Type of School

School Type	Male	Female	N	Ratio of school type
Government	61	102	163	2.63
Government-aided	33	145	178	2.87
Independent/Autonomous	20	42	62	1.00
Total	114	289	403	
Gender Ratio	1.00	2.54		

In terms of the type of school, the ratio of about three government schools to one independent/autonomous school was quite representative of that of the population. However, the ratio of three government-aided schools to one independent/autonomous school differed from the ratio of 1:1 in the target population.

PRESENTATION OF PHASE ONE AND PHASE TWO DATA

In the Phase One survey, teachers were asked to list their perceptions of the characteristics of good secondary schools by writing down their responses to the open-ended question: "**What, in your opinion, makes a good (or effective) secondary school?**" A total of 900 responses were received from the 220 secondary school teacher respondents. After sorting and categorising them, the responses were grouped under five dimensions; namely, **STAFF**, **STUDENTS**, **CURRICULUM**, **RESOURCES** and **PARENTS**. For each of the five dimensions, the responses were further sub-grouped; for example, under then **STAFF** dimension, the responses were further sub-grouped into categories such as 'principal', 'teachers' and 'discipline'. Table 5 below shows the top three responses in each of these dimensions in the Phase One responses.

Table 5: Summary of Top Three Phase One Responses in each Dimension by Gender

Dimension	Male	Female	N	% ¹	% ²

STAFF	146	408	554		61.56
Principal	42	117	159	28.70	17.67
Teachers	23	76	99	17.87	11.00
Discipline	27	53	80	14.44	8.89
STUDENTS	54	136	190		21.11
Excel in exams and ECAs	8	32	40	21.05	4.44
Conducive environment.	17	19	36	18.95	4.00
Enjoy learning	11	16	27	14.21	3.00
CURRICULUM	25	48	73		8.11
Solid instructional programme	14	31	45	61.64	5.00
Integrated	10	9	19	26.03	2.11
Relevance	-	5	5	6.85	0.55
RESOURCES	24	42	66		7.33
Physical	16	17	33	50.00	3.67
Human	4	19	23	34.85	2.56
Others	4	6	10	15.15	1.11
PARENTS	7	10	17		1.89
Support school programmes	4	4	8	47.06	0.89
Interest in children's learning	2	5	7	41.18	0.78
Strong communication links with parents	1	1	2	11.76	0.22

Note:

%¹ -- Number of item responses expressed as a percentage of total number of items within the same dimension.

%² -- Total number of responses in each dimension expressed as a percentage of all 900 responses.

In Phase Two, 403 teachers from another nine schools rated the relative importance of each item in each dimension as a characteristic of an effective school. The mean ratings of the Phase Two responses to the 40 items in the instrument

are shown below (see Table 6).

Table 6: Mean Ratings and Standard Deviations of Responses to Items in Phase Two Instrument

Item		x	SD
1	An instructional programme that provides a broad and challenging academic education.	3.85	0.77
2	An integrated curriculum that provides a balance of subject areas and various ECAs.	3.68	0.81
3	Enforcing strict discipline.	4.23	0.77
4	Parents realise that education is a co-operative venture between school and home. Parents support school programmes.	4.14	0.80
5	A conducive environment for students to learn.	4.19	0.69
6	Reducing class size to 1 teacher for 25 students.	4.18	0.96
7	Curriculum content that is current and relevant to world needs.	3.75	0.81
8	Emphasizing character development among students.	4.16	0.76
9	Parents have an active interest in their children's learning.	3.97	0.78
10	Students feel proud belonging to their school.	4.05	0.79
11	Adequate clerical support for teachers.	4.30	0.56
12	Broad curriculum structure that achieves an educational outcome of well-rounded students.	3.87	0.73
13	An effective pastoral care programme.	3.34	0.89
14	Students who excel both in examinations and ECAs.	3.21	0.92
15	Adequate facilities and equipment such as special rooms, AVAs and photocopying machines.	3.90	0.79
16	Less administrative duties for teachers. Teachers only teach.	4.31	0.77
17a (i)	A principal who is understanding and approachable.	4.37	0.67

17a (ii)	A principal who has foresight, is visionary and dares to make changes.	4.33	0.75
17a (iii)	A principal who is fair and firm in making decisions.	4.49	0.66
17a (iv)	A principal who distributes duties fairly among teachers.	4.42	0.70

Table 6 continues

Table 6 continued

Item		x	SD
17b (i)	A principal who is capable, competent and efficient.	4.29	0.67
17b (ii)	A principal who is dedicated and diligent.	4.28	0.68
17b (iii)	A principal who is resourceful and organised.	4.31	0.71
17c (i)	A principal who is sincere.	4.22	0.73
17c (ii)	A principal who is confident.	4.13	0.71
17c (iii)	A principal who is sensitive.	4.12	0.79
17c (iv)	A principal who is perceptive.	4.11	0.77
17c (v)	A principal who is cheerful.	3.69	0.95
17c (vi)	A principal who is dynamic.	4.05	0.79
18	Students have respect for teachers.	4.42	0.60
19	Students develop a love for learning (as a life-long process).	4.24	0.66
20	A better cohort of students.	3.36	0.96
21	Teachers who are committed and dedicated to the teaching profession.	4.31	0.70
22	Teachers who are happy and cheerful.	3.99	0.80
23	Teachers who are compassionate and caring.	3.93	0.77

24	Teachers who are co-operative to work with.	4.11	0.71
25	Harmonious relations among staff members.	4.08	0.75
26	High staff morale.	4.34	0.71
27	Principal and teachers share the same vision and work towards common goals.	4.29	0.78
28	Principal recognises and acknowledges staff contributions.	4.38	0.73

ADDRESSING THE RESEARCH QUESTIONS

Research Question 1: What do Singapore school teachers consider as characteristics of good secondary schools ?

After categorising all the responses, the **STAFF** dimension had the highest number of responses (N=554). About a third of these related to the category 'principal' (see Table 5). Teachers tend to perceive principals as instructional leaders, school administrators, educational managers and more recently as the Chief Executive Officer (CEO) of the school providing leadership, structure, management, vision and goal. They wrote:

In a good school, the principal leads the staff in the school's vision and mission and the principal provides direction and the motivation for improvement.

In the teachers' perceptions, these principals were fair and firm in making decisions and distributed duties fairly among teachers. They performed work well and were capable, competent and efficient. Principals also recognised and acknowledged contributions from the staff. One teacher wrote, "*principals should show more appreciation and consideration to teachers in order to encourage them to work happily*". On the personal qualities of the principals, teachers perceived good schools to be run by principals who were sincere, confident and sensitive. Therefore, teachers perceived principals of good schools to be both efficient and effective.

Next on their list, teachers perceived good schools to have staff members who were committed and dedicated to the teaching profession. At the same time, teachers also believed that high staff morale must be promoted and that teachers and principals must share the same vision and work towards common goals. Several teachers wrote, "*staff morale can make or unmake a good secondary school*". Another teacher highlighted the word "*cohesion*" and wrote, "*everybody should work towards the same goal*".

Schools where the discipline is strict was also perceived to be another characteristic of good schools. More important than students developing a love for learning as a life-long process was the perception that students must have respect

for teachers. Good schools should also provide a conducive environment for students to learn. However, Item 14 which was "students who excel both in examinations and ECAs" had the lowest overall mean rating of 3.21. Item 20 which had the second lowest overall mean rating of 3.36 was "A better cohort of students". These relatively lower mean ratings appear to indicate that teachers, although acknowledging these to be characteristics of good schools, did not perceive them to be more important than those characteristics mentioned above. Instead teachers perceived the 'principal and teachers' characteristics to be more important characteristics of good schools.

In the area of resources, teachers perceived strongly that good schools were characterised by the provision of adequate clerical support for teachers and the reduction of class size to one teacher for 25 students. While it may not always be possible to have such a small class size, the Ministry of Education has recently adopted measures to recruit 'school administrators' to assist principals and teachers in their school administration.

Although a very small percentage (2%) of the 900 Phase One responses were on the **PARENTS** dimension, item 4 which was "Parents support school programmes" had a rather high mean rating of 4.14. It would thus appear that teachers perceived parental support of school programmes to be an important characteristic of good schools. While teachers indicated that good schools should have a comprehensive curriculum, well-integrated across subjects and offering a wide range of ECAs, they did not perceive the **CURRICULUM** dimension to be more important than any of the other dimensions mentioned above.

Research Question 2: How do secondary school teachers' perceptions of the characteristics of good schools differ from those fifteen characteristics listed in the "Towards Excellence in Schools" report; i.e., from principals' conclusions of their visit to 25 'acknowledged successful schools' in the U.K. and U.S.A.?

In many aspects, teachers' perceptions of the characteristics of good schools were the same as those listed in the "Towards Excellence in Schools" report. In fact, from the data gathered, there were some other characteristics perceived by teachers to be important characteristics which were not mentioned in the report (see Table 7). Some of these were "Enforcing strict discipline", "Students have respect for teachers" and "High staff morale". The only two characteristics in the report which were not mentioned by teachers were (1) responsible governing board and (2) single-session schools.

This is understandable because schools in Singapore have School Advisory Committees and School Management Councils but they are not quite the same as the governing boards mentioned in the report. It is highly likely that teachers did not mention responsible governing boards as a characteristic of good schools because this is a 'non-issue' for them. These committee and council members hardly interact with the teachers directly. And as far as single-session schools are concerned, it was only recently that the Ministry of Education had announced plans to make all secondary schools single-session by the year 2000. In Singapore, single-session schools function from 7:30 am to about 3:00 pm. Double-session schools, on the other hand, function from 7:30 am to 1:30 pm for the morning session and from 12:30 pm to 6:30 pm for the afternoon session

What was interesting was the fact that while the teachers' list of characteristics of good schools matched that of the principals', the two groups did not necessarily attach the same level of importance to these characteristics. For

example, it was found that while teachers perceived the 'principal and teachers' characteristics (or the **STAFF** dimension) to be the most important characteristic, principals, on the other hand, identified the enhancement of student success in public examinations and the enforcement of firm school discipline as significant in creating effective schools. Thus, there seems to be this perception gap between the teachers' perceptions and the principals' perceptions.

Basically, there are two perspectives to this perception gap. From the teachers' perspective, they work closely with their principals and with the continual emphasis the Ministry of Education places on the roles and responsibilities of the school principal, it is little wonder that teachers look up to their heads and therefore perceive them (i.e., the **STAFF** dimension) to be the most important feature of good schools. The then Minister for Education, Mr Lee Yock Suan, in his opening address at the Principals' Conference in 1995 said that, "The principal, in particular, deserves special recognition... and it was generally observed that outstanding leadership is a key characteristic of outstanding schools." On the other hand, from the principals' perspective, the external school appraisal by the Ministry of Education and, in particular, the annual school ranking are likely to add extra pressure on them to ensure that their schools perform well in the ranking.

**Table 7: A Comparison of the Characteristics of Good Schools
as Identified in the 1987 "Towards Excellence in Schools" Report
with those reported by Teachers in Phase One Survey**

Characteristics of Good Schools		
Identified in 1987 Schools Excellence Report	Reported by Teachers in Phase One Survey	Item # in Phase Two Instrument
1. Capable headmaster	3	17b(i)
2. Responsible governing board	7	-
3. Flexibility and latitude given headmaster in selecting teachers and deciding on curriculum and other school matters	3	17a(ii)

4. Effective and committed teachers	3	21
5. Selective admission of pupils	3	20
6. Enrolment of manageable size	3	6
7. Favourable teacher-pupil ratio	3	6
8. Comprehensive PCCG prog.	3	13
9. Flexible and broad-based curriculum	3	12
10. Wide range of ECAs	3	2
11. Single-session schools	7	-
12. Adequate physical resources	3	15
13. Clear delineation of responsibilities between academic and non-academic staff	3	16
14. Adequate ancillary support	3	11
15. Close parental and alumni relationship	3	4

Research Question 3: Is there a high level of agreement between the ratings of the level of importance of the characteristics of good schools by teachers with varying lengths of teaching experience (or service) and from different types of secondary schools and would the ratings be affected by gender?

The dependent variables were the mean ratings of the level of importance of the characteristics in each of the five dimensions: **STAFF**, **STUDENTS**, **CURRICULUM**, **RESOURCES** and **PARENTS**. The three independent variables were (1) gender, (2) type of school and (3) length of service. Gender was found to have no effect on the dependent variables. It appears that male teachers' perceptions and female teachers' perceptions of the relative importance of the characteristics of good schools were similar. The effect of type of school on the **RESOURCES** dimension was found to be significant at $p < .05$ level ($F = 5.57$). Teachers from government-aided schools also tended to rate or perceive the **RESOURCE** dimension to be significantly lower or as less important ($x = 3.99$, $SD = 0.88$) than did teachers from government schools ($x = 4.15$, $SD = 0.84$). One possible explanation is that since government-aided schools, unlike government schools, do not get full government funding for physical resources, teachers from government-aided schools therefore have to make do with whatever they have and consequently may have perceived the **RESOURCES** dimension as a less important characteristic of good schools than did teachers from government schools.

Except for the **CURRICULUM** dimension, the effect of length of service on the other four dimensions was significant. It was found that teachers with "high" length of service (i.e., fifteen or more years of service) consistently rated all dimensions (except **CURRICULUM** dimension) of lesser importance than did teachers with "low" or "medium" length of service. The implication is that these teachers who have been in the teaching service for fifteen or more years seem to perceive characteristics other than those already listed in this study to be more important characteristics of good schools.

A correlational study was also done for the dependent variables. It was found that the correlation coefficients for the **STAFF** and **STUDENTS** dimensions were high (all above $r = 0.60$ at $p < .01$ level). This appears to mean that teachers were likely to rate items from the **STAFF** dimension and items from the **STUDENTS** dimension as equally important.

A strong correlation was also found between **STAFF** and **CURRICULUM** dimensions for independent/autonomous schools ($r = 0.70$, $p < .01$). This appear to mean that independent/autonomous school teachers were very likely to give the same ratings of the level of importance to items in both the **STAFF** and **CURRICULUM** dimensions. In other words, these teachers perceived the **CURRICULUM** dimension to be as important a characteristic of effective schools as the **STAFF** dimension.

Research Question 4: Which characteristics would secondary school teachers place as first priority to act upon to make their schools more effective ?

A total of 403 teachers were asked to identify one characteristic they would act upon first to make their schools more effective. Of the 304 who responded, 214 teachers (70.39%) felt that the **STAFF** dimension deserved the most attention (see Table 8).

Table 8: Acting On Effective Schools Characteristics

Dimension	Frequency of Responses	% (of 304 teachers who responded)	Ranking
STAFF	214	70.39	1
STUDENTS	34	11.18	2
CURRICULUM	7	2.30	5
RESOURCES	32	10.53	3
PARENTS	6	1.97	6
OTHERS	11	3.63	4
No response	99		
Total	403		

Of these 214 teachers, 54 (25.23%) pointed to the category 'principal' (Item 17), 42 (19.63%) indicated that discipline (Item 3) needed to be looked into first, 28 (13.08%) indicated the need for the principal and the teachers to share the same vision and work towards common goals (Item 27), 23 (10.75%) expressed the need to maintain a high staff morale (Item 26), 19 (8.88%) felt the need to have committed and dedicated teachers and the remaining 48 (22.43%) mentioned a few other characteristics. 24 (44.44%) out of the 54 responses on the category 'principal' were about the principal who manages well.

About 11% of the teachers who responded perceived the **STUDENTS** dimension as deserving top priority for action. Of the 34 responses on the **STUDENTS** dimension, 13 (38.24%) were on the need for students to develop a love for learning as a life-long process (Item 19). Another 11% felt that resources should be dealt with first. Of the 32 responses on the **RESOURCES** dimension, 28 (87.50%) of them felt that class sizes should be reduced to one teacher for twenty-five students (Item 6).

In some ways, most of the characteristics identified in this study could be acted upon to make schools more effective. Some characteristics such as "principal recognises and acknowledges staff contributions" are easier to act upon than others such as "reducing class size to one teacher for 25 students". In acknowledging staff contributions, principals could give verbal praise or some other tangible rewards such as token gifts or recommendations for promotions. However, to implement a small class size in all schools would involve the voluminous task of financial and logistics

considerations.

RECOMMENDATIONS

Although the study had achieved its objectives, there were specific areas which needed more investigation. Several recommendations are suggested below to extend the study to gather more information which would be useful for school administrators and educators in general. Firstly, interviews could be included for several purposes. One purpose is to study more closely the effect of length of service on teachers' perceptions. Since teachers with "high" length of service (i.e., fifteen or more years of service) consistently rated all dimensions (except **CURRICULUM** dimension) of lesser importance than did teachers with "low" or "medium" length of service, they could be interviewed to find out if there are other characteristics that they perceive to be of more importance. A second purpose could be to examine the basis for the teachers' ratings. How do they rate one characteristic as more important than another? Are their perceptions of the relative importance of these characteristics based on their personal experience or deep psychological beliefs about teaching and learning or on the feasibility of implementation of these characteristics? A third purpose of the interview could be to find out how teachers plan to act on these characteristics. What are their suggested plans of action?

Secondly, future studies should also attempt to explore the perceptions of other groups such as primary school teachers, junior college teachers, key personnel from the Ministry of Education, students or even parents concerning the characteristics of effective schools. The data collected from these various different groups could then be triangulated. Any potential perception gaps would be worth exploring further.

Thirdly, since teachers perceived good schools to be characterised by principals who are fair and firm in decision making and who distribute duties fairly among staff, these findings should be communicated to principals and vice-principals in schools and to potential principals during their Diploma in Educational Administration (DEA) programme - the one-year principal preparatory programme. While it will not always be easy nor feasible for principals to be equitable in distributing duties among staff, what perhaps need to be emphasized is for principals to handle the matter in such a way that they are **perceived** by teachers to be fair. One such way is to be open with teachers and persuade them to see the 'big picture' in any given situation. Another is for the DEA programme to include more case studies of real and difficult situations in schools. Principals should also be conscious of the importance of developing and projecting personal qualities such as sincerity, confidence, sensitivity and perceptiveness since teachers perceive principals of good schools to have these qualities. The Singapore Secondary School Principals' Association (SSSPA), the Principals' Executive Centre (PEC) and the Singapore Educational Administration Society (SEAS) could perhaps jointly organise more sharing sessions for principals to discuss how they could acquire and nurture the qualities described above.

CONCLUSION

The aim of this exploratory study was to identify what teachers in Singapore secondary schools perceived to be

characteristics of good schools and the level of relative importance they perceived each characteristic to have. One major finding is that teachers consistently perceived the **STAFF** dimension to be an important characteristic of good schools; particularly referring to principals who were fair and firm in making decisions and who distributed duties fairly among teachers. The implications of this finding are many, e.g., the Principals' Executive Centre should continue to provide a platform for dissemination of information and mutual support among principals enhancing their professionalism and thus contributing to greater school effectiveness. Another significant finding is that teachers with length of service of 15 or more years consistently rated all dimensions (except **CURRICULUM** dimension) of lesser importance than did teachers with "low" (0-4 years) or "medium" (5-14 years) length of service. Again there are implications; Are these teachers 'dulled' by their many years in the teaching service? What, then, are some other characteristics that they might perceive to be of more importance? The perceptions of these seniors teachers with so many years of experience could be important. The findings of this present study and other studies in future would have great implications for school administrators and educational policy-makers in our efforts to create more effective schools.

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